Information and Networks (I&N) Program Review Panel

External Review Final Report

Submitted to IDRC Policy & Evaluation Division
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Contents

Acronyms

A2K	Access to Knowledge
API	Application programming interface
CEA/ICA	Connectivity and Equity in the Americas/Institute for Connectivity in the Americas
ECOSOC	United Nations Economic and Social Council
ESCR	Economic, Social and Cultural Rights
FPR	Final Prospectus Report
I&N	Information and Networks
ICT	Information and communication technologies
ICT4D	Information and communication technology for development
IDRC	International Development Research Centre
IODC	International Open Data Conference
IP	Intellectual property
K4D	Knowledge for development
LAC	Latin America and the Caribbean
NGO	Non-governmental organization
POs	Program Officers
RQ+	Research Quality Plus
ToRs	Terms of Reference

1. Introduction

The 2011-2016 period marks the implementation term of the IDRC's Information and Networks (I&N) Program, which seeks to enable greater understanding of how information networks affect citizens in developing countries, especially those belonging to marginalized communities.

The program is structured around four interconnected outcome areas:

- Improve the quality of openness that networked technologies enable
- Protect the rights of citizens and consumers
- Catalyze the inclusion of marginalized communities in emerging networked societies
- Deepen and broaden the field of information networks and development

These outcomes were meant to be achieved through encouraging innovation, generating knowledge, influencing policy, and building integrated research capacities.

The I&N Program has a budget of CA$78.6m across a portfolio of 106 projects.[1] The largest portion of the budget is allocated to the Openness outcome area which accounts for 40 percent of the total budget, followed by Inclusion (32 percent), Rights (19 percent) and Field Building (9 percent). Allocations to individual projects within the outcome areas vary widely, ranging from a few thousand dollars to support publishing initiatives, to over CA$2.9m for ongoing support of some research networks.

The I&N External Review Panel commenced work in April 2015 and comprises Manuel Acevedo, Martha Garcia-Murillo, and Daniel J. Paré, ably assisted by Kelly Garton (See Appendix 1). The cooperation of the I&N Team throughout the review process facilitated the undertaking of this exercise and has been very much appreciated by the review panel.

2. Approach and Methodology

As with all IDRC external reviews conducted during 2014-2015, the review process started with the Program writing a self-assessment. In its Final Prospectus Report (FPR), the I&N team explained how it implemented its prospectus, its main outcomes, and the lessons derived from this programming period. The parameters for this external review were established by four questions stipulated in the Terms of Reference (ToRs) (see Appendix 2):

- *How did the program perform in implementing its Prospectus?*
- *Overall, was the quality of the research supported by the program acceptable?*
- *To what extent are the program outcomes relevant and significant?*
- *What are the key issues for the IDRC's Board of Governors?*

The panel developed an evaluation matrix consisting of 18 questions to guide the gathering of evidence to address the above four questions,[2] and employed a mixed methods approach, relying on different sources of data collection to enable adequate triangulation of the findings. The key components were: (i) a document review of selected program and project documents;[3] (ii) a synthesis of technical reports and project completion reports when available; (iii) a total of forty-eight 1.0-1.5 hour interviews (email, face-to-face, telephone, and Skype) with purposefully selected key informants and (iv) an assessment of the quality of 64 research outputs produced by 24 projects spanning the four outcome areas. The assessment of research outputs was

conducted using the *Research Quality Plus* (RQ+) assessment tool provided by the IDRC's Policy and Evaluation Division. Detailed information about the panel's approach and methodology is provided in Appendixes 3 to 7.

3. Challenges and limitations

This external review has taken place some 13 months prior to the completion of the Program's implementation period. When looking at the 75 projects approved from 2011 onward, more than half (n=40) are active. Given the large portfolio of I&N projects, the panel elected to analyze one third of the projects in depth. Within this sample more than one-third (10 of 24) have active status. For projects falling into this category it is too early to reach robust conclusions about the potential relevance and significance of their eventual research outcomes. The work of the panel also was somewhat constrained by two other considerations. The first pertains to shortcomings in the archiving and cataloguing of project-related documentation, especially research outputs. There is notable variation in the rigor with which Program Officers (POs) collect such documentation. The panel identified a number of instances in which the available project documentation was incomplete (e.g., missing research outputs, missing program completion reports).[4]

The second consideration centers on limitations with the RQ+ tool that was designed by IDRC's Policy and Evaluation Division to provide external reviewers with a systematic approach for answering a key external program review question - "Overall, was the quality of the research supported by the program acceptable?"[5] While acknowledging the benefits of using a comprehensive framework to evaluate research quality in a context-sensitive manner, the panel had to contend with implementation challenges resulting from what it views as overly broad definition of certain criteria, an erroneous operationalized assumption that project-level documentation offers adequate grounds for making determinations about specific criteria within individual research outputs, and tensions between focusing on individual research outputs versus individual projects (See Appendix 8 for a discussion of the challenges).

4. How did the program perform in implementing its prospectus?

Key Findings:

- ***Selecting, in 2010/11, Openness, Rights, Inclusion, and Field-Building as interconnected outcome areas was visionary and responded to demands from the global South;***
- ***Program implementation was coherent and effectively used financial and human resources to realize objectives;***
- ***When required, POs made appropriate changes to adjust to Program evolution and changes on the ground; and***
- ***Assigning the main programming priority to Openness demonstrates astute reading of the changes taking place in developmental, policy, and scholarly domains.***

The panel was asked to evaluate the coherence, effectiveness and appropriateness[6] of the implementation of the I&N Program Prospectus 2011-2016. In doing so, we focused on the evolution of the Program's strategy, and its implementation. In summary, we ***find that the I&N Program has been managed in a manner which ensured that program implementation was***

broadly in line with what was envisaged at the start of the existing program period. Priorities were established and changes were made in a thoughtful manner, with convincing rationales offered for divergences from what was originally intended.

4.1 Strategy Evolution

The selecting, in 2010/11, of Openness, Rights, Inclusion, and Field-building as interconnected outcome areas in which the I&N Program would "catalyze positive and inclusive benefits from information networks, as well as dampen their negative tendencies" (I&N Prospectus 2011-2016, p. iii) **was visionary and responded to demands from the global South**; a view echoed by a number of key informants.[7]

Four strategies drove program implementation: (i) stimulating innovation, (ii) generating knowledge, (iii) influencing policy, and (iv) building integrated research capacity. These strategies cohered with the specified purpose of the I&N Program. Having considered the diverse contexts within which the I&N Program operates and the resources at its disposal **the panel finds some minor discrepancies in the implementation of these four complementary strategies, but views choices made in their evolution to be, as a whole, appropriate.** The strategies 'generating knowledge' and 'influencing policy' were properly and widely implemented across the Program portfolio and contributed to generating a large volume of research outputs – including some produced by Program staff[8] – that flowed into a wide array of policy processes. For example, the *Broadband adoption and poverty: Evidence and new research directions from Latin America* (106990) project took advantage of relatively new data sets with highly disaggregated data to analyze the effect of broadband adoption at the individual, student, business, household levels in Brazil, Chile, Colombia, Ecuador, Mexico and Peru. Its research findings were utilized during the regional digital policy process (e-LAC 2015)[9] led by the UN Economic Commission for Latin America and the Caribbean. Likewise, the research findings and work of the *HarassMap: Using Crowd Sourced Data in the Social Sciences* (106623) project played a central role in Cairo University implementing an anti-sexual harassment policy; making it the first public university in the Middle East to do so. At the same time, important yet often overlooked efforts at systematizing and reflecting on the rich experience of IDRC in the Information and Networks domain were carried out by current and former IDRC staff members.[10] The results of these efforts merit wider visibility given their value as developmental knowledge resources.

