INCEPTION REPORT

May 2015

Evaluation of the CGIAR Research Program on Global Rice Science Partnerships (GRiSP)

Flavio Breseghello
Derek Byerlee (Team Leader)
Olivier Panaud
Benjavan Rerkasem
Aziz Sy
Paul Teng
Martha Ter Kuile

CGIAR | Independent Evaluation Arrangement

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http://iea.cgiar.org/

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Acronyms

A4NH	Agriculture for Nutrition and Health CRP
AAS	Aquatic Agricultural Systems CRP
ACIAR	Australian Centre for International Agricultural Research
AfricaRice	Africa Rice Center
ARI	Advanced Research Institute
BOT	Board of Trustees
CCER	Center-Commissioned External Review
CIAT	Centro Internacional de Agricultural Tropical
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CORIGAP	Closing Rice Yield Gaps in Asia
CSISA	Cereal Systems Initiative for South Asia
CRP	CGIAR Research Program
CURE	Consortium for Unfavorable Rice Environments
EC	European Commission
FP	Flagship Project
GRiSP	Global Rice Science Partnership
IDO	Intermediate Development Outcome
IEA	Independent Evaluation Arrangement of CGIAR
IFAD	International Fund for Agricultural Development
INIA	Instituto Nacional de Innovación Agraria
IRD	Institut de recherche pour le développement
IRRI	International Rice Research Institute
ISPC	Independent Science and Partnership Council
JIRCAS	Japan International Research Center for Agricultural Sciences
MAIZE	CRP on Maize
M&E	Monitoring and Evaluation
NARS	National Agricultural Research System
PIM	Policies, Institutions and Markets CRP
PL	Product Line
SLO	System-Level Outcome
SRF	Strategy and Results Framework
STRASA	Stress Tolerant Rice for poor farmers in Africa and South Asia
TOR	Terms of Reference
WHEAT	CRP on Wheat

Executive Summary

1. The GRiSP evaluation is one of ten CRP evaluations commissioned by the IEA at the request of the CGIAR Fund Council to provide evaluative information for the preparation and approval of CRP proposals going into the 2nd call of CRPs. GRiSP is a global partnership, which brings together three CGIAR centers—IRRI, Africa Rice Center and CIAT—and three non-CGIAR Institutions—CIRAD, JIRCAS and IRD—as core partners, and engages around other 900 partners world-wide in activities along the impact pathway. GRiSP began in 2011 with approval for 5 years at a total budget of USD 593.4 million. GRiSP is organised around six Themes (Flagships) and 26 Product Lines. In the first three years bilateral grants have been the major source of funding (64%) with core-type funds from Windows 1 and 2 accounting for 36%.

2. The GRiSP evaluation will look at both programmatic and organizational aspects of the CRP and cover six main criteria as defined in the Terms of Reference (TOR) [1]: relevance, quality of science, likely effectiveness, efficiency (related to organizational arrangements and as an element of science quality), impact and sustainability (as a dimension of impact but also program effectiveness). The evaluation will specifically address seven key questions that, in addition to the criteria, will determine the scope of the inquiry.

3. This evaluation will adopt a cross-scale approach. It will conduct case studies based on selected Product Lines to assess the core components of the research program that have relevance across participating core partners and the two main rice production systems: irrigated and rainfed. An additional case study will focus on Theme 1 on genetic diversity and its linkage to Theme 2 on development and delivery of varieties, which forms a principal impact pathway for Theme 1. The case studies will be complemented by evaluation of the program using the key criteria at multiple levels—CRP, Themes and disciplines. Multiple means will be used at the different levels of the Program, including in the case studies. These include documentation review, interviews with key stakeholders, publications analysis, researcher survey and field visits at research sites.

4. The sequence of investigation includes a review of key program and project documents followed by field visit in South and Southeast Asia, East and West Africa and Latin America; researcher survey to complement interviews during field visits and virtually, which will serve both the case studies and program-level assessment. The inquiry phase will be completed by August and the team will share its preliminary findings with GRiSP management and evaluation reference group before the Program will finalise the pre-proposal for the CRP 2nd call. The draft report for comments is due by end of September and the final report will be completed by November.

[1] http://iea.cgiar.org/sites/default/files/GRiSP%20evaluation%20Final%20TOR-web.pdf

1. Introduction

1.1 Origins of This Evaluation

5. Research in CGIAR is guided by the Strategy and Results Framework (SRF), which sets forth the System's common goals in terms of development impact (System-Level Outcomes [SLOs])[2], strategic objectives and results, in terms of outputs and outcomes. The first SRF was approved in 2011 and a new SRF is at final stages of approval. The CGIAR's research agenda is implemented by the CGIAR Centres and their partners through multi-partner CGIAR Research Programmes (CRPs). Research is funded through a pooled funding mechanism in the Fund[3,] and through bilateral funding to Centres.

6. The CGIAR's Independent Evaluation Arrangement (IEA) Office[4] is responsible for System-level Independent External Evaluations. IEA's mandate is to facilitate the implementation of the CGIAR Policy[5] for Independent External Evaluations through strategic evaluations of the CRPs and institutional elements of CGIAR, and through the development of a coordinated, harmonized and cost-effective evaluation system in CGIAR.

7. The IEA's Rolling Work Plan for 2014-17, approved in November 2013 by the Fund Council, foresees the evaluation of up to 10 CRPs over the 2013-2015 period. The CRP Global Rice Science Partnership (GRiSP)[6] is one of the CRPs being evaluated in 2015.

1.2 Evaluation purpose and clients

8. The principal purpose of this evaluation is to enhance the contribution that GRiSP is likely to make to reaching CGIAR goals, in particular food security and poverty reduction. The evaluation is aimed to inform decision-making and planning by Programme management, CRP sponsors, partners and other stakeholders with respect to Programme performance and potential options for the future.

9. In November 2013, the Fund Council of CGIAR agreed that all current CRPs should undergo some form of evaluation by the time preparation of the full proposal for the second call of CRPs begins. The evaluation of GRiSP is therefore expected to provide information for preparing the Programme proposal and selection in the second call.

10. The evaluation addresses accountability among the CRP, donors and partners, and learning for improving the likelihood of programme relevance, effectiveness, efficiency, impacts and sustainable results. It will look at the extent to which GRiSP, within its mandate, is responding to the key aspirations

[2] The three SLOs in the new SRF are: Reduced poverty; Improved food and nutrition security for health; and Improved natural resource systems and ecosystem services. CGIAR Strategy and Results Framework for 2016-2025. May 2015.
[3] The CGIAR Fund is a multi-donor, multi-year funding mechanism that provides funding to (i) CRPs through two "Windows"; Window 1 across CRPs as per Consortium decision and Window 2 to donor-specified CRP; and to (ii) donor-specified Centres through Window 3.
[4] http://iea.cgiar.org/
[5] http://www.cgiarfund.org/sites/cgiarfund.org/files/Documents/PDF/CGIAR_evaluation_policy_jan2012.pdf
[6] http://www.grisp.net/main/summary

underlying the CGIAR reform related to vision and focus, delivery orientation, synergy through efficient and effective partnerships and accountability.

11. The main stakeholders of this evaluation are the management of GRiSP, all participating Centres (IRRI, AfricaRice and CIAT), other core partners (CIRAD, IRD, JIRCAS), other partners associated with the Programme, and the CGIAR's governance and management at the System level.

1.3 Purpose and structure of the inception report

12. This inception report lays out the scope and framework of the evaluation and outlines the approach and methods to be used. Section 3 provides the background for the evaluation in terms of the reform context and the GRiSP structure, content, finance and management. Section 4 describes the scope of the evaluation, Section 5 provides presents the evaluation criteria and questions, and Section 6 gives detail on the approach and methods, including limitations to the evaluation. The organization and timing for the evaluation are presented in Section 7.

2. Background

2.1 Context of CGIAR reform

13. The current CGIAR reform was set in motion in 2008. The CGIAR donors, in a Joint Declaration, agreed on the following main principles for the reform:

1) to harmonize our approach to funding and implementing international agricultural research for development through the CGIAR Fund (the Fund), The Strategy and Results Framework (SRF) and the consortium established by the Centres (the Consortium), respectively;
2) to manage for results in accordance with the agreed SRF and the Mega Programs that derive from the SRF;
3) to ensure effective governance and efficient operations in the provision and use of our resources; and
4) to collaborate and partner with and among funders, implementers, and users of SRF research, as well as other external partners supporting the SRF.

14. The SRF was approved in 2011 at a time when the Centre-led CRPs had already been developed, and two of them had been approved. Thus the current CRPs did not emerge as a direct response to the SRF, although the SRF is intended to provide the broad rationale and context for the development, implementation and evaluation of all CRPs. Indeed, the programming of GRiSP predates the CGIAR reform process, when IRRI, CIAT and Africa Rice began to discuss a global rice partnership in 2007.

15. The CRPs were developed and appraised following a set of common criteria: (i) strategic programme coherence; (ii) focus on delivering outcomes and impacts towards the SLOs; (iii) quality of science; (iv), management of partnerships, including both research and development partners; (v) efficiency of programme management; and (vi) accountability, sound financial planning and efficiency of governance.

16. Coordinated by the Consortium Office, CRPs collectively and individually have worked on defining Intermediate Development Outcomes (IDOs). The IDOs link CGIAR research to the SLOs and should facilitate priority setting, both at CGIAR and CRP levels. The articulation of theories of change and impact pathways – leading from research activities to the achievement of the IDOs – has also been a requirement. CRPs were expected to define clear target domains (agro-ecologies and end user groups) and measurable results at outcome level.

17. A new SRF is at final stages of approval. Instructions for the 2nd call for funding CRPs are to be agreed in May-June 2015. The new SRF defines the CGIAR's mission, vision and a results framework at three levels: SLOs, IDOs and sub-IDOs that CRPs will directly target. It determines accountability at CRP level and for aspirational high level targets at CGIAR levels. The experience and work on impact pathways and targeting will contribute to a Results-based Management approach that currently is being piloted in five CRPs, including GRiSP.

18. The funding sources available to CRPs are shown in Box 1[7]. The level of W1/W2 funding for each CRP was initially set on the basis of the core funding in the period preceding the CRP (i.e. 2010).

[7] http://www.cgiar.org/who-we-are/cgiar-fund/

Box 1: Major Sources of Funding in the CGIAR System

To maximize coordination and harmonization of funding, donors to CGIAR are strongly encouraged to channel their resources through the CGIAR Fund. Donors to the Fund may designate their contributions to one or more of three funding "windows":

- Contributions to **Window 1** (W1) are the least restricted, leaving to the Fund Council how these funds are allocated to CGIAR Research Programs, used to pay system costs or otherwise applied to achieving the CGIAR mission.
- Contributions to **Window 2** (W2) are designated by Fund donors to specific CRPs.
- Contributions to **Window 3** (W3) are allocated by Fund donors to specific CGIAR Centres.

Centres also mobilize financial resources for specific activities directly from donors as **bilateral funding** and negotiate agreements with their respective donors for the use of these resources.

19. CGIAR has adopted templates for annual reporting to the Consortium regarding all sources of funding. In parallel, bilateral funders have their own specific reporting requirements. Given that bilateral funding remains a significant proportion of all funding, the reform has not yet resulted in the anticipated reduction in reporting burden.

2.2 Context of research on rice and rice systems

20. Rice as the world's most important food crop is critical to global food security. Some 3 billion people in the world consume rice as an important staple, and 650 million of them are estimated to be extremely poor (less than $1.25 per day) (GRiSP proposal). Hundreds of millions of poor people depend on rice farming for their livelihood mostly in high-risk rainfed environments. Although there is some debate about the future supply-demand dynamics of rice in Asia, it is likely that over 100 Mt of additional rice will be needed by 2040. With rising incomes and urbanization, rice consumption is growing especially rapidly in Africa where nearly 40% of rice is imported. Richer consumers everywhere are demanding higher quality rice, requiring upgrading of a range of activities along the value chain.

21. On the supply side, there are major constraints to meeting future production needs including loss of land, labor and water resources in Asia to other crops and nonfarm uses, and a slowdown in genetic yield gains. These constraints are less acute in Africa and Latin America but major investments are needed to develop land and water resources there. In all regions, climate change will impact rice production systems that are in turn a cause of climate change and environmental degradation more generally.

22. These challenges suggest that a Global Rice Science Partnership will be needed for the foreseeable future as an essential element of global food security and meeting sustainable development goals to 2030.

2.3 GRiSP background

2.3.1. Program Objectives and Structure

23. GRiSP's broad objectives are to increase the production, value, and quality of rice and rice products worldwide, while ensuring a healthy rice production environment for future generations. In addition to the CGIAR centers, three non-CGIAR organizations, CIRAD, IRD and JIRCAS are involved as core partners, and GRiSP engages 900 other research and development partners worldwide.

24. The design of GRiSP predates the CGIAR reform process responding to the need to increase efficiency and coordination in rice research in CGIAR. GRiSP began operating in 2011 based on ongoing research activities and 80% of the portfolio comprised existing restricted grants. Hence, initially only 20% of funding went toward new priorities that were identified during the CRP development process. GRiSP was approved for five years (2011-15) and an extension for 2016 has also been approved.

25. GRiSP has had three objectives that reflect the three dimensions of GRiSP strategy—genetic enhancement, efficient natural resource use and enhanced policies:

> Objective 1: Increase rice productivity and value for the poor in the context of a changing climate through accelerated demand-driven development of improved varieties and other technologies along the value chain (addressed through themes 1, 2, 3, 4, and 6).
>
> Objective 2: Foster more sustainable rice-based production systems that use natural resources more efficiently, are adapted to climate change and are ecologically resilient, and have reduced environmental externalities (addressed through themes 3, 4, and 6).
>
> Objective 3: Improve the efficiency and equity of the rice sector through better and more accessible information, improved agricultural development and research policies, and strengthened delivery mechanisms (addressed through themes 5 and 6).

