Improving System Financing Modalities
 – A Scoping Note for further development and presentation
to the System Council

Purpose
This document presents some initial reflections on improving system financing modalities for the 4th meeting of the System Council on 10-11 May 2017 in The Netherlands.

Action Requested
Guidance is sought on whether this paper sets out the appropriate range of both challenges and potential solutions, and on next steps.

Explanatory note on Revision 1 version, 4 May
In this revision 1 version: (i) a small number of new paragraphs have been provided to give additional explanations on related points. Such paragraphs are identified with the marking “**” at the start of the relevant paragraph; and (ii) in several instances, information has been moved within the body of the paper to provide for improved readability. Where this has taken place, the information is identified with a footnote reference at the first convenient opportunity.

Distribution notice: There is no restriction on the circulation of this document

Prepared by: CGIAR System Management Office
## Contents

Purpose............................................................................................................................................ 1
Action Requested............................................................................................................................ 1
Part A - Background ........................................................................................................................ 3
Part B - Is some rebalancing needed, and where?........................................................................ 3
Part C - Challenges – Some Key Features ...................................................................................... 9
Part D - Challenges – Some Key Drivers....................................................................................... 11
Appendix 1: Challenges – Some Key Features............................................................................. 15
Appendix 2: Challenges – Some Key Drivers................................................................................ 36
Part A - Background

1. The following action was agreed at the November 2016 3rd System Council meeting:

   **SC/M3/AP1 – Genebanks and broader funding discussion**
   Recognizing the importance of the former Fund Council’s decision at FC14 on funding the Genebanks, the System Management Office will put in motion a wider funding discussion amongst the System Council members (which includes the Genebanks decision, builds on the work done on the transition, and does not seek to reinvent the wheel). This work is to be overseen in due course by the System Council’s Strategic Impact, Monitoring and Evaluation Committee.

2. This paper presents some analysis of the challenges raised and provides more some examples to illustrate potential solution areas. These are not presented as proposals or recommendations, but instead as potential ideas that could merit further discussion and consideration.

3. It is envisaged that System Council could provide advice on a way forward on i) the accuracy of the reflections and analysis on the challenges identified in the paper, ii) initial guidance on the general direction and specific potential solutions identified, and iii) guidance on a process – if desired – to bring the discussion to a potential decision. Alongside continued informal consultation, this could include consideration of by the newly-created Strategic Impact, Monitoring and Evaluation Committee of the System Council (“SIMEC”), with a view to a revised paper being brought to the November 2017 System Council for decision.

Part B - Is some rebalancing needed, and where?

4. The core emphasis of this scoping exercise is to continue in the positive direction set last year. In 2016, key elements of the governance system were successfully addressed. Their resolution has potentially opened up the opportunity to resolve long-standing challenges in the financing system – to helping to rebuild confidence in system-level financing such that the reliability, percentage share and absolute level of overall and system financing can be maintained and even increase.

5. A key aspect of preparations for this paper was to try to understand why system-level financing has fallen in volume and proportion. One hypothesis that emerged in various initial conversations with Funders and Centers was a concern that the system-funding model and associated CRP modality is perhaps imbalanced in terms of being:

   a. over-determined on how system-level funding is received, and how research is managed across the system and over time; and
   b. under-determined on how system-level financing is allocated and its results framework, expected added value/quality, and funding cycle.
6. If the above hypothesis is correct, a ‘solution space’ could involve exploring some significant incremental improvements through **clarifying** the system funding model in some areas, and **liberalizing** it in others.

7. To promote discussion, the following sets out some initial ideas that have emerged in discussions so far.

**Clarifying some things? For example:**

1. **A clearer approach to system-level fundraising through a large-scale 2018 commitment push:** this would aim to introduce more shape and structure to voluntary funding commitments to CGIAR. Specifically, organize a two-part conversation in 2018 on the future of public international agricultural research, and its funding (including CGIAR). A commitment conference could aim for multi-year pledges to encourage forward financing, peer engagement and focus for funding cycle discussions and fundraising.

2. **An agreed approach to Genebank funding:** either through i) maintaining the existing approach of W1/2 funding, requesting continued cost-efficiency from genebanks to drive down management costs even further, and continuing efforts to build the endowment and/or ii) introduce new funding modalities. See Appendix 2 for a more detailed analysis.

3. **Agreed principles for the use and allocation criteria/process for system-level financing:** this could include **exploring:**
   
   a. **Common criteria to inform allocation decisions**
   
   b. **The optimal way to decide indicative CRP funding targets at the System Council level** - informed by these common review criteria.

   c. Whether it is advisable or indeed possible (given the deep alignment of many bilateral and system-level-funded activities behind CRPs) to **more clearly define the boundaries of system-level financing in CRPs/flagships** – i.e. mapping W3/bilateral projects to CRPs/platforms but distinguishing between the purpose, use and results of W1 and 2 financing at the CRP/platform level compared to W3 and bilateral financing.

---

1 Noting the System Management Board’s responsibilities in this regards as prescribed in the Charter of the CGIAR System Organization, Article 8.1 (bb)
4. **A voluntary target funding profile:** e.g. establish a soft target at the System Council level for the share of multi-year funding agreements (e.g. 50% of financing - up from current 16% in 2016 and 35% in 2015), and possibility some voluntary targets on shares of funding contributions to W1 and/or W2.

5. **Improved transparency of results and fund use:** establish the results framework (SC3-03 Towards a Performance Management System) and maintain a real-time W2 contributions dashboard to allow Funders to assess financing needs in their ongoing allocation of their resources between CRPs, based on surveys of funder CRP/platform intentions. Establish 3-year rolling FINPLANs – including system entity costs to encourage greater review and cost-control of System Entities.

**And liberalizing others? For example:**

6. **New flexibilities in the CRP funding modality:**
   a. Explore **flagship-level earmarking in W2?** W2 contributors could earmark some or all of their W2 contributions, if desired, to specific CRP flagships. This could be in the form of a negative ‘exclusion list’ to accompany any W2 CRP funder allocations, or positive quantified allocations to specified flagships.
   b. Allow System Council to **approve an additional flagship to be added to a CRP after its initial approval.**
   c. Build in flexibility to longer-run CRP (and possibly flagship-level) financing targets through **bi-annual ‘adjustment reviews’ of these financing targets** by System Council supported by ISPC reviews of performance.
   d. Agree a **minimum ‘critical mass’ size for system-level funding of CRPs**, below which the activity would be either refinanced from any available additional resources, or wound-down subject to a System Council decision.
   e. **A partial de-linking approach between W1 and W2:** so that additional W2 contributions feed through to increases in a CRP’s funding, and within-year cuts are not ‘salami-sliced’ equally across CRPs. Some of W1 would be used to address end of year funding gaps between W2 and System Council CRP/platform allocations to meet strategic requirements across all funding gaps between W2 and System Council indicative W1/2 allocations such that the ability to deliver is upheld by the same percentage amount until W1.

---

funding is exhausted. This could offer a middle ground\(^4\) between full and zero coverage of the gap with W1, thus creating a greater incentive for W2 financing while at least partially ensuring the portfolio objectives are met.

