



An Evaluation of the ISPC Science Fora

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CGIAR

Independent
Science and
Partnership
Council

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Foreword

The Science Forum (SF) series is a flagship event initiated by the Independent Science and Partnership Council (ISPC) in 2009 under its remit of mobilizing science for development through international dialogue on critical issues that agricultural research can contribute to as well as impact on. The biennial Science Forum is organized in partnership with other CGIAR bodies and a host country, and aims to foster partnerships that best complement expertise of the CGIAR and its partners on research initiatives and emerging issues. It serves to provide a focal point at which CGIAR scientists, scientific communities largely external to the CGIAR, funders and key partners in terms of delivering development can meet to discuss novel research approaches and their relevance to the CGIAR research portfolio. Research needs to change, to meet the complex challenges of the 21st century and in particular to become better structured at the interface between disciplines and sectors.

The ISPC is interested in learning from the three events held so far (2009 in Wageningen, 2011 in Beijing and 2013 in Bonn) in order to improve the focus, implementation and logistics of future SFs. It therefore conducted an evaluation of the SF in terms of its utility as a core mechanism for mobilizing science and its success in identifying new science needs and opportunities, forging new partnerships, and increasing the visibility of the CGIAR. Because the objective of learning was central to this evaluation, it was organized as a self-evaluation but with external assistance on evaluation and quality assurance. Since the decision to undertake a formal evaluation was taken in advance of the 2013 SF, a range of complementary methods was utilized for an extensive and systematic evaluation of that event. However, influence and impact can be

assessed only when some time has passed from any event and were thus more feasible dimensions for the 2009 and 2011 SFs.

The ISPC welcomes the outcome of this evaluation and is happy to see mainly positive findings. The evaluation report reflects that the SFs have evolved since their inception in line with experience and the lessons learned. As is evident from the report, each successive event has been improved from the previous one based on the feedback received. The evaluation provides several insights on the organization of the Forum, particularly to structure more time for dialogue, discussion and debate. It reports on the intangible benefits of networking and of providing opportunities to young and developing country scientists to learn from the experience of global experts. The evaluation also highlights the importance of publishing papers from the Fora in a special edition of a scientific journal, both to raise awareness of development issues among parts of the international scientific community, which are not working on agriculture for development, and also to draw attention to the high-quality research that the CGIAR and its partners are doing.

The Science Forum is a highly effective means of reaching out to external communities and the evaluation report indicates that it provides good value for money for the relatively modest outlay by the ISPC, our co-hosts, other sponsors and participants. We plan to apply the lessons learned and take on board the suggestions in the report to inform future Science Fora.



Margaret Gill
ISPC Chair

Executive Summary

The Independent Science and Partnership Council (ISPC) of the CGIAR organized three science fora (SFs), in 2009, 2011 and 2013, to help mobilize science for development by stimulating broad-based scientific debate. The SFs respectively tackled: 1) the issues of mobilizing global linkages by addressing a range of research topics, 2) the agriculture - environment nexus, and 3) targeting agricultural research in nutrition and health.

The purpose of this evaluation is to gauge the extent to which the SFs met their objectives, document their merits and shortcomings and detail the major lessons learned from the SFs so that future SFs can better address changes in world agriculture and associated research.

Although this evaluation concentrates on the 2013 SF, an attempt is made to assess the 2009 SF and 2011 SF in terms of their influence in light of the overall objectives of the SFs. This was done through an analysis of impact of the publications from the meetings and a simple assessment of the perceived value of the meetings through e-mail questioning. To evaluate the 2013 SF, full use was made of responses to an electronic questionnaire sent to participants, face-to-face interviews carried out among attendees and e-mail answers to some follow-up questions asked of a selection of participants.

There was an overwhelming consensus that the 2013 SF was a high quality multidisciplinary gathering that fostered dialogue among participants and represented a useful interactive forum for scientific debate on agriculture and nutrition. Participants' expectations were generally

either met or exceeded according to questionnaire respondents and interviewees, and many reported that the SF effectively promoted partnerships and networking within the scientific community, with the result that mutual understanding among agriculturalists and nutritionists was improved. The structure of the SF was generally held to be appropriate, with keynote speakers presenting suitable topics for discussion. Breakout sessions represented opportunities for greater in-depth discussion of critical issues and social events provided additional opportunities for dialogue. For the interview responses, there were 43 positive comments for overall impression of the 2013 SF versus five negative comments.

There was a consistency in comments on the lessons learned from the 2013 SF, although criticism when voiced was generally mild relative to praise. Two major issues were identified relating to SF organization and content. Many considered that the 2013 programme was a little too rigid and congested, leaving insufficient time for necessary discussion and putting attendees in the difficult position of having to choose among parallel sessions, thereby missing out on important issues.

The Google Scholar citation analyses for papers published from the 2009 and 2011 SFs (Crop Science and Proceedings of the National Academy of Sciences USA, respectively) indicated relatively high visibility in terms of citations. Additional online impact indices confirmed this for the 2011 SF publication. For the 2009 SF, publications with broad appeal were cited more than specialist papers. Papers from the 2013 SF are yet to be published.

Responses to two simple questions on usefulness and value of the 2009 and 2011 SFs indicated that the 2011 SF had generally been 'very useful' and the 2009 SF only 'quite useful'. The specific values of the two SFs, as perceived by the survey respondents, were similar and included representation of an opportunity to form new contacts, reinforce established contacts, initiate partnerships, enter into networks, exchange ideas, discuss new ideas and in some cases develop new projects.

There are several lessons to be learned from the ISPC's experience with the SFs. It is important to pick a theme for the Forum that unites disciplines and to take care to organize well, giving thought to providing sufficient time for broad-ranging discussion and exchange of ideas. It is also important to secure the best possible keynote speakers, leaders in their fields, and make sure that they present on subjects that stimulate discussion and exchange. It was suggested that all the CGIAR centres should be represented at the SF and that CGIAR managers, in addition to researchers, should be present and active given that they are instrumental in discussing and setting research agendas and contributing to policy changes. Early career scientists were also considered to benefit tremendously from the SFs, where they have an opportunity to establish important partnerships that can positively influence their career development.

Participants in the 2013 SF made an assortment of useful suggestions. Some felt that they might have got more out of the SF had information on it been circulated earlier. Others considered that it was necessary to get summaries of sessions produced and circulated as soon as possible after they took place as an aid to discussion. There were also suggestions that discussions could be extended and broadened online and through web-streaming. One commentator suggested that the SF should be more forward-looking and another that an acronym dictionary should be standard issue.

Future SFs can no doubt be improved by taking past experiences into account, including those connected with organizational aspects and content, but success will inevitably depend to a large extent on theme and venue. It was never the purpose of the SFs to imitate regular, specialist scientific conferences and care should be exercised to ensure that the purpose of the SFs is not compromised. SFs are and should remain unique opportunities for broad-based scientific debate among practitioners from many disciplines associated with agriculture. Only in this way will they effectively contribute to mobilizing science.

Introduction

The Independent Science and Partnership Council (ISPC) of the CGIAR has, as one of its mandated activities, the responsibility to help mobilize science and enhance partnerships for development. It does this through international dialogue on critical emerging issues and through cultivating partnerships between the CGIAR and collaborators worldwide. The CGIAR Science Forum (SF) is a biennial event that represents an opportunity for practitioners to meet and examine key researchable issues and to establish strategic alliances that address current and emerging challenges in agriculture and related disciplines. The SFs are not typical specialist conferences; rather they aim to get a diverse group of individuals, including scientists, associated with a particular theme to interact and share experiences and expertise. Partnership is a core characteristic of the SFs. There is an acceptance procedure for attendance at the SFs and criteria for selection include, but are not limited to, gender, geographical representation, type of organization/work setting, evidence of interest/research in the field, etc.

The SFs essentially represent an interactive forum for scientific debate on agricultural research applied to improving sustainable food production and food security. The

three broad objectives of the SFs are to:

- i. Explore recent scientific advances in research areas relevant to a particular theme
- ii. Identify areas where there is real potential to deliver impacts on development goals
- iii. Explore new modalities for research collaboration between the CGIAR and partners

The first SF was held in Wageningen, The Netherlands, in 2009 on “*Science for Development: Mobilizing Global Linkages*” and covered six topics¹, exploring new areas of research and the most pressing research and partnership needs for making progress towards development goals. Key papers produced from the 2009 SF were published in a special issue of the journal *Crop Science* in March-April, 2010, Volume 50².

The second SF, on “*The Agriculture - Environment Nexus*”, was held in co-operation with the Chinese Academy of Agricultural Sciences in 2011 in Beijing, China. The plenary and breakout sessions addressed different aspects of the central theme, with six topics³ being discussed. Selected papers from the 2011 SF were published in the *Proceedings of the National Academy of Sciences USA* (PNAS, May 21st 2013)⁴.