26. Through 2015, the objectives are implemented through six Themes[8]:

1. Harnessing genetic diversity to chart new productivity, quality, and health horizons.
2. Accelerating the development, delivery, and adoption of improved rice varieties.
3. Ecological and sustainable management of rice-based production systems.
4. Extracting more value from rice harvests through improved quality, processing, market systems and new products.
5. Technology evaluations, targeting and policy options for enhanced Impact.
6. Supporting the growth of the global rice sector.

27. Within the Themes there are 26 Product Lines (PL) for generating 94 products. GRiSP funds "New Frontier" research through competitive calls, for exploratory research in promising areas.

28. GRiSP's first gender strategy from 2010 was revised and approved in 2013. A specific theory of change was developed for the "engendered" impact pathways linked to the SLOs.

[8] In the 2016 extension proposal, the current 6 Themes will change into **five** Flagship Projects (FPs) following CGIAR guidelines. The original Themes 3 and 4 have been combined into a single FP 3 on crop management and value chains technology—with added emphasis on the entire production value chain.

29. GRiSP has also a strategy for capacity-building. The activity involves developing tools and virtual extension modules; women's self-help groups; continual extension training; scholarships for PhD and MS students; participatory leadership training; short-courses; and "mini-sabbaticals" and internships. GRiSP builds internal capacity through M&E impact assessment and workshops. Further "program coordination and capacity-building" funding goes to initializing new partnerships, and public dissemination and communications. Windows 1/2 (see Box 1) funds are used to support specific "GRiSP scholarships".

2.3.2. IDOs and Impact Pathways/Theory of Change

30. At the time of GRiSP approval, the concept of IDOs had not been made operational, and GRiSP had developed an impact pathway from research to short-term, mid-term, and long-term outcomes, and to intermediate and ultimate program impacts (Figure 1). When new terminology and concepts of theories of change were introduced at CGIAR level in 2013, GRiSP re-conceptualized its impact pathways through an evolving framework of IDOs. The most up-to-date thinking is captured in the proposal for the 2016 extension period, which contains a refined theory of change with specific risks/assumptions and associated enabling actions the program needs to undertake—for GRiSP as a whole (Figure 2), as well as for each of its Themes/FPs. In this theory of change, the impact pathway assumes a hierarchical order for the FPs from small to expanding scale. Assessment of assumptions and associated risks underpin "enabling actions" for GRiSP to undertake.

Figure 1: The original GRiSP impact pathway diagram. (Source: 2010 Proposal)

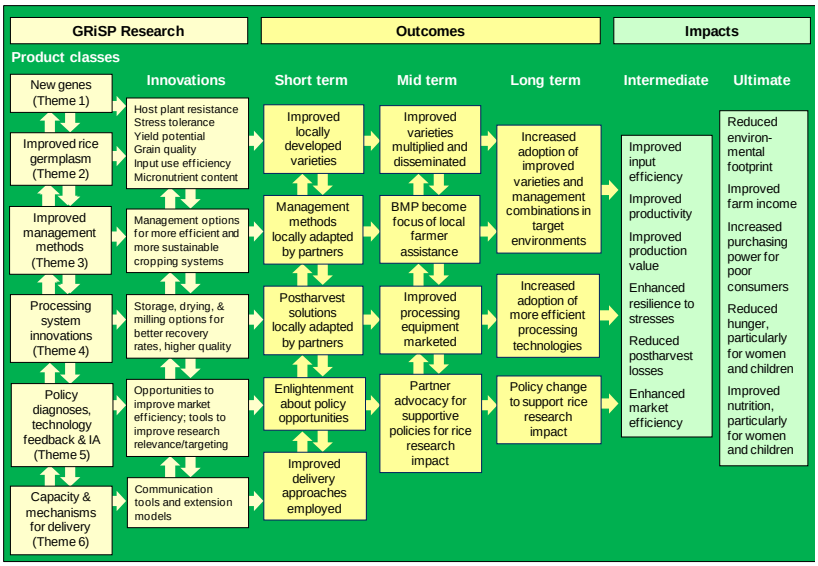
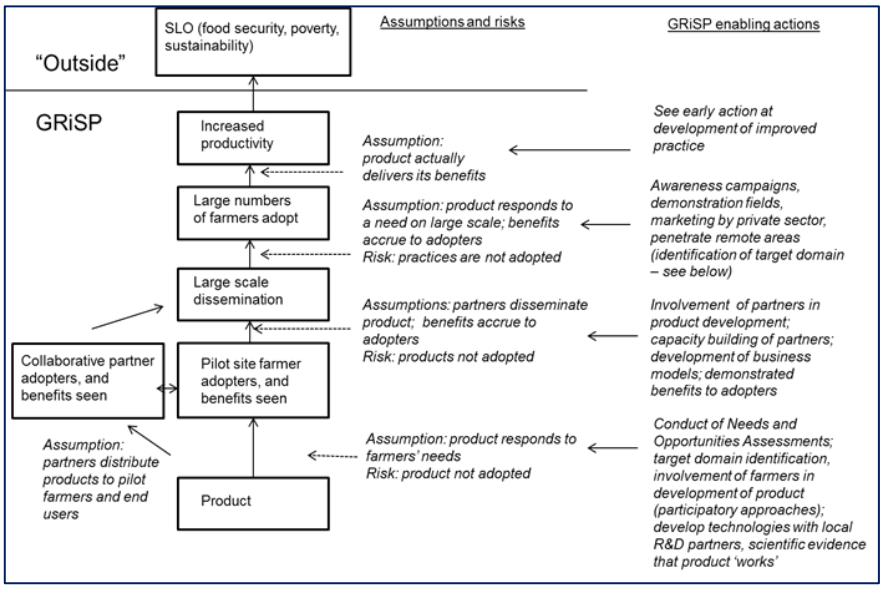
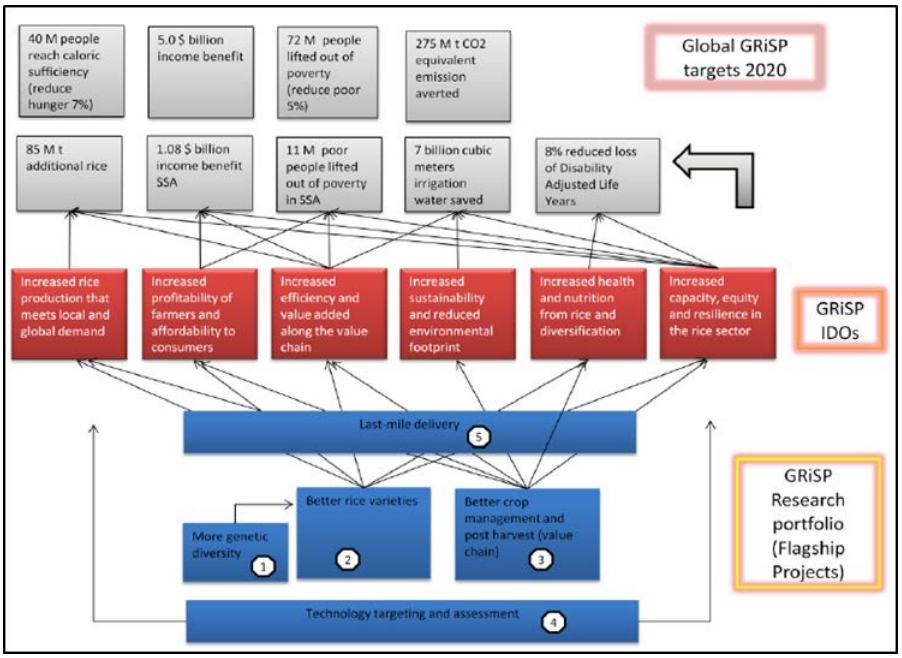


Figure 2: From the larger Theory of Change of GRiSP as a whole, an impact pathway leading to the IDO "increased productivity." (Source: 2016 Extension Proposal)



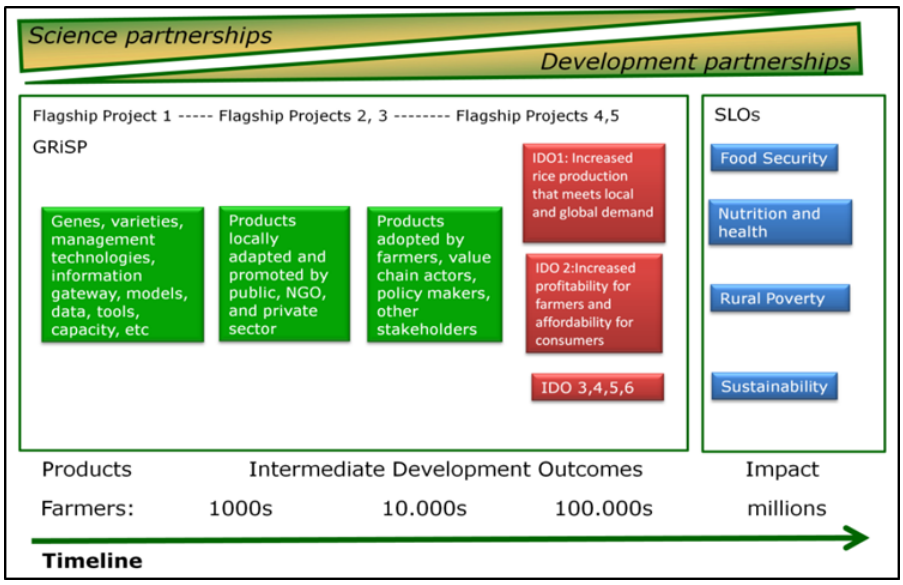
31. Each of the new five FPs contributes to seven IDOs with global targets for 2020 and 2035 based on ex-ante impact modeling (Figure 3).

Figure 3: The proposed GRiSP FPs and IDOs for 2016. (Source: 2016 Extension Proposal)



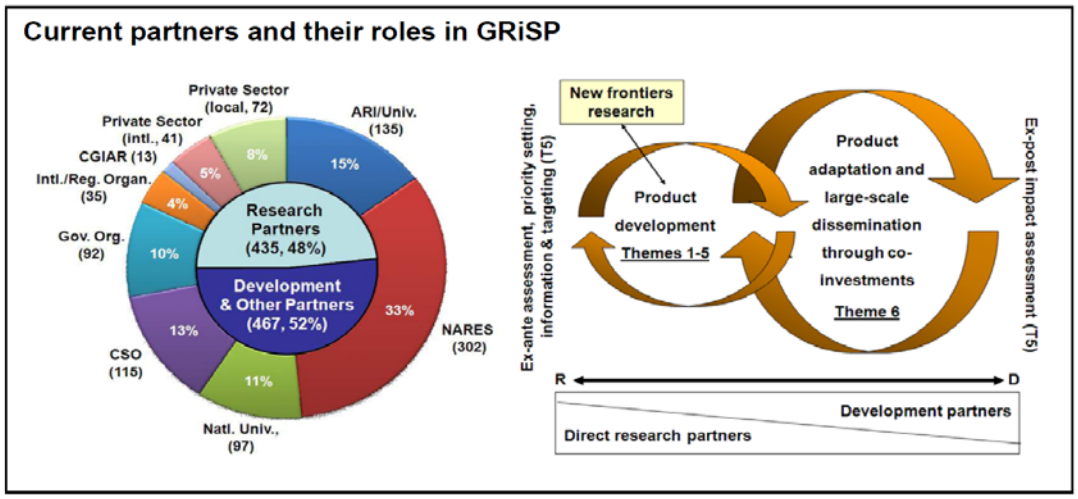
32. This pathway from PLs to impacts involves an evolution from upstream research to downstream development partners (illustrated in Figure 4).

Figure 4: Diagram illustrating how GRiSP's partnership composition changes along the impact pathway. (Source: 2016 Extension Proposal)



33. GRiSP defines its partners as primarily research partners (48%), development partners (47%) and other boundary partners (5%). The institutional spread and roles of partners are shown in Figure 5. GRiSP also collaborates with other CRPs, such as MAIZE, WHEAT, PIM, A4NH, WLE and AAS, in specific cross-cutting projects and in particular locations.

Figure 5: GRiSP partner types, next to partnership impact pathways. (Source: 2010 proposal)



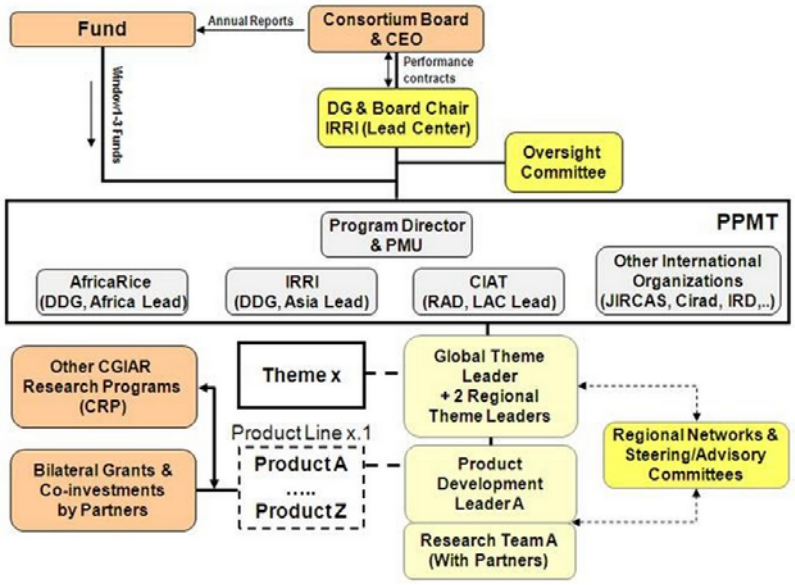
2.3.3. Governance and management

34. Program management in GRiSP is largely through existing research management and administrative support systems of IRRI, AfricaRice and CIAT. Global leadership and coordination is provided by a Program Director and a small Program Management Unit. GRiSP's management also includes the Program Planning and Management Team, comprising the GRiSP Director as leader and senior managers from the six partners. GRiSP's Oversight Committee consists of five CGIAR Board of

Trustees (BOT) members (two from IRRI; two from AfricaRice; one from CIAT), representatives of IRD, CIRAD and JIRCAS, and four representatives of international fora, as well as IRRI and AfricaRice Directors-General *ex officio* (Figure 6).