7. **A wider range of funding mechanisms:**

   a. **South-South knowledge challenge instruments:** the objective would be to make CGIAR a more attractive investment proposition for emerging recipient countries, to build on the generous support already provided. New instrument(s) could enable major emerging economies to earmark their contributions to CGIAR for partnership investments with their national institutions for work at home and overseas.

   b. **A climate-smart agriculture impact initiative:** this could be an innovative results-based funding facility to draw in additional dedicated climate finance to support research and knowledge generation across the CGIAR system and its transfer and scaling up through partnerships with international and local implementers\(^5\).

   c. **New non-grant funding instruments:** new methods could be explored with existing and current non-donors to broaden the funding base as well as boosting long term predictability through:

      i. a **returnable capital fund** to generate a long-run income flow to agricultural research (the difference between investment returns and repayments/dividends to investors in a new fund is provided to CGIAR as an income stream);

      ii. accessing **development bank lending** based on potential borrower interest in investing in partnerships between, and capacity-building in, NARs, the CGIAR, and others.

---

\(^4\) FINPLAN 2017 explored three alternative approaches, concluding that for 2017 the ‘middle ground’ approach was the best: (1) “**Undefined until year-end**”: an ex post approach which defers a decision on how to address funding gaps until later in the year. This would enable more flexibility in response depending on having clearer information at the end of the year, although would reduce the predictability and potentially therefore the credibility of system-level finance. (2) “**Fixed in advance – winner takes all (W2)**”: equal amount of W1 would be allocated to each CRP up to the System Council indicative W1/2 allocation and not adjusted for W2 end-of-year outcomes. This gives a major incentive for W2 fundraising for CRPs by not reducing W1 1:1 for each W2 contribution. However, when applied in 2016 this led to some CRPs only being made aware at the end of the year of receiving less funding than programmed. This approach provides the largest variation between CRP outcomes and System Council indicative allocations. (3) “**Egalitarian – cuts applied equally across CRPs**”: equal application of a possible cut irrespective of the level of W2 funding already received by CRPs. W1 is allocated such that all CRPs face the same percentage reduction of W1/2 from their System Council allocation until W1 funds are exhausted. This has the advantage of being optimal in terms of getting closest to the original System Council allocation, although it does not provide an immediate incentive for CRP fundraising (except when 100% of the System Council can be raised from W2).

\(^5\) This could aim to access various bilateral and multilateral sources of earmarked climate finance, including the Green Climate Fund (GCF) for example. Of note, the former Consortium Office and various Centers have applied for accreditation to the GCF. All applications are still pending, but CGIAR can nevertheless be an implementing partner for entities that are already accredited to the GCF.
d. **Greater access to stabilization funding at system level**: to allow Centers to respond to within-year funding shocks and help Centers manage any potentially major reductions from key Funders in 2017/18. This could take the form of a larger stabilization balance in W1 and/or a special facility in the form of a grant or (zero or low interest) line of credit or loan.

e. **A rapid response and innovation capability**: creating the capability in W1 for the System Council to make additional funding available for i) emerging urgent new funding priorities, and ii) the design and crowding in of innovative new types of investments at the System and Center level.

f. **An infrastructure innovation challenge instrument**: new capability (e.g. a platform in W1) with the aim of funding innovative responses to the problem of aging physical infrastructure - challenging a “new for old” replacement and finding creative solutions that jointly build shared capacity with partner countries.
### Table 1:

<table>
<thead>
<tr>
<th>CHALLENGES?</th>
<th>MODALITIES IDEAS?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FEATURES</td>
</tr>
</tbody>
</table>

#### Clarifying...

1. A large-scale 2018 funding push
2. Agreed Genebanks funding approach
3. Agreed approach to use, allocation process for W1/2
4. A voluntary target funding profile
5. Improved transparency on results and fund use

#### Liberalize...

6. New flexibilities in CRP funding modality
7. Partial de-linking of W1/2
8. A wider range of funding mechanisms
Part C - Challenges – Some Key Features

The above analysis and potential solutions are informed by some major challenges facing the CGIAR funding system, and system-level financing in particular.

These are analyzed in detail in Annex 1. In summary, these include:

1. **Declining absolute and proportionate W1+2**: after an initial strong growth, total funding to the CGIAR in 2015 had almost fallen to its 2012 level. However, the picture is quite different by funding windows: W1 decreased by more than half during the 2012-2016 period, W2 remained more or less flat, W3 almost doubled and Bilateral declined slightly (chart 1). The reduction in W1&2 funding continued in 2016. Not included in this analysis are in-kind contributions and leveraged co-investments.

   ![Chart 1](image)

2. **Within-year and multi-year predictability of funds:**
   a. **In the short term (within year)**, CRP funding from W3 and Bilateral is more predictable than System-level financing since these rely on typically 3-year project commitments. However, the W1&2 predictability of funding is poor – the last funders to announce their funding decisions are two major funders who together represent 30% of W1&2 funding, towards the end of the year, requiring centers to pre-finance the research and absorb the risk between budgeted and actual income.

   b. **In the medium and long term**: CRP funding from W1&2 is mostly unpredictable over the medium and long term. In terms of ‘revealed preference’, W2 percentage allocations to some CRPs by funders appears to be stable over years but the corresponding amount received often varies because of changes in their total size of contributions (including due to exchange rate changes).
3. **Funding for Genebanks**: some funders have made the case that, since many CRPs benefit from genebanks, its costs should be shared more equally across the system than on W1 funders. As background, during phase 1 (2011 – 2016) the proportion of W1 funding allocated to Genebanks was an average of $17m per year, which represented 6% of total W1/2 funding ($1,695m over 6 years) provided by Funders. In 2017 the Genebanks require $31.6m funding of which $24.9 or 80% is W1/2 funding. The reason for the increased request in 2017 from the average of $17m during phase 1 to $24.9m in 2017, representing 13% of the System Cost W1/2 $191m indicative allocation, is primarily the result of the inclusion of “plant health units” recommended by the ISPC. The GCDT front loaded this requirement into 2017 activities to get the plant health units in place. The GCDT projects that the endowment will eventually cover all recurring expenditures incurred by Centers to maintain genebank collections. The target estimated by the Trust for the endowment, based on the Costing Study conducted in 2009/2010, is $525 million. As of 31 December 2017, the endowment has increased to $188m and is currently projected to increase to $200m by 2019. In addition, concessional loans are under negotiations which will support the operation. Between the endowment funding and the prioritization of genebank funding, the impression may have been generated that genebanks do not need the support of W2, W3 and bilateral. Given that overall funding to the system has decreased, and the endowment fund/contributions are growing less than expected due to low interest rates, we suggest that (i) greater emphasis is being placed on encouraging donors to use the diversified funding modalities (W1, W2, W3, bilateral) for genebank support, meanwhile (ii) preference will continue to be given to use W1 to ensure maintaining genebank collections.

4. **Maintaining Center-level solvency and reserves**: the transition from a largely core-funding model of the CGIAR to program and project-level funding one has raised a number of significant issues requiring attention. In many cases the indirect costs paid by funders on W3/bilateral projects do not fully cover actual costs. Further, there are many ways in which Center-level reserves are drawn down (e.g. end of year funding cuts), but few if any ways to increase them since any underspends on system or project level funding are not retained as Center income. In terms of generating returns on reserves, there is a very wide distribution of reported average returns across Centers.