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1. Resilient natural resource systems; The future of food: developing more nutritious diets and safer food; ICTs transforming agricultural science, research and technology generation; Beyond the yield curve: exerting the power of genetics, genomics and synthetic biology; Eco-efficiencies in agro-ecosystems; Agriculture beyond food: science for a bio-based economy
 2. https://www.crops.org/publications/cs/tocs/50/Supplement_1
 3. Resource scarcity and the ecological intensification of agriculture; Sustainability science: are new arrangements for scientific partnerships needed to address the integrated natural resources management targets of the reformed CGIAR?; Metrics, monitoring and certification to support sustainable intensification of smallholder agriculture; Can intensifying agriculture save the forests?; Agro-biodiversity: an important contributor to productivity and the key to sustainability, nutrition and rural incomes; Animal protein: increased production and a healthy environment in conflict?
 4. <http://www.pnas.org/content/110/21.toc#AgriculturalInnovationToProtectTheEnvironmentSpecialFeatureFreeOnline>

The 2013 SF focussed on “*Nutrition and Health Outcomes: Targets for Agricultural Research*” and was held in Bonn, Germany. It was co-hosted by the Federal Ministry for Economic Cooperation and Development (BMZ) Germany. The Forum was structured to be a mix of plenary and ten breakout sessions⁵. Papers from the meeting are yet to be published.

While the first SF covered a large range of concerns, the subsequent two SFs were designed around specific topics significant to agricultural research and also highly relevant beyond agriculture. The 2011 and 2013 SFs brought together researchers from different communities to search for common ground and research interests that cut across disciplinary and sector boundaries. The ISPC acknowledged that agricultural research, for generating impact on environmental sustainability in the first instance and on human health and nutrition in the second (both areas being included among the CGIAR’s high level impact goals, the System Level Outcomes), needed to establish linkages with the environmental scientists’ agenda-setting and the health and nutrition sector, respectively. The interests and agendas of agricultural research have not been traditionally well aligned with the agendas of these other communities, and yet such alliances are crucial for generating impact.

Other changes that took place relating to the organization of the SFs resulted from internal ISPC analyses of the lessons learned from each SF. The changes related to the balance between plenary and breakout sessions, between presentations and discussion, and the profiles of participants and speakers, including gender balance considerations. Also increasingly more opportunities were given to early career scientists to attend, recognizing that attendance could act as a fillip to their careers.

5. Undernutrition; Non-communicable diseases (NCDs); Diet diversification; Food safety; Policy and institutional approaches; Science, technology and partnerships; Facilitating research uptake; Value chains; Farm size, urbanization and productivity; Economic implications

Evaluation of the SF

Why evaluation?

The ISPC has discussed among its members and Secretariat the lessons learned after each SF to model the event more successfully to its intended purposes. However, for assessing the extent to which the three SFs that the ISPC has organized have met their objectives, an evaluation gauging the participants' perceptions and analyzing other potential indicators of success was necessary. The fundamental question to be answered was *'Have the SFs helped mobilize science and influence science agendas?'* Also the nature of strengths and weaknesses of the SFs should be documented to ensure that future SFs are planned to meet the expectations of the participants and the research community. Evaluation of past experiences will assist in planning for the future.

Organizing this evaluation to focus on the 2013 SF gave the ISPC the opportunity to learn about the perceived values and weaknesses of this already relatively well established event by canvassing the thoughts and opinions of 2013 SF participants. At the same time, it was possible to explore influences of the two previous SFs in terms of the perceptions of the research community, indicated by citations of the academic papers published for each.

Methods

Various methods were used to evaluate the three SFs. Both qualitative and quantitative methods were used for the 2013 SF, where the participants were contacted while the event was running, or at least while the event remained fresh in their minds. The possibilities to evaluate perceptions of the 2009 and 2011 SF participants were limited, however due to the long lag time, it was possible to assess to some extent the visibility and influence of the main output from these SFs, i.e. the journal articles.

The ISPC Secretariat managed the evaluation throughout the process. An external company⁶ was contracted to administer surveys and interviews at the 2013 SF. An independent evaluation specialist⁷ was engaged to provide external oversight and quality assurance to the different components of the evaluation as well as comments on an earlier draft of the report. An external consultant⁸ drafted the evaluation report based on the data collected. The 2013 SF was thoroughly evaluated using a range of tools as listed below:

1. Online participant survey: 212 participants were invited to answer a range of questions relating to the value of the SF (see Annex 1 for the post-conference questionnaire). The questionnaire

6. Green Ink, scientific communication agency

7. Burt Perrin, senior evaluation consultant

8. Jonathan Robinson, science editor and writer

followed the end of the SF itself (vs. a more usual “happy sheet” evaluation while an event is still in progress). Two reminder messages were also sent to increase response rates.

2. Four questions on the 10 breakout sessions for session coordinators: The questions addressed expectations, general impressions of the process, feedback and suggestions for future session structure.
3. 25 targeted key informant interviews of specific participants (to cover a range of donors, CGIAR scientists, NGOs, private sector, etc.) undertaken by eight ISPC staff members: The questions addressed general impressions, strengths, weaknesses, and suggestions for the future.
4. 45 face-to-face interviews with a range of participants randomly chosen: These were conducted by two staff members from Green Ink similarly to the ISPC interviews.

For the 2009 and 2011 SFs, citation analyses were done using Google Scholar (GS) for the presentations written into papers that were published in Crop Science and the PNAS respectively. Two questions were also put to all attendees at the 2009 and 2011 SFs (respectively 5 and 3 years after the events):

1. Looking back, how useful for you was the SF (very, quite, not much, not at all)?
2. Was there any specific value to you from attending the SF - such as new contacts, new research ideas, new partnerships, new information about the topic? Please specify.

Results

Overview of the three SFs

It is apparent that with each new SF, based on the responses to interviews and questionnaires, there has been an increase in value perceived by the participants. This could be a result of improvements made in the light of experience and lessons learned or that the more recent the SF, the better it is remembered. However, from the comments received it does seem that the improvement has been genuine and comes from the choice of theme in particular, but also from improvements in the organization resulting from analyses of the merits and demerits of previous SFs. The 2009 SF was, according to a sample of attendees, 'quite successful', whereas the 2011 SF was 'very successful', and the 2013 SF exceeded expectations substantially according to several criteria. There was greater diversity of opinion about the usefulness of the 2009 SF compared with the 2011 SF and 2013 SF. While one attendee at the 2009 SF commented on the merits of having been able to 'develop a genome sequencing initiative', another suggested that it 'didn't shape any scientific programmes'.

The 2013 SF was overwhelmingly well received - one participant praised it for presenting 'the big picture and long-term trends, which are otherwise difficult to address in regular conferences'. There was relatively little negative criticism of either content or organization and when voiced it was invariably mild. The strengths of the SF centred on the opportunity for a diverse group of practitioners in the fields of agriculture, nutrition and health to meet and discuss topics of mutual interest. In this respect the SF fully met its prime

objectives. The 2013 SF was the only one of the three that was organized by a steering committee of experts in nutrition and health, and which thoroughly discussed the lessons to be learned from the previous two SFs. Suggestions arising from the 2013 SF were made on how particular shortcomings might be addressed in the future, most being related to time management and the need to loosen up the timetable to allow for longer and more focussed discussion of important topics. Overall there was a 67% response to the online questionnaire - a very good response rate.

Value of the 2009 and 2011 SFs

Responses to questions

According to the 14 individuals that responded to the two questions posed on the usefulness and value of the 2009 SF, it was generally 'quite useful', although one praised it as the 'most fruitful and best organised meeting' that he had attended. For the 12 respondents for the 2011 SF however, the vast majority deemed it to have been 'very useful', with only a single individual suggesting that it was not of much use. One participant suggested that the 2011 SF 'raised the profile of China', an important consideration in assessing its success. The specific values of the two SFs however were very similar, including representation of an opportunity to form new contacts, reinforce established contacts, initiate partnerships, enter into networks, exchange ideas, discuss new ideas and develop new projects.

Table 1. Citation analysis by Google Scholar for 2009 SF articles published in Crop Science, March-April, 2010, Volume 50, Issue Supplement 1 (journal Impact Factor 1.513).