35. Management cost for GRiSP is presented as a component of Program Coordination and Capacity Building funding (see Figure 6). In 2013 USD 1.1 million was budgeted (only USD 0.7 million spent) for staff and operations of the Program Management Unit, general administrative support, and communication.

Figure 6: GRiSP Governance and management.[9]



2.3.4. Budget and Expenditures

36. GRiSP's budget was approved for USD 593 million over five years, 2011-2015. It is the largest CRP in the CGIAR System. Annual co-investments by the three strategic non-CGIAR partners were expected to exceed USD 20 million each. Additional co-investments were expected from other key partners. GRiSP's actual expenditure in the first three years has been USD 97, USD 99 and USD 91 million, respectively.

37. In 2013, GRiSP partner institutions accounted for 16% (about USD 15 million) of the total CRP budget (about 75% to IRRI partners, the remaining mostly to AfricaRice partners).

38. In 2011-2013, 36% of the expenditure was from Windows 1 and 2 and 64% from Window 3 or bilateral sources. W1/W2 funds are distributed to centers according to an agreed formula—IRRI 64%, AfricaRice 26% and CIAT 10%, while W3/bilateral expenditure was 75%, 21% and 4%, respectively, among the three centers. The expenditure at each center, by thematic area, is shown in Figure 7 (2013 is the only year for which data is available). Figure 8 illustrates how funding to Themes has changed from 2011 to 2014. Figure 9 shows the total funding history and projections by type of funding (W1/2 vs. W3/bilateral).

[9] http://grisp.irri.org/oversight-planning-management

Figure 7: 2013 GRiSP Expenditure (USD '000) by thematic area (2013).

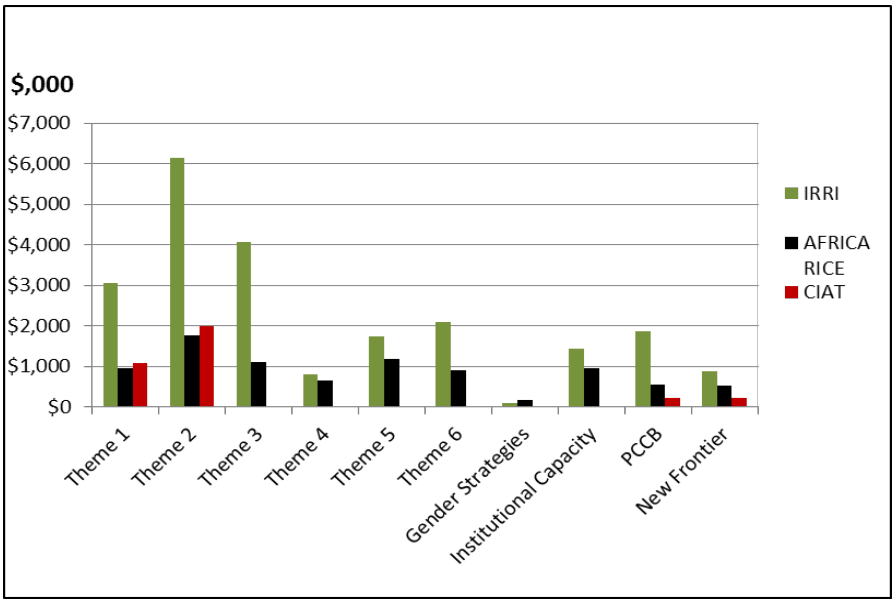


Figure 8: Annual GRiSP Funding by Theme, 2011-14 (in USD ,000s)

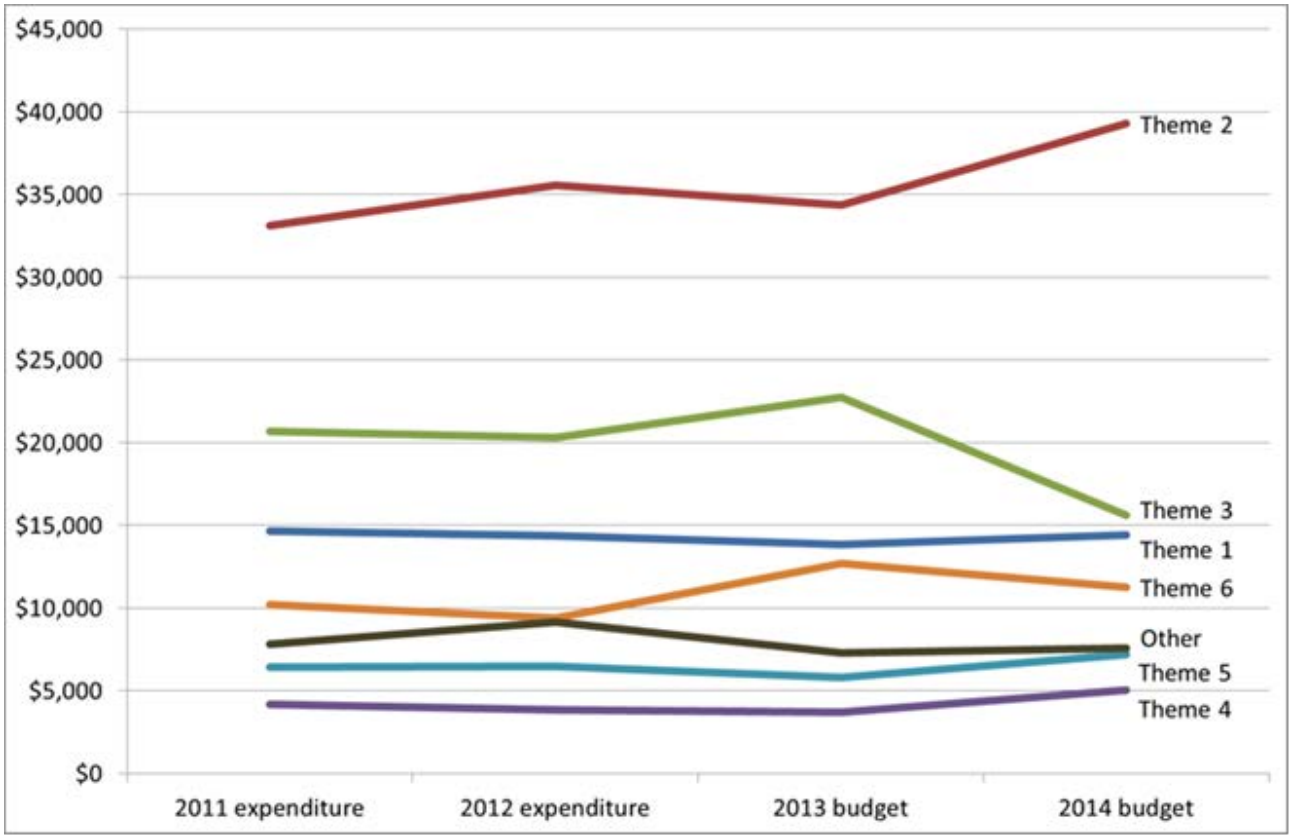
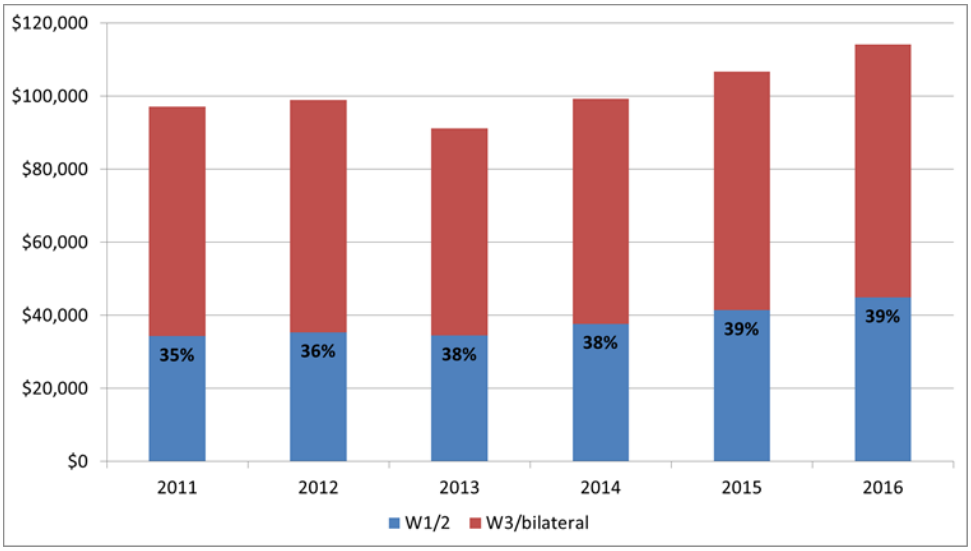


Figure 9: Annual GRiSP funding, 2011-13 expenditure and 2014-16 proposed budgets



2.4 GRiSP portfolio

39. Due to the fact that bilateral funding goes directly to the participating centers, a comprehensive GRiSP portfolio of projects and activities, with consistent and comparable financial information for each participating center, was not available for the evaluation team.

Table 1: Size distribution of bilateral grants mapped to GRiSP by participating centers. Funding in size groups (USD).

		Total Grants	<100,000	100,000 to <500,000	500,000 to <1 million	1 million to 7 million
IRRI	No. grants	320	182	92	21	25
	%		57%	29%	7%	8%
	Funding		6,627,499	19,890,127	14,833,924	65,945,766
	%		6%	19%	14%	61%
AfricaRice	No. grants	37	13	16	2	6
	%		35%	43%	5%	16%
	Funding		701,327	3,345,072	1,106,843	11,285,868
	%		4%	20%	7%	69%
CIAT	No. grants	31	21	9	1	0
	%		68%	29%	3%	-
	Funding		826,626	15,940,769	630,684	-
	%		5%	92%	4%	-

40. Funding at PL level comprises mostly of bilateral grants to each center mapped by the center to GRiSP and GRiSP PLs. Each center also allocates W1/2 funding to PLs (see center-specific allocations in in Annex 7). Bilateral projects correspond to more than one GRiSP PL and consequently PLs comprise the funding and contributions of more than one project. Therefore, the GRiSP PL portfolio is a description of the Program from an output perspective whereas the activities contributing to these PLs are part of each center's grant and activity management. Table 1 presents the spread of GRiSP-mapped grants and their funding in size groups. PL funding is shown in Table 2.

Table 2: GRiSP Product lines and funding

GRiSP Product Lines (PL)	IRRI	Africa Rice	CIAT	2014 Budget (USD '000s)
PL 1.1. Ex situ conservation and dissemination of rice germplasm	x	x		1,998
PL 1.2. Characterizing genetic diversity and creating novel gene pools	x	x	x	2,917
PL 1.3. Genes and allelic diversity conferring stress tolerance and enhanced nutrition	x	x	x	4,346
PL 1.4. C4 Rice	x			5,143
PL 2.1. Breeding informatics, high-throughput marker applications, and multi-environment testing	x	x		8,820
PL 2.2. Improved donors and genes/QTLs conferring valuable traits	x	x	x	5,224
PL 2.3. Rice varieties tolerant of abiotic stresses	x	x	x	12,031
PL 2.4. Improved rice varieties for intensive production systems	x	x	x	8,008
PL 2.5. Hybrid rice for the public and private sectors	x	x		1,812
PL 2.6. Healthier rice varieties	x			3,402
PL 3.1. Future management systems for efficient rice monoculture	x	x		4,697
PL 3.2. Resource-conserving technologies for diversified farming systems	x			3,099
PL 3.3. Management innovations for poor farmers in rainfed and stress-prone areas	x	x		6,592
PL 3.4. Increasing resilience to climate change and reducing global warming potential	x	x		1,211
PL 4.1. Technologies and business models to improve rice postharvest practices, processing, and marketing	x	x	x	1,699
PL 4.2. Innovative uses of rice straw and rice husks	x	x		423
PL 4.3. High quality rices and innovative rice-based food products	x	x		2,946
PL 5.1. Socioeconomic and gender analyses for technology evaluation	x	x		2,904
PL: 5.2. Spatial analysis for effective technology targeting	x	x		1,187
PL: 5.3. Global Rice Information Gateway	x	x		2,580
PL 5.4. Strategic foresight, priority setting, and impact assessment for rice research	x			504
PL 6.1. Innovation in learning and communication tools and extension capacity development	x	x	x	2,231
PL 6.2. Effective systems for large-scale adoption of rice technologies in South Asia	x			5,101
PL 6.3. Effective systems for large-scale adoption of rice technologies in Southeast and East Asia	x			454
PL 6.4. Effective systems for large-scale adoption of rice technologies in Africa	x	x		3,221
PL 6.5. Effective systems for large-scale adoption of rice technologies in Latin America and the Caribbean				280

3. Scope of the Evaluation

41. The scope and focus of the evaluation will be determined by the key questions and the set of evaluation criteria in the context of evaluating the global partnership. The evaluation uses a cross-scale, mixed methods approach for drawing conclusions at Theme and Program level. Given the very large spread of partners, geographies and impact pathways, the evaluation is emphasizing in its focus activities and projects that have high relevance for favourable and unfavourable rice production systems which define the two main rice production systems. There are several initiatives with rather specialized targeting, some involving only one of the three centers or aimed at very specific target groups. The evaluation will not address these activity areas in detail but as part of the overall assessment of relevance and alignment and for lessons relevant across the centers and geographies (rationale for case selection is given under section 6.1.).

42. The evaluation will cover all types of funding and all three regions. The evaluation will be forward looking and it will have a strong formative orientation to assess the strengths and improvement needs for GRiSP in order to strengthen and to add value to the CGIAR's research on rice into the medium- and long term. However, given that this is the fifth year of GRiSP operation and that much of past research continued within GRiSP, the evaluation will assess achievements since the start of GRiSP from relevant past research and review GRISP performance along the impact pathway continuum. It will assess impacts primarily through document review. Emphasis will be on generating lessons for GRiSP in the second phase.