The panel's findings regarding the effectiveness of the evolution of the 'stimulating innovation' and 'building integrated research capacity strategies' is more ambiguous. This appears to be due, in part, to a pervasive lack of conceptual clarity about the term innovation. In the Program Prospectus 2011-2016 the 'stimulating innovation' strategy pillar was defined as "catalyze innovations and demonstrate their value, social impact, sustainability and potential scaling-up over different thematic areas" (p. 12). However, through the interviews with key informants ***the panel finds that 'innovation' is understood in myriad ways spanning from being synonymous with the word change to implying the commercialization of new products/services.***

In its early stages, the I&N Program supported work focusing on innovation that failed to generate expected results. The *Mobile Money and Local Development* (106459) project is archetypal. It sought to study and test a mobile application but managed to produce only

research results. Shortly thereafter it was decided to shift focus away from supporting research seeking to generate technology-based innovation products to supporting policy research aimed at informing the establishment of enabling environments for innovation. Exemplary actions in this regard include the activities of *African Innovation Research and Training Network* (106223), or *Open A.I.R.*, whose work on Intellectual Property (IP) influenced policies in Egypt, South Africa and which has provided an African voice in international IP policy fora. On the basis of the materials reviewed, **the panel endorses this shift because the I&N Program's core competencies are better suited to informing the establishment of enabling environments for technology-driven innovations, than to spurring the development of technological innovations.**

In the Program Prospectus 2011-2016, the building of integrated research capacity is directly linked to the Field Building outcome area and is defined as, "*Support systemic and interdisciplinary thinking and research for an integrated and interconnected domain to be defined as 'research on inclusive networked society'*" (I&N Prospectus 2011-2016, p. iii). The logic of this novel interdisciplinary and systemic research approach[11] rests on overcoming known limitations of working in disciplinary silos. This was arguably the most ambitious of all programmatic expectations. Despite its efforts, the Program was unable to catalyze effective partner engagement in its proposed interdisciplinary approach due to a lack of buy-in and time from project grantees. At the mid-point of the program implementation cycle a reasonable decision was taken to discontinue this strategy, with emphasis being instead placed on advancing the emergent field of Open Development[13] and building research capacities in legacy information and communication technology for development (ICT4D) research. The panel maintains that, despite falling short of initial expectations **the I&N Program's efforts to promote and advance interdisciplinary and systemic approaches to research in the area of Information and Networks were understandable, defensible, and justifiable on pragmatic and theoretical grounds.**

4.2 Prospectus Implementation

The implementation of the I&N Prospectus was well managed. Programming was coherent with Prospectus objectives and strategy evolution. In turn, programming was appropriately carried out to deliver outcomes. Likewise, financial and human resources were effectively used.[12] In its interviews with project leaders the panel consistently received commendable expressions of the commitment and support provided by Program Officers. The available financial resources supported a well structured program architecture, with appropriate geographical diversity. **The panel finds that the decision to assign the main programming priority to Openness demonstrates an astute reading of the dynamic transformations taking place in developmental, policy, and scholarly domains**. The work generated in Openness has and is generating returns – although not formally quantified and calculated – on the ground and is a promising avenue of future networked societies research. The commitment and quality of the support provided by the Program team also played a significant role in the successful implementation of the Prospectus.

The Program team exhibited flexibility with projects and generally made appropriate choices in the implementation process. For example, LIRNEasia received of a supplementary budget to support research investigating tariffs and taxes at a time when the Sri Lankan government was discussing these issues. As noted above, the I&N Program also adjusted thematic targets in a

coherent manner when involvement in particular initiatives did not generate expected results and/or realities changed on the ground. Evidence of this can be seen in the shift from a creative industries focus to a concentration of intellectual property rights in *The Ecology of Access to Educational Material in Developing World Universities* (106657) project. The intellectual capital residing in the I&N Program team combined with a core set of highly capable grantees enabled it to effectively mitigate the risks associated the program being a pioneer in Openness and catalyzer in Rights-related research.

The panel identified two shortcomings in Prospectus implementation with the potential to constrain the impact of some of the Program's outcomes. The first relates to networks and networking; the I&N Program's principal programming modality, and one with a long history of operationalization in IDRC activities. As observed by the Lipson (2015) evaluation of the Program's networking approach,[14] and validated by the panel, some limitations in network implementation are evident. On the one hand, I&N networks: (i) contribute to increasing the numbers of actors involved in research and expand opportunities/outreach channels as well as allowing for some commonality in the application of research methods across countries,[15] (ii) improve the standing – in some cases – of grantees' potential for policy influence, and (iii) enable more efficient grant-management by the network-coordinating partners (i.e., the 'hubs' in the hub-and-spoke models). However, in contrast to advances made through network projects like *Communication for Policy Research (CPR) South-South* (106333), projects such as *Protecting Privacy* (107071) and *Cyber Stewards* (106967) show limited results in terms of (i) research capacity building, (ii) network communications and coordination, (iii) addressing individualized policy capacity needs, and (iv) network-wide actions. It seems plausible that the absence of an explicit network strategy set by the I&N Program and the limited guidance provided to the hubs contributed to this state of affairs. Although the Prospectus 2011-2016 identifies different types of networks (e.g., research, policy or capacity-building networks) and their differing requirements, it appears that some networks were expected to undertake the combined research, policy influencing, and capacity-building functions.[16] In addition, the chosen hub-and-spoke network model has inherent limitations, not the least of which is a propensity to generate bottlenecks resulting from demands placed on the hub to be responsible for all network activities. Moreover, this model does not *de facto* enable or foster collaborative interactions among network members (i.e., the nodes). Put simply, you can build networks but there is no guarantee the nodes work together. **The panel suggests that in moving forward with the network modality greater attention be given issues of network design and management to ensure that networks are not mainly used as administrative mechanisms for project-delivery, and that network effects are maximized.**

As noted in both the FPR[17] and the Drissi and Rashid (2015) evaluation of gender integration in the I&N Program, gender programming marks a noteworthy shortcoming in the I&N Program implementation.[18] The basic objective was to build gender analysis capacities among flagship projects with the aid of an internationally renowned gender specialist who would act as a mentor.[19] However, after much negotiation the gender specialist opted to focus her attention on developing a project focussing specifically on gender aspects of information and communication technologies rather than mentoring I&N projects. Following this, the I&N Program decided to focus on building staff competencies in gender analysis. However, the effects of the latter have

yet to be widely observed in project outputs. By drawing more effectively from lessons learned in previous ICT4D programs, the I&N Program likely would have benefitted from setting out a gender strategy whose success was less heavily contingent on the engagement of one individual serving as a mentor for other projects. Possible alternatives include (i) a specific project or partnership arrangement – perhaps akin to the utilization-focused evaluation approach employed by the *Developing Evaluation and Communication Capacity in Information Society Research (DECI-2)* project – to support other projects with gender analysis capacities, (ii) a clear operational definition of 'gender responsiveness' and (iii) criteria specifying the desired balance between 'gender-targeted' information and communication technology (ICT) projects and gender-mainstreaming practices. **The Panel suggests that future programs carefully draw upon the lessons learned from the IDRC's existing Gender programming knowledge base in order to improve capacities for gender analysis and programming.**

5. Overall, was the quality of the research supported by the program acceptable?

Key Findings:

- ***The I&N program lacks a clearly articulated definition of research quality;***
- ***Research produced by I&N supported projects is of high quality, and frequently innovative;***
- ***Less than ten percent of the sampled research outputs were assessed as adequately gender responsive;***
- ***Marginalized and/or vulnerable communities appear to be given due consideration in the research design, execution and findings; and***
- ***The I&N program has produced original and relevant research outputs***

In assessing the quality of research outputs from the I&N program the review panel was required to use the RQ+ Assessment Tool. The latter is a framework for assessing how IDRC-supported research is designed and positioned for uptake and use. The RQ+ tool encompasses consideration of: 1) key contextual influences likely to affect the quality of research for development; and 2) dimensions and sub-dimensions that characterize research quality including research integrity, research legitimacy, research importance, and positioning for use (See Appendix 9).

5.1 The Research Context

At the highest level of analysis, the panel observes that I&N-supported research is largely occurring in emerging and new fields, and that a strong research capacity focus is evident in the project design phase. Much of this effort consists of workshops and pre/post conference seminars. We also note that with few exceptions (see, for example, *HarassMap: Using Crowd Sourced Data in the Social Sciences* (106623)) the political environment did not appear to significantly impede the work of I&N supported researchers. Nonetheless, many of the contexts within which I&N supported research is conducted are inherently risky and those working in rights-related research areas find themselves working in domains that many governments find politically sensitive (see, for example, the cyber surveillance work conducted under the *Cyber Stewards* (106697) project). The research and data environments were likewise found to neither help nor impair the ability to conduct research. With regard to research environments, the panel identified two notable impediments affecting university and non-for-profit organizations in the global South. These are a lack of funding and/or limited capacity to conduct research. As for the

data environment, the panel found that constraints tended to relate to difficulties researchers encounter – in varying degrees – in ensuring stakeholder participation and in obtaining information from private sector and government actors.[20]

5.2 Definition of research quality

The panel found that both I&N staff and the Program's grantees maintain largely individualized subjective understandings of quality research. Not surprisingly, no uniform definition exists. For some, the notion of research quality is rooted in traditional academic standards involving the inclusion of methodological narratives, literature reviews, and the presentation of results through peer reviewed publications and, subsequently, citations from other scholars.[21] For others it means research of a clearly applied nature that leads to observable action in a particular domain (e.g., effecting change in a policy arena), while for still others it is associated with work that highlights, assesses, and addresses the needs of the global South. **The panel notes that in transitioning toward a new program it will be desirable for I&N Program Officers and grantees to share a more consistent definition of research quality, and to continuing elevating the quality of work generated by researchers from the global South.**

5.3 Research integrity

Research integrity refers to "the technical quality (technical merit), appropriateness, and rigor of the design and execution of the research as judged in terms of commonly accepted standards for such work (e.g. standards for experimental research, ethnography, survey research, etc)," and external evaluators are called upon to assess "the execution of the research, and the extent to which attention to integrity is reflected in the research outputs" (*Towards Research Excellence for Development*, p. 12). The panel maintains that condensing the broad array of research integrity related factors into a single metric inhibits effective assessment of research outputs. In assessing research outputs on the basis of this criterion, panel members drew upon their own expertise as well as that of some key informants.