5. **Diversity of overall and system-level funding**: there is a (very) high concentration. CGIAR funding is bi-modal – overall, five large donors contribute over 50% of the total CGIAR funding, with at least 45 donors contribute the remaining 50%. There is a high reliance on large OECD funders and low emerging economies share, a high reliance on core agricultural research budgets from funding agencies, a low share of funding earmarked for other thematic areas (such as climate change, nutrition, environment, etc.), and a high reliance on pure grant financing with zero use of non-grant funding.
Part D - Challenges – Some Key Drivers

There are a number of potential drivers behind the above challenges. These are analysis in detail in Appendix 2. In summary:

1. **Alignment of incentives for system-level funding**: CGIAR’s funding system – like the natural landscapes we work in - faces a constant risk of the “tragedy of the commons”, whereby incentives at an individual (funder, Center, CRP or ISC) do not always align with the collective benefit of maintaining system funding. Funders are reporting instances where they are facing incentives to earmark their funding, including in some cases from within the CGIAR system. The following Chart 2 aims to provide a visual description of some of these ‘push’ and ‘pull’ factors:

![Chart 2](chart2.png)

2. **Funder earmarking capability at system-level**: the range of choice for system funding could be characterized as a wide divergence between two domains – bilateral, with significant funder and recipient transaction costs, and pooled, for which Funders allocate funding to large “buckets” e.g. W1 or CRPs/platforms. There is no option for system financing at a more granular sub-program level e.g. at the flagship level. We need to understand what makes the CGIAR so different that W1&W2 funding have proportionally reduced.
3. **Portfolio-level flexibility and breadth:** A concern is expressed by some stakeholders on a perceived risk of rigidity in the CRP/platform funding modality, with some noting that a balance between predictability and the ability to respond to performance information and changing funding preferences is needed – and a concern that the duration of the current portfolio may not achieve that balance without adjustment mechanisms in place that enable the System Council to actively manage the portfolio on an ongoing basis. Further, some note the breadth of the CRP/platform portfolio relative to the funding available, questioning whether this is sufficient to cover the range of work proposed, and whether it achieves sufficient ‘critical mass’ at the CRP level to leverage the depth of work required or justify the management overheads of the current CRP modality. It should be noted that through W3 and bilateral funding individual Funders steer approximately 80% of the portfolio directly.

** The overall objectives, SDGs in particular, are longer-term. They will not change on an annual basis and are aligned with donor priorities, due to the underlying global consultation process. Instead of making disruptive ad-hoc changes, an option is that the System Council may want to consider steering the portfolio by systematically reviewing and defining the relative emphasis between SLOs and cross-cutting outcome, and investing greater efforts in establishing systematic linkages and co-funding mechanisms with other thematic areas, such as climate change, nutrition, environment.

4. **Sharing of overhead costs:** there are three areas where the issue of sharing overhead cost across windows and funders is sometimes raised:

a. **System entities costs:** the CSP was created, in part, to find an equitable way of sharing the cost of system entities across funds. Notably this applies also to overhead recovered from W3 and bilateral funders that are System Council members and as such expressed support to collecting the CSP. Currently, about 60 percent of these costs are covered from W1/2, and the rest from W3/bilateral projects. Of note, legacy projects (no CSP recovered) have decreased from a high of 73% in 2012 to just 18% in 2015 – a success in terms of overhead cost sharing. It is hard to find evidence suggesting that the introduction of the CSP mechanism led to net additional overhead collection from W3 and bilateral funders. Anecdotal evidence suggests that some Funders see the CSP as part of overall project overheads and expect it to be funded within their own standard ceilings.

The following chart 3 shows core System costs as a percentage of total System expenditure over 10 years (not adjusted for inflation). No cost to attend to System activity from Center Boards and Center Management is included under System entities cost.
b. **CRP and Center management costs**: a common sentiment is that W1&2 funds are used to support the gap between full cost recovery and the indirect cost recovery from W3 and bilateral grants to cover Center costs. There are two dimensions to this question – CRP management costs, and Center management costs.

- Regarding **CRP and Platform management and support costs**, these amounts to approximately $24 million in 2017. They are mostly paid for by W1&2.

- Regarding **Center overhead costs**, analysis of Center’s indirect cost recovery suggests that a slight improvement has been achieved in average levels of overhead rates recovered from W3/bilateral projects. The average W3/Bilateral overhead rate in 2015 was 12% compared with the System average overhead rate of 15%.

- **What are reasonable overhead costs**: The CGIAR as a system has established a guideline for indirect cost allocation. However, there is continuous pressure to reduce indirect or overhead cost, with little understanding what overhead costs are being used for. Funders are concerned about effective services and compliance with international standards. Those requirements have increased yet continuous pressures on overhead costs may prove contra-productive. Perhaps the CGIAR may conceptualizes and benchmark its overhead costs with comparable organizations. One avenue may be for System Council members to identify comparable organizations for the System Office to develop a data set that would aid in increasing the understanding on overhead use and for the System Council to have a benchmark.
6. **Funding for infrastructure investment**: many stakeholders observe that CGIAR’s institutional infrastructure needs revitalizing to continue delivering top notch research. The current program-focused funding system for CGIAR is not conducive to infrastructure re-investment.
Appendix 1: Challenges – Some Key Features

This section describes some key features of CGIAR’s financing modalities in terms of challenges that have emerged. Financial information is not adjusted for inflation.

These are analyzed below as i) Declining absolute and proportionate W1+2; ii) Within and multi-year predictability of funds; iii) Diversity of system funding; iv) Funding for infrastructure investment; and v) Maintaining Center-level reserves.

1. Declining absolute and proportionate W1+2

After an initial strong growth, total funding to the CGIAR in 2015 had almost come back down to its 2012 level. However, the picture is quite different by funding windows: W1 went down by 40% over the 2012-2015 period and further declined in 2016 to less than half of 2012, W2 remained flat, W3 increased by almost 60% and Bilateral went down by 7% (chart A1-1). The reduction in W1&2 funding continues in 2016 (-27% and -20% from 2015 levels respectively), although the W1+2+3 funding has stabilized thanks to an increase in W3 funding6 (chart A1-2).

CHART A1-1: Total annual funding during the 2012-2015 period, percentage change from 20127; broken out by the type of funding source (windows / bilateral)8

---

6 The 2016 Bilateral funding report is in process at the time of writing.
7 We use 2012 as a reference year instead of 2011 because not all donors were set up to contribute to the CGIAR Fund in 2011. Also 2011 is biased by large one-off multi-year payments.
8 Note that a large European Commission contribution is included in these figures as a multi-year contribution.
**Over the longer term, the CGIAR has seen a 24% increase from $145 million to $180 million in absolute terms of “W1&2-like” funding since 2001 (chart A1-3). In real term, funding decreased by 3% to $140 million using 2001 USD values.**

**CHART A1-3: Evolution of the W1&2-like\(^9\) funding over the 2001-2016 period**

---

\(^9\) It should be noted that unrestricted funding before 2011 is the closest comparison to the “untied” funding of W1&2 that appeared in 2011 with the reform of the CGIAR.
We also analyzed the shift between funding windows/ bilateral for the top 10 W1&2 donors\(^{10}\) between 2012 and 2015 (chart A1-4).