43. The evaluation will cover the cross-cutting issues of gender, partnership and capacity development as part of the cross-center GRiSP activities and at project and site level.

4. Evaluation Criteria and Questions

4.1 Overarching questions

44. The evaluation team articulates a small number of overarching priority questions, which complement and amplify the set of criteria-specific evaluation questions listed in the Evaluation Matrix in Annex 1. The evaluation team decided on these questions after (i) review of the basic documents on GRiSP, including the 2016 Extension Proposal and documents related to program approval; (ii) consultation with GRiSP management and key stakeholders during visits to IRRI and Africa Rice headquarters (Annex 6); and iteration among the team. The questions listed below are addressed both directly and through the criteria-specific questions.

a) What is the value added of GRiSP in facilitating synergies and multidisciplinarity that can enhance the global benefits from CGIAR rice research to poor producers and consumers?

b) Is GRiSP structure conducive to efficient delivery of results and to engaging advanced research institutes, including strong national programs in the beneficiary countries, to harness their knowledge and innovations to enhance the effectiveness of global rice research?[10]

c) Are the partnerships with national innovation systems structured to enhance the capacity of those systems for sustained impact?

d) Has GRiSP been successful in implementing an outcome and impact oriented culture and approach to research, while at the same time investing in long-term strategic science?

e) In the current complex funding environment, has GRiSP been able to manage multiple sources of funding to assure strategic coherence around highest priority areas of research?

f) To what extent do the governance and management structures and practices of GRiSP contribute to or impede the achievement of program coherence and effectiveness?

4.2 Evaluation criteria

4.2.1 Research/Programmatic Performance

45. As part of programmatic performance, the evaluation will look at the following evaluation criteria: relevance, quality of science, likely effectiveness of the CRP as currently designed and implemented, impact of past research and the effort made in documenting it, and the sustainability of benefits. Within programmatic performance, three cross-cutting topics are specifically addressed: gender, capacity building and partnerships. Evaluation questions specific to these criteria are presented in Annex 1.

[10] GRiSP engages research organizations in both developing and developed countries that have high level of research competence, resources and mandate for strategic research related to rice, which can be complementary and synergistic with CGIAR.

Relevance

46. The evaluation will assess the extent to which the objectives and design of GRiSP are consistent with current global and national priorities and policies, as well as those of intended beneficiaries, partners and donors. It also refers to the extent to which the CRP is consistent with the CGIAR SLOs and the extent that program components and activities are consistent with the CRP's objectives at the level of its IDOs. Assessment of relevance includes the demand-side in terms of users in national programs (including the private sector) and comparative advantage of the program. Comparative advantage is an important aspect of relevance of CGIAR research. It will be considered as an evolving condition where the role of agricultural research, versus other activities in providing solutions, and the role of other providers will be considered.

47. The evaluation will assess the formulation of the IDOs and their relevance against the program objectives and CGIAR SLOs, and the logic underpinning the impact pathways linking program activities to the intended results. It will assess the integration of research within and among the FPs and the prioritization of activities for addressing the IDOs. Priority setting processes will be assessed, as will the use of W1/W2 funding, resource mobilization and strategic foresight. The evaluation will also assess the synergies among GRiSP partners, and opportunities for further enhancing the relevance of research results.

Quality of Science

48. The evaluation of science quality will look at several dimensions of quality including the make-up of the research teams and partnerships, research design, research management, quality assurance and research outputs.

49. The evaluation will look at the processes and incentives in place for ensuring high quality research across program components and partners. It will assess the track record of research leaders. It will look at the program design in terms of problem setting, the use of state-of-the art research literature and methods, and novelty. It will also look at the quality of research management regarding synthesis of research findings and new knowledge at theme and program level. The science quality evaluation framework is given in Section 5.2.

Likely Effectiveness

50. Effectiveness will be assessed primarily from the point of view of likely effectiveness of the current program, rather than past impact. The evaluation will look at the program design, and particularly the plausibility of the theories of change underpinning the impact pathways (both generic and specific). The assumptions underpinning the theories of change will be assessed as well as the Program's use of the theories of change for informing the assumptions and monitoring changes towards outcomes. The evaluation will consider the extent to which risks and constraints influencing out-scaling, outcomes and impacts are being addressed in research design, partnerships and capacity building. It will look at the extent to which gender analysis and social analysis more broadly have informed the impact pathways. The evaluation will also consider the extent to which opportunities to link with other centers and CRPs are captured for further enhancing the likely effectiveness of the research.

51. The evaluation will assess progress towards milestones and outputs across the research portfolio. It will assess the M&E system and the extent to which it is used by management to adjust research plans and impact pathway designs, including learning from gender and policy analyses.

Impact and sustainability

52. As part of the summative component of the evaluation the extent to which past research has led to positive outcomes and impacts will be assessed. Due to time and resource constraints, the assessment will depend largely on studies, assessment and data mostly at center level on adoption, outcomes and impact. It will be primarily based on CRP-provided impact narrative supported by evidence. The evaluation framework is consistent across all CRP evaluations and is presented in section 5.2. To the extent possible, the evaluation will assess emerging results and outcomes of GRiSP since its beginning. It will also gauge perceptions of impact by stakeholders. Regarding sustainability of outcomes and impacts from GRiSP, the evaluation will assess measures taken by GRiSP to analyse and address factors enhancing the sustainability of the results.

Partnerships

53. The evaluation will consider the partnerships among the implementing centers and other core partners (CIRAD, IRD, JIRCAS), linkages with other centers and CRPs, and with other research and development partners. It will look at partners' involvement in CRP management. The extent to which GRiSP has a strategic and well articulated approach to partnerships will be assessed. The evaluation will consider issues such as coordination, decision-making, joint ownership of results, and transaction costs, as well as assess equity, transparency, efficiency and effectiveness of partnerships. The composition of the partner portfolio will be analysed to assess the balance of research and development partners, and for the geographical distribution of partners in relation to countries where rice is relevant.

Gender

54. As with all CRPs, GRiSP has a gender strategy that has been developed with the guidance of the Consortium Office. The evaluation will assess the adequacy and implementation of the gender strategy including measures to enhance the relevance of research to women and improve and document its likely effectiveness by considering gender-dependent factors that affect the acceptance and uptake of results, and possible unintended consequences affecting women, and by monitoring adoption and outcomes.

Capacity development

55. The evaluation will look at how capacity development is prioritized in order to address partners' needs and considering GRiSP's comparative advantage; the incorporation of capacity development into research activities for mentoring and enhancing the relevance and likely uptake of research results; the consideration of capacity issues among assumptions and risks related to the theories of change; and equity in targeting. Capacity development is seen as closely linked to partnerships and will be addressed through overarching question d. Evaluation questions on capacity development are also incorporated into the assessment of relevance and likely effectiveness.

4.2.2 Organizational Performance

Governance and management

56. In order to facilitate the understanding and consistency across CGIAR, this part of the evaluation will wherever possible and appropriate, use the same terminology and criteria as the "Review of CGIAR

Research Programs' Governance and Management" (Final Report, March 2014[11]). In line with this cross-CRP review, the following review criteria will be addressed: (i) legitimacy and participation, (ii) accountability, (iii) fairness and equity, (iv) transparency, (v) efficiency, (vi) effectiveness and (vii) independence. The evaluation will assess the performance of GRiSP governance and management against the Consortium response to the CRP Governance Review.

57. With these criteria in mind, the evaluation on governance aspects will focus on: (i) management oversight; (ii) stakeholder participation, (iii) risk management, (iv) conflict management and (v) audit and evaluation (see section on Monitoring and evaluation below).

58. In relation to management the evaluation will focus on: (i) priority setting and planning, (ii) regulatory compliance, (iii) reviewing and reporting, (iv) administrative efficiency (see section on Efficiency below), (v) internal and external communication and relationships, (vi) learning, (vii) financial management and (viii) human resource development and staff performance assessment.

59. Special attention will be given to the extent that GRiSP is sustainable in terms of funding full Program costs, including research infrastructure. The framework for evaluating GRiSP's governance and management is shown in Section 6.2.

Efficiency

60. Efficiency is defined by IEA as "the extent to which the program has converted, or is expected to convert, its resources/inputs (such as funds, expertise, time, etc.) economically into [research] results." The efficiency of GRiSP will be evaluated primarily from the perspective of administrative efficiency as part of organizational performance. The evaluation will look at organizational structures and processes, institutional and administrative arrangements and financial management and monitoring; the extent to which GRiSP has established systems that allow it to allocate resources cost-effectively and manage transactions costs.

61. To the extent feasible, the evaluation will assess aspects of research efficiency, which is also capture in the overarching question (c).

Monitoring and Evaluation

62. Monitoring and evaluation are part of the research management in GRiSP and thus the M&E design, indicators, and frequency and timing of use in adaptive management will be evaluated as part of the process.

63. The methods used for monitoring and documenting GRiSP results will be assessed, including the aspects of program design and implementation (for instance baseline studies that will enable impact assessment), and the resources allocated to documenting outcomes and impacts.

[11] http://www.iea.cgiar.org/sites/default/files/Final%20report%20CRP%20G%26M%201%20April%202014.pdf

5. Evaluation Approach and Methodology

5.1 Evaluation approach

64. The evaluation uses a cross-scale approach, which includes multiple methods discussed below. Case studies are used to assess the core components of the research program with relevance across participating core partners and for major beneficiary groups and agroecologies. The case studies will be complemented by addressing the key criteria (presented in Section 5) at multiple levels—CRP, Themes and disciplines—through a number of means. These include documentation review, interviews, publications analysis, researcher survey and field visits at research sites, as detailed in Annex 1. The methods and frameworks for addressing different criteria and means for collecting evidence are explained below.

5.2 Methodology

65. The methodology includes several components. The main components described below include inter-related methods (e.g. case studies and interviews that provide information for case studies), and frameworks (e.g. science quality assessment, assessment of governance and management).

Case studies

66. The purpose of the case studies is to allow an in-depth review of a subset of research according to the key criteria of the review. The Evaluation Team will carry out PL-based case studies (see Table 3) that cover a good part of 11 out of the 26 PLs, and a case study on Theme 1. In the focused case studies, triangulation of information and cross-verification of findings will be done using evidence and information from multiple sources such as project review, expert testimonies, country visits, and literature.

67. The first set of case studies focuses on 11 PLs that have particular relevance to delivery of research results and impact on the two main rice production systems; namely favourable, mostly irrigated, and unfavourable, mostly rainfed production systems. In selecting the PLs for this set of case studies the criteria included: (i) their relevance for the target recommendation domains (in terms of production systems and beneficiary groups); (ii) their size in terms of budget allocation; (iii) their ability to best explore linkages across Themes and across Regions; and (iv) their ability to explore linkages across the core partners. In most cases these PLs are the largest within the Theme. In Themes 2 and 3, PLs are largely but not exclusively differentiated by production system. In Themes 4, 5, 6 the PLs are not specific to production system but much of the research at the specific locations/countries within these PLs can be mapped to production system.

68. For these cases, an in depth review will be conducted of each PL according to the major criteria for the review (relevance, quality of science, likely effectiveness, partnership, gender, capacity building). In the analysis the team will pay particular attention to looking at research across the three centers and three core partners and the value added of GRiSP. These cases will also look closely at how research across Themes links up for a particular production system. Impacts will be reviewed for GRiSP across PLs, disaggregating as far as possible impacts in favourable and unfavourable systems.

69. The case study on Theme 1 research (Harnessing genetic diversity to chart new productivity, quality, and health horizons) takes a networking perspective looking at linkages among the core GRiSP

partners and with respect to other Advanced Research Institutes, including those in emerging countries. This case study will also pay particular attention to links of Theme 1 research to Theme 2.

Table 3: Product line selection for case studies

Theme	Product lines	Production system relevance
2	2.3 Rice varieties tolerant of abiotic stresses	Unfavourable
2	2.4 Improved rice varieties for intensive production systems	Favourable
3	3.1 Future management systems for efficient rice monoculture	Favourable
3	3.3. Management innovations for poor farmers in rainfed and stress-prone areas	Unfavourable
4.	4.1 Technologies and business models to improve rice post-harvest practices, processing and marketing	Favourable and unfavourable
5.	5.1 Socioeconomic and gender analysis for technology evaluation	Favourable and unfavourable
5	5.3 Global rice information gateway (policy aspects only)	Favourable and unfavourable
6.	6.1 Innovation in learning and communication tools and extension capacity development	Favourable and unfavourable
6	6.2, 6.3, 6.4, 6.5 Effective systems for large-scale adoption of rice technologies (field site activities)	Favourable and unfavourable

70. For these PLs and Theme 1 a set of projects (bilateral grants) have been selected (Annex 2). In the selection of projects, the following criteria were used: size of project, focus on favourable/unfavourable rice production environments, project history to allow assessment of progress from past and new directions; with Theme 1, relevance for assessing networking and potential of research for Theme 2. Allocation of W1/2 funding to the PLs investigated and how it is spent will also be assessed.

71. The case studies will be conducted by:

- reviewing documents related to the PLs, especially for the selected bilateral projects, including the proposals and progress reports;
- reviewing publications related to the PLs;
- interviewing Theme leaders, leaders of PLs and leaders of major projects, when applicable;
- field visits to sites selected to be most suitable for the case study analysis.

72. In the production systems oriented cases, each team member will be responsible for analysing 2 PLs and a set of projects that are mapped to these PLs (Annex 2). The projects were selected on basis of (i) representing major funding to the selected PLs within GRiSP; (ii) representing opportunity to assess thematic integration and different stages along the impact pathway (from planning to maturity); (iii) representing opportunity for cross-regional exchange; and (iv) representing center partnership. Team members will then work as a group to synthesize the analysis by product lines into each of the case studies paying particular attention to the linkages across Themes.

73. An assessment template will be prepared to guide individual assessment and assure consistency across assessments (this will include, for instance, assessment of impact pathways and theory of change, research design, progress and achievements).