Publication	Citations 10.01.13	Citations 07.04.14
Should enhanced resilience be an objective of natural resource management research for developing countries? Brian Walker <i>et al.</i>	15	25
Boundary work and the complexity of natural resources management, Peter P. Mollinga	21	37
The future of food: Scenarios for 2050, Bernard Hubert <i>et al.</i>	24	42
Biofortification—A sustainable agricultural strategy for reducing micronutrient malnutrition in the global south, Howarth E. Bouis and Ross M. Welch	58	110
Relearning old lessons for the future of food—by bread alone no longer: Diversifying diets with fruit and vegetables, John D. H. Keatinge <i>et al.</i>	13	24
Information and communication technologies—opportunities to mobilize agricultural science for development, Peter Ballantyne <i>et al.</i>	4	7
Mobilizing science to break yield barriers, Ronald L. Phillips	19	33
Climate risk management for adaptation to climate variability and change, Walter E. Baethgen	11	16
Rapid determination of gene function by virus-induced gene silencing in wheat and barley, Cahid Cakir <i>et al.</i>	7	15
Breeding and cereal yield progress, R. A. (Tony) Fischer and Gregory O. Edmeades	82	167
Eco-efficient agriculture: Concepts, challenges, and opportunities, Brian A. Keatinge <i>et al.</i>	45	82
Enhancing eco-efficiency in agro-ecosystems through soil carbon sequestration, R. Lal	31	51
More than eco-efficiency is required to improve food security, S. E. Park <i>et al.</i>	9	15
Development perspectives of the biobased economy: A review, J. W. A. Langeveld <i>et al.</i>	20	35
Biorefineries— A path to sustainability? RajniHatti-Kaul	10	16

Citation indices

Within the scientific community, an indicator of interest taken in the information contained in scientific articles is a citation index. The 2009 SF papers were published in Crop Science as indicated in **Table 1**. GS citations were recorded on two dates, approximately three years after publication and again four years after. The

numbers of citations increased between the two dates for all articles, and doubled for the most cited articles. However, the ranges were wide, the top three articles, in terms of citations, were in a group of their own with the general paper of Fischer and Edmeades on breeding and cereal yields being the most cited at both dates, while that of Ballantyne *et al.* the least cited.

Table 2. Citation analysis by Google Scholar and PNAS metrics, including Online Impact Factor (OIF) for 2011 SF articles published in PNAS May 21st 2013 (Journal Impact Factor 9.737).

Publication	Citations 07.04.14	PNAS OIF	Abstract downloads	Full text downloads	Percentile all PNAS articles*
Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses, Jeffrey Sayer <i>et al.</i>	23	50	14297	1087	95
Addressing uncertainty in adaptation planning for agriculture, Sonja J. Vermeulen <i>et al.</i>	13	24	13081	914	88
Green Revolution research saved an estimated 18 to 27 million hectares from being brought into agricultural production, James R. Stevenson <i>et al.</i>	9	47	12476	796	94
Innovative grassland management systems for environmental and livelihood benefits, David R. Kemp <i>et al.</i>	4		12846	269	-
New technologies reduce greenhouse gas emissions from nitrogenous fertilizer in China, Wei-feng Zhang <i>et al.</i>	13	13	14878	688	81
Scope for improved eco-efficiency varies among diverse cropping systems, Peter S. Carberry <i>et al.</i>	8	4	8913	278	59
Interactive effects among ecosystem services and management practices on crop production: Pollination in coffee agroforestry systems, Virginie Boreux <i>et al.</i>	6	22	9503	401	88
Innovations in capture fisheries are an imperative for nutrition security in the developing world, Stephen J. Hall <i>et al.</i>	6	24	7653	286	90
Zoonosis emergence linked to agricultural intensification and environmental change, Bryony A. Jones <i>et al.</i>	13	31	9608	807	90

* 20,524 articles

A similar analysis was done for the scientific articles produced at the 2011 SF (**Table 2**), but the time lapse between the publication and recording citations was much shorter (about 10 months) than was done for the 2009 SF. The citation results for the two journals are thus not strictly comparable,

but it is worth noting that only ten months after the publishing date of the PNAS volume, several of the articles have been cited as much as many of the Crop Science Articles after four years. Several of the PNAS articles, particularly that of Sayer *et al.*, are considered to be of very high visibility

by the scientific community. PNAS uses a range of indicators to gauge the impact of its articles, including its own online impact factor, download numbers, tweets and several other metrics. There was a general correlation among the various metrics recorded by PNAS that allows the papers to be ranked in 'value', similarly as when the GS citation index is used. Metrics such as numbers of Tweets reflect the visibility of the article among researchers already long before the citations have begun to accumulate. Crop Science, however, does not use a set of corresponding indicators and therefore GS citations only were used.

Crop Science is a very widely distributed journal read by agriculturalists of many disciplines on a global basis. Thus, the fact that the two most highly cited articles relate to plant breeding is not surprising. The third highly cited article was however on a cross-cutting topic - eco-efficiency. PNAS is a very high impact journal that potentially reaches readers in disciplines other than agriculture. Therefore, it may serve for increasing the visibility of CGIAR research and the Science Forum among researchers that have not traditionally been engaged in agriculture. This may help expand partnerships into new areas of science or at least stimulate the discussion necessary for expanding partnerships. It should also be noted that while the 2009 SF Crop Science articles were on subjects that were actually given by people presenting at the conference, the PNAS volume - and the upcoming volume targeted from the 2013 SF - are more a set of papers arising from the subject matter of the Forum and designed to augment the original presentations and to fill in gaps.

Care should be taken in interpretation of these data because the GS citation indices are not necessarily an accurate reflection of science quality or value but more of popularity. The papers of Fischer and Edmeades and Sayer *et al.*, for example, have broad appeal but represent reviews of information rather than new results meant for practical application.

In general, the opportunity to get the SF presentations published in a high quality journal is likely to serve as an incentive for the CGIAR and non-CGIAR scientists alike to attend the SF and pursue joint publishing opportunities.

The 2013 SF

The questionnaire survey results were analyzed by looking at frequency distributions of answers provided by all respondents and by selected groups of participants. The filtering of responses by gender, nationality (developed vs. developing country), organization (CGIAR vs. non-CGIAR) and sector (agriculture vs. other) did not reveal any differences for the main questions that were ranked quantitatively and thus the results are presented for the complete group of respondents.

Participants

A breakdown of the 2013 SF participants by region in which they are based is given below in **Figure 1**. Of the 130 respondents⁹ to the online questionnaire, 51% were male and 49% female (as opposed to 56% and 44% respectively for participation in the SF).

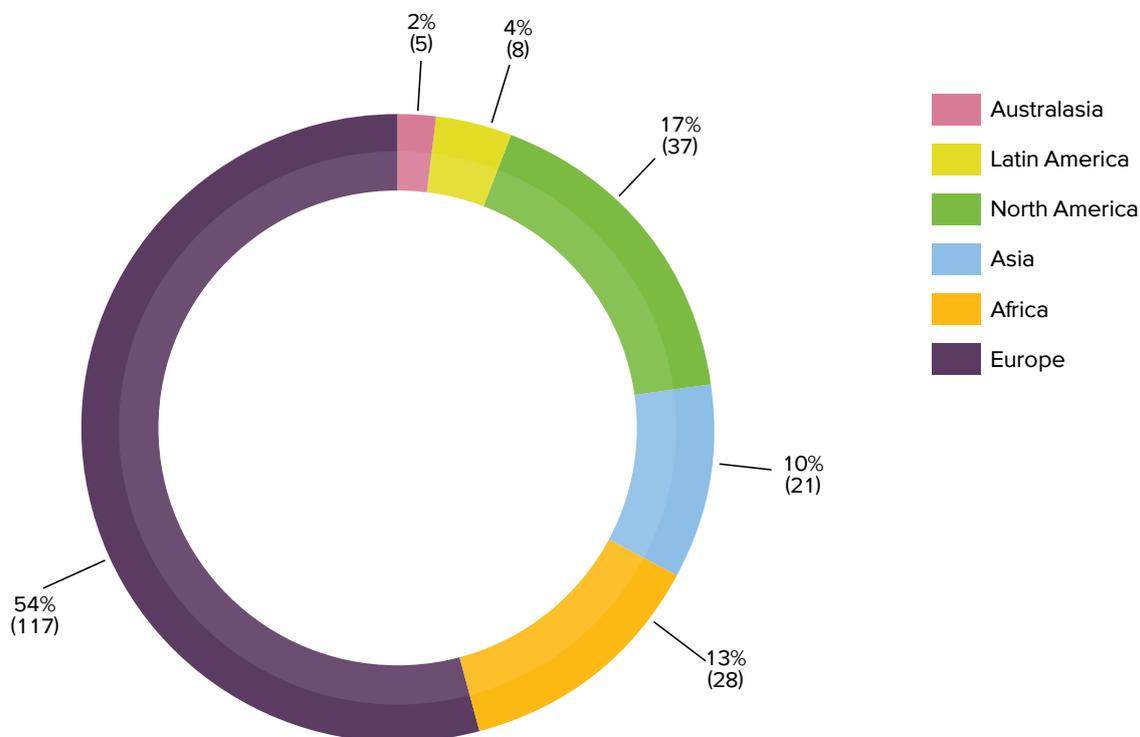
Survey respondents¹⁰ largely worked in universities/research institutes and the CGIAR, although donors and IGO/NGOs were significantly represented (**Figure 2**), the vast majority being from the agriculture and nutrition sectors (**Figure 3**), although the ‘other’ category comprised many economists from a range of disciplines.