Having reviewed 62 research outputs,[22] **the panel finds that, overall, the research produced by I&N supported projects is of high quality with some projects producing exceptional outputs** (see, for example, *Innovations for Inclusive Knowledge Based Economies in Asia - LIRNEasia Phase III* – (106233) and *Networks for Development: the Caribbean Information and Communication Technologies Research Programme* (105818)).

5.4 Research Legitimacy

The research legitimacy dimension is meant to capture "the extent to which research results have been produced by a process that took account of the concerns and insights of relevant stakeholder" (*Towards Research Excellence for Development*, p. 15). It consists of four components: addressing potentially negative consequences, gender-responsiveness, inclusiveness of vulnerable populations, and engagement with local populations. In conducting its assessment, the panel observed that the latter are not consistently detailed across all projects.

In terms of mitigating potentially negative consequences and outcomes for research participants and affected populations, the panel finds that, in instances where a risk exists of relevant populations being negatively affected (see, for example, *Privacy and the IS in Asia* (104927)) purposeful efforts (e.g., preserving participants' confidentiality, monitoring outputs and public statements by IDRC staff and grantees to ensure individuals are not endangered) are made to minimize such risks.

When examining the issue of gender-responsiveness, it is clear that much works remains to be done. **Less than ten percent (n=6) of the sampled research outputs were assessed as adequately gender responsive**. For some seventy percent of the sampled research outputs there was insufficient information to assess gender responsiveness, and/or the gender component was found to be not applicable. Likewise, a majority of the thirty percent of sampled research outputs that purposely address gender in their research design, were deemed not to have put sufficient attention on, or as not doing enough to address, gender biases. In the panel's view, three factors may account, in part, for these findings: (i) a gender component was neither integral or central to the work reported in all the sampled research outputs;[23] (ii) editorial guidelines to which published research must adhere (i.e., limitations on word length, focus of publication venue, expected content, manuscript structure, etc) requires authors to make instrumental choices about the content of individual outputs that may hinder directly addressing gender considerations; (iii) it is evident from the interviews with the grantees that many individuals lack sufficient experience and/or expertise in gender analysis to adequately consider it in their work.

In considering the inclusiveness of the research process, **the panel finds that marginalized and/or vulnerable communities appear to be given due consideration in the research design, execution and findings**. This assessment is based on our individually nuanced interpretations of inclusion, but is tempered by three considerations. First, despite having participated in a calibration exercise aimed at ensuring each panelist applied the RQ+ tool in a common manner, wide differences persist among the panel about how to interpret the criterion specified for this sub-dimension.[24] Second, a good portion of the sampled research outputs did not specifically address vulnerable populations, nor expound upon the methodological undertakings associated with producing the individual research outputs examined. Third, the level of granularity the RQ+ tool calls evaluators to draw upon in making their determinations for the inclusiveness category are foremost methodological and research design considerations that are seldom reported in individual research outputs.

5.5 Research Importance

The I&N program has produced original and relevant research outputs, facilitating greater understanding of Open Development, an emergent field benefitting from IDRC's evidence-based work. Notable examples are the collaboration between a public and a private institution that provided insights about the manner in which networks are opening opportunities for work (*Microwork and Virtual Production Networks in Sub-Saharan Africa and South East Asia* (107384)), and the mobile price index that empowered populations in both Africa (*Evidence-based ICT Policy for Development and Innovation* (106231)) and Asia (*Communication for Policy Research (CPR) South-South* (106333)). In addition to these unique contributions, research from the rest of the I&N Program operates in emerging fields; meaning research is necessary, and the outputs produced fill gaps in knowledge by focusing on the needs on the global South.

5.6 Positioning for Use

As stated in the *Towards Research Excellence for Development* document, the issue of positioning for use is largely outside of the scope of research quality assessment. The sub-dimensions comprising this category may be interpreted as constituting part of a communication plan and strategy. The objective is to move research outputs from a largely academic exercise to more actionable undertakings capable of impacting the activities of intended stakeholders. **The panel finds that knowledge accessibility and sharing was generally good, with grantees disseminating their work through conferences and web portals as well as their own or the project's websites.** As is to be expected, there is much variety in project website design, with some being more effectively organized and more frequently updated than others. The panel also found that not all the outputs acknowledge IDRC support. **While this did not affect our work, we believe this marks a lost and inexpensive opportunity to enhance awareness of IDRC-supported research.** None of the sampled research outputs were linked to an explicitly articulated communication strategy. While it is next to impossible to predict whether research outputs have been well-timed, many grantees counted timeliness and actionability among their limitations. The panel finds that the most effective projects in this regard are those who maintain well-organized, up-to-date websites.

In summary, **the panel finds that the research produced by I&N supported projects is of high quality**[25] and notes that three factors appear to be directly contributing to the quality of the work being produced: 1) The presence of IDRC Program Officers in the field who understand the environments within which grantees operate, and work with them to minimize risks; 2) IDRC staff's local knowledge that enables them to find grantees that can deliver quality research; and 3) the program staff's efforts at pairing young researcher with their more senior counterparts, and/or the pairing of researchers from developing and developed countries.

6. To what extent are the program outcomes relevant and significant?

Key Findings:

- ***I&N-supported networks and projects have, and are having, important direct and indirect policy influence;***
- ***There is ample evidence suggesting that the I&N program has played an important role in advancing knowledge in Open Development; Rights, and Inclusion;***

- ***The outputs and outcomes reported in the FPR offer persuasive evidence of important contributions being made to catalyze positive and inclusive benefits from information networks, and to dampen their negative tendencies***; ***and***
- ***Limited progress made in engendering I&N supported research, and in Field Building***

As noted above, there are four interconnected program-level outcome areas identified in the FPR: openness, rights, inclusion, and field building. The panel was tasked with verifying the relevance and significance of the reported outcomes in these areas in accordance with the views of research grantees and partners, research users, and other influential stakeholders. The analysis presented below focuses largely on substantiating the extent to which the desired outcomes and sub-outcomes set out in the 2011-2016 Prospectus have been realized as reported in the FPR. In conducting our assessment, the panel referred to the program resources outlined above, and evaluations commissioned by the I&N program, including the Reilly and McMahon (2015) evaluation of the program's contributions to Open Development, the Lipson (2015) evaluation of its networking approach, and the Drissi and Rashid (2015) evaluation of gender integration in the Program.[26] It must also be recognized that where outcomes have been achieved, they may, in many cases, be linked back to prior work undertaken by previous IDRC programs, especially, ACACIA (1996-2011), PAN Americas/Connectivity and Equity in the Americas/Institute for Connectivity in the Americas (1998-2011), and Pan-Asia Networking (1994-2011). Overall, ***the panel considers the outcomes emanating from the I&N program to date to be highly relevant and valuable.***

Outcome 1: Enhancing the quality of openness to enable development

This outcome centers upon enabling "social and economic development by supporting and improving the application of open educational resources, open science, open data, and open business models" (FPR, p. 7). The central domains in which the I&N program focused its efforts include, government, business, innovation, education and science.

The *From Data to Development* (107075) network project, which is administered by the World Wide Web Foundation, brings together some 17 grantees in Latin America, Africa and Asia. In addition to generating the *Open Data Barometer*,[27] an internationally recognized leading resource for gauging the implementation of open data policies, the project has also generated important data-centered country-level and sector-specific case studies. The panel's findings regarding this network validate the conclusions advanced by Pereira da Silva and Montano in their 2014 mid-project external evaluation. They recognize the project as, on the one hand, being particularly successful in building research capacity, and raising awareness of open data concepts among policy makers, city officials, parliamentarians, journalists and non-governmental organizations (NGO) networks while observing on the other hand, "many of the research results remain disconnected from each other," with project impacts being linked to single case study research (Pereira da Silva and Montano, 2014: 5). The *Open A.I.R.* network project (106223) which is composed of a network of IP scholars based in four hubs throughout Africa analyzes conditions under which intellectual property regimes limit innovators' access to and production of knowledge-intensive products and services with the aim of identifying Africa's future IP needs. The members of this network have briefed, and had their research cited by, a number of African

and international policy fora. In the case of the *Quality in the Open Scholarly Communication of Latin America Project* (106660) an application programming interface (API), the SciELO Index, was created that enables researchers to generate important ranking and indexing information (e.g. journal quality, number of downloads, geographical location of journal) and other facets of scholarly publishing based on routinely collected data. The index is a bibliographic database and digital library of open access journals comprising some 650 titles spanning twelve countries in Africa, Europe, and Latin and South America.[28] This goes a long way to enhancing researcher access to both important regional content and the global research terrain.