74. The Theme 1 case study (looking also at Theme 1 relevance to Theme 2) has the objective to assess how GRISP has catalyzed networking within the rice scientific community at large (ARIs, CG-GRISP,

non-CG-GRISP, NARS). The assessment involves a thorough review of few selected projects with the following criteria:

- dynamics of the GRISP community: evolution of partnership during the past five years;
- added value of new GRISP partnership in terms of research output (bibliometry);
- new funding opportunities enabled by GRISP;
- added value for training and mobility. Impact on technology transfer. Extent to which research attracts CG-GRISP partners;
- C4 rice only to the extent that it provides intermediate results that are used in Theme 2.

75. The tools to be used for Theme 1 case study include project document review, bibliometry (scientific production of selected projects, share of "GRISP research" within the global rice scientific production, citation impact) and interviews with all partners (PIs, junior researchers). This case study will also explore the links between Themes 1 and 2, as an indicator of how upstream research within GRISP actually translates into the development of new rice products. The evaluation team is well aware that such impact may be significant only over a longer period than five years. However, the team will assess how the coordinators anticipate the exploitation of Theme 1 outputs and whether Theme 2 objectives are being considered in the elaboration of Theme 1 projects.

76. The research areas left out from this sampling frame are mainly the following:

- research on hybrid rice and high quality rice, neither of which is especially pro-poor;
- research on healthier rice, except as included in mainstream breeding. Some of this work is mapped to A4NH CRP. A major component of this product line is Golden Rice, which presents a specific research and breeding case of IRRI with many complex issues that cannot be adequately covered in an evaluation of the CRP;
- innovative use of rice straw and rice husks, which is a new line of research with a low level of funding to date;
- Theme 5 PLs on Spatial analysis for effective technology targeting and Strategic foresight, priority setting and impact assessment for rice research; these aspects will be covered in the review of research relevance and impacts.

Interviews

77. The evaluation team will conduct both on-site and remote interviews with the aim of interviewing a representative group of stakeholders across relevant categories, and involving both GRiSP partners and other stakeholders. The interviewee categories include the following:

- GRiSP management and oversight committee
- Lead center senior management and BOT
- CIAT and Africa Rice management and BOT
- Non-CGIAR core partners (JIRCAS, IRD, CIRAD)
- Senior researchers contributing to GRiSP
- Other centers and CRPs potentially linked to GRiSP
- ARI partners
- Public NARS, including universities and extension listed as GRiSP partners
- Private sector partners
- Civil Society Organizations partners

- Key donors
- Peer scientists with knowledge of science relevant to GRiSP

78. Partners and stakeholders in important target countries that the evaluation team will not be able to visit will be specifically covered in interviews. The interviews will follow a general guideline with a check-list of core issues specifically designed for different categories of interviewees. The interviews will be documented for synthesis and analysis.

Document review

79. The document review will be an important part of several components of the evaluations and will include:

- key CRP documents, such as the Original 2010 proposal, Extension proposal, Annual reports, Annual Program of Work and Budget documents for background and assessment;
- evaluative documents, such as ISPC and Consortium Office assessments of GRiSP, Center Commissioned External Reviews, External Programme and Management Review, ISPC cross-cutting reviews;
- selected documents on bilateral projects for the case studies;
- published literature on development, deployment or use of product lines;
- review of selected documents for the Management and governance assessment, including IEA commissioned review of cross-CRP governance and management;
- reference documents, such as the Strategy and Results Framework (2010 and 2015), CGIAR guidance notes and instructions for the 2nd call of CRPs.

Portfolio analysis

80. The Portfolios of all participating centers will be analysed regarding:

- distribution of grants across Themes and Product lines;
- grant size distribution;
- distribution of W1/2 funding across Themes and Product Lines;
- partnerships by country/subregion, Theme and Product Line;
- budget allocation by country/subregion;
- budgeting and expenditure.

81. The analysis will feed into the case studies and overall assessment.

Researcher survey

82. The evaluation team will undertake a survey of IRRI, AfricaRice and CIAT researchers who contribute to research mapped to GRiSP. The survey will cover research and programme management including aspects of relevance, quality of science and likely effectiveness, management effectiveness and cross-cutting issues (gender, partnerships and capacity strengthening). The survey will be confidential, conducted on-line through Survey Monkey. The surveys will be tested and launched in the first part of the inquiry phase to allow for follow-up and qualitative validation through other means. The survey will be launched in late March.

Field visits

83. The field visits will serve both the purpose of the case studies and assessment of the program on different criteria, partnerships in particular. The field visits represent the focus of the case studies as well as a representation of relatively strong national programs and national programs with weaker capacity. The countries and site were selected in consultation with GRiSP management. The team in small sub-groups will visit each major region. The following considerations influenced the choice of countries: GRiSP partner center headquarters; major activities such as STRASA and CSISA projects in South-Asia; major events, such as meeting of the Consortium on Unfavourable Rice Environments in Myanmar; contrasting countries in terms of the strength of the national program; history of activities to allow evaluation of progress and evolution of center and GRiSP presence. All evaluation team travels are shown in Table 4.

Table 4: Centre and field visit timeline

Country	Date	Travel purpose	Team involvement	Focus
Philippines	1-7 February	Inception meeting	All	All, IRRI
Benin	9-12 February	Africa Rice Center Science Week	DB, AS, MtK	AfricaRice
France	8-10 March	GRiSP Oversight Committee meeting in Montpellier	MtK, OP	Governance, Consortium relations
France	June	CIRAD and IRD	AS	Links to core non-CGIAR partners
Bangladesh	28-31 March	Field visit	DB, PT, BR, IEA	Rainfed/irrigated and partnerships; CSISA, STRASA, IFAD/EC grants
India	1-7 April	Field visit	DB, PT, BR, IEA	Rainfed/irrigated and partnerships; CSISA, STRASA, IFAD/EC grants
Senegal	6-12 May	Field visit	DB, AS, OP	
Nigeria	12-16 May	Field visit	DB, AS, OP	
Myanmar	20-22 May	Field visit	BR, IEA	CURE, CORIGAP
Vietnam	23-16 May	Field visit	BR, PT, IEA	
Colombia	24-30 May	Field visit	DB, FB, IEA	CIAT rice research, FLAR, Fedearroz
Peru	27-30 May	Field visit	FB	INIA, Peru
Nicaragua	Early June	Field visit	DB	
Tanzania	6-12 June	Field visit	AS, FB	
Kenya	12-16 June	Field visit	AS, FB	
Rome	2-5 September	Writing workshop	All	Draft final report

Science quality

84. Quality of science will be assessed at several levels: (a) the program as a whole; (b) case studies; (c) disciplines

85. The framework includes elements of processes and inputs for assuring quality, including program design, output quality and perceptions of quality. The assessment will contribute to questions related to quality of science in the evaluation matrix and specifically to key question (d) above. The main dimensions include:

- ***Processes*** in place at CRP and center level: Internal peer-review processes in place and how they function; use of center or CRP commissioned external reviews for managing and overseeing science quality; staff performance assessment process (consistency, fairness, attention to excellence); data management; other GRiSP research related processes and protocols that quality depends on. Sources of evidence include interviews, document review (related to processes and protocols) and a researcher survey.
- ***Inputs*** at CRP, Theme and disciplines levels: researcher quality; facilities and resources; research design. Sources of evidence include researcher H-index assessment at team leader/supervisor level; assessment of program/project design in proposals, other evaluative information (e.g. ISPC commentaries, CCERs) concerning research design, and interviews, particularly with peers.

- ***Outputs*** quality (Theme/discipline, product line): quantitative bibliometric analysis; qualitative assessment of outputs including data sets; synthesis of scientific knowledge.

  The main component of this section is a systematic evaluation of the scientific production based on bibliometry, which will be conducted for all themes for publications from 2011-2014. Evidence of publications quality for the participating centers for 2002-2012 is available in a study commissioned by the Consortium Office (Elsevier, 2014). Therefore qualitative peer assessment by team members of a sample of publications (about 20%) randomly chosen within disciplinary areas will be done for publications from 2013-2014, which in total are about 420. An assessment template will be used. The diverse scientific fields involved in the GRISP programme (ranging from basic molecular biology to applied social sciences) have their own production and dissemination methods and thus require the use of assessment tools to ensure equity in the evaluation process. Quantitative bibliometric assessment will be complemented by a qualitative assessment of a sample of the scientific output.

  The need for diversity of outcomes and quality parameters in scientific research (biological and social sciences) and practical breeding is recognized. The assessment of the breeding program will include to the extent feasible assessment of progress, protocols and efficiency, in addition to the scientific aspects of breeding within GRiSP.

86. In the systematic assessment of projects and products, the team members will use templates and simple scoring to assure consistency across assessments. Interview and the research survey will also contribute to the assessment of GRiSP science quality by providing perceptions on quality and measures used to manage and enhance quality.

Assessment of impact and sustainability of benefits

87. This assessment is based primarily on an impact narrative done by GRiSP at the request of the IEA. This narrative provides a summary of documented outcomes and impacts from research relevant to GRiSP capturing a period since the most recent External Program and Management Reviews of participating centers. The narrative is supported by a list of evidence documents underpinning the claims made about adoption of, or the outcomes/impacts resulting from the use, adoption or influence of research results linked to CRP research. The claims in the narrative should specify the magnitude of the

effect in terms of, for instance, geographic area or number of farm households affected/adopting and/or impact, or significance of intermediate uptake of research results. The narrative can also include extrapolation from specific evidence where the findings are considered generalizable over large domains than covered in the evidence. The evaluation will assess the impact claims and the coverage of the documentation across relevant areas of research. In addition to the assessment based on the impact narrative, the evaluation will look at the adequacy of impact assessment in GRiSP.

88. A specific aspect of sustainability to be addressed is the adequacy of funding and current funding methods for ensuring future impacts, especially funding of key overheads such as infrastructure.

Assessment of governance, management and leadership

This assessment contributes to answering the evaluation questions related to the organizational performance of GRiSP and specifically the key question (f) above. The key evaluation activities are:

- desk research, including:
    - review relevant findings in CRP governance and management reviews, including the system and CRP-level governance reviews implemented at the time this Inception Report was written,
    - synthesize available guidance on CRP-level governance arrangements, including on GRiSP governance and management arrangements; in particular the Consortium response to the CRP Governance Review;
    - understand GRiSP governance and management structure and practices, as well as centers' management structures;
    - obtain and review contracts along the GRiSP performance contract hierarchy
    - review Consortium Independent Audit Unit reports on Governance and Management, and Financial Performance of GRiSP.
- analysis of meeting minutes (attendance, discussion and decision-making content analysis) of the last 5 years, or from when relevant: identify degree to which standard governance functions (see: World Bank Independent Evaluation Group 2007) are covered by what body, assess management of overlaps and gaps. Conditional on availability of minutes, the following bodies should be covered:
    - GRiSP Oversight Committee;
    - BOTs of IRRI, AfricaRice, CIAT.
    - GRiSP Program Planning and Management Team
- interviews (participating centers' BOT interviews, possibly BOT group discussions, center management interviews):
- online survey as part of GRiSP research staff survey (possibility of an additional surveys is not excluded): Collect feedback on managerial oversight and guidance, perceived issues (e.g. cross-center management, two-masters situations, GRiSP terms of reference versus center performance feedback mismatches);
- interviews (GRiSP coordinators and focal points, GRiSP researcher interviews): deepen understanding of managerial oversight and guidance, perceived issues (e.g. cross-center management, two-masters situations, GRISP terms of reference versus center performance feedback mismatches).
- observation of Oversight Committee meeting, March 2015: deepen understanding of independence/legitimacy questions; conflict of interest issues and

Assessment of financial management

89. This assessment contributes specifically to answering key evaluation question (e) above. Key evaluation activities are:

- interviews (as part of GRiSP coordinator interviews): surface GRiSP fundraising and fund allocation issues;
- interviews (as part of center management and BOT interviews): record plans to address GRiSP fundraising and fund allocation issues, including financial risk management;
- interviews (as part of CGIAR system-level interviews): record plans to address GRiSP fundraising and fund allocation issues, including financial risk management.

5.3 Main limitations of the evaluation

90. Due to the large number—and institutional and geographic spread—of partnerships in GRiSP, the evaluation team needs to be selective in regard to the activities reviewed, stakeholders contacted, and sites visited. This need for focus necessarily means that some components of the Program will not be assessed in depth. The timeline, where the evaluation findings will feed into preparing a proposal for the 2nd call of CRP funding, limits the possibility of the team to incorporate a large number of site visits into its itinerary and puts more emphasis to desk work which logistically is less demanding than organizing multiple field visits. Finally, the evaluation is conducted at a time when CGIAR is making major decisions about its strategy and results framework, its governance structure, the structure of the CRP portfolio and the instructions and guidance for preparation of the 2nd call CRP proposals. While the evaluation will focus on the GRiSP partnership and research conducted within the CRP, it needs to be cognizant of the changes at CGIAR level influencing decisions at CRP level, and this changing context may remain in a state of flux throughout the evaluation. Finally, GRiSP has been in operation only four years; a time period that is insufficient to assess the research program fully, particularly regarding delivery towards development outcomes from GRiSP rather than the from past research by the participating centers. Much of the evaluation will be 'formative' by assessing progress and likely effectiveness of research in the pipeline. The 'summative' part of the evaluation will necessarily draw on outcomes and impacts of research completed prior to GRiSP.

6. Organisation and timing of the Evaluation

6.1 Team composition and responsibilities

91. Team members, their primary area of responsibility and the research sites to be visited by each team member are given in Table 5. A short resume for each team member is given in Annex 3.