The ‘other’ category also included representatives from numerous sectors, including government, social sciences and the food industry.

Early career scientists

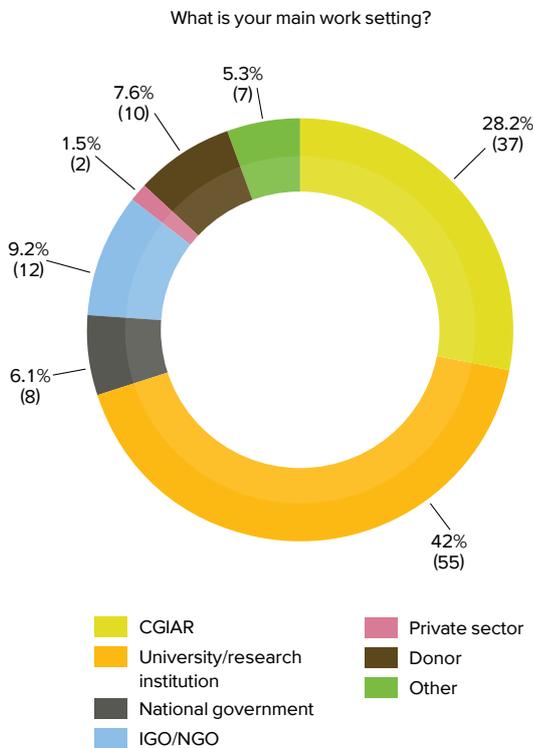
It is worth noting that the ISPC sponsored some of the participants from developing countries in 2011 and 2013, particularly early career scientists. However, an innovation in the 2013 SF was the introduction of a special session targeted at early-career scientists (ECS) to increase opportunities for participation and exchange. 62 expressions

Figure 1. Continental base of the 2013 SF participants. Note that for Europe many Italy-based participants were from the ISPC secretariat and the proportion of Germany-based ones was large because the SF was held in Bonn.



9. 130 respondents completed the survey once started. An additional 11 respondents started the survey and contributed some responses but did not finish it.

Figure 2. Work setting of respondents to the 2013 SF questionnaire.



of interest were received in response to a call for proposals, from which 21 individuals were selected to participate at the 2013 SF. The ECS that attended the 2013 SF with the support of the ISPC were highly appreciative, typically saying that it was 'of great significance to career advancement'.

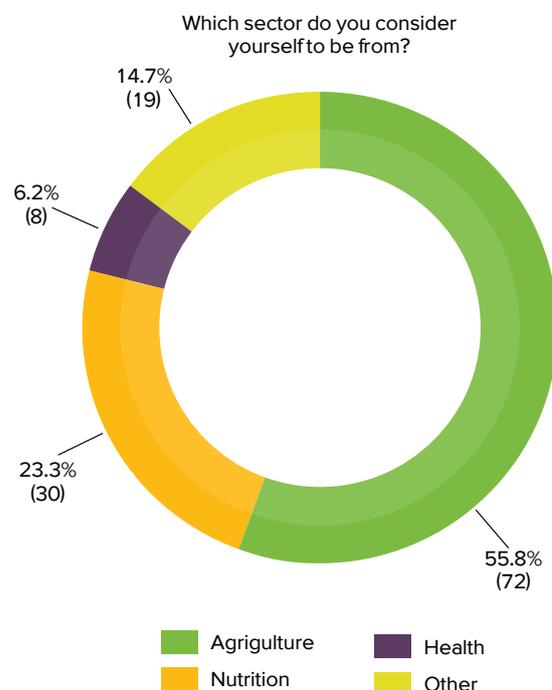
Funds were also made available for a competition between the ECS who attended the Science Forum, to support exchange visits and create new partnerships. Eight such exchanges are being supported in 2014.

Organization, structure and content

The organization, structure and content of the 2103 SF were generally held in high regard, with numerous respondents referring to them as 'excellent'. One highly experienced participant thought the 2013 SF to be 'one of the best ever meetings' and another described it as being of 'immense value'.

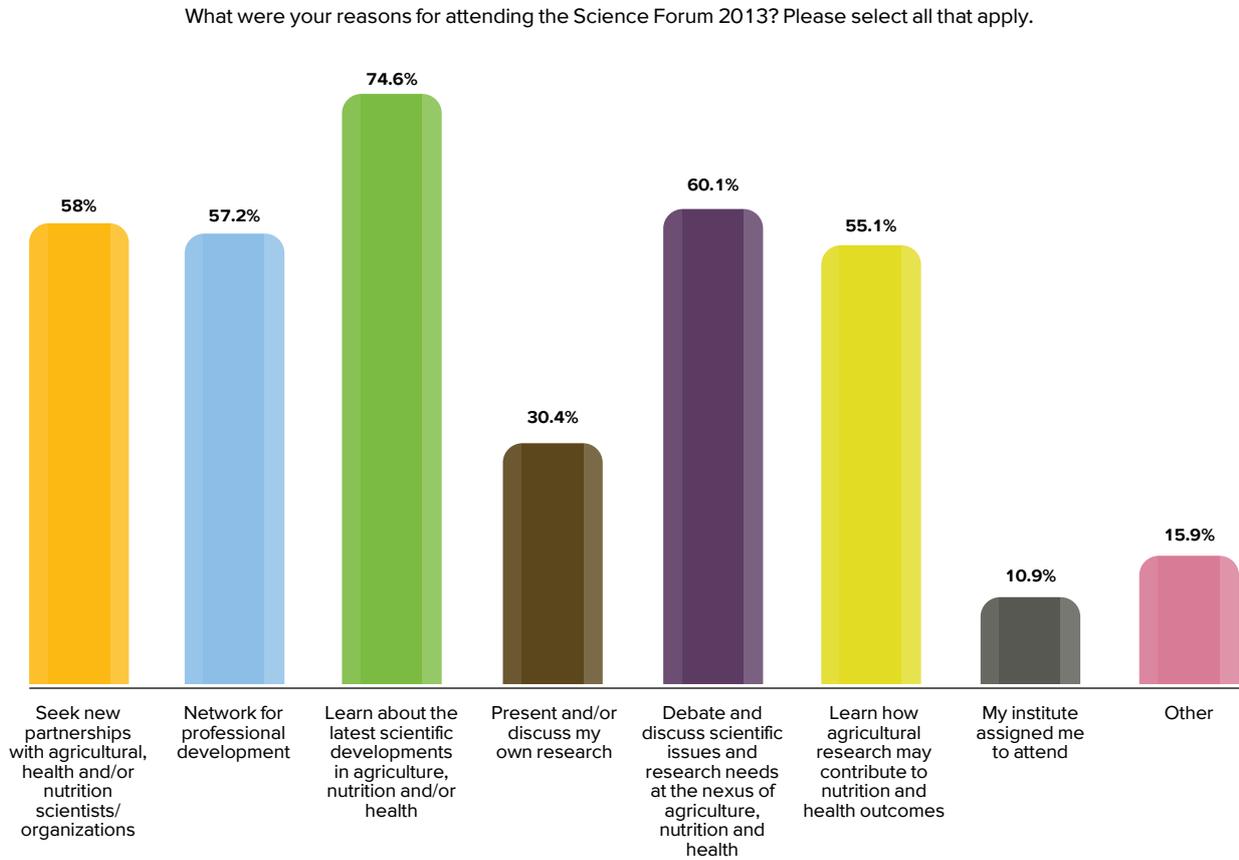
Where there was criticism, it invariably centred on aspects of time allocation, particularly on there being insufficient time for adequate discussion of presented topics, the timetable being too tight and there being too many parallel sessions, which meant that attendance was restricted - difficult choices had to be made. The social programme was also praised for representing a useful informal opportunity for meaningful discussion and interaction.

Figure 3. Sectors in which respondents to the 2013 SF questionnaire worked.



10. It is important to note that respondents to the questionnaire attended the SF, but that many who applied for entrance were not successful. Their opinions have not been canvassed.

Figure 4. Reasons for attending the 2013 SF



Reasons for attendance

For 75% of the 138 respondents to the online questionnaire, the major reason for attendance was to learn about the latest scientific advances in agriculture and nutrition and establish new partnerships (Figure 4). Respondents could select as many answers as desired so percentages do not add up to 100. The key benefits of attendance are listed in Table 3.

Expectations were rated on a ten-point scale and are included in Figure 5, where a summary of responses is provided for specific expectations. It is apparent that all expectations were at least met according to the 139 respondents. Expectations were not influenced by gender, nationality or occupation.

Table 3. Key benefits of attendance at the 2013 SF according to respondents to the 2013 SF questionnaire.

Issue	No.	Personal View
Gained better understanding on a specific area, or a new idea for research; high quality presentations.	37	New insights regarding the complex links between agriculture, nutrition and health from an agricultural perspective was useful and appreciated for one from a health background.
Good interaction/learning with colleagues, like-minded professionals, with diverse participants, networking, etc.	27	I gained a lot in terms of networking and sharing ideas with experts in the field.
Opened doors for implementation (scale-up) of new technologies, projects; made contacts/partnerships to help with PhD studies or collaborate on research/intervention.	23	I established that a very relevant study is conducted in a similar setting to mine and got in touch with those responsible.
Gained a sense of the current debate/thinking on agriculture-nutrition issues that has helped frame my ideas for research, writing, publication, etc.	12	Helped me better understand the research context that my PhD project sits in.
Inspiration, motivation, validation of own efforts.	3	As an early career scientist, I drew inspiration and motivation to aim for more through interactions with experienced professionals in my area of study.
Had an opportunity to share my own research, and/or to give out information about experiences or events.	1	Meeting and interacting with professionals from the agriculture sector. Introduced to many people and had opportunity to share on a personal level some of my own research in nutrition and also 'advertise' for an upcoming conference on nutrition in Africa.

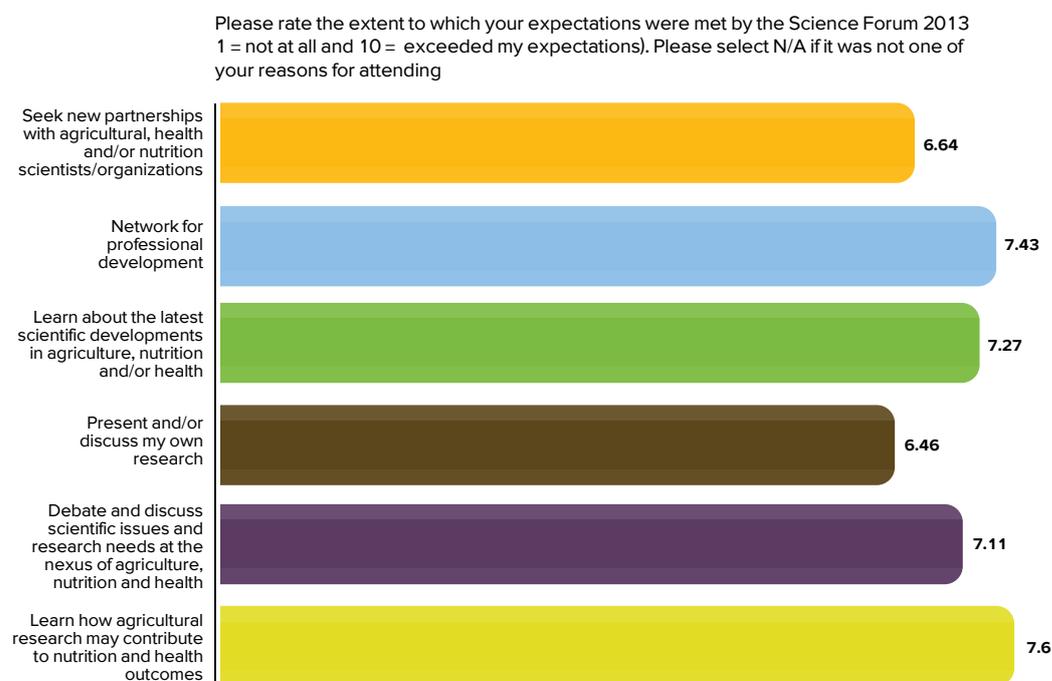
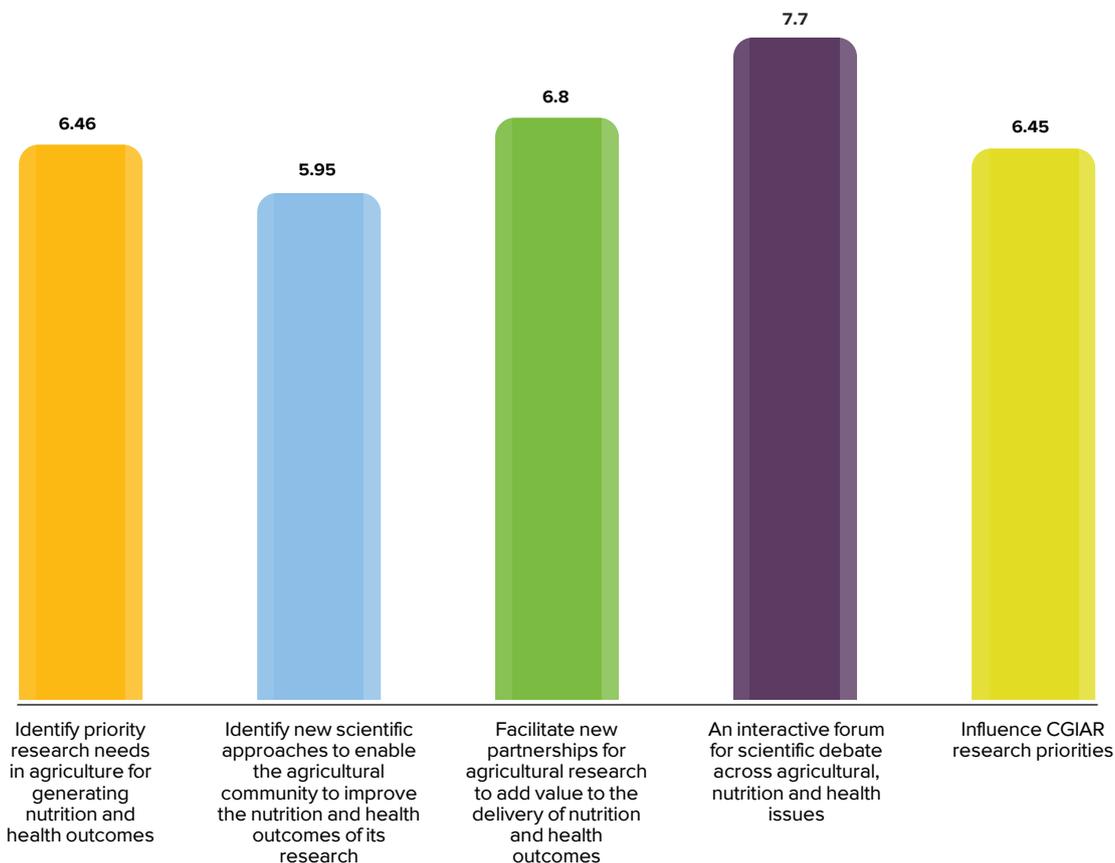
Figure 5. Expectations of respondents to the 2013 SF questionnaire rated on a ten-point scale.

Figure 6. Effectiveness on a ten-point scale for the 2013 SF according to 132 respondents.

How effective do you feel the Science Forum 2013 has been in meeting each of the following objectives?
 1 = not at all effective and 10 = more than met the objective



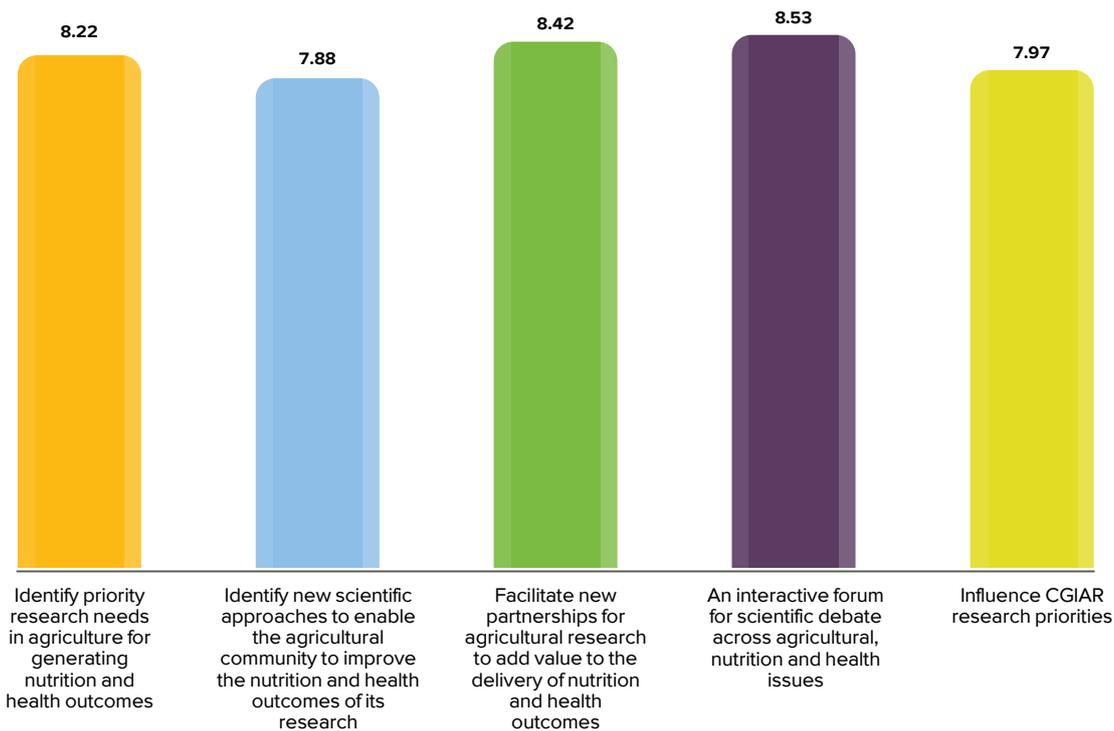
Effectiveness

The SF scored high as ‘an interactive forum for scientific debate across agricultural, nutritional and health issues’, but also as an opportunity to identify priority research needs and new scientific approaches and partnerships (Figure 6). More

detailed analyses of the complete respondent data for the 2013 SF indicated that quantitative responses to questions on effectiveness were not influenced by gender, country of origin (developed vs. developing country), CGIAR or non-CGIAR staff membership or area of work (agriculture vs. non-agriculture).