In their January 2015 summative evaluation of the degree to which past and on-going I&N projects are achieving quality of openness outcomes Reilly and McMahon conclude:[29]

> *The program has supported the creation of networked environments for innovation that are able to identify and promote desirable social change processes; it has fostered a field of study that produces research of interest and utility to peer groups, the media and policy-makers; and it has influenced policy both directly and indirectly through the promotion of policy leaders and engagement with policy communities (pp. 40-41).*
>
> *I&N has substantially met the outcome criteria set out in its prospectus in the areas of networked innovation, research recognition and policy and practice. In particular, we found that I&N is a major contributor in the field of Open Development, which is in turn advancing access to knowledge (A2K) in underprivileged contexts, and producing cutting edge research within the long-established field of knowledge for development (K4D). Its work is driving forward a maturing research agenda around open development (p. 74).*

Based on our review of the I&N program, ***the panel endorses and supports Reilly and McMahon's observations.*** Indeed, perhaps the strongest evidence of the impact that the I&N program has had in this regard was its co-hosting of the International Open Data Conference (IODC) in May 2015, which was attended by some 3000 participants, including some 1,000 on-site and 2,000 virtually.[30] This landmark meeting brought together open data experts and advocates (a number of whom are involved in I&N-supported research), senior government officials, civil society representatives, and policy makers from six continents to take stock of what has been learned thus far from open data initiatives throughout the world, and to foster strategic international collaborations aimed at enhancing democracy, building prosperity, and ensuring that everyone benefits from the opportunities open data affords.[31] In the words of Tony Clement, President of the Treasury Board of Canada, the IODC provided "an unprecedented opportunity for the international open data community to meet, make connections, and work together to enable the open data revolution."[32]

Outcome 2: Protecting Human Rights

The 'Rights' outcome area is particularly well aligned with the I&N's main program goal of generating an understanding of the positive and the negative effects of information networks. It refers to how ICTs can both promote and curtail the rights, capabilities and freedoms of individuals. This outcome area is particularly timely and relevant given that human rights are increasingly being threatened by government and commercial efforts to control cyberspace

through surveillance, censorship and diminishing Internet freedoms, as made clear by the Edward Snowden revelations.[33]

The two main projects in this area are: *Protecting Privacy* (107071), which focuses on the right to privacy in the digital environment; and *Cyber Stewards* (106967), which is working for a secure and open Internet.[34] Other exemplary projects in this outcome area include (i) the innovative project, *A Rights Based Approach to Internet Policy and Governance for the Advancement of Economic, Social and Cultural Rights (ESCR)* (107488); (ii) the small research project *Mapping the Latin American Digital Rights Landscape* (107288);[35] and (iii) the *Adding A2K Principles to the UN Guidelines for Consumer Protection* (106658) project whose work on Intellectual Property Rights as part of the larger Access to Knowledge (A2K) movement, is closely linked to the Openness outcome area.

The sampled projects from the Rights area have contributed to expanding the field of digital rights research. They have produced a growing body of empirical evidence about this domain, and enhanced opportunities for partners' engagement. An important benefit of the I&N Program partnering with such leading entities as Privacy International, Citizen Lab, and the Association for Progressive Communications is that these organizations now serve as project managers and mentors which, in turn, has facilitated exposing the work of their sub-grantees internationally. The panel also notes that **the I&N Program has catalyzed research involvement and participation from civil society organizations with an activist profile.** This is noteworthy because many of the participant activist organizations lacked the capacity to perform research prior to their engagement with the program. For instance, the *Protecting Privacy* and *Cyber Stewards* projects include some 34 organizations from the global South as sub-grantees,[36] whose research has produced a notable volume of new policy-oriented evidence that strengthens the capabilities and credibility of human rights organizations. This work has included some highly publicized cases such as that of Shahzad Ahmad who help change online censorship policies in Pakistan.[37]

In terms of rights-related policy effects, I&N-supported research has had some important impacts as noted in the FPR and the Lipson (2015) evaluation.[38] The Program has achieved a number of successes relating to legislative/normative domains. Notable examples include, work in India on privacy protection, in Brazil with regard to this country's Internet Bill of Rights, in Zimbabwe on restricting access to personal data from mobile phone subscribers, and the revising of an online defamation law in Indonesia. To this end, **the Panel endorses and supports Lipson's observation that I&N supported partners had some incidence on rights based policy changes.** That said, evidence of the I&N Program's work in the Rights area contributing to policy outcomes, cannot be equated with exclusive causation. This is not surprising and is to be expected given that directly impacting policy normally requires time-spans exceeding the typical program cycle. Likewise, effects cannot be directly ascribed to I&N Program-supported activities because grantee and partner organizations may be involved in policy work outside of specific project/initiative domain. Put simply, monitoring and policy influence requires specialized methodologies to track the evolution of policy work over extended periods. There are no such measures in place for the I&N program. **The Panel suggests that future programs draw upon the lessons learned in IDRC's knowledge base regarding capacity building and influencing policy in order to further improve capacities for connecting research and policy.**[39]

Outcome 3: Catalyzing inclusion in the benefits of information networks

When the I&N program cycle got under way in 2011 there was evidence of mobile and internet access ballooning in developing countries. However, little was known about how the poor actually use ICTs, and whether access was universal. For much of the work in this outcome area the I&N Program was able to capitalize from projects originating under the previous Latin America and the Caribbean (LAC) regional program, Connectivity and Equity in the Americas/Institute for Connectivity in the Americas (CEA/ICA). A central tenet of the latter program was enhancing access to ICTs. In the transition to the I&N program, staff were able to transform these successful projects to address the notion of use of ICTs by underprivileged populations. In this transition we found a move in the population focus from mainly rural to urban poor. Research on access was not abandoned, as this continued to be a problem in some parts of the global South. In this area, important achievements happened in policy domains. In Sri Lanka, for example, LIRNEasia was a significant contributor to government discussions about net neutrality. The mobile price index (*Evidence-based ICT Policy for Development and Innovation* 106231) is popular and useful tool with journalists and policy actors.

In focusing on ICT use, the I&N Program has helped advance knowledge about the ways in which fishers and farmers employ these technologies in their business practices. Using ICTs has enabled fishers to locate fish more effectively and to get better prices for their catch (*Networks for Development: the Caribbean Information and Communication Technologies Research Programme* (105818)). Likewise, the *Innovations for Inclusive Knowledge Based Economies in Asia - LIRNEasia Phase III* (106233) project examined value chains in the agricultural sector, identifying information deficiencies that resulted in overproduction and increased storage costs. The project's work with rice, tangerine and longan growers in Thailand found that by using online resources farmers were able to trace market related data to reduce this waste. Based, in part, on the research emanating from this project the Sri Lankan Agriculture Department has recently expressed interested in developing mobile apps to both gather agriculture sector information and to enhance its flow to farmers.

In the area of ICT use we find an increased understanding of how underprivileged populations use ICTs. The household survey (*Evidence-based ICT Policy for Development and Innovation* 106231 and *Communication for Policy Research (CPR) South-South* 106333) elucidated many important habits and deficiencies in the manner in which the poor use ICTs. The survey has wide appeal to a broad spectrum of domestic and international agencies including the World Bank. Due to budget constraints, however, it appears, at the time of writing, that this survey may no longer be conducted in as many countries, thus reducing its potential value;[40] a troubling possibility given that transitioning this important tool to the statistical/census government offices of the respective countries seems plausible.

Outcome 4: Field Building

Field building was included in a number of program prospecti prepared under the IDRC's 2010-2015 corporate strategy. The I&N program was one of these programs. In its 2011-2016 Prospectus, the Field-building outcome was described as focusing on: (i) establishing interdisciplinary research cutting across issues of openness, rights, and inclusion; (ii) enhancing

the understanding of information networks and development by fostering new interdisciplinary research concepts, questions, and methodologies; and (iii) supporting various aspects interdisciplinary research capacity-building. The objective was to transcend the limitations associated with seeking to understand networked economies through a reliance on traditional disciplinary silos. This proved to be a most challenging proposition. Moreover, with the program's shift toward placing greater emphasis on Open Development as a field of study, an explicit focus on supporting interdisciplinary work waned. ***The panel finds that this change in direction was appropriate, reflecting a timely and well-reasoned response to changes taking place on the ground and in the domain of information and networks more broadly***. Whereas the notion of field building seems to have been initially understood largely in a methodological sense (i.e., make a difference by getting researchers from different disciplines and geographical areas to work together and thereby reconsider existing theories, methods, and frameworks), over time the concept morphed into the notion of building a field of study (i.e., Open Development). The return on investment from the resources placed in developing and advancing the concept of Open Development is evident; whereas in 2011 the IDRC was internationally renowned for the ICT4D research it supported, in 2015 it is widely recognized as being at the forefront of the Open Development field and in understanding how populations in the global South use information and networks. It is also worth noting that many of the applied, methodological, policy, and theoretical advances being made in this field of study bring together and encompass work conducted in the rights and inclusion outcome areas.

The panel finds that the outputs and outcomes reported in the Final Prospectus Report offer persuasive evidence of important contributions being made to Field Building in a broad sense. However, we question the value-added of positioning Field Building as an outcome category. It seems highly plausible that much of the 'field building' work associated with the development of the Open Development concept (e.g. building on legacy ICT4D research, identifying key debates, establishing networks of scholars, sharing knowledge) and the realm of 'information and networks' more broadly would likely have been accomplished regardless of whether this particular outcome category was explicitly articulated.