Table 5: Team composition and primary responsibilities

Team Member	Primary responsibility for	Sites to be visited
Derek Byerlee	Evaluation team leader Socio-economic research, prioritization and impact assessment, M&E, gender issue (Theme 5)	• IRRI HQ • Africa Rice HQ • India, Bangladesh • Senegal, Nigeria • CIAT HQ, Colombia, Nicaragua
Flávio Breseghello	Crop improvement, pre-breeding (Theme 2), partnerships LAC	• IRRI HQ • Burundi, Tanzania • CIAT HQ, Colombia, Peru
Olivier Panaud	Genomics (Theme 1), contribute to science quality	• IRRI HQ • Senegal, Nigeria • Montpellier
Benjavan Rerkasem	Agronomy, natural resource management (Theme 3)	• IRRI HQ • Vietnam, Myanmar • Senegal, Nigeria
Abdoul-Aziz Sy	Partnerships, delivery, capacity development, SSA (Theme 4)	• IRRI HQ • Africa Rice HQ • Burundi, Tanzania • Senegal, Nigeria • France: IRD/CIRAD
Paul Teng	Partnerships, delivery, capacity development, Asia (Theme 4)	• IRRI HQ • India, Bangladesh • Vietnam, Myanmar
Martha ter Kuile	Governance & management, M&E, gender issues	• IRRI HQ • Africa Rice HQ • France: Montpellier

6.2 Evaluation governance/roles and responsibilities

92. The Evaluation will be conducted by a Team of Independent External Experts. The Team Leader has final responsibility for the evaluation report and all findings and recommendations, subject to adherence to CGIAR Evaluation Standards. The Evaluation Team is responsible for submitting the deliverables as outlined in more detail below.

93. The IEA is responsible for planning, designing, initiating, and managing the evaluation. The IEA will also be responsible for the quality assurance of the evaluation process and outputs, and for the

dissemination of the results. The IEA will take an active role in the preparatory phase of the evaluation by collecting background data and information and by carrying out preliminary analysis. An Evaluation Manager, supported by an Evaluation Analyst, will provide support to the team throughout the evaluation.

94. GRiSP management plays a key role in providing information to the evaluation team. It provides documentation and data, information on all GRiSP activities, access to staff for engagement with the evaluators, and information on partners and stakeholders. It facilitates arrangement of site visits and appointments within the lead Centre and other stakeholders. GRiSP management is also responsible for giving factual feedback on the Draft Report and for preparing the Management Response to the Final Report. It assists in dissemination of the report and its finding and lessons and it acts on the accepted recommendations. While the evaluation is coordinated with GRiSP management, IRRI as the lead Centre is a key stakeholder in the evaluation. It hosts visits to the Centre and its leadership and BOT are expected to make themselves available for consultations during the evaluation process.

95. A Reference Group has been set-up for the IEA Evaluation Manager and Team Leader to provide feedback and to ensure good communication with, learning by, and appropriate accountability to primary evaluation clients and key stakeholders, while preserving the independence of evaluators. The Reference Group provides views and inputs at key decision stages in the evaluation design and implementation process, including for the Terms of Reference, the Inception Report and the Draft Report. The Reference Group may also play an important role in leading evaluators to key people and documents.

96. The reference group consists of 13 participants, listed in Annex 4.

6.3 Quality Assurance

97. In order to ensure evaluation rigor, the following quality assurance will be implemented during the evaluation exercise.

98. The IEA, as manager of the Evaluation, will play a crucial role in assuring its quality. The IEA will work closely with the Evaluation Team throughout the evaluation, and will ensure that the tools and methodologies, as well as the process followed, are in line with the CGIAR Evaluation Policy and Standards as well as with those used in other ongoing CRP evaluation. In addition, two senior evaluation experts will provide assessment and advice on the evaluative quality of the evaluation inception report and draft final report of the CCAFS evaluation.

99. External peer review: The IEA quality assurance of evaluations includes evaluation quality advice for each CRP evaluation by external peer reviewers at two stages in the evaluation process: the draft inception report and the draft evaluation report. It is timed so that it can help improve the process and outputs (whether the inception or the evaluation report) and make them in line with CGIAR-IEA standards. Guidance for the peer review is standard across CRP evaluations.

6.4 Timeline and deliverables

100. The schedule for deliverables and work is indicated in Table 6 below.

Table 6: Evaluation Timetable and Tentative Deliverables

Phase	Period	Main outputs	Responsibility
Preparatory Phase	Aug – Oct 2014	Final ToR Evaluation team recruited	IEA, team leader
Inception Phase	Jan 2015 – March 2015	**Inception Report**	Evaluation team
Inquiry phase	April – July 2015	Various analysis products as defined in inception report	Evaluation team
Presentation of preliminary findings	July/August 2015	Interaction with and feedback from main stakeholders	Evaluation team IEA
Reporting phase			
Preparing of Report	Sep 2015	**Draft Evaluation Report, Final Evaluation Report**	Evaluation team
Management Response	Oct 2015	Management Response	CRP Management
Dissemination phase	Nov 2015	Communications products	IEA Team Leader CRP Management

7.5. Reporting

101. The Evaluation Report will be the main deliverable of the evaluation. The structure (outline) of the final report will be agreed between the team and IEA at the start of the inquiry phase.

102. A draft report will be compiled as the inquiry phase progresses, with contributions from each team member. The final report of the review will be compiled when the inquiry phase is completed. The team leader will co-ordinate the report writing with guidance from IEA and according to standard requirements for CRP evaluation reports. All team members will contribute as requested to the analysis and text.

103. The recommended maximum length of the final report is 80 pages, excluding Executive Summary and Annexes (see draft report outline in Annex 5). It will describe the findings and conclusions that are informed by the evidence collected within the framework defined for the evaluation criteria and issues and for addressing the specific evaluation questions (Annex 1). It will present a set of recommendations that are prioritized, focused and actionable, indicating the stakeholders that are responsible for their implementation. The main findings, conclusions and recommendations will be summarized in an executive summary.

6.5 Consultation and dissemination

104. The evaluation team leader and evaluation manager will consult regularly with GRiSP management. They will consult with the evaluation reference group at key stages of the evaluation: finalising this Inception Report, presenting preliminary findings and circulating the draft evaluation report for comments. As needed, the team will engage with the reference group through teleconference. The list of persons consulted during the inception phase is given in Annex 6.

105. Finalization of the evaluation report will include engagement with different groups for their feed-back[12]. The final report will be disseminated through various means, including an evaluation brief.

106. Several events will be organized to disseminate the evaluation results, including but not limited to:

- presentations of the preliminary findings (through virtual means) to GRiSP management and staff/Reference Group at the end of the evaluation team writing workshop (July/August 2015);
- sharing of the draft report to GRiSP reference group, GRiSP governing bodies; IRRI management and BOT; consortium for feed-back (October 2015). Virtual discussions may be included;
- presentation of the final report to the Evaluation and Impact Assessment Committee (EIAC) and the Fund Council (Nov/Dec 2015).

6.6 Feedback and Responses to the Evaluation

107. GRiSP Management will prepare a response to the evaluation. The Management Response will contain both an overall response to the evaluation, as well as response by recommendation—addressing each recommendation in the order presented in the Evaluation Report. The Final Evaluation Report and the GRiSP Management Response will be considered by the governing body of CGIAR for endorsement of the evaluation, responses, action plans and proposed follow-up. Given the forthcoming changes in CGIAR governance, the steps for finalizing the evaluation process will be confirmed at a later stage.

[12] See also the IEA document: CRP Evaluation: Process for Finalization, Feedback and Decision-making

ANNEX 1 – Evaluation matrix

Research/Programmatic Performance

Evaluation Issues and Questions	Sources of evidence, analysis
Overarching questions • What is the value added of GRiSP in facilitating synergies and multidisciplinarity that can enhance the global benefits from CGIAR rice research to poor producers and consumers? • Is GRiSP structure conducive to efficient delivery of results and to engaging advanced research institutes, including the strong national programs in the beneficiary countries, to harness their knowledge and innovations to enhance the effectiveness of global rice research? • Are the partnerships with national innovation systems structured to enhance the capacity of those systems for sustained impact? • Has GRiSP been successful in implementing an outcome and impact oriented culture and approach to research, while at the same time investing in long-term strategic science? • Does the GRiSP partnership elevate the quality of science among its partners while enhancing the effectiveness of results? • In the current complex funding environment, has GRiSP been able to manage multiple sources of funding to assure strategic coherence around highest priority areas of research? • To what extent do the governance and management structures and practices of GRiSP contribute to or impede the achievement of program coherence and effectiveness?	The overarching questions will be answered through case study analysis, interviews, quality of science analysis and analysis of governance and management. In addition synthesis of responses to the criteria-specific analysis will contribute to answering these questions.
Relevance	
Coherence and prioritization • Is research in the centers involved in GRiSP strategically coherent and consistent with the CRP's main objectives and CGIAR's System Level Outcomes? • Does the program target an appropriate set of Intermediate Development Outcomes (IDOs) and have	Review of CRP proposal, extension proposal Review of 2015 Strategy and Results Framework Case studies, project proposals

the research activities been prioritized for targeting the IDOs? • Does the current practice of allocating core funding (Windows 1 and 2) lead to strategic use of these funds, or should GRiSP move from formula funding allocation toward more competitive allocation of W1/2 funds?	Information about core-fund allocation
Comparative advantage	
• How strategically is GRiSP positioning itself, considering both the CGIAR's mandate of delivering international public goods and obligation towards outcomes—relative to other international initiatives/research efforts, including the private sector; partner country research institutions; and development agencies?	Interviews ISPC commentaries Researcher survey
Program design	
• Do the impact pathways logically link the principal clusters of activities to the IDOs and are the IDOs linked to the SLOs through plausible theories that take into account trade-offs between multiple objectives? • Has gender analysis adequately informed program design and targeting and are gender issues incorporated in the design?	CRP proposal, extension proposal Project document review ISCP commentaries Review of GRiSP gender strategy
Quality of Science	
• Do the research design, problem-setting, and choice of approaches reflect high quality in scientific thinking, state-of the-art knowledge and novelty in all areas of research? • Is it evident that the program builds on the latest scientific thinking and research results? • Are the internal processes and conditions, including research staff and leadership quality, adequate for assuring science quality? • Do the products of scientific research and breeding meet with high quality standards?	Review of evaluative studies Program and project documents Researcher survey Peer interviews Bibliometric analysis; qualitative publications analysis

Likely effectiveness	
• Has the CRP stayed on track in terms of progress and milestones toward outputs, and along the impact pathway toward outcomes? • Is the monitoring system used effectively for adjusting the program on basis of lessons learned? • Are there adequate theories of change that incorporate realistic assumptions on risks and constraints to outcomes and impacts • Is the CRP adequately addressing enabling factors for uptake of research results and out-scaling outcomes? • Has gender been adequately considered in CRP impact pathway analysis and implementation, understanding the differential roles of women and men along the impact pathway, generating equitable benefits for both women and men, and enhancing the overall likelihood of enhancing the livelihoods of women? • Are capacity building activities sufficiently and appropriately incorporated into the program? • Does GRiSP engage with appropriate partners, given their roles in implementation and achieving the objectives of the program?	Case studies Review of monitoring information and how it used Partner interviews Assessment of feed-back from evaluative and impact studies Field observation Project document review (for gender and capacity building)
Impacts and Likely Sustainability	
• What has been the record of the centers engaged in rice research, in terms of documenting and demonstrating outcomes and impacts from past research? • Have there been sufficient efforts to document outcomes and impact from past research, with reasonable coverage over all research areas? • What can be concluded from the findings of *ex post* studies, regarding the magnitude of impact in different geographical regions—and the equity of benefits? • To what extent have benefits from past research been—or to what extent are they likely to be—sustained?	Impact review report and evidence Interviews with partners

Organizational performance

Governance and Management	
• Do the governance and management arrangements and functions conform to the program partnership requirements of independence, accountability, transparency, legitimacy and fairness? • Are the GRiSP institutional arrangements, management and governance mechanisms efficient? • Does GRiSP research management provide effective leadership, culture and ethos for advancing the program's objectives? • To what extent have the reformed CGIAR organizational structures and processes increased (or decreased) efficiency for successful program implementation? • Is the level of collaboration and coordination with other CRPs appropriate and efficient for reaching maximum synergies and enhancing partner capacity? • How effectively does GRiSP implement the principles of results-based management in its delivery framework? • Is GRiSP management using a monitoring and evaluation system efficiently for recording and enhancing CRP processes, progress, and achievements?	Review of BOT and Oversight Committee meeting minutes Review of Terms of References of governing bodies, etc. Interviews of G&M persons Interviews with partners (at centers and key institutions) Researcher survey Interview with managers Review of the IEA cross-CRP governance and management review Review of selected CGIAR documents on governance Review of relevant policies Interviews with staff responsible for M&E
Efficiency	
• Are GRiSP organizational processes, and institutional and administrative arrangements appropriate for achieving efficiency? • Do the financial management and monitoring systems allow GRiSP to allocate resources cost-effectively and manage transactions costs? • Have clear lines of communication been established between the research themes to enhance the efficiency research? • Are the research approaches, strategies and feed-back from monitoring used to enhance research efficiency?	

ANNEX 2: Sample projects for case studies

IRRI bilateral projects selected for case study in-depth review

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
Stress-tolerant rice for poor farmers in Africa and South Asia (STRASA) (Phase 2)	2.3; 2.4; 3.1; 3.3; 5.1; 6.1; 6.4	$6,588,448	2011	3	Bill & Melinda Gates Foundation
STRASA Phase 3 – Stress-Tolerant Rice for Africa and South Asia	2.3; 6.2	$6,479,442	2014	5	Bill & Melinda Gates Foundation
Expansion of Cereal Systems Initiative for South Asia (CSISA) in Bangladesh	6.2	$4,691,499	2010	5	United States Agency for International Development
Reinvesment 51586 C4-Rice Phase 2: Supercharging Photosynthesis	N/A	$3,610,110	2012	4	Bill & Melinda Gates Foundation
Developing the Next Generation of New Rice Varieties for Sub-Saharan Africa and Southeast Asia	1.3; 2.3; 2.4; 6.1; 6.4	$3,479,504	2010	6	Ministry of Finance - Japan
Creating the second Green Revolution by supercharging photosynthesis: C4-rice	N/A	$3,003,324	2008	4	Bill & Melinda Gates Foundation
Transforming Rice Breeding	2.3; 2.4	$2,480,968	2013	5	Bill & Melinda Gates Foundation
Hybrid Rice Development Consortium (Management)	N/A	$2,390,907			Hybrid Rice Development Consortium Participating Members
Reducing food insecurity and poverty through development and effective delivery of new stress-	1.3; 2.1; 3.1; 3.2	$2,067,248	2013	1	International Fund for Agricultural Development

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
tolerant rice varieties (for the EC 2013 Allocation)					
Cereal Systems Initiative for South Asia (CSISA) (BMGF component) (Phase II)	2.3; 2.4; 3.1; 5.1; 6.1; 6.2	$2,063,114	2012	3	Centro Internacional de Mejoramiento de Maiz y Trigo
Accelerating Adoption of Stress-Tolerant Varieties by Smallhoder Farmers in Nepal and Cambodia	N/A	$2,000,000	2014	3	United States Agency for International Development
"Green Super Rice" for the Resource-Poor of Africa and Asia - Phase II (funded by BMGF)	2.3; 2.4; 3.1; 3.3; 5.1; 6.1; 6.4	$1,766,667	2012	3	Chinese Academy of Agricultural Sciences
CORIGAP: Closing Rice Yield Gaps in Asia (Phase I)	3.1; 4.1; 5.1	$1,314,589	2013	4	Swiss Agency for Development and Cooperation
Cluster Demonstration on Stress Tolerant Rice Varieties under NFSM Rice 2012-2015	2.3	$1,211,294	2012	3	Ministry of Agriculture - India
DFID Funding to International Rice Research Institute for 2010	N/A	$1,199,609	2010	1	Department for International Development
Green Super Rice for the Resource-Poor of Africa and Asia (funded by BMGF)	1.3; 2.3; 2.4; 3.1; 5.1	$1,158,192	2008	4	Chinese Academy of Agricultural Sciences
The Irrigated Rice Research Consortium (IRRC), Phase IV - Platform for Poverty Alleviation	3.1; 4.1; 6.3	$1,145,513	2009	4	Swiss Agency for Development and Cooperation
Reducing food insecurity and poverty through development and effective delivery of new stress-tolerant rice varieties (for the EC 2011 Allocation)	N/A	$1,053,403	2011	1	International Fund for Agricultural Development
Season-long Rice Farming Extension Training Program for Africa	6.4	$1,003,726	2011	4	Japan International Cooperation Agency

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
Cereals Systems Initiative for South Asia (India Mission)	1.3; 2.3; 2.4; 6.2	$1,000,000	2011	1	United States Agency for International Development
Extension Capacity Development for Rice Food Security in Africa (A JICA-IRRI Initiative)	N/A	$1,000,000	2015	5	Japan International Cooperation Agency
Rice Monitoring System for South Asia (Phase II)	5.1	$997,637	2014	3	Bill & Melinda Gates Foundation
Strategic Research for Sustainable Food and Nutrition Security in Asia	3.1; 4.1	$878,248	2010	3	Asian Development Bank - Philippines
Sustainable Soil Management for Food Security of Poor, Small and Marginal Farmers of Active Flood Plain and Charlands of Bangladesh (SUSFER)	3.1; 6.1; 6.2	$870,035	2010	3	European Commission
Climate Change affecting Land Use in the Mekong Delta: Adaptation of Rice-based Cropping Systems (CLUES)	3.3	$860,487	2011	4	Australian Centre for International Agricultural Research - Australia
Regional Rice Monitoring Pilot for South Asia	5.1	$690,327	2013	1	Bill & Melinda Gates Foundation
Development and Dissemination of Climate-Resilient Rice Varieties for Water-Short Areas of South Asia and Southeast Asia	2.3	$651,786	2014	2	Asian Development Bank - Philippines
Addressing the Pre- and Post-Harvest Challenges of the Rice Supply Chain	3.1; 4.1	$628,861	2010	3	Asian Development Bank - Philippines
Improved rice germplasm for Cambodia and Australia	2.3	$580,017	2010	5	Australian Centre for International Agricultural Research - Australia
Increasing productivity of direct seeded rice areas by incorporating genes for tolerance to anaerobic conditions during germination (Large Grant)	1.3; 2.3; 3.3	$525,533	2013	3	German Federal Ministry for Economic Cooperation and Development

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
Scientific Know-how and Exchange Program (SKEP II Syngenta)	2.4; 3.3	$524,207	2013	6	Syngenta Asia Pacific Pte. Ltd.
Safeguarding Asian Rice Production from a Rapidly Warming Climate (Large Grant)	1.3; 2.3	$443,680	2012	3	German Federal Ministry for Economic Cooperation and Development
Diversification and Intensification of Rice-Based Systems in Lower Myanmar	3.1	$437,422	2012	4	Australian Centre for International Agricultural Research - Australia
Improved rice crop management for raising productivity in submergence-prone and salt-affected rainfed lowlands in South Asia	2.3; 3.3; 6.2	$423,846	2010	3	International Fund for Agricultural Development
From QTLs to Variety: Pyramiding Major Drought Responsive QTLs for Sustainable Rice Yields in Asia and Africa (BMZ Large Grant)	1.3; 2.3	$394,335	2011	4	German Federal Ministry for Economic Cooperation and Development
Tracking Changes in Rural Poverty in Household and Village Economies in South Asia (Gates-Village Level Surveys (Gates-VLS)) (funded by BMGF)	5.1	$336,757	2009	6	International Crops Research Institute for the Semi-Arid Tropics
Enhancing and Stabilizing the Productivity of Salt-Affected Areas by Incorporating Genes for Tolerance of Abiotic Stresses in Rice (CFP2007)	1.3	$314,822	2008	4	German Federal Ministry for Economic Cooperation and Development
Sustainable intensification of rice-maize production systems in Bangladesh (joint project with CIMMYT)	6.2	$306,070	2008	6	Australian Centre for International Agricultural Research
Climate Change Adaptation in Rainfed Rice Areas (CCARA) (Japan-IRRI Collaborative Project Phase VI)	2.3	$305,378	2010	5	Ministry of Agriculture Forestry and Fisheries - Japan

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
Rice Multi-parent Advanced Generation Inter-Crosses (MAGIC) Phase II	N/A	$258,578	2011	3	Generation Challenge Programme: Cultivating Plant Diversity for the Resource Poor
Decoding rice genetic diversity- a public resource for discovering new genes for rice improvement (Oryza SNP Consortium Project)	N/A	$253,067	2008	5	Centre de coopération internationale en recherche agronomique pour le développement (CIRAD)
Rice Crop Manager: A Comprehensive Decision Support Tool for Increasing Yields and Income for Farmers in the Philippines – Year 2	3.1; 6.1	$230,541	2014	1	Bureau of Agricultural Research - Philippines
Project G1: Resource profiles, extrapolation domains and land-use patterns	N/A	$228,167	2011	4	CGIAR Challenge Program on Water and Food
AXA Chair in Genome Biology and Evolutionary Genomics	N/A	$138,045	2014	5	AXA Research Fund
Developing multi-scale climate change adaptation strategies for farming communities in Cambodia, Laos, Bangladesh and India (funded by ACIAR)	3.3	$137,486	2010	5	Commonwealth Scientific and Industrial Research Organisation
Agricultural Research for Development in Portuguese-Speaking Africa: Enhancing Local Research Capacity and Helping to Address Local Challenges	2.4	$130,906	2014	4	Instituto de Investigacao Cientifica Tropical (CIAT)
Technical support for sustainable rice production program under Agricultural Competitiveness Project (ACP)	3.1; 6.3	$109,187	2013	1	Ministry of Agriculture and Rural Development - Vietnam

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Donor
Increasing Economic and Food Security in Burundi through Rice Production (Phase II) (funded by Liang)	6.1	$75,000	2012	4	The IRRI Foundation Hong Kong
ARC Centre of Excellence for Translational Photosynthesis (funded by ARC)	N/A	$0	2014	7	Australian National University

AfricaRice bilateral projects selected for case study in-depth review

Grant Title	Case Study PLs	Average Annual Budget (USD)	Start Year	Duration (Years)	Geographic Location
Multinational-CGIAR project 'Support Agricultural Research for Development of Strategic Crops in Africa (SARD-SC)	N/A	$3,875,000	2012	4	Benin, Côte D'Ivoire, Ethiopia, Ghana, Madagascar, Niger, Nigeria, Senegal, Sierra Leone, Tanzania, and Uganda
Stress tolerant rice for poor farmers in Africa and South Asia - Phase 3	1.3; 2.1	$1,600,000	2014	5	Nigeria, Benin, Senegal, Burkina Faso, Ghana, Guinea, Gambia, Mali, Mozambique, Tanzania, Uganda, Ethiopia, Madagascar, Rwanda, Côte D'Ivoire, Sierra Leone, Burundi, Kenya
Developing the next generation of new rice varieties for sub-Saharan Africa and Southeast Asia	1.3; 2.3; 2.4	$1,600,000	2010	5	Member countries
Rapid mobilization of alleles for rice cultivar improvement in sub-Saharan Africa	1.3; 2.3	$1,500,000	2013	5	Nigeria, Burkina Faso, Liberia
Enhancing food security in Africa through the improvement of rice post-harvest handling, marketing	2.3; 6.1; 6.4	$1,092,000	2011	5	Cameroon, Gambia, Ghana, Mali, Nigeria, Senegal, Sierra Leone,

and the development of new rice-based products					Uganda
Improving rice farmers' decision making in lowland rice-based systems in East Africa	3.1; 6.1	$600,000	2015	2	Madagascar, Ethiopia, Rwada
Improving rice productivity in lowland ecosystems of Burkina Faso, Mali and Nigeria through maker-assisted recurrent selection for drought resistance and yield potential	2.3; 3.3	$506,843	2010	5.5	Africa
Strengthening rice value chains in West and Central Africa	3.1; 3.3; 4.1; 5.1; 6.1; 6.4	$490,000	2013	3	Guinea, Sierra Leone, Senegal and DRC
Green Super Rice project for the resource poor of Africa and Asia (Phase 2)	2.4	$325,000	2012	4	Nigeria, Mali, Senegal
Enhancing partnership among Africa RISING, NAFAKA and TUBORESHE CHAKULA Programs for fast-tracking delivery and scaling of agricultural technologies in Tanzania	3.1; 3.3; 4.1; 5.1; 5.2; 6.1; 6.4	$300,000	2014	1	Tanzania
Coalition for African Rice Development (CARD) Mechanization project	6.1; 6.4	$212,000	2013	2	Sub-Saharan Africa
Joint Africa/Asia research on inter-specific hybridization between African and Asian rice species	3.1; 3.3	$210,000	2014	1	Sub-Saharan Africa
Catalyzing the adoption and use of scalable technologies in Africa	6.1	$166,250	2014	2	Benin, Côte D'Ivoire, Guinea, Togo
East African Wetlands: Optimizing sustainable production for future food security	3.3; 4.1	$141,333	2013	3	Rwands, Tanzania, and Uganda
Realizing the agricultural potential of inland valley lowlands in sub-Saharan Africa while maintaining their environmental services	2.3	$127,200	2012	2	Benin, Mali, Liberia, Sierra Leoone
Realizing the agricultural potential of inland valley lowlands in sub-Saharan Africa while maintaining their environmental services (SMART-Valleys)	3.3	$118,911	2014	4	Benin, Togo, Liberia and Sierra Leone

Genomic approaches to understanding resistance and virulence in the cereal-Striga interaction for targeted breeding of durable defense	1.3; 3.3	$86,692	2012	4	Tanzania, Kenya, Uganda, Madagascar
Validating the services of a decision support system for nutrient management for rice in West Africa	3.1; 6.1	$68,667	2014	1.5	Ghana, Côte D'Ivoire, Senegal
Integrated management of Rice Yellow Mottle Virus (RYMV) in lowland ecosystem	3.1	$60,200	2014	1	Western and Central Africa (mainly Burkina Faso, Mali, Benin, Senegal and Niger)

ANNEX 3: Evaluation Team profiles

Derek Byerlee (Team Leader) from Australia is currently Visiting Scholar at Stanford University, USA. He worked with the World Bank as Lead Economist, Rural Strategy and Policy Adviser, Leader of Agricultural and Rural Development in the Ethiopia Country Office, and Director of the World Development Report in 2008: Agriculture for Development. Previously he worked at CIMMYT for 17 years as Regional Economist, South Asia and then Director of CIMMYT's Economics Program. In 2009-12 he served as Chair of the Standing Panel on Impact Assessment of the CGIAR's Science Council. He has a PhD in Agricultural Economics from Oregon State University, USA.

Flávio Breseghello from Brazil has a PhD on genetics and plant breeding from Cornell University. He has been DDG-R&D and currently is the Director General of CNPAF, the EMBRAPA institute for rice and beans, and is a member of EMBRAPA's Program Management Committee. He has experience in rice breeding and technology transfer, having released several rice cultivars. In 2009 he participated at the AfricaRice Center Commissioned External Review of the Rice Diversity and Improvement Program.

Olivier Panaud is a Professor at the University of Perpignan Via Domitia, France where he has acted also as Vice-President for Research. He has a PhD from University of Paris, Orsay in Plant genetics. His research interests are in genomics and genetic resources (including sequencing the genome of African rice, *Oryza Glaberrima)*. He was a PhD fellow at IRRI in 1989-92.

Benjavan Rerkasem is Professor Emeritus from Chiang Mai University in Thailand. She was Professor of Agronomy for 10 years and before that of Plant Nutrition. She has a PhD on plant nutrition from University of Western Australia. Recently she received a Crawford Fund Award for services to international agriculture. Her academic interests include crop nutrient management, agroecology and conservation agriculture. She has been an external reviewer of CIAT activities in Asia and of IRRI's upland rice research for the CGIAR Science Council, among other reviews for international agencies.

Abdoul-Aziz Sy is an international consultant (agricultural research and capacity building specialist) from Senegal who has an academic background in crop sciences and did his PhD at the Institut National Polytechnique, Toulouse, France. He has worked on evaluations of a range of agricultural and science & technology programs and activities, mostly in Africa and including rice research and adoption. In the 1990s he worked at WARDA as Principal Plant Pathologist.