Figure 7. Appropriateness of objectives on a ten-point scale for the 2013 SF according to respondents to the 2013 SF questionnaire.

How would you rate the appropriateness of each of these Science Forum objectives?
1 = not appropriate at all and 10 = very appropriate



Appropriateness of objectives

Five key objectives were rated on a ten-point scale as indicated in **Figure 7**, where it is evident that they were considered to be highly appropriate.

More detailed analyses of the complete respondent data for the 2013 SF indicated

that quantitative responses to questions on appropriateness, as for effectiveness, were not influenced by gender, country of origin (developed vs. developing country), CGIAR or non-CGIAR staff membership or area of work (agriculture vs. non-agriculture).

Table 4. Some key outcomes according to respondents to the online survey of participants at the 2013 SF.

Issue	No.	Personal view
New/more effective partnerships; better coordination, cooperation; better integration of agriculture and nutrition; more joint work, interdisciplinary research, etc.	25	Potential for asking questions of mutual interest in future data collection in both sectors; potential for new research to explicitly test linkages.
Key list of research/funding priorities identified; change in research priorities.	14	A new focus of linking agriculture to improve nutrition in countries where nutrition deficiencies are perennially high.
Revision of CGIAR approach to nutrition: more clarity, more honesty.	13	15 CGIAR research to measure dietary quality as a core outcome of its investments.
More attention to/awareness of/understanding about this field/issues.	11	Participants, particularly from the agricultural community, have a better understanding of the need to use sound assessment methods to evaluate effects of agricultural interventions in nutrition and health.
New tools/measures to include in research, improved methodology (e.g. limitations of RCTs) and more active debate about this.	10	Recognition of the limitations of RCTs in this field and the need for exploring more appropriate standards and methodologies.

Key outcomes

More effective partnerships, greater interdisciplinarity and better integration of agriculture and nutrition were the three key outcomes mentioned by participants at the 2013 SF according to the information in **Table 4**.

Value of session types

Plenaries were highly rated and the knowledge share fair low by the 132 respondents. According to **Figure 8**, for plenary sessions, keynote talks and 'evaluating nutrition and health outcomes' were most appreciated and speakers and their presentations were considered to be of high quality.

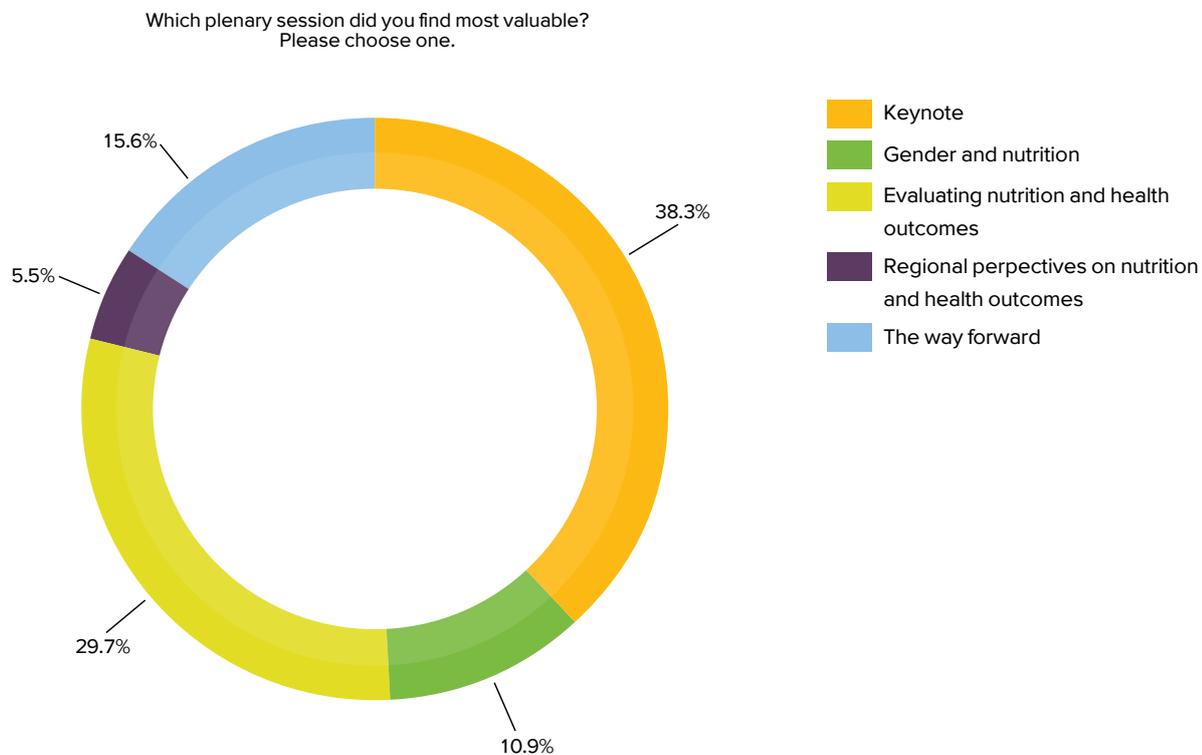
Value of social events

Social events were also important because much of the most useful discussion and networking took place under informal conditions, outside the lecture halls. The dinner and photo exhibition at the Museum Koenig were the most appreciated social event as they promoted meaningful discussion and interaction according to 60% of the respondents.

The breakout session evaluations

The breakout session co-ordinators almost unanimously had their expectations for the sessions met or exceeded and got a very positive impression of the process leading up to the SF. Feedback was also regarded positively. More pre-SF communication would have been useful according to some to help coordination and planning, and fewer and longer sessions were suggested for future SFs. The core of the rather limited criticism focussed on time management: while organization was good, greater strictness in managing sessions could pay benefits. An additional suggestion was that different breakout session discussions should avoid addressing the same issues.

Figure 8. Relative value of plenary session type according to 2013 SF online survey respondents.



Interviews

For the interview responses, there were 43 positive comments on overall impression of the 2013 SF and only five negative comments. Regarding management, there were 38 positive comments versus 35 negative ones and for logistics the respective numbers were 15 and five.

Targeted key informant interviews

The responses from the interviewees were overwhelmingly positive regarding the usefulness of the SF and its organization. The content was indicated to be of high quality and the meeting was reported to be good for promoting partnerships, networking and interdisciplinary discussion. The content was described as having successfully addressed 'the big picture of agriculture and nutrition' according to one respondent.

Interviews with participants randomly chosen

Again there was high praise for the organization and content of the SF, providing an opportunity to make and secure partnerships and promote discussion among participants from a diversity of disciplines, occupations and countries that might otherwise not have had the opportunities to link up. It was a particularly good opportunity for CGIAR representatives to meet outsiders and vice versa. The abiding weakness, as indicated previously, concerned time. The schedule was tight, attendance at various sessions had to be prioritized and insufficient time was allocated for discussion periods. These observations were linked with the fact, mentioned several times, of there being too much information generated for it all to be assimilated successfully.

Various useful suggestions were made for how the problems of insufficient time and excess information might be addressed in future SF, two of the most useful being:

- Fewer parallel sessions and shorter presentations allowing more time for dialogue, discussion and debate
- Distribution of rapidly produced summary documents for presentations and discussions

However, several participants thought that the discussions could be opened up to more contributors, including those from outside the SF, by setting up online discussion groups and web-streaming presentations.

Several of the non-scientists present, particularly journalists, believed that they could have been better catered for, given their limited understanding of the detailed science of agriculture and nutrition. A similar perception was mentioned by NGO representatives.

Response to the single question asked in March 2014 of the 2013 SF

There were eleven responses that were very much in line with those received for the 2009 and 2011 SFs, addressing issues of value in terms of meeting new people, getting an update on current thinking in the field, establishing new contacts, networking and establishing partnerships and collaborative ventures. The general consensus was that the 2013 SF was valuable and one experienced researcher claimed that the 2013 SF was 'one of the best conferences that he had participated in'.

Analytics for the 2013 SF presentations

All the 2013 SF presentations (68) were made available on SlideShare and were viewed ranging from a minimum of 41 times to a maximum of 387, with only 25% of the presentations being viewed less than 126 times. The videos for the plenary sessions (20) were uploaded on to YouTube, receiving a total of 783 views as of 31st March 2014.

Strengths and limitations of the evaluation

The excellent response to the 2013 online questionnaire was an obvious strength of this evaluation. Furthermore, the interviews covered a large number of participants serving different roles, allowing triangulation of quantitative and qualitative information. Consistency of information gathered using different methods strengthens the validity of the main conclusions.

The time lapse between the three SFs made it impossible to apply similar methods for evaluating the perceptions and influence of the events. Thus the evaluation covered different aspects of the different SFs. Comparison among the SFs was further hindered by the fact that the participants were mostly not the same at each event. Furthermore, while the response rate to the 2013 survey was good, and the survey thus provided a rich source of information, the brief survey among 2009 SF and 2011 SF participants was completed by only a very small number of respondents. This may have been due to the time lapse from the events, making it difficult for

participants to recall their impressions, or that the SFs had not made lasting impressions. Also, the responses received were quite general, making it difficult to draw definite conclusions. There were, however, no indications that any of the SFs had suffered from serious shortcomings.

Finally, statistics for the participants regarding their background (e.g. gender, nationality, type of organization where employed, etc.) were not collected in a standard way for the three SFs. Therefore, it was difficult to assess improvements from one SF to another on attendance in terms of specific participant profiles. Likewise, although the SF summary is an important output of the event, nothing could be said about its value to the SF participants as downloads from the Internet were not able to be tracked¹¹. These are among the aspects that the SF organizers need to address in the future.

Despite the lack of comprehensive data on SF participants, there has been an improvement in the gender balance over time (**Table 5**).

Table 5. Progress in ensuring gender balance at SFs.

Gender	2009 no.	2009 %	2011 no.	2011 %	2013 no.	2013 %
Male	244	76	147	68	120	56
Female	78	24	70	32	96	44
Total	322		217		216	

11. The 2013 SF summary was directly linked as a pdf from an e-mail sent to all the participants, and thus Google Analytics was not able to track the download.

The interpretation of the data on nationality is complicated by the fact that those working in international centres (also other than the CGIAR) are not necessarily nationals of the country in which they work. Nationality of participants is also influenced by the venue, and thus for the 2011 SF a large proportion of the participants, about a third, were from China. However, it appears that from the outset Latin America has been under-represented - 8% and 4% respectively in 2009 and 2013. This could be a result of language - conferences in English might be less attractive to Spanish speakers than they are to nationals of Europe, Africa, Asia, Australasia and North America. It may also reflect the fact that the CGIAR has relatively fewer activities in Latin America than in other developing regions. Europe was possibly over-represented in both the 2009 SF and 2013 SF, bearing in mind that both SFs were held in Europe, with respectively 45% and 54%

of participants. African representation at the SFs was 17% in 2009 and 13% in 2013 and the corresponding data for Asia were 14% and 10%.

Overall, the proportion of developing country and developed country representation differed for the 2009 and 2013 SFs, with slightly over a third of the participants coming from developing countries in the 2009 SF and approximately a quarter from developing countries in the 2013 SF. Respondents to the 2013 SF interviews indicated that with regard to participant mix there were equal numbers of positive and negative aspects, half believing that there was a strong and balanced mix of participants and half believing that a wider stakeholder community could have been represented. Care will have to be exercised in the future to ensure that a representative balance is aimed for among participants in terms of gender, nationality and area of expertise.

Summary of lessons from the SFs

The principal lesson learned from the three SFs organized by the ISPC is that the SFs are appreciated by the participants and that although improvements can be made to content and organization, the SFs have been successful and have met their objectives. There were very few instances of harsh criticism made by participants for any of the three SFs, but there were numerous suggestions made for improvements, including those listed below:

- Choose the theme carefully to maximize participation and discussion
- Choose keynote speakers and session chairs carefully
- Summarize discussions rapidly and distribute information
- Expand discussion online
- Get participant feedback after meeting and one year later
- Ensure that SF outcomes inform CGIAR and CGIAR Research Programmes (CRPs) research priorities and agendas
- Discuss practical research applications
- Gauge extent of new partnerships and networking
- Hold follow-up meetings and discussion
- Track professional development of early career scientists
- Be even more forward looking
- Strengthen the development aspect of the SF

Additional lessons learned: ISPC self-reflection

Reflecting on individual feedback and the ISPC Secretariat's experience from organizing the three Science Fora, additional lessons learned and insights gained are summarized below.

The Science Forum topic chosen should ideally address the interests of most Centers / CRPs and be related to the Strategy and Results Framework (SRF). To maximize the SF utility to CRP implementation, the themes of future SFs could be selected through a process that engages a foresight exercise, involving consultation with key partners, and steered by the ISPC. However, it should still be kept in mind that while a broader consultation process is essential, it ought to be a strategic selection.

The guiding principle to date has been to produce outputs that will assist the ISPC to further its role in mobilizing science for development within the CGIAR and potential partner organizations. The three main outputs of SFs are:

- a summary of the Forum proceedings
- an ISPC brief
- a special edition of a peer-reviewed journal

Although these are the three main outputs, the less tangible ones include networking and the residual effects of having participated, e.g. through the continued referencing and influence of the presentations made by the speakers. That these are major components of the overall influence of a meeting is evidenced by the number of YouTube and SlideShare views for the 2013 SF presentations. Other factors that contributed to the success of the 2013 SF included a targeted communication strategy that was put in place (e.g. the setting up of an informative website and the use of other channels, including the CGIAR blog) to increase visibility. A solid visual identity for the 2013 SF outputs was created, a crucial element in building recognition and coherence among the outputs that will also be followed

through for the upcoming Science Fora. Domain names for the 2015 and 2017 SFs have already been purchased in line with this strategy.

While subject matter specialists are invited without respect to origin, to maximize the value and spread of the presentations and discussions, gender and diverse geographical representation among participants is crucial, and should be pursued as a priority. Funding was allocated to facilitate the participation of early career scientists at all three SFs. Partners, including the CTA¹² (in 2009) and GFAR¹³ (in 2009 and 2011), sponsored some scientists from specific constituencies, which helped to achieve a better geographical spread. As such, a portion of the SF budget or specific contributory funding should be dedicated to support the participation of women and developing country scientists in addition to the early career scientists. Since the direct costs for the SFs are shared between the ISPC and the host institution, responsibilities and budget allocations should be defined at the initial stages of the SF planning.

Convening funding and development partners to consider the key conclusions of the Science Forum, and chart a course for actionable follow-up, would be a useful next step. There is scope to ensure that new cross-cutting information (e.g. nutrition/agriculture for the 2013 SF) is distilled for policy makers, making development decisions that impact on these two fields. This might be made possible either through follow-up workshops or linking with other conferences that are policy-maker oriented, e.g. the Second International Conference on Nutrition (ICN2) scheduled to take place in November 2014 at FAO in Rome. Although

the selection of format and venue for follow-up depends on subject matter, enhancing the policy information strategy of future Science Fora should be part of the conference planning cycle.

With regards to CGIAR participation, all Centers participated in the 2009 and 2011 SFs, while only 12 participated in the 2013 SF. Some funding assistance for travel was provided in 2009, but in 2011 and 2013 Centers bore the full costs of their participation. The level of Center staff that participated has also changed - in 2009 participants were mainly early career researchers and in 2011 DGs and DDGs participated. At the 2013 SF, two DGs and four CRP leaders participated even though there are 11 CRPs with nutrition Intermediate Development Outcomes (IDOs). There is a need to engage fully with the Centers and CRPs so that they see value in participating, as well as to use their networks to identify experts external to the CGIAR, who can contribute to the scientific dialogue and exchange.

12. Technical Centre for Agriculture and Rural Cooperation

13. Global Forum on Agricultural Research

Discussion and implications

Maximizing value

Value of future SFs can be maximized from the outset by ensuring that a broad range and appropriate mix of participants are attracted to the forum. The 2013 SF was the first to include a steering committee of technical experts to plan the programme. This proved to be worthwhile and should become standard. A careful choice of theme will maximize interdisciplinarity and this will be complemented by a careful choice of keynote speakers and topics. The 2013 theme fitted very well with other nutrition issues being discussed at global fora during 2013 - it was good timing and very topical. Preferably future SFs should be held at a venue that is relatively easy to reach by air and presents the minimum challenge to the majority in terms of visa requirements. Possibly this favours the choice of a European country, which could be considered a trade-off. However, the SFs are by design kept relatively small (<300 participants) so as to be able to stimulate discussion and exchange and manage them successfully. Venue is an important factor to the extent it helps achieve optimal diversity and the right mix of participants. Other contributing factors to maximizing value include rapid and comprehensive communication of discussions and results, extended discussion through online fora, publication of presentations in a well-read journal and getting feedback from participants and acting on it.

Future improvements

It is evident that there has been an improvement in value of the SFs as perceived by the participants, which at least in part can be attributed to learning from past experience. Many responses to questions on the usefulness of the 2013 event suggested that time management was a key issue. The suggestion for improvement was not to pack the timetable, allow sufficient time and opportunity for informal discussion and try not to run numerous parallel sessions that require participants to miss out on interesting presentations and discussions. A similar observation had been made internally in the ISPC after the previous SFs but it seems that the balance of presentations and discussion can be further improved. Maybe the ISPC could consider presenting new information in future SFs during breakout sessions and confine plenary presentations to detailed reviews of important topics. It is evident from participant feedback, however, that SFs are appropriate for discussing key issues in agriculture and related sciences and that the concept of holding Science Fora does not have to be questioned.

There were also suggestions to take into better account the requirements of those participants outside the research community, including journalists, NGO representatives and donors. This could be achieved through communicating information about the SF before, during and after the event in more diverse formats and specifically preparing some of it for non-scientific audiences. It would also be useful to design and use a standard monitoring and evaluation methodology to allow comparisons to be made among SFs; for instance by maintaining similar records

about participants and by monitoring uploads of SF-related information material. Organization of an SF needs to begin well in advance of the event and particular attention needs to be paid to having necessary information distributed to prospective participants in a timely manner.

Implications for the CGIAR

One of the principal purposes of the SFs is to integrate the CGIAR better into the global research community through establishing partnerships and contributing to networks. Only in this way can the CGIAR remain relevant, up-to-date and be responsive to the continuously changing demands made of agricultural research. It is also important that the CGIAR remains aware

of what happens outside of its immediate circle of agricultural partners to ensure that important research is a) carried out by those with the competitive advantage, to do so, and b) is not unnecessarily repeated. Furthermore, it is important that the CGIAR engages with research sectors other than agriculture that ultimately have the same goals. Therefore, the success of the SFs has a direct bearing on the extent to which the CGIAR can fulfil its function in these regards and ensure that its research complements that of other programmes and organizations. This is something that donors are keenly aware of and therefore the CGIAR has to remain relevant in an increasingly competitive environment if it is to survive in the future and make a valid contribution to agricultural development in its broadest sense.

Conclusion

The SFs have been successful with respect to their short-term objectives of bringing together researchers from different organizations and sectors to debate research issues that are important for development. They have become increasingly appreciated as the SF model has evolved, and the special journal issues published have likely increased the visibility of agricultural research and the CGIAR. The exploration of new modalities for research collaboration between the CGIAR and partners is advancing with each SF, taking into account recent scientific advances in important areas. The 2013 SF was arguably the most successful SF to date and represents a model that can be used to build on in the future. If the lessons learned from it, particularly regarding improvements to organization, are borne in mind in planning the next SF, it is likely that the 2015 SF will be even more relevant and appreciated than its predecessors. The lessons learned from the SFs should be useful to inform policy and practice both within and outside the CGIAR. The key to success is good planning, particularly with regard to the theme chosen for the SF, local organizers interested in the topic and the quality of interaction and support provided by the local host organization, the quality of the invited speakers and the place where the SF is to be held.

The concept of the SFs was to provide a unique opportunity for broad-based scientific debate among practitioners from many disciplines associated with agriculture. The Science Forum has been designed to enable the ISPC to support the CGIAR's strategic agenda. If the SFs can remain true to this, they will serve a useful function in the future, elevating scientific debate of topics relevant to the CGIAR and to development - they will continue to help mobilize science and influence science agendas. The SFs were not designed to play the same role as regular scientific conferences and this original intention should not be compromised.

Annex

Survey questionnaire

Section 1. Reason(s) for attending the Science Forum 2013

What were your reasons for attending the Science Forum 2013? Please select **all** that apply.

Please also rate the extent to which these expectations were met by the Science Forum 2013.

Use a scale of 1 to 10, where 1 = not at all and 10 = exceeded my expectations.

Objective	An objective of mine (select all that apply by marking an X below)	Your rating (1–10) or N/A if not applicable (if it was not one of your objectives)
Seek new partnerships with agricultural, health and/or nutrition scientists/organizations		
Network for professional development		
Learn about the latest scientific developments in agriculture, nutrition and/or health		
Present and/or discuss my own research		
Debate and discuss scientific issues and research needs at the nexus of agriculture, nutrition and health		
Learn how agricultural research may contribute to nutrition and health outcomes		
My institute assigned me to attend		
Other (please explain)		

Can you identify and describe one key benefit that you personally obtained from your participation in the Science Forum 2013?

Section 2. Effectiveness of the Science Forum 2013

How **effective** do you feel the 2013 Science Forum has been in meeting each of the following objectives? Please rate using a scale of 1 to 10, where 1 = not at all effective and 10 = more than met the objective.

Objective	Your rating (1–10) or DK (don't know)
Identify priority research needs in agriculture for generating nutrition and health outcomes	
Identify new scientific approaches to enable the agricultural community to improve the nutrition and health outcomes of its research	
Facilitate new partnerships for agricultural research to add value to the delivery of nutrition and health outcomes	
An interactive forum for scientific debate across agricultural, nutrition and health issues	
Influence CGIAR research priorities	

How would you rate the **appropriateness** of each of these Science Forum objectives? Please rate using a scale of 1 to 10, where 1 = not appropriate at all and 10 = very appropriate.

Objective	Your rating (1–10) or DK (don't know)
Identify priority research needs in agriculture for generating nutrition and health outcomes	
Identify new scientific approaches to enable the agricultural community to improve the nutrition and health outcomes of its research	
Facilitate new partnerships for agricultural research to add value to the delivery of nutrition and health outcomes	
An interactive forum for scientific debate across agricultural, nutrition and health issues	
Influence CGIAR research priorities	

What other objectives would you like to see for the Science Forum in the future?

Can you identify one key outcome that you think is most likely to arise from the Science Forum 2013?

Section 3: Value of the Science Forum 2013 sessions and events

How valuable and informative did you find the Science Forum 2013 sessions?

Please rate using a scale of 1 to 10, where 1 = not at all and 10 = exceptional

Session	Please indicate your rating (1–10) or N/A (not applicable, if you did not participate)
Plenary sessions	
Reporting back sessions	
Breakout sessions	
Knowledge Share Fair	
Exploring opportunities for early career scientists	

Which plenary session did you find most valuable and why?

(Please choose **one** of the following: Keynote; Gender and nutrition; Evaluating nutrition and health outcomes; Regional perspectives on nutrition and health outcomes; Way forward)

Which social event (conference dinner with photo exhibit, reception, etc.) did you find most valuable and why?

Section 4: Assessment of the breakout sessions

For the breakout sessions **you attended**, please give us your impressions on the usefulness of the sessions.

Breakout Session 1: Under-nutrition – Monday 23rd and Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 2: Non-Communicable Diseases – Monday 23rd and Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 3: Diet Diversification – Monday 23rd and Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 4: Food Safety – Monday 23rd and Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	

Breakout Session 5: Policy and Institutional Approaches – Monday 23rd and Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 6: Science, Technology and Partnerships – Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 7: Facilitating Research Uptake – Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 8: Value Chains – Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 9: Farm Size, Urbanization and Productivity – Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	
Breakout Session 10: Economic Implications – Tuesday 24th	
What did you find useful?	
What were the weaknesses of the session?	

Section 5: Suggestions for improving future Science Fora

What specific follow-up activities should take place in order to maximize the value and impact of Science Forum 2013, which you just attended? Who needs to do these?

Do you have any suggestions for **themes** of future Science Fora?

Do you have any other comments, observations, or suggestions, about the Science Forum 2013, or about future Science Fora?

Section 6: Background information about yourself

In which country are you based?

Are you:

- Female?
- Male?

What is your main work setting?

- CGIAR
- University/research institution
- National government
- IGO/NGO
- Private sector
- Donor
- Other (please specify)

What sector do you consider yourself to be from?

- Agriculture
- Nutrition
- Health
- Other (please specify)

In what capacity did you attend the Forum?

- Invited speaker/panellist
- Breakout session coordinator
- Early career scientist
- Registered participant
- Other (please explain)

Have you attended previous Science Fora?

- Yes
- No



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