7. What are the key issues for the IDRC's Board of Governors?

In building on the legacy of the IDRC's work in information and communication technology for Development (ICT4D), the I&N Program has and is establishing itself as a pioneer in the multi-faceted field of Open Development. The Program's demonstrable track record of producing rigorous evidence-based knowledge is filling an important niche both in terms of understanding the opportunities and constraints afforded by information and networks for the global South and, perhaps, equally important fostering continued favourable global brand recognition for IDRC. **The panel's review makes clear that the I&N program is making a positive contribution to the building of an evidence-based critical southern perspective about the promises and pitfalls of networked societies.** It also reveals some important issues requiring close attention as the IDRC moves forward in supporting and catalyzing development research.

1. Synthesize, codify, and communicate lessons learned. IDRC distinguishes itself as a key generator of evidence-based development knowledge. The I&N Program is no exception, as is seen from its contributions to the field of Open Development. However, the panel concludes

there is a need to more effectively harness, communicate, and implement – both in-house and with external grantees and partners – lessons learned from IDRC programs. This requires both a continued valorization of learning within the organization through such means as summative, formative, utilization-focused forms of evaluation, and the implementation of measures to systematize and harness the lessons drawn from program experiences. For example the I&N Program commissioned program-level evaluations for the Openness thematic area, the cross-cutting theme of gender, and of the network modality. Each of these exercises have created valuable learning resources with the potential to contribute to the more efficient and effective realization of future programming goals beyond simply the I&N Program. As a leading development research organization, and given the rapidity and dynamism of change in the global South, it is both appropriate and necessary for IDRC to continue allocating resources to investigating issues whose implications affect multiple programs such as 'Research-to-Policy', 'Enabling Innovation', 'Research Capacity Building', 'Gender Responsiveness', and 'Knowledge Management'.

2. Integrate development networks as agents of change in program strategies. Contemporary development programs operate in the context of networked societies that hastens the need for better understanding the role of networks as development actors in their own right. With its long tradition of creating/supporting networks,[41] IDRC is in a privileged position to harness the administrative, capacity-building, collaborative, and productive benefits networks afford provided it can effectively manage their inherent complexities. This calls for continued research into the conditions that enable, constrain, and define networks as agents of change (which in itself comprises an element of Open Development). Networks are as messy as they are creative. Hence, the ability of future IDRC programs to realize positive network benefits is likely to be contingent upon the presence of a clearly articulated networking strategy that, (i) guide network-based projects, (ii) actively stimulates collaboration within/among projects (i.e., network nodes), (iii) establishes knowledge management features; and (iv) facilitates connections to outside organizations.

3. Programming in Openness, Rights, and Inclusion will continue to be highly relevant. In the light of the positive impact that openness can have on governance and socio-economic development, the panel believes that open data and open government will continue to be crucial aspects of development worthy of much needed research support for years to come. It is equally important to recognize that innovations in information and communication technologies, including the myriad forms of knowledge generated by big data analytics, afford as many opportunities for reaping cultural, economic, political, and social benefits as they do opportunities for infringing upon human and commercial rights. The importance of understanding how these rights are being affected will not diminish any time soon and constitutes a key component of Open Development. Much the same can be said with regard to the continued relevance of, and need for continued work in, ensuring that marginalized populations benefit from the affordances of Open Development. Indeed, the continued relevance and significance of continued support for research in each of these three areas is evidenced by the central role they are set to play in actualizing the United Nations' recently

adopted post-2015 development agenda and its Sustainable Development Goals (See, *Transforming our world: the 2030 Agenda for Sustainable Development*).

4. Effectively integrating gender analysis skills

Gender responsiveness is a core value of the IDRC and is identified as such in the approval document template for every project; "There is no such thing as a gender neutral project". While the I&N Program supported a number of projects with successful gender development and research outcomes, the program's efforts to systematically build gender analysis skills among all grantees and partners largely fell short. Although grantees and partners commonly allude to efforts at gender inclusion, a deeper consideration and/or understanding of meaningful gender analysis is frequently absent. Indeed, for the majority of projects in the panel's sample the project leaders tended to view gender issues as incidental to the research agenda. The ongoing challenges with realizing gender-related objectives – which also figured in prior IDRC ICT4D programs such as CEA, ACACIA, and PanAsia – begs the question of whether grantees and partners are equipped to deal with meaningful gender analysis and whether they have sufficient incentives to pay significant attention to this type of work. Actualizing meaningful gender analysis in future programming is likely to be contingent upon two inter-related factors. The first entails integrating clearly defined gender-specific sub-outcomes into specific areas, and/or program outcomes focusing specifically on meaningful gender analysis, as well as providing the necessary financial and capacity building resources to support these activities. Part this process may entail seeking to work with partners and grantees – at times possibly in a peer-support mode – that are concerned *a priori* with how to integrate inclusion and gender analysis and/or mainstreaming[42] into their research projects. The second is acknowledging that meaningful gender analysis takes time. The requisite changes in behaviours, relationships, and activities are not bound to program cycles.

Notes:

1. The total budget is $78.6M. However, this amount includes $16,866,280 of funding for projects labeled 'previous prospectus' (i.e., 21 percent of the total budget). When the latter funds are removed, the total budget is $61.7M, with the revised budgetary allocations per outcome area breaking down as follows: Openness 25 percent, Rights 18 percent, Inclusion 35 percent, and Field Building 22 percent.
2. The IDRC evaluation unit approved the framework in June 2015.
3. The Panel had open access to the I&N Program's information systems and a research assistant to assist and support its document searches.
4. The panel was not able to determine the degree to which these deficiencies are a product of the recent shift to the sharepoint information system.
5. See, *Towards Research Excellence for Development: The Research Quality Plus (RQ+) Assessment Instrument, Executive Summary (IDRC, 2014).* http://www.idrc.ca/EN/Documents/Executive-Summary-Research-Quality-Plus-Instrument.pdf
6. Definitions of all evaluative terms are provided in the Appendix 4.
7. A number of these individuals had either: (i) participated in, or knew of, the March 2010 Open Development workshop held by members of the soon to be I&N team; and/or (ii) attended the December ICTD2010 conference held at Royal Holloway University, London, UK. Both events served as sounding boards for members of the then to be future I&N team to share ideas and garner feedback about the upcoming I&N program.
8. For more details see, Calderon, K.A., Rashid, A.T. & Elder, L. *Human Rights in the Digital Age: A Selective Review*. IDRC internal document, IC01-8394-15 (April 2015).
9. See, http://www.cepal.org/elac2015/default.asp?idioma=IN
10. See, for example, Elder, L., Emdon, H., Fuchs, R., and Petrazini, B. (2013). *Connecting ICTs to development the IDRC experience,* Ottawa: IDRC http://www.idrc.ca/EN/Resources/Publications/Collections/ICT4D/Pages/default.aspx and 25 *Years of the Information Society in LAC 2000-2025,* http://info25.org/en/idrc
11. Intended mainly for exploring the complementarities and mutual effects among Openness, Rights, and Inclusion.
12. While the panel endorses the changes in implementation as appropriate and effective, we maintain that a more formal, and documented, cost benefit analysis holds the promise of buttressing justifications of the changes in strategy given the budgetary constraints within which the Programs operates.
13. Smith, Elder, and Emdon (2011: iii) define open development as referring "to an emerging set of possibilities to catalyze positive change through." Elaborating on this idea, Smith and Reilly (2013: 4) point out that, "it isn't the term that is important, but rather the idea

behind the term: harnessing the increased penetration of information and communication technologies to create new organizational forms that improve the lives of people."

14. See, Morris Lipson. *Evaluation of the Networking Approach of IDRC's Information and Networks Program*. 3 April 2015.
15. See, for example, research supported by the *Cyber Stewards* (106697) project investigating the state of Internet freedoms in East African countries.
16. As with any organizational approach, a direct relation exists between expected results (e.g., from networks/networking) and management quality (e.g., network-oriented management). Simply setting up a network does not guarantee the desired results will be achieved.
17. In the words of the FPR authors, "The area where I&N fell short was in systematically building gender analysis skills among its partners…. I&N originally predicted that integrating gender analysis into projects would be a weakness for partners, and to address this, attempted to build a gender analysis mentorship program. However various issues precluded this mentorship." (p. 33).
18. The panel notes that the I&N Program did support some successful gender-focused projects. See, for example, the *Harrasmap: Using Crowd Sourced Data in the Social Sciences* (106623) and *Women-owned Microentreprises in India* (107385) projects.
19. As originally envisaged, this initiative was to be modeled on an approach akin to the *Developing Evaluation and Communication Capacity in Information Society Research (DECI-2)* (107064) project. The latter provides supports to other I&N projects in their efforts to improve evaluation and research communication capacities.
20. These limitations closely parallel constraints with which researchers in the North also must contend.
21. The panel notes that such an understanding often tends to conflate the notion of research quality with a particular idealized publication format. This view overlooks the differing, and often divergent, editorial submission guidelines that vary across academic periodicals, disciplines, and subject matter.
22. The sample of research outputs was meant to consist of 72 items (i.e., 3 outputs from each of the 24 projects in the project sample). However, in putting together the research output sample, the panel found that research outputs had yet to be archived for some projects. In some cases this was due to a lack of rigor in maintaining up-to-date files, while in others it reflected the fact that some projects had yet to produce research outputs.
23. This observation does not preclude the desirability of including a gender component in research outputs. Rather, it recognize that while "there is no such thing as a gender neutral project" a gender component cannot be integrated into every research output.
24. These differences raise concerns about inter-coder reliability. As can be seen by the information presented in Appendix 9, the reported standard deviations appear to support these concerns.