**CHART A1-4: Change in funding amount (USD, millions) between 2012 and 2015 for the top 10 W1&2 donors**

<table>
<thead>
<tr>
<th>Funder</th>
<th>W1</th>
<th>W2</th>
<th>W3</th>
<th>Bilat</th>
<th>Gran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>-2</td>
<td>-4</td>
<td>0</td>
<td>0</td>
<td>-6</td>
</tr>
<tr>
<td>Canada</td>
<td>-7</td>
<td>-7</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>IDRC</td>
<td>0</td>
<td>-5</td>
<td>0</td>
<td>2</td>
<td>-4</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>0</td>
<td>5</td>
<td>-3</td>
<td>8</td>
</tr>
<tr>
<td>Norway</td>
<td>-8</td>
<td>0</td>
<td>0</td>
<td>-1</td>
<td>-9</td>
</tr>
<tr>
<td>Sweden</td>
<td>-4</td>
<td>-21</td>
<td>0</td>
<td>-4</td>
<td>-29</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0</td>
<td>3</td>
<td>-2</td>
<td>-4</td>
<td>-3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-36</td>
<td>38</td>
<td>-4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>United States of .</td>
<td>0</td>
<td>-9</td>
<td>50</td>
<td>-23</td>
<td>18</td>
</tr>
<tr>
<td>World Bank</td>
<td>-20</td>
<td>0</td>
<td>0</td>
<td>-2</td>
<td>-22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-71</td>
<td>+10</td>
<td>+49</td>
<td>-27</td>
<td>-40</td>
</tr>
</tbody>
</table>

These top 10 donors decreased their W1&2 funding by $62 million, a 20% reduction of the total W1&2 funding available in 2012\(^{11}\).

2. **Within-year and multi-year predictability of funds: unpredictable Funding in the Short, Medium and Long terms**

The following analysis looks at the predictability of the funding to the CGIAR in the short (within the year), medium (1 to 3 years) and long (3 to 6 years) term.

**In the short term (within year):**

CRP funding from W3 and Bilateral is predictable in the short term since Centers make proposals and are granted on average 3 years of project funds.

However, the W1&2 predictability of funding is poor: the annual W2 allocation decision by CRP is made at different time of the year, depending on the donors’ internal processes – the last funders to announce their funding decisions are two major funders who together represent 30% of W1&2 funding, towards the end of the year, requiring centers to pre-finance the research.

---

\(^{10}\) The top 10 donors collectively represent over 90% of the total W1&2 funding in 2012.

\(^{11}\) FOREX fluctuations may explain part of this variation but not all. We have not quantified the effect of FOREX.
Each year, CGIAR develops a financing plan based on prior year funding experience as targets. However, the financing plan turns out to be unrealistic each year. Most of the funding becomes available only towards the second half of the year and sometimes, towards the end of the calendar year. As a result, Centers have to plan their research work less efficiently because they face incentives to under-program against SC allocations to factor in a level of risk that they can absorb in case of an actual funding shock.

The figures in chart A1-5 (2012-2015) illustrate how funding targets are realized from W1+2+3 projection to confirmed and received in the Trust Fund during the year. There were years when disbursement to CRPs were made the following year because the funds were received by the Trust Fund too late in the year to make the disbursement. There was even a year when a substantial amount was received by the Trust Fund the following year.

Chart A1-5: W1+2+3 projections (green line) by month; W1+2+3 confirmed (red area) by month; W1+2+3 received (blue area) by month;
In the medium and long term:

CRP funding from W1&2 is mostly unpredictable over the medium and long term. The budget data reflects the current funding challenges that the CGIAR is facing: developing and managing a multi-year research programs with 2022 development targets with a large uncertainty in secured funding in future years.

**Chart A1-6 shows a large portion of unsecured amount from CRP and Platform proposals received. In addition, W1&2 assumed secured is in fact uncertain until donor commitment is received. Also, the average commitment years of the W3 and bilateral funding is 3 years. Since the CRP has a 6 years’ time-frame, and some W3 and bilateral projects are in different stages of its funding cycle about one quarter of the funding can be called secured and the other three quarters is still to be raised overtime.**

**CHART A1-6: Six-year budget projections submitted by all flagships, as part of their proposals for the second phase CRP**

At the CRP level, there is an additional level of uncertainty resulting from the large annual variations of annual W2 amounts allocated to CRPs.
CHART A1-7: Annual percentage share of W2 allocated to CRPs (bars); And Total amount of W2 funding (line)

The bar chart shows the relative proportions of W2 spending on the left vertical axis, by year and by CRP. The line shows the total W2 amount on the vertical right axis by year.
Even when the W2 percentage allocations appears to be stable over time for some CRPs (chart A1-7), for example Livestock (~10%) and RTB (~11%), the corresponding amount received can vary tremendously: from $4M to 16M per year between 2011 and 2016 in the case of Livestock and RTB (Chart A1-8).

Chart A1-8: High degree of variability of actual annual W2 financing from the perspective of some of the individual CRPs.

This chart shows the band (minimum/maximum between 2011 and 2016) of W2 amount received by CRPs.

The following Chart A1-9 shows the variability more graphically giving an indication of the work planning challenges.
A similar analysis was not conducted for W3 because the mechanism for W3 funding is different: it isn’t pooled together then allocated across CRPs. Rather, it is project-based and at the entire discretion of individual donors.

3. Diversity of system funding: a (very) High Concentration of the Funding Base

Taking 2015 statistics, there are at least 50 donors to CGIAR:

- Five large donors contribute over 50% of the total CGIAR funding with an average funding of $104M (per donor in 2015).
- At least 45 donors contribute the remaining 50% with an average contribution of $10M (per donor in 2015).

CGIAR overall funding is bi-modal: a few very large donors, lots of small (or very small) donors, and none in the middle.

---

12 The analysis could not be done for 2016 as Bilateral figures have not been released by centers yet.
13 Sometimes donors are grouped together in the data – for example, “Universities and other academic institutions” are counted as one donor.
Chart A1-10 provides an overview of the total funding by donors over time.

The percentage labels indicate an individual donor’s share of the total funding in a given year.

**CHART A1-10: Breakdown of the total CGIAR funding by donors with respective percentage share, between 2012 and 2015**

We use the Herfindahl-Hirschman Index (HHI) to measure the concentration of the funding base of the CGIAR. The index increased by almost 40% between 2011 and 2015 pointing to a concentration of the CGIAR donors’ base, resulting from the departure of several small donors over that time period.
In 2015, the HHI value is high for W3 (chart A1-11), pointing to a highly concentrated funding base (two donors contribute 80% of the funding and hence strongly influence the agenda). W2 is also concentrated, with two donors contributing 50% of the funding. For W1, three donors contribute 50% of the funding. Bilateral has a large number of donors (at least 43), all contributing relatively comparable amounts.

There are other key qualitative dimensions to diversity not described in the analysis above.