Paul Teng is Professor and Dean of the Graduate Studies and Professional Learning at the National Institute of Education, Nanyang Technological University in Singapore. He has a PhD on Agricultural microbiology/System research from University of Canterbury in New Zealand. In early 2000 he was DDG of Reach at the World Fish Center and previous to that worked for Monsanto as Asia Pacific Vice President on Public Affairs and Asia-Pacific Director on Science & Technology. In 1990s he was at IRRI as Program leader on cross-ecosystems research. He participated in several boards, advisory bodies and reviews on S&T.

Martha ter Kuile currently works as Minister at the Bloor Street United Church, Toronto Ontario, Canada. She has a PhD on Ethics from the University of Ottawa. In the past she has held several positions at the Canadian International Development Agency, including Head of Aid at the Canadian Embassy in Guatemala, and was the Canadian representative to CGIAR. She has served in the Boards of international organizations, including CIP, and participated in External Program and Management Reviews of two CGIAR centers, including IRRI in 2009.

ANNEX 4: Members of Evaluation Reference Group

Name*	Role/Position
Stephen Baenziger*	IRRI BOT member; Nebraska Wheat Growers Presidential Chair, Department of Agronomy and Horticulture, University of Nebraska
Geoffrey Hawtin	CIAT BOT member; private consultant
Lala Razafinjara*	AfricaRice BOT member, Director General, Centre National de Recherche Appliqué au Développement Rural, Madagascar
Masa Iwanaga*	Africa Rice Center BOT member; President, JIRCAS
Keijiro Otsuka**	
Pascal Kosuth*	Director of Agropolis Foundation
Gonzalo Zorilla	Director, Programa Nacional de Arroz, Instituto Nacional de Investigacion Agropecuaria, Uruguay
Subbanna Ayyappan*	Director General, ICAR
Alioune Fall	Director General Institute Senegalais de Recherces Agricoles, Senegal
Carmen Thoenissen	Senior Advisor, Federal Department of Foreign Affairs, Swiss Agency for Development and Cooperation
Gamini Keerthisinghe	Federal Department of Foreign Affairs, ACIAR
Gary Atlin	Senior Program Officer, ***Bill*** & ***Melinda Gates Foundation***
Marco Ferroni	Executive Director, Syngenta Foundation

* Member of GRiSP Oversight Committee

** GRiSP Oversight Committee Chair

ANNEX 5: Draft outline for GRiSP evaluation final report

		Source	Responsibility
Glossary and Acronyms			IEA
Acknowledgments			DB/IEA
Executive Summary			DB
List of Recommendations			DB
1. Introduction to the Evaluation			
Purpose and Audience		From IR	IEA
Evaluation Questions		From IR	IEA
Scope		From IR	IEA
Evaluation Methodology		From IR	IEA
Timeline, Organization of the Evaluation and Quality Assurance (much of this can be Annex)		From IR	IEA
Changes with Respect to the ToR and the Inception Report (maybe just a box)		Changes in scope, in methodology, etc	IEA/DB
Main Constraints of this Evaluation		Expanded from IR	IEA/DB
2. The CRP			
Context		Revised from IR	DB
Overview of CRP (very brief)		From IR	IEA
3. Relevance			
Mapping Flagships to SLO and IDO; impact pathways Relevance of CRP objectives (within CGIAR and global relevance) Coherence of Flagships, program design Comparative Advantage of Institutions involved in CRP Priority setting mechanisms		Document review Portfolio review Case studies	DB based on team inputs
4. Quality of Science			
Quality of researchers, program design and outputs Management for quality of science		Overall study Case studies Staff survey	OP based on team inputs
5. Program Effectiveness			
Effectiveness at theme/PI level (progress to-date and reporting; Theories of Change, addressing constraints) Effectiveness at the Program-Level and future responsiveness of CRP Feed-back from M&E		Case studies Interviews Staff survey	BR based on team inputs

6. Cross-cutting Activities			
Partnerships with development agencies, non-formal and private sector		Interviews Case studies Staff survey	AS and PT to take the lead, with inputs from other team members
Partnerships upstream with advanced science		Case study Interviews Staff survey	OP and FB to take the lead, with inputs from other team members
Gender and equity		Documents Case studies Interviews Staff survey	AS and PT to take the lead, with inputs from other team members
Capacity development and technology transfer		Documents Case studies Interviews	AS and PT to take the lead, with inputs from other team members
7. Impact and sustainability			
Existing studies (adoption, impacts, outcomes)		Review of meta-analysis	DB
Sustainability		Financial review	MTK
8. Governance and Management			
Governance and management structures, Reference to IEA CRP Review of Governance and Management and recent changes		Interviews Documents Staff survey	MTK
9. Added Value of CRP and the Way Forward		Synthesis	DB
Annexes			IEA

ANNEX 6: List of persons consulted during inception phase

Name	Organization	Title
Bas Bouman	IRRI	GRiSP Director
Robert Ziegler	IRRI	Director-General
Matthew Morrell	IRRI	Deputy Director-General, Research
Reianne Quilloy	IRRI	Specialist-Knowledge Management and Communication
Rica Flor	IRRI	Researcher
Joseph Sandro	IRRI	Assistant Scientist - Agricultural Engineering
Rosa Paula Cuevas	IRRI	Post-doctoral Fellow
Liz Humphreys	IRRI	Water Scientist
Grant Singleton	IRRI	Principal Scientist
Finbarr Horgan	IRRI	Research Officer
Nese Sreenivasulu	IRRI	Head of Grain Quality and Nutrition Center
Abdelbagi M Ismail	IRRI	STRASA Overall Project Leader
David Johnson	IRRI	Head, Crop and Environmental Sciences Division
Martin Gummert	IRRI	Senior Scientist in Postharvest Development
Yoichiro Kato	IRRI	Rainfed Agronomist
Luo Ju	CNRRI (China National Rice Research Institute)	Deputy Division-Chief
Cheng Shi-hua	CNRRI (China National Rice Research Institute)	Director-General
John Hamer	CIAT	BOT Member
Osamu Koyama	JIRCAS	Director, Research Strategy Office
Hasil Sembiring	Directorate General of	Director, Directorate of Cereal

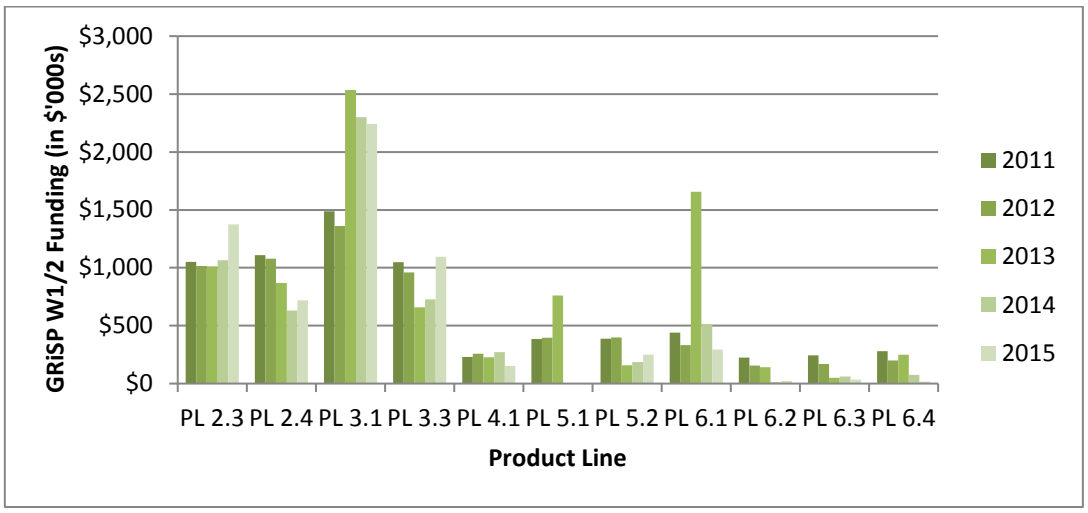
	Food Crops, Ministry of Agriculture, Republic of Indonesia	
Masa Iwanaga	JIRCAS	President
Aime Lala Razafinjara	FOFIFA, Ministry of Agriculture and Rural Development, Madagascar	Director General
Paul Fox	IRRI	Representative for Bangladesh
V. Bruce J. Tolentino	IRRI	Deputy Director General (Communication and Partnerships) and Secretary to the BOT
Nourollah Ahmadi	CIRAD	Geneticist and Team Leader
Hei Leung	IRRI	Principal Scientist
Eero Nissila	IRRI	Head of Plant Breeding, Genetics and Biotechnology Division
Sam Mohanty	IRRI	Head of Social Sciences Division
Noel Magor	IRRI	Head of Training Center and Manager of the Rice Knowledge Bank
Hope Webber	IRRI	Monitoring and Evaluation Specialist
Sonia Akter	IRRI	Gender Specialist
Takashi Yamano	IRRI	Senior Scientist
Fiona Hay	IRRI	Senior Scientist and Genetic Resource Specialist
Rita Ndri	ANADER (Ivory Coast)	Facilitator
Rabeson Raymond	FOFIFA (Madagascar)	Chief of Department of Rice Research
Malick Ndiaye	GIE-Agritech (Senegal)	Director General
Masa Iwanaga	AfricaRice	Member, BOT
Osamu Koyama	JIRCAS	Director, Research Strategy Office
Wayne Powell	CGIAR Consortium Office	Chief Scientist
Denis Huneault	AfricaRice	Director, Administration and Finance

Kelly Mbokeli	AfricaRice	Head of Human Resources
Samuel Bruce-Oliver	AfricaRice	Advisor to Director General
Marie-Noelle Ndjiondjop	AfricaRice	Molecular Biologist and Head, Biotechnology Unit
Takashi Kumashiro	AfricaRice	Program Leader, Genetic Diversity and Improvement
Koichi Futakuchi	AfricaRice	Program Leader, Sustainable Productivity Enhancement
John Manful	AfricaRice	Research Scientist
Rita Agboh-Noameshie	AfricaRice	Gender focal point
Kabirou Ndiaye	AfricaRice	Agronomist and project coordinator
Joe Tohme	CIAT	DDG-R&D
Edgar Torres	CIAT	Leader of Rice Breeding
Camilla Reboledo	CIAT	Crop Physiologist
Cecille Grenier	CIRAD/CIAT	Upland rice breeder
Achim Dobermann	Rothamsted Res	Director General
Susan McCouch	Cornell Univ.	Professor
Eduardo Graterol	FLAR	Executive Director
Sergio Lopes	IRGA	Rice Breeding Leader
Maurício Fisher	IRGA	DDG-R&D
Olivier Husson	AfricaRice/CIRAD	Cropping system agronomist
Rose Fiamohe	AfricaRice	Agricultural economist (Marketing)
Adama Traore	AfricaRice	Acting Director General
Marco Wopereis	AfricaRice	Deputy Director General and GRiSP Focal Point
Menozzi Phillippe	AfricaRice/CIRAD	Entomologist
Ibnou Dieng	AfricaRice	Biometrician
Arouna Aminou	AfricaRice	Impact assessment economist

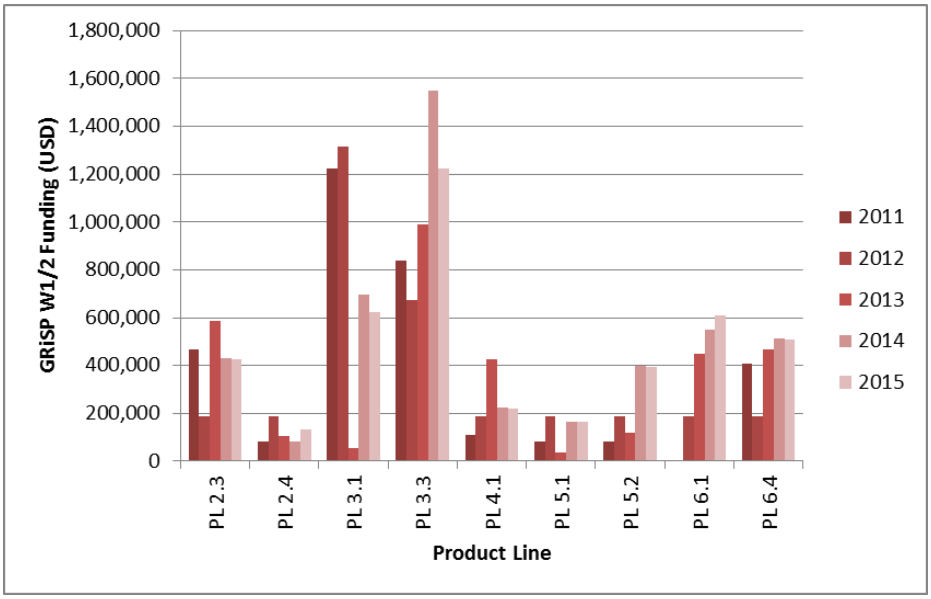
John Rodenburg	CIRAD/GRiSP	Agronomist
Moussa Sie	AfricaRice	Rice Breeder
Kazuki Saito	AfricaRice	Agro-Physiologist
Myra Wopereis-Pura	AfricaRice	Knowledge Management & Capacity Strengthening
Mandiaye Diagne	AfricaRice	Agricultural economist (Value chain specialist)
Dr Grace Bolfrey-Arku	Council for Scientific and Industrial Research (CSIR), Ghana	Gender Task Force
Dr Vivian Ojehomon	National Cereals Research Institute (NCRI), Nigeria	Gender Task Force
Sidi Val Sidi Yeslem	Private	Mechanization Task Force
Paa-Nii Torgbor Johnson	CSIR/CRI, Ghana	RSDP, Post-harvest processing
Samuel Bakare	NCRI, Nigeria	Agronomy
Dorothy Malaa	IRAD, Cameroon	Gender

ANNEX 7: Allocation of W1/2 funding by GRiSP Centers

GRiSP W1/2 Funding at IRRI, 2011-2015: Case Study Product Lines



GRiSP W1/2 Funding at AfricaRice, 2011-2015: Case Study Product Lines



GRiSP Funding at CIAT, 2015: Theme 1, and PLs on other Themes