25. This is also the perception of a large number of external key informants interviewed by the panel.
26. We also note that improving and systematizing outcome tracking – perhaps as part of the project completion reports – would offer the program, external evaluators, and IDRC, more broadly, an additional robust measure for informing determinations of project relevance and significance.
27. See, http://barometer.opendataresearch.org
28. The twelve countries in the SciELO network and its journal collections are: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Spain, Mexico, Peru, Portugal, South Africa and Venezuela. Initiatives are underway to expand the SciELO to include Bolivia, Paraguay and Uruguay. See, http://www.scielo.org/php/index.php
29. It is worth noting that Reilly and McMahon's sample consisted of eleven projects. Of the six projects representing the openness outcome in our sample, five were also examined by Reilly and McMahon. The selection of similar projects in the samples from each evaluation was serendipitous. The panel had not examined the Reilly and McMahon report prior to selecting the sample of projects for its review.
30. This conference was organized by the IDRC, the Government of Canada, and the World Bank. It capped a week of open data events including the first Open Data Research Symposium, an Open Data Unconference, and the Canadian Open Data Summit, to name but a few. See, http://opendatacon.org/
31. Some of the key questions addressed at the conference included: (i) How might we build a global consensus on open data standards? (ii) How might we promote the adoption of data solutions? (iii) How might we ensure inclusion and broad participation so that everyone can benefit from the data revolution?
32. See, Treasury Board of Canada Secretariat (May 29, 2015). *International Open Data Conference Brings Global Experts to Ottawa.* http://news.gc.ca/web/article-en.do?nid=982209
33. For a basic overview, see the interactive presentation provided by the Guardian newspaper titled, *NSA Files: Decoded, What the revelations mean for you.* http://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded
34. The *Protecting Privacy in an Increasingly Digital Developing World* (107071) project is coordinated by London-based Privacy International, which created the SAFEGUARD network that deals with privacy issues. *The Understanding Southern Influence in Cyberspace Security and Governance* (106967) project is coordinated by the University of Toronto-based Citizens Lab which created the *Cyber Stewards* network. The latter deals specifically with cyber security issues.
35. The outputs of this project clearly demonstrate that even small projects (it had a $50,000 budget) can generate valuable results.

36. Another noteworthy example is the *Rights Based Approach to Internet Policy and Governance for the Advancement of Economic, Social and Cultural Rights* (107488) project that is a partnership with the Association for Progressive Communication, and which involves no less than ten national organizations in research activities.

37. Shahzad Ahmad is currently the country director of Bytes for All. The latter is a human rights organization and research think tank with a focus on Information and Communication Technologies (ICTs), and sub-grantee of the Cyber Stewards network. In 2014, Mr. Ahmad received the Index for Censorship's 2014 Doughtly Street Advocacy Award that recognizes activists fighting for free expression around the world. See, https://www.indexoncensorship.org/freedom-expression-awards-2014/

38. In evaluating the network modality Lipson focused on two large networks in the Rights outcome area: *Protecting Privacy* and *Cyber Stewards*. Commenting on the influence of these networks on policy regimes he writes, "clear policy influence can be traced to two of them with respect to specific policy or legislative developments… access to policymakers is evident, and it is also evident that their voices are taken seriously by those policymakers" (Lipson, p.ii).

39. See, for example, Carden, F. 2009. *Knowledge to Policy: Making the Most of Development Research.* Ottawa: IDRC. Also notable work emerging for the I&N-supported *Impact 2.0: New mechanisms for linking research and policy* (105246) project which produced resources dealing with how to influence policies in today's densely networked environments. See, http://comunica.org/pubs/impact2point0.pdf

40. The I&N Program is currently contributing to surveys in a few target countries. They are Myanmar, South Africa, Kenya and Nigeria. It is expected that national governments will contribute as well to covering the costs of these undertakings.

41. Some of the IDRC's most successful projects in previous ICT4D programs were implemented using network modalities (see, for example, the Red GeALC for e-governance in Latin America, DIRSI, LIRNEasia.

42. Gender mainstreaming entails much more than simply adding a woman's component or a gender equality component to an existing activity. The United Nations Economic and Social Council (ECOSOC) defines the concept of gender mainstreaming as "the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making the concerns and experiences of women as well as of men an integral part of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal of mainstreaming is to achieve gender equality."

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Appendix 1: Panel Biographies

Manuel Acevedo is an independent consultant specializing in information and communication technologies for development (ICT4D), digital inclusion and development networks. He has evaluated various ICT4D programs, including IDRC's 'Connectivity and Equity in the Americas' program in 2010 and the European Union's 'Alliance for the Information Society (@LIS2)' in 2014. He is a lecturer on ICT4D, networks, and the Information Society at the Polytechnic University of Madrid, the University of the Basque Country and UNDP's Virtual Development School for Latin America. He has served as a senior advisor on ICT issues to the Ministry of Communications of Argentina and the Ministry of Foreign Affairs and Cooperation of Spain. His early career experience is within the United Nations system, at the United Nations Development Program (UNDP) and the United Nations Volunteers (UNV) agency. Manuel is an associate editor of the *International Journal of Information Communication technologies for Human Development*, a Ph.D. candidate in Human Development and Networks at the Polytechnic University of Madrid, and holder of a Masters in Engineering from University of California at Berkeley.

Martha Garcia-Murillo is a Full Professor at Syracuse University's School of Information Studies. Martha was awarded a M.A. in Economics and a Ph.D. in Political Economy and Public Policy from University of Southern California. She has been an associate Researcher with CIDE (Centro de Investigación y Docencia Económicas) of Mexico, a visiting regulatory officer at the ITU (International Telecommunications Union) as well as a visiting scholar at MIT's Program on Internet and Telecoms Convergence, University of British Columbia's School of Library, Archival and Information Studies and the Barcelona Institute of International Studies where she conducted research about the impact of technology in Society She is a development researcher who has written and presented on a range of I&N-related topics including: the impact of ICTs on the informal economy, employment, business creation and corruption, as well as regulation of ICTs, virtual higher education and theory construction. She is co-founder of two communities of ICT and policy scholars in Latin America (LACAIS and CPR-LATAM); and in this role she has interacted extensively with parallel networks in other regions of the world (CPR Asia, CPR Africa and CPR Europe). Martha is originally from Mexico and is a native speaker of Spanish. She has previously served as an external evaluator for IDRC, evaluating in 2010 IDRC's Communications and Equity in the Americas (CEA) Program.

Daniel J. Paré is an Associate Professor in the Department of Communication at the University of Ottawa, and is cross-appointed with the university's School of Information Studies (ÉSIS) and its Institute for Science, Society, and Policy (ISSP). Daniel has some 20 years of experience in the field of information and communication technology and development, and in science and technology policy. He has conducted numerous ICT-related assessments, evaluations, and research projects at organization, regional, and national levels in Asia, Africa, the Caribbean, North America, Europe, and South America. Much of this work has examined the management of innovation and technological change, and the social justice implications of digital transformations in low and middle-income countries. In 2010 he was a member of the external review panel for IDRC's Communities and Information Society in Africa (Acacia)

program. Daniel's current research, funded by SSHRC, investigates open data, and how open data and open government is manifest and experienced at the municipal level in Canada.

Appendix 2: Guiding Questions Specified Terms of Reference

1. How did the program perform in implementing its prospectus?

Validate the coherence, effectiveness, and appropriateness of:

i. The choices made and priorities set by the program to adopt and/or evolve its strategies from what was outlined originally in the prospectus (the panel is not being asked to evaluate the original content of the prospectus);
ii. Taking into account the context and the risks and expectations involved, was the strategy adopted, adapted, and implemented in a way that was modest/ambitious/balanced?; and
iii. The strategic lessons the program drew from its experience.

2. Overall, was the quality of the research supported by the program acceptable?

Assess the main research outputs/publications produced by a sample of completed projects in order to judge the overall research quality and the significance of the research findings to the field of study/research area. Take into account:

i. Methodological and scientific standards;
ii. The context in which the research was conducted and disseminated;
iii. The research's intended purpose;
iv. Potential for application to policy and/or practice; and
v. Any other influential factors.

3. To what extent are the program outcomes relevant and significant?

Verify the contributions of the outcomes reported in the final prospectus report according to research partners, research users, and other influential stakeholders. Take into account:

i. The nature of the field of study;
ii. The maturity of the program;
iii. The financial/human resources available;
iv. The research priorities and challenges in the contexts in which the program works; and
v. Any other influential factors.

Document any important outcomes (positive/negative, intended/unintended, or emergent) that were not noted in the final prospectus report.

4. What are the key issues for the Centre's Board of Governors and senior management?

The Centre's Board of Governors, the Centre's international governing body, meets three times per year to set the Centre's strategic direction, oversee the Centre's activities, and approve budgets. Only a small number of significant issues for consideration should be noted in this section. These issues may particularly relate to niche, relevance, and gaps in outcomes that could have been expected, whether problems stemmed from theory or implementation failures, issues for future programming, and emerging research or program performance questions. Any issues the panel raises in this section must be linked to the findings and have evidence to substantiate them. If the panel wishes to bring any issues (particularly significant

operational issues) to the attention of management or the program that fall outside of the scope of the external program review, they should write a management memorandum in a separate annex.

Appendix 3: Description of Review Approach and Methodology

Review process

The review panel initiated its work in April 2015 after introductory conference calls with the IDRC evaluation unit and members of the I&N Program. In early May 2015 the panel met face-to-face in Ottawa over a three-day period to develop the review design. During this meeting the panel met with members of the evaluation unit and members of the I&N Program, developed a shared understanding of the focus of the review, defined key concepts, developed its analytical framework (see Appendix 4), and set out the assessment criteria to be used. The period spanning mid-May to August 2015 was used to: develop the interview protocol (which varied in accordance with who was being interviewed – i.e., I&N grantees, I&N program staff, external informants) (see Appendix 5); to gather data; and to share information between panel members. Email and Skype-based meetings were the main modes of communication between the panel members during this period. At the start of September panel again met in Ottawa over the course of five days. This time was used to conduct final interviews with IDRC staff, agree on findings and conclusions, and to present preliminary findings to the Evaluation Unit and the I&N team. A draft report was circulated for comment in mid-September. The final report was submitted on 14 October 2015 after consideration and integration of the stakeholder feedback.

Unit of analysis

While the overall unit of analysis was the I&N Program, data and information were collected and analysed by outcome area and compared and consolidated to program level. Project level information was used in the assessment of outcomes, but in no instance was a project a unit of analysis.

Data Collection

Key informant interviews

Interviews were conducted with a total of 48 key informants (see Appendix 6), purposefully selected from the I&N management team, project leaders, network leaders, research partners, interdisciplinary champions, and external experts (see Tables 1 and 2 below). Structured interview guides largely using open-ended questions were employed to ensure consistency among the panel members. The interviews were conducted in a semi-structured format to deepen the discussion and to allow issues to emerge. Each panel member was responsible for identifying key informants for her/his respective outcome areas, conducting her/his own interviews, and consolidating and analyzing her/his own data. This latter information was shared among panel members when and as needed.

Research quality analysis

In assessing the quality of research outputs from the I&N program the review panel was required to use the RQ+ Assessment Tool. Individual panel members planned on reviewing no less than three research outputs from each project in their portion of the overall project sample. This was not possible, however, because research outputs from a number of sampled projects had yet to be archived. See Table 3.

Table 1: Interviewee Characteristics (N=48)

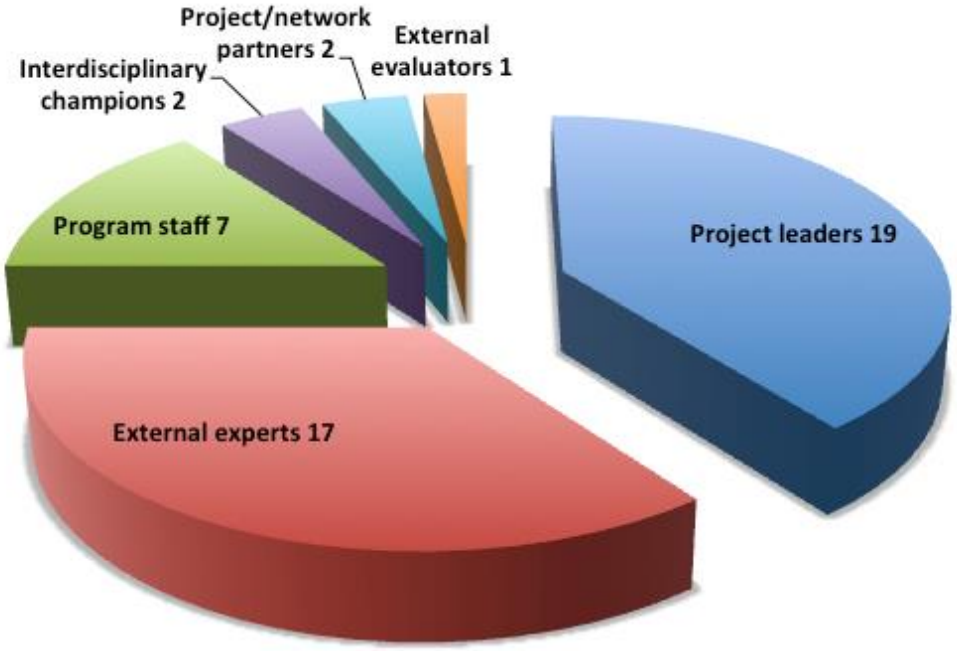


Table 2: External Informants (N=17)

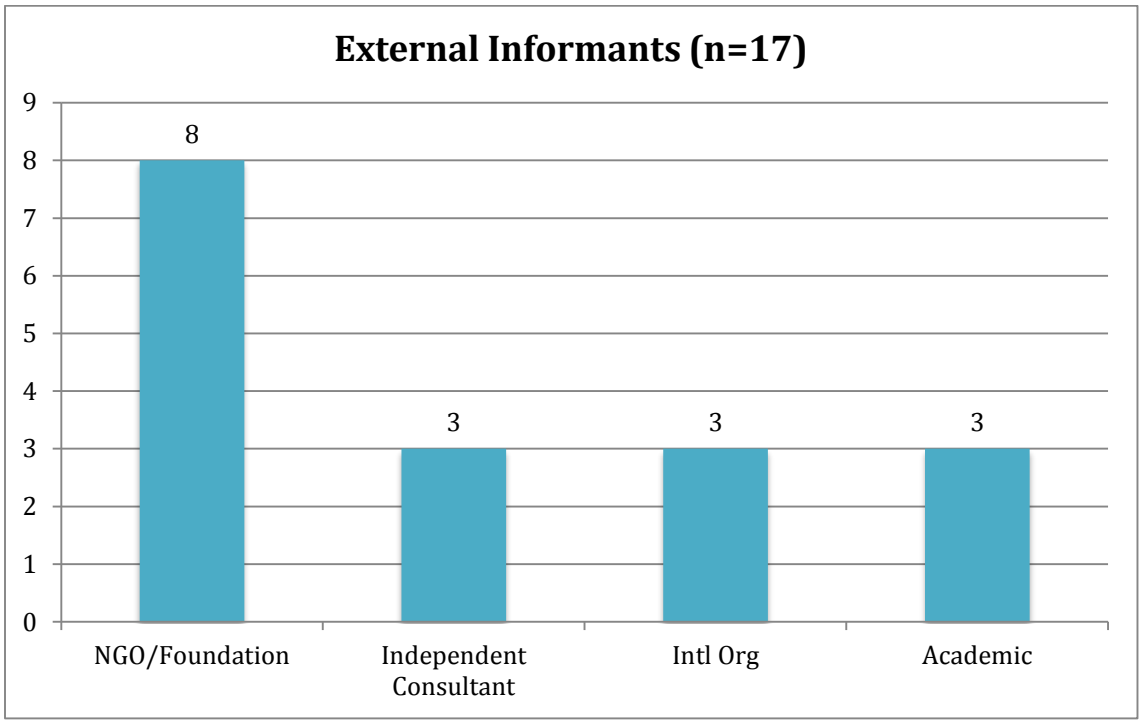
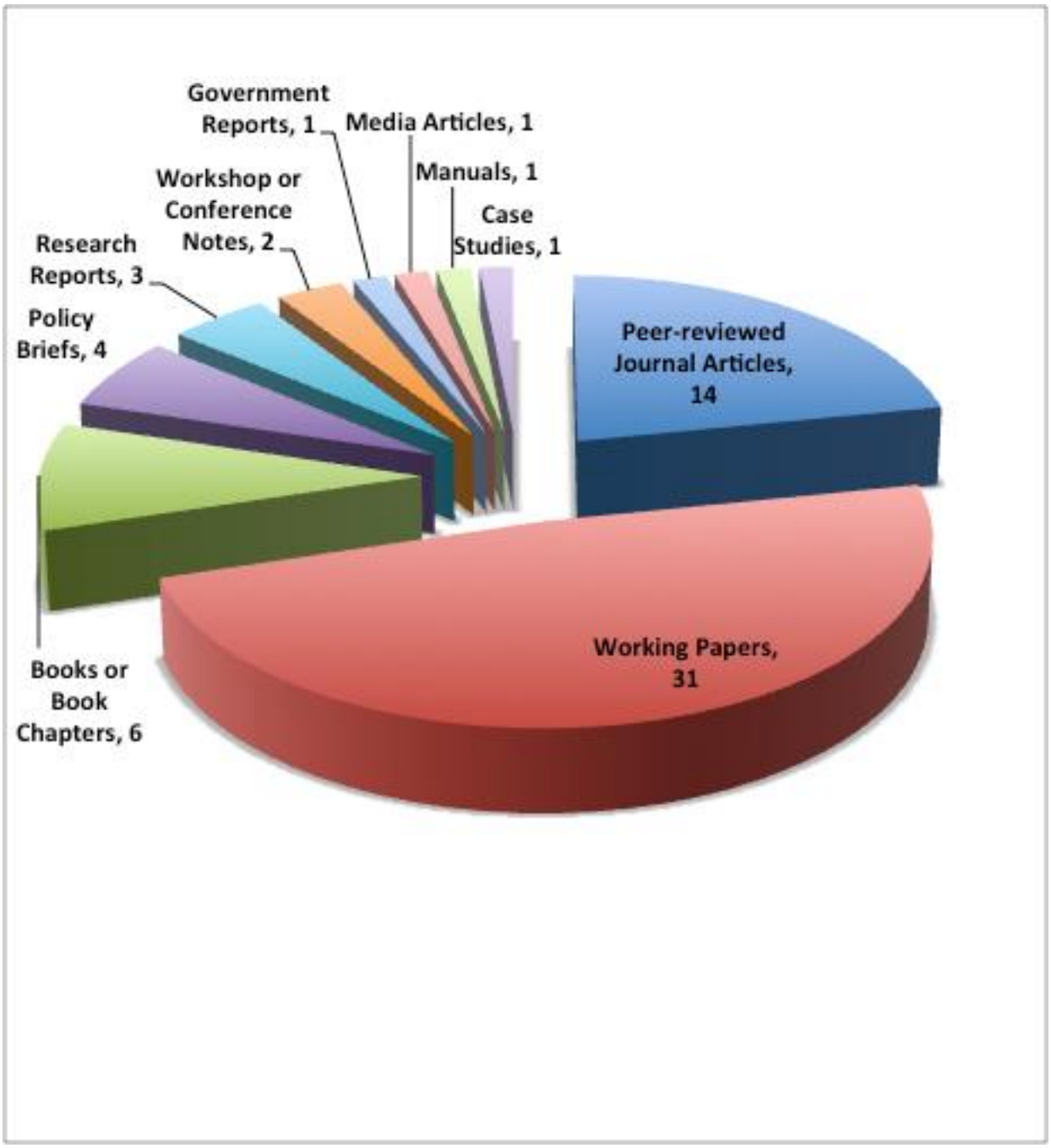


Table 3: Composition of Research Output Sample (N=64)



Sampling strategy

The sampling strategy of the review panel was purposefully designed to ensure a variety of diverse sources, perspectives and experiences representative of the themes, subthemes and networks. In order to adequately represent the breadth of I&N supported research and to reduce any potential bias from the narrative set out in the FPR, the 24 projects comprising the review sample were selected on the basis of six criterion (see Appendix 7): (i) project budget, (ii) geographical representation, (iii) outcome area; (iv) project status (i.e., active/closed), (v) project flagship status; and (vi) whether a project is mentioned in the FPR. Once the sample of projects was selected, each panel member took responsibility for reviewing her/his outcome area. The panelists jointly reviewed the Field Building outcome area. In the end, each panel member reviewed eight projects.

Ethical considerations

Despite each of the review panel members having worked with IDRC on other assignments, none has been engaged in the I&N Program design or implementation. The panel did not find any sign that the IDRC evaluation unit or the I&N Program team wanted to have anything but a high quality review. Pressure was never exerted on the panel to take a specific point of view. The confidentiality of information provided by interview informants was respected and safeguarded at all times. The informants and respondents were informed of this at the start of their engagement.

Appendix 4: The Analytical Framework

The analytical framework adopted for this assignment consisted of four components, corresponding to the four evaluative questions (EQs) in the ToRs. Each component is comprised of a series of sub-questions that was used to guide the research efforts of the Panel.

Evaluation Question 1: Appropriateness of Implementation Priorities and Choices

The Panel was asked to validate the coherence, effectiveness, and appropriateness of the implementation of the I&N Program Prospectus 2011-2016. For the purposes of this review these concepts were defined with cognisance of their use in the program and in the compilation of the initial and final prospectuses. As such, the Panel adopted the following definitions in evaluating the implementation of the Prospectus:

Coherence: The choices made resulted in programming that was logically integrated, consistent, and intelligible. Put simply, to what extent does the program as implemented make sense?

Effectiveness: the extent to which the style and management of the implementation process (including, but not limited to addressing gaps and weaknesses) contributed to the achievement of the program's objectives (or their expected achievement at the program's end).

Appropriateness: The choices made by the program (a) align with the program's purpose, (b) are suitable to the context for information and networks regionally and globally, and (c) are feasible given the resources available.

Central to assessing the appropriateness of implementation priorities and choices across the I&N Program is the need to understand the logic framework guiding this initiative. It will be elucidated and understood using the initial Prospectus, changes in priorities or strategies as the program evolved, and the explicit logic set out in the FRP. Interviews with program managers were used, in part, to verify the program logic and to examine the theory of change assumed by these individuals.

The six sub-questions guiding the review and assessment of the appropriateness of implementation priorities and choices, along with the unit(s) of analysis and the methods and sources used are set out in the table below:

Guiding Sub-Questions	Focus/Approach/Aim	Methods and Sources
1. What is the program **logic/assumptions underpinning I&N** as conceptualized in the initial prospectus? How did it evolve over time? Was it **used to guide** program implementation and management? If not, what guided program implementation and management?	Qualitative and quantitative mapping of program activities and outputs	• Program prospectuses and related program documents, in-house evaluations • Interviews with program management
2. To what extent did the project activities **reflect the initial I&N prospectus**? Were the priorities set and choices responsive to the intent? What factors were responsible for any **modifications or deviations**?	Analyses of • divergences from initial prospectus • rationale(s) for divergences (e.g. risks) • influencing factors (e.g., context)	• Program documents & reports • Selected project documents • Interviews with program management
3. To what extent did I&N's choices and priorities **reflect and evolve with changes in the external environment, particularly in a dynamic field such as information and networks in the global South?**	Comparison between • changes in external environment, and I&N directions	• Interviews with key informants • Selected project documents • Evaluation reports
4. To what extent do priorities and choices reflect **responsiveness to (e.g. socio-cultural) context?**	Analysis of how context has been addressed in programming and implementation	• Program documents & reports • Interviews with program management & network leaders
5. How has **program coherence** been understood and managed at the program level? (i.e., differing modalities of operation)	• Extent of shared understanding of coherence • Extent of coherence in the priorities and choices made - also over time	• Program documents & reports • Interviews with program management & network leaders

Guiding Sub-Questions	Focus/Approach/Aim	Methods and Sources
6. To what extent are the '**strategic lessons' in the FPR representative** of the lessons drawn from experiences across the program? Were they **systematically drawn and 'learnt'**? Do they shed **light on the (implicit or explicit) logic** underpinning the program?	• Sources of evidence to support claims of lessons learned. • Linkage between lessons and the logic underpinning the program	• Final prospectus & program (project?) reports • Interviews with program management & network leaders

Evaluation Question 2: **Quality and Significance of the Research**

The Panel assessed the quality and the significance of the research supported through the I&N Program by examining the main research outputs produced from a specific subset of projects (the selection criteria are specified below in section 4). For this portion of the review the panel members used the RQ+ Assessment tool provided by the IDRC and considered: (i) the methodological and scientific standards of research outputs, (ii) the context within which the research was conducted/disseminated, (iii) the intended purpose of the research, (iv) the research output's potential for application to policy and/or practice, and (v) any other influential factors.

The two sub-questions guiding the review and assessment of the quality and significance of the research outputs, along with the unit(s) of analysis and the methods and sources used are set out in the table below:

Guiding Sub-Questions	Focus	Methods and Sources
7. How has the **concept of research quality** been understood and managed at the program and network levels?	• Extent of shared understanding among program management, network leaders and members • Quality assurance system in place at different program levels	• Program documents & reports • Interviews with program management, & network leaders

Guiding Sub-Questions	Focus	Methods and Sources
8. To what extent do the **research outputs reflect quality as defined by the RQ+ Assessment tool** (i.e., significant at a (i) theoretical and (ii) applied level)?	• Core features of the research process • Advancing knowledge in the field in terms of: (i) thought leadership; (ii) research practice; and (iii) use of research outputs • Reputation for quality	• Project completion reports • Research output/publication analysis • FPR & evaluation reports done about some portions of the program. • Interviews with key informants • Interviews with program management, network leaders & members • Use of the RQ+ Framework tool.

Evaluation Question 3: **Achievement of Program Outcomes**

The review of program outcomes was structured around the I&N Program's four outcome approaