



RESEARCH
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RTB Quality of Research for Development (QR4D): current thinking and future perspectives

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Outline

- Summary of ISPC deliberations on framework for QR4D
- QR4D in RTB Research Program
- Discussion



ISPC Framework for QR4D

QR4D-ISPC status

- ISPC to facilitate System-wide agreement on the nature and assessment of quality of science
- broadened to Quality of Research for Development (QR4D)
- CGIAR and donors concerned with both quality of programs and likelihood of delivery.



Brief Number 52

ISPC to develop a frame of reference for QR4D across the CGIAR that gives guidance at different levels but without burdening the Centers and CRPs; and, to use that tool

QR4D viewed as an integrated whole of four key elements: **relevance, credibility, legitimacy and effectiveness** (Belcher et al., 2016)

Belcher, B.M., et al. (2016). Defining and assessing research quality in a transdisciplinary context. *Res. Eval.* 25, 1-17.

QR4D- Relevance

“importance, significance and usefulness of the research objectives, processes and findings to the problem context and to society, and CGIAR’s comparative advantage to address the problems”

Consideration	Indicator (RTB)	Challenge
strategic stakeholder engagement	workshop reports, survey data and analysis	<i>need to go beyond counting and measure quality of engagement</i>
impact pathways (IPs)	Proposal Updates in POWB and Annual Reports	<i>need to follow progression along IP</i>
original, socially relevant research aligned to national and regional priorities and CGIAR SRF and SDGs	RTB proposal and annual reports; <i>ex-ante</i> study reports and publications white papers, discussion papers	<i>national and regional priorities lack detail</i>

QR4D- Credibility

“refers to the quality of science and implies that the research findings are robust and sources of knowledge are dependable”

Consideration	Indicator (RTB)	Challenge
importance of good scientific practice such as peer review	peer-reviewed publications: ISI-journals, books, book chapters	<i>need to go beyond counting and establish doable guidelines for ranking</i>
clear demonstration of: adequacy of the data; methods used to procure the data; data clearly presented with logical interpretation of findings	Datasets	<i>strategies to evaluate adequacy of data-beyond publication</i>
quality of breeding pipelines (methods used, breeding populations etc.)	Breeding Program Assessment Tool- BPAT; center evaluation of breeding programs	<i>address context; extend to which partners;</i>

QR4D- Legitimacy

“the research process is fair and ethical and perceived as such”

Consideration	Indicator (RTB)	Challenge
ethical and fair representation of all involved; genuine recognition of partners' contributions	ethics boards-reports and assessments; partners included in publications; letters of partner support	<i>counting partners included might not capture all involved</i>
consideration of interests and perspectives of intended users transparency/lack of conflict of interest	ethics boards-reports and assessments; surveys of partner perceptions of collaborations	<i>need to incorporate into research plans and allocate resources</i>
recognition of responsibilities that go with public funding	contracts with partners, open access guidelines	<i>Responsibilities set; feasibility of monitoring and enforcing with partners</i>

QR4D- Effectiveness

“research generates knowledge, products and services that stimulate actions that address the problem and contribute to solutions and innovations”

Consideration	Indicator (RTB)	Challenge
dynamic theories of change with assumptions for how change happens	Publications (ranking & citations), training materials, datasets & tools, genetic material; reports (impact assessments); survey data and analysis	<i>go beyond counting and measure usage and adoption; need allocation of resources and time; ranking non-ISI publications</i>
negative unintended consequences		<i>how to evaluate negative consequences; indicators?</i>
effective communication	communication products changes in policy (government documents, media releases)	<i>measure usage of communication materials; measure changes in behavior</i>
leadership & capacity development	number of trainings and trainees; follow up on trainees	<i>resource allocation, cannot capture all types</i>

QR4D in RTB Research Program

Relevance: how is RTB doing?

- portfolio
 - flagships/clusters with connections between discovery research and product delivery
 - impact pathway aligned to SDGs and CGIAR SRFs
 - well aligned with priority setting study
- Phase II Proposal scores among best
- dedicated cluster for priority setting (CC5.1) with consultative process across RTB flagships for impact study selection
- Emphasis on end-user preferences and demand-driven breeding
- Linkages to other CRPs and Platforms



Credibility: how is RTB doing?