These include:
- The high reliance on large OECD funders and low emerging economies share
- The high reliance on core agricultural research budgets in funding agencies and low share of funding earmarked for other thematic areas (such as climate change, nutrition, environment, etc)
- The high reliance on pure grant financing and zero use of non-grant funding
4. Funding for Genebanks\textsuperscript{14}

During the 12th Fund Council meeting, in November 2014 in Brussels, Fund Council members asked about plans for the continuation of the existing genebank CRP that will end in 2016. The Fund Council concluded that contributions from the GCDT endowment in collaboration with CGIAR will provide full funding for the genebanks when the CRP concludes at the end of 2016. If necessary, to protect the collections, a funding mechanism would be found until the GCDT endowment reaches the required level. The Fund Council decided that the Fund Office would prepare an analysis of the funding for and management of the genebanks, including identifying potential implications in the event of a short fall in the GCDT’s target endowment and proposing a plan for submission to the Peer Review Team (PRT) for its review and input. Thus, in 2015 an “Option Paper” was developed by the Global Crop Diversity Trust (GCDT) and the Consortium Office to address the two pressing issues related to genebanks (future funding and improving genebanks performance) and presented to the PRT. The PRT, in conjunction with the Fund Office, developed the paper “Options for funding core activities of the CGIAR Genebanks, 2017–2021”. Both were presented and discussed during the 13th Fund Council meeting in April 2015 in Bogor\textsuperscript{15}.

The GCDT paper proposed two Options (Table A1-1). The difference between the two options is the inclusion of additional performance improvement. Both options include the endowment contribution to grow by 45% between 2017 and 2021 while the CGIAR funding support decreases over 60%.

Table A1-1

\begin{tabular}{|l|c|c|c|c|c|c|}
\hline
 & 2017 & 2018 & 2019 & 2020 & 2021 & Total \\
\hline
\textbf{OPTION 1: Total funding needs for core operations and collective needs} & & & & & & \\
Total funding needs & 29.69 & 28.33 & 26.52 & 24.27 & 23.30 & 132.10 \\
Contribution from endowment & 6.75 & 9.06 & 11.53 & 13.35 & 15.03 & 55.72 \\
Funds requested from CGIAR Fund & 22.94 & 19.27 & 14.99 & 10.92 & 8.27 & 76.38 \\
\hline
\textbf{OPTION 2: Total funding needs for core operations, collective needs, collecting, outreach and partnership activities} & & & & & & \\
Total funding needs & 30.54 & 29.84 & 28.03 & 25.56 & 23.75 & 137.71 \\
Contribution from endowment & 6.75 & 9.06 & 11.53 & 13.35 & 15.03 & 55.72 \\
Funds requested from CGIAR Fund & 23.79 & 20.78 & 16.50 & 12.21 & 8.72 & 81.99 \\
\hline
\end{tabular}

Additional activities required to improve genebanks performance, received general support including from the ISPC and as mentioned in option 2 above focused on:

\begin{itemize}
\item[a.] The option of setting up a small high level policy advisory committee.
\item[b.] The importance of “targeted collecting” of germplasm, in partnership with national programs, outreach and partnerships, if it is made part of a global strategic approach.
\end{itemize}

\textsuperscript{14} This section previously appeared on pages 32-36 but has been moved to this section for improved visibility of this information.

\textsuperscript{15} Meeting summary from 14\textsuperscript{th} CGIAR Fund Council Meeting: Apply 3% levy to Window 2, 3 and bilateral funds, applicable only to the relevant CRPs; initiate implementation of the levy next year rather than in 2017, pending advice from the Trustee and attorney; the Consortium CEO to inform the Centers to ensure that the levy is appropriately presented as a direct cost, embedded in the programs, not as overhead.
c. Upgrading of Center’s Germplasm Health Unit (GHU) to strengthen the conservation and safe movement of germplasm.

The Peer Review Team considered seven different funding options based on the “Option Paper” cost assumptions and endowment contributions projected for the phase 2 genebank platform. In the opinion of the PRT these are shared asset for the benefit of the entire system and should thus be regarded as having parity in terms of funding with other system entities. Option 1 (Table A1-2) would simply add the genebank as a “Special Initiative Project” financed with W1 funding allocations of USD 82 million. This would require the CSP to more than double to 4.13% based on total system expenditure assumptions of approximately USD 1 billion (50% from the Fund and 50% Bilateral). It was assumed that the rate would decrease over time as contribution from the endowment fund would increase. It was recognized that simply adding an additional percentage to the 2% CSP would be confusing.

Table A1-2
All figures in USD million

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund Office</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Consortium Office</td>
<td>6.60</td>
<td>6.60</td>
<td>6.60</td>
<td>6.60</td>
<td>6.60</td>
</tr>
<tr>
<td>ISPC (CGIAR Fund Financed portion)</td>
<td>2.33</td>
<td>2.33</td>
<td>2.33</td>
<td>2.33</td>
<td>2.33</td>
</tr>
<tr>
<td>IEA</td>
<td>3.94</td>
<td>3.94</td>
<td>3.94</td>
<td>3.94</td>
<td>3.94</td>
</tr>
<tr>
<td>Trustee</td>
<td>0.62</td>
<td>0.62</td>
<td>0.62</td>
<td>0.62</td>
<td>0.62</td>
</tr>
<tr>
<td><strong>Total System Entities' costs</strong></td>
<td><strong>17.49</strong></td>
<td><strong>17.49</strong></td>
<td><strong>17.49</strong></td>
<td><strong>17.49</strong></td>
<td><strong>17.49</strong></td>
</tr>
<tr>
<td>Special Initiatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genebanks</td>
<td>23.79</td>
<td>20.78</td>
<td>16.50</td>
<td>12.21</td>
<td>8.72</td>
</tr>
<tr>
<td>Total Systems Cost</td>
<td>41.28</td>
<td>38.27</td>
<td>33.99</td>
<td>29.70</td>
<td>26.21</td>
</tr>
<tr>
<td>Estimated CGIAR 2015 Funding contributing to CSP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGIAR Fund</td>
<td>500</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Bilateral</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Sharing Percentage</td>
<td>4.13%</td>
<td>3.83%</td>
<td>3.39%</td>
<td>2.97%</td>
<td>2.62%</td>
</tr>
</tbody>
</table>

Considering that increasing the CSP would be confusing, Option 2 considered the implementation of a time bound levy of a certain percentage rate that would be charged to “relevant CRPs”. During the levy phase-in time the difference would be drawn from W1. Under the same assumptions as in Option 1, 3 different scenarios were evaluated applying a levy of 1%, 1.5% and 2%. It was concluded that a levy of 1.5% would suffice.

Option 3 simply changed the overall expenditure assumption from USD 1 billion to USD 900 million which would require the levy to increase to 2%.
Four additional options were developed. They are variations to the 3 above mentioned options and would include certain or all 3 genebank performance improvement measures as mentioned above under additional activities a. policy advisory; b. outreach and partnership; and c. GHU. For a total cost of USD 11.1 million over 5 years or USD 2.2 million/year.

The PRT recommended that a levy of 1% to 2% should be considered on all system funding, and while implemented making up the difference from W1. The additional performance improvement measures, being the GHU first mentioned, were considered important and it was assumed that these could partially be funded with new innovative funding mechanisms. The Fund Council concluded that genebanks are vital and recommended – in both the short and long term – to make it a priority to secure funding in line with existing agreements on the partnership nature of support to the genebanks. The Fund Council agreed to commit $93.1 million over 5 years for the period 2017 - 2021, as per recommendation of the PRT. The Fund Council agreed to a blended approach to funding (levy and W1) to reduce the pressure on Window 1 funds, while recognizing that W1 funds will remain a safety net; the GCDT was asked to provide clear and transparent financials to support building the endowment and complete a detailed costing exercise for Fund Council 14; Genebank support was to be applied to the relevant CRP research as a line item in Windows 2 and 3; and the Fund Council would apply an across-the-board levy in the event of a funding short fall. The mechanism and exact amount of the levy would be determined by the Fund Council as per PRT recommendation to be presented during Fund Council 14.