- enhanced communication strategies for program-stronger culture for Science Quality
- linkages to Big Data Platform
 - Ensure all CGIAR data is FAIR (Findable, Accessible, Interoperable, and Reusable)
 - Generate data sharing platforms and protocols
 - Facilitate discoverability of data
- Breeding Community of Practice Cluster (BCoP)
 - More effective breeding programs (implement BPAT, Stagegate pipeline management and outreach to partner breeders)



BCoP meeting, June 2017

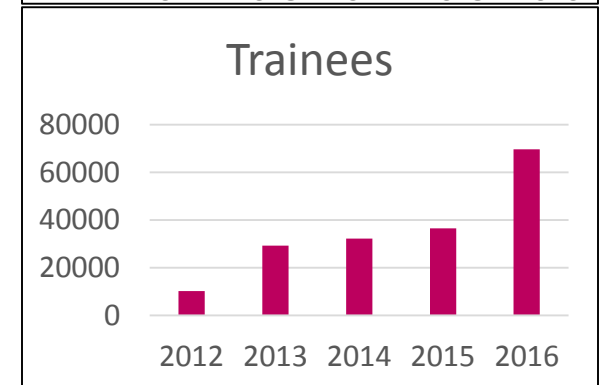
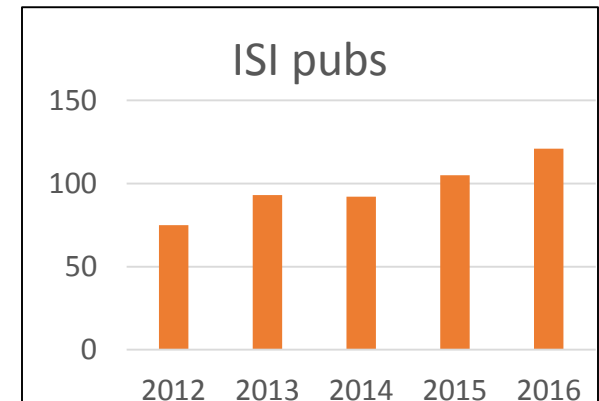
Legitimacy: how is RTB doing?

- RBM pilots-stakeholders involved in improved Theories of Change for selected clusters
- MEL system implemented-allowing better tracking of partner involvement
- RTB annual meeting together with local partners



Effectiveness: how is RTB doing?

- product portfolio addresses improved variety development, seed systems, value chains and major biotic/abiotic constraints with extensive network of local partners
- enhanced communication strategies for program
- promotion of scaling strategies for RTB products (Scaling Innovation Fund)
- impact studies important part of portfolio
- increase in ISI publications and trainees (short term)



QR4D Indicators & Strategies

Category	Indicator	Who	Oversight	Periodicity
Relevance	Phase II Proposal	RTB	ISPC	6 yr
	Annual Report, POWB	RTB	SO	Annual
	Program workplans	Centers	BoTs	Annual
	ex-ante and foresight study reports	Centers	BoTs	Annual
Credibility	ISI publications and IF	Centers	RTB Mgmt	Annual
	H-score senior staff	Centers	RTB Mgmt	3 or 6 yr
	"relevant" non-ISI pubs	Centers	RTB Mgmt	Annual
	"quality" datasets	Centers	RTB Mgmt	Annual
	"quality" of research pipeline management	Centers	BoTs & RTB Mgmt	Annual

QR4D Indicators & Strategies

Category	Indicator	Who	Oversight	Periodicity
Legitimacy	ethics committees	Centers	RTB Mgmt	6 yr
	policies in place	Centers	RTB Mgmt	6 yr
	# open access publications	Centers	SO & RTB Mgmt	Annual?
	# publications with partner coauthors	Centers	RTB Mgmt	Annual
Effectiveness	outcome indicators	RTB	SO & RTB Mgmt	Annual or longer?
	impact studies	RTB	SO & RTB Mgmt	Annual
	Tools & technologies released	Centers	RTB mgmt	Annual or longer?
	usage stats on communication products	RTB	SO & RTB Mgmt	Annual
	# of CapDev activities	Centers	RTB Mgmt	Annual
	# of trainees	Centers	RTB Mgmt	Annual
	mid-term review of CRP	RTB	IEA	3 or 4 yr

QR4D concluding thoughts

- Considering annual peer review of RTB Flagship programs (1 or 2 per year, at RTB Annual meeting), suggested by IEA
- Issue of selecting and using indicators- they should:
 - *be measurable (as simple as possible)*
 - *be evaluated fairly in a comparable scale*
 - *be balanced between their effectiveness and ease of measuring*

Program must continue to dedicate (and increase) resources to do follow-up studies, or have these be part of projects to generate evidence of impact



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THANK YOU