During the Washington DC 14th Fund Council in November 2015, the PRT addressed the issue of “relevant CRPs” and proposed that genebank funding should be built into the below listed CRP budgets as a way of ensuring CRP research has access to high quality genebank services and products. These CRP budgets should include a line item for this. The identified CRPs were: WHEAT; MAIZE; RICE; RTB; GLDC (GL + DC); FTA

Based on 2014 budget assumption two options were considered. Option 1, applying a 4% levy to W3 and bilateral funding only and Option 2 (Table A1-3), applying a 3% levy to W2, W3 and bilateral funding.

Table A1-3

<table>
<thead>
<tr>
<th>CRP</th>
<th>2014 Budget ($)</th>
<th>Levy ($)</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEAT</td>
<td>4.2 13.0 7.9 13.6</td>
<td>34.5</td>
<td>0.3</td>
<td>0.7</td>
<td>1.0</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>MAIZE</td>
<td>15.1 4.0 13.3 27.9</td>
<td>45.2</td>
<td>0.5</td>
<td>0.9</td>
<td>1.4</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>RICE</td>
<td>25.2 10.0 23.6</td>
<td>35.1</td>
<td>0.7</td>
<td>1.4</td>
<td>2.1</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>RTB</td>
<td>11.1 20.0 20.3</td>
<td>23.7</td>
<td>0.6</td>
<td>1.3</td>
<td>1.9</td>
<td>2.6</td>
<td>3.2</td>
</tr>
<tr>
<td>GL</td>
<td>5.4 11.0 13.3</td>
<td>16.3</td>
<td>0.4</td>
<td>0.8</td>
<td>1.2</td>
<td>1.6</td>
<td>2.0</td>
</tr>
<tr>
<td>DC</td>
<td>4.6 4.0 5.6</td>
<td>7.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>FTA</td>
<td>22.4 8.0 12.4</td>
<td>35.6</td>
<td>0.6</td>
<td>1.1</td>
<td>1.7</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>88.0 70.0 96.4</td>
<td>159.4</td>
<td>325.8</td>
<td>413.8</td>
<td>6.5</td>
<td>9.8</td>
<td>13.0</td>
</tr>
</tbody>
</table>
It was assumed that by 2021 a 3% levy on W2, W3 and bilateral funding applied to relevant CRPs could provide USD 9.8 million (Table 3) which would cover just short of 90% of the funding needed in support of the USD 11 million needed to cover the CGIAR Fund portion required in support of genebanks (Table A1-4). Together with the projected endowment funding from the GCDT endowment Fund of USD 15 million, genebanks could be financed.

Table A1-4

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Essential Operations</td>
<td>18.8</td>
<td>18.9</td>
<td>18.8</td>
<td>18.7</td>
<td>18.6</td>
<td>93.8</td>
</tr>
<tr>
<td>Policy advisory; Outreach &amp; partnership; and GHU</td>
<td>10.4</td>
<td>9.9</td>
<td>8.6</td>
<td>6.7</td>
<td>5.4</td>
<td>42.0</td>
</tr>
<tr>
<td>Management &amp; Support</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Total Direct Cost</strong></td>
<td>29.7</td>
<td>29.4</td>
<td>28.0</td>
<td>26.0</td>
<td>24.6</td>
<td>137.7</td>
</tr>
<tr>
<td>10% indirect cost and 2% CSP</td>
<td>2.9</td>
<td>2.7</td>
<td>2.2</td>
<td>1.8</td>
<td>1.5</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total Genebank Cost</strong></td>
<td>32.7</td>
<td>32.0</td>
<td>30.3</td>
<td>27.8</td>
<td>26.1</td>
<td>148.8</td>
</tr>
<tr>
<td>Projected endowment contribution</td>
<td>6.8</td>
<td>9.1</td>
<td>11.5</td>
<td>13.4</td>
<td>15.0</td>
<td>55.7</td>
</tr>
<tr>
<td>Funds required from the CGIAR</td>
<td>25.9</td>
<td>23.0</td>
<td>18.7</td>
<td>14.5</td>
<td>11.0</td>
<td>93.1</td>
</tr>
</tbody>
</table>

Do these assumptions hold using the submitted CRP/Platform proposals.

During phase 1, the proportion of W1 funding allocated to genebanks was an average of $17m per year which represented 6% of total W1/2 funding as shown in Chart A1-12 while for phase 2 the genebank platform request for W1/2 increases to 8% with the caveat that further W1/2 reductions would not affect the genebank platform. During phase 1 genebanks were primarily financed with W1 (82% - including limited amounts of W2) and bilateral funding (18% - primarily endowment). Bilateral and W3 did not contribute to support the cost of genebanks. With that backdrop, and different to CRPs, donors may have been inadequately encouraged to use W2, W3 or bilateral to contribute to support the cost of genebanks.

In 2017 Genebanks require $31.6m funding of which $24.9m or 80% is W1/2 funding and the remaining $6.7m or 20% is provided from the endowment fund. Module 1, which supports the conservation effort of 11 Center Genebanks, requires total funding of $28.8m. Module 2 and 3 require $2.1m while Management & Support cost are $0.7m all financed from W1/2 as shown in chart A1-13.
The reason for the increased request in 2017 from the average of $17m during phase 1 to $24.9m in 2017, representing 13% of the System Cost W1/2 $191m indicative allocation, is primarily the result of the inclusion of policy advisory, outreach & partnership; and GHU recommended by the ISPC. The GCDT front loaded this requirement into 2017 activities. The underlying assumptions of the endowment support to the Genebank Platform, is from the Genebank platform proposal which states “The results from the Pledging Conference do not yet enable the Crop Trust to deliver the projected endowment income over the 2017 to 2022 horizon of the Genebank Platform, as envisaged at the 13th Fund Council meeting in April 2015. Nevertheless, the Crop Trust stands by its commitment to provide annual funding as a contribution to the Genebank Platform” as per chart 19.

The GCDT projects that the endowment eventually aims to cover all recurring expenditures incurred by Centers to maintain genebank collections. The target estimated by the Trust for the endowment, based on the Costing Study conducted in 2009/2010, is $525 million of which in 2011 approximately $120m was in place. In 2011 the assumption was that the endowment target of $525m could be achieved by 2017. As of 31 December 2017, the endowment has increased to $188m and is currently projected to increase to $200m by 2019. In addition, concessional loans are under negotiations which will support the operation.

While a 3% levy approach might in theory eventually cover (2021/2022) the required funding in place of W1/2 allocations, the experience in levying the CSP suggests that many funders may be unwilling to provide additional project level funding for this activity – raising the possibility that the funding would instead be drawn from Center income, with potentially significant impacts on solvency.

**As previous Fund Council meetings recognized, the core for funding the Genebanks lies in getting a greater number of donors supporting the genebanks. Given that overall funding to the system has decreased, and the endowment fund/contributions are growing less than expected due to low interest rates and lower than projected endowment, greater emphasis may be placed on encouraging donors to use the diversified funding modalities (W1, W2, W3, bilateral) for genebank support, meanwhile, internally preference will continue to be given to use W1 to ensure maintaining genebank collections.

5. Funding for infrastructure investment

Many of the “infrastructure heavy” Centers (IRRI, CIMMYT, IITA, CIAT, ICRISAT) were built in the 1970s. Most of these Centers received grants specifically for building necessary infrastructure or for acquiring fixed assets such as laboratory equipment or machinery for the field operations. Several Centers have indicated that this equipment may be outdated, laboratories may operate below required safety standards and personnel safety in some cases might be at risk.

The current funding system for CGIAR is not conducive for system-level financing to replace or upgrade existing infrastructure, building of new infrastructure or to a certain extent even
acquisition of new equipment that might serve a more general purpose beyond a project-specific task.

**Chart A1-14**

![Capital Investment in PPE - Centers](image)

**Investment in Property, Plant and Equipment (Chart A1-14 above) has decreased during the past 5 years. This is because CIMMYT received a significant specific grant for infrastructure and invested $25 million in 2012 in addition to regular capital investments.**

In terms of ratio, Chart A1-15 (capital investment over fixed assets), CGIAR shows a high investment which is primarily the result of depreciated infrastructure and CIMMYT’s significant investment in 2012 and 2013. This ratio will significantly drop (probably to around 10%) with the transition of Centers to IFRS.

**Chart A1-15**

To get a better feel for short, medium and long term capital investment needs, we asked some Centers to share their capital investment plans. In the case of CIAT short term (1-2 years) high
priority needs amount to $3.5 million (excluding a new genebank which requires approx. $15 million), mid-term (5 years) requirements amount to $4-5 million and long term investments needed amount to $3-4 million of which approximately 90% is for research.

6. Maintaining Center level reserves

There are two issues on center-level reserves – the challenge of maintaining them in the current funding system, and the ability to generate returns on the investments

Maintaining Center reserves and solvency

A challenge in the current program-level funding model is that there are many ways in which Center-level reserves are drawn down, but few if any sources to increase them.

Center-level reserves are drawn down for various reasons, including a) unanticipated funding reductions from W1 or W2; b) CSP which bilateral Funders are unwilling to accept if a Center has an indirect cost rate at or above the maximum allowed c) emergency situations (i.e. ICARDA exiting Syria). However, because system-level and bilateral allocations are tightly tied to implementing programs or projects, surpluses either do not occur or, when they do in bilateral projects, they are returned to Funders.

As of 2015 Center Reserves (Unrestricted net assets excluding fixed assets) have decreased from high of $281 million in 2014 to $269 million in 2015 and are estimated to decrease further to $259 million in 2016. However, an average is not a good indication considering the difference in Center structure, staff and infrastructure as per chart A1-16.

Table A1-16

Center’s long-term financial stability or solvency is expressed in unrestricted net assets less net fixed assets divided by daily operating expenses. The recommended minimum range is
75-90 days. The indicator shows a Center’s capacity to operate without interruption in case of a significant revenue reduction or disruption and is based on the residual days of unrestricted net assets excluding investments in fixed assets. Most Centers are within or above the recommended rate of 75 to 90 days.

Chart A1-17

While the System has reduced indirect cost rate (overhead cost) over time from 20% in 2006 to 15% in 2015 as per chart A1-18, there is a significant variation of indirect cost rate amongst Centers as apparent in chart A1-19. Centers will always have different indirect cost rates as this rate depends on many variables i.e. Center structure, applied methodology, budgeting accuracy, project implementation amongst others.

Chart A1-18

Chart A1-19

When the 2% CSP was implemented in 2011, it was agreed that this charge should be considered a direct cost. Nevertheless, many bilateral Funders consider the CSP as an additional overhead, which makes the recovery even more difficult for Centers with a rate above the Funder allowable limit which can significantly add to drawing down reserves.
Center reserves - and particularly the appropriate level required - have been in discussion for several years. With decreasing unrestricted funding, replenishing of reserves has become a more important issue. Chart A1-20 shows that from 2012 onwards reserves no longer tracked with expenditures.

This results in lower operating reserves expressed in number of days. The higher the Center expenditure the lower the reserve expressed in number of days of operation as per following chart A1-21.
The Nonprofit Operating Reserves Initiative (NORI)\textsuperscript{16} recommends a minimum operating reserve should be 3 months of the annual expense budget which is closely in line with the 75-90 days’ minimum recommendation of the CGIAR. Higher reserves are justified depending on a combination of Revenue Risk Factors and Spending Risk Factors.

**Generating returns**

Each Center has its own Center Board approved investment policy. All policies have in common that invested contribution and grant assets need to be safeguarded and that preservation of capital is the primary objective. The level of aggressivity of reserve investments depends on the Center Board risk appetite and Center short and medium term needs for reserves. In October 2013, the former Consortium provided a CGIAR Investment Policy Guideline that was revised in November 2015. The guideline provides general recommendations as to treatment of cash, reserves and fiduciary funds held on behalf of 3\textsuperscript{rd} parties (mainly Funders). The underlying philosophy is that investment decisions shall always prioritize preservation of capital ahead of maximizing investment returns.

Depending on Funders requirements, income generated from contributions and grants are generally required to supplement projects of such grants.

Income generated from investing Centers reserves is used to support Center operations or, if the operating result permits, increase reserves. Chart A1-22 shows investment returns achieved by Centers in 2015 from invested assets. The return is driven by the Center Board risk appetite alongside several other factors (including the deposit rates in their headquarters country).

Pooled investment of Center reserves (or part of Center reserves) was explored several times in the past. The last attempt in 2016 was a result of the “Large scale efficiency gains in the CGIAR” initiative\textsuperscript{17} launched in 2014. During the June 2016 CSE meeting in Munich, Allianz presented a proposal. The projected investment returns, for a portfolio based on partial Center reserves, was at the lower end of the returns often achieved individually by Centers.

\textsuperscript{16} OPERATING RESERVE POLICY TOOLKIT FOR NONPROFIT ORGANIZATIONS

\textsuperscript{17} Thinking like a Billion Dollar Organization
Chart A1-22

2015 Center Annual Investment Return

[Bar chart showing annual investment return for various centers]
Appendix 2: Challenges – Some Key Drivers

This section sets out some possible key drivers to features described above, focusing mainly on the drivers behind the declining absolute and proportionate value of system-level financing (Windows 1 and 2). Financial information is not adjusted for inflation.

Key possible drivers assessed include i) Alignment of incentives for system-level funding; ii) Funder earmarking capability at system-level; iii) Portfolio-level flexibility and breadth; iv) sharing on overhead costs; v) Lack of results clarity on added value of system financing; vi) Lack of clear allocation approach; and vii) Lack of funding cycle of system-level financing.

1. Alignment of Incentives for system-level funding

CGIAR’s funding system – like the landscapes we work on - faces a constant risk of the “tragedy of the commons”, whereby incentives at an individual (funder, Center, CRP or ISC) level do not always align with the collective objective. Funders are reporting some instances where they are facing incentives to earmark their funding, including in some cases from within the CGIAR system.

The following graph aims to provide a visual description of some of the ‘push’ and ‘pull’ factors...
2. Funder earmarking capability at system-level

The choice for CGIAR could be characterized as a wide divergence between two domains:

- **Bilateral (W3 and bilateral) funding**, which imposes additional funder and recipient transaction costs, as set out in the Lions Head 2014 study\(^{18}\) and as is obvious when looking at the overall W3 and bilateral project portfolio of 2015 as per table A2-1

<table>
<thead>
<tr>
<th>Bilateral and W3 Projects in the CGIAR System - 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of projects</td>
</tr>
<tr>
<td>Total amount of grants (UASD million)</td>
</tr>
<tr>
<td>Average duration of projects (years)</td>
</tr>
<tr>
<td>Average project size (USD million)</td>
</tr>
<tr>
<td><strong>Projects &gt;$500,000</strong></td>
</tr>
<tr>
<td>41% or 946 projects</td>
</tr>
<tr>
<td>93% or $3,123 million</td>
</tr>
<tr>
<td>Avg grant size $3.3 million</td>
</tr>
<tr>
<td><strong>Projects &lt;$500,000</strong></td>
</tr>
<tr>
<td>59% or 1,355 projects</td>
</tr>
<tr>
<td>7% or 241 million</td>
</tr>
<tr>
<td>Avg. grant size $0.18 million</td>
</tr>
</tbody>
</table>

- **Pooled (W1 and W2) funding**, for which Funders have options to allocate funding to large “buckets” e.g. CRPs and Platforms which have a large targeted, and have themselves large activities e.g. Flagships and Modules which in average have a target size of $13 million.

An observation from conversations with various funders is that there is no option in between these two domains. Some point to a lack of vehicles at the system level for pooled funding which is more targeted at the (still quite large) sub-program level, such as the almost 60 CRP Flagships and Platform modules. Compared to an average lifetime estimated CRP size of $350 million, flagships have an average lifetime size of $80 million.

It has been noted that i) the breadth of CRPs does not accommodate the granularity of interests by funders, ii) despite strong efforts to manage perceived quality differences between flagships, there is a still a perception by some funders that some differences remain such that they would like to choose between flagships in targeting funding, and iii) in the face of funding pressures broader W1 or CRP-level pooling of funds may in some cases make it harder to make attribution link to activities and to create a sense of ‘ownership’.

3. Portfolio-level flexibility and breadth

Additional concerns have been raised by some Funders about system-level funding in terms of:

- The flexibility of the CRP/platform portfolio over time – some funders have noted that there should be an appropriate balance between the need for predictability of financing over time with the need to adjust the portfolio in response to performance information, changing Funder priorities, and changes in the overall external environment. This concern is expressed in terms of a fear of ‘locking up’ the whole potential funding envelope for long periods without an ongoing role for the System Council to actively manage the portfolio on an ongoing basis. Emerging topics that are mentioned include the energy-food nexus, microbial resistance, or urbanization.

- The breadth of the CRP/platform portfolio relative to the funding available – some funders have concerns over the scope of the new portfolio in terms of whether, in a challenging funding environment, this is too broad.

4. Sharing on overhead costs

There are three areas where the issue of overhead-sharing across windows and funders is sometimes raised: system entities, and CRP/Center management costs. This section looks at each in turn.

**System-entities funding**

The CSP was implemented with the first phase of CRP programs in 2011. The purpose of CSP is to pay for System entities cost. The Funders Forum in 2011 agreed on a formula to equitably share the non-research cost overhead cost and agreed on uniform application of this Cost Share Formula (CSF) at a single rate, the Cost Sharing Percentage (CSP) for all CGIAR Funders. This approach provides full transparency as CSP is applied to all funding sources equally.

Initial projections indicated that 2% will pay for total System cost, once all Bilateral grants include the CSP. For funding contributions to W2 and W3 the Trustee was asked to withhold CSP and transfer the withholding on a regular basis to W1. The Consortium Office was given the responsibility to collect the CSP from all Centers, based on the reported Bilateral grants that fall under the SRF (including on projects not mapped to CRPs). It was agreed that CSP shall not be applied retroactively to Bilateral grants. It was assumed that all new Bilateral grants, starting in February 2011, will include CSP and that within a 4-5 years’ period (average life cycle of grants) no more legacy grants (exempt from CSP) would exist.

Chart A2-2 shows CSP collected in relation to actual Core System Cost. It also shows how bilateral grants have increased contribution (larger amount of CSP) to pay for System cost as was planned. Today 40% of all CSP is paid from bilateral projects which is in line with the 41%
that bilateral funds represent of total expenditures. In 2016 over 80% of all bilateral grants will pay CSP. The remaining grants are either very long term (government) grants, pure infrastructure grants or grants that are outside of the SRF.

No cost to attend to System activity from Center Boards and Center Management is included under System entities cost.

Chart A2-2

Legacy projects (no CSP recovered) have decreased from a high of 73% in 2012 to just 18% in 2015.

Core System cost as a percentage of total System expenditure over 10 years and system cost as percentage of total System expenditure is shown in chart A2-3.

Chart A2-3
It is hard to find evidence suggesting that the introduction of the CSP mechanism led to net additional overhead collection from W3 and bilateral funders. Most anecdotal evidence suggests that Funders see the CSP as part of overall project overheads and expect it to be funded within their own standard ceilings.

**CRP and Center management costs**

When the CGIAR moved away from institutional and onto programmatic funding, the concept of unrestricted funding has changed. The closest comparison to unrestricted funds in the reformed CGIAR is the W1&2 funds, although these are provided to specific CRPs or Platforms and can only be considered earned by the Centers once it is spent (it cannot flow to reserves if unspent).

A common sentiment is that W1&2 funds are used to support the gap between full cost recovery and the indirect cost recovery from W3 and bilateral grants to cover Center costs when in fact W1&2 funding is used to leverage a significant amount of Bilateral funding. There are two dimensions to this question – CRP and Center costs.

Regarding **CRP and platform management and support costs**: these amounts to approximately $24 million in 2017. They are mostly paid for by W1&2. In general, the nature of bilateral funding is very targeted to a specific activity.

Regarding **Center overhead costs**, analysis of Center’s indirect cost recovery suggests that a slight improvement has been achieved in average levels of overhead rates recovered from W3/bilateral projects. The average W3/Bilateral overhead rate in 2015 is 12% compared to the average System overhead or indirect cost rate of 15% in 2015.

**What are reasonable overhead costs**: The CGIAR as a system has established a guideline for indirect cost allocation. However, there is continuous pressure to reduce indirect or overhead cost, with little understanding what overhead costs are being used for. Funders are concerned about effective services and compliance with international standards. Those requirements have increased yet continuous pressures on overhead costs may prove counterproductive. Perhaps the CGIAR may conceptualize and benchmark its overhead costs, as presented in table A2-2 for 2015, with comparable organizations. One avenue may be for System Council members to identify comparable organizations for the System Office to develop a data set that would aid in increasing the understanding of overhead use and for the System Council to have a benchmark.

**Table A2-2**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th>million</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Total</td>
<td>% Direct</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>117%</td>
<td>985.00</td>
</tr>
<tr>
<td>System Entities</td>
<td>2%</td>
<td>2%</td>
<td>18.00</td>
</tr>
<tr>
<td>Center Indirect Cost</td>
<td>13%</td>
<td>15%</td>
<td>126.00</td>
</tr>
<tr>
<td>Implementation = &quot;Research&quot;</td>
<td>85%</td>
<td>100%</td>
<td>841.00</td>
</tr>
</tbody>
</table>

CRP Management & Support (M&S) cost are not tracked in phase 1 CRPs. In phase 2 CRPs the cost for CRP M&S is $24m. CRP M&S cost is not an indirect cost and is part of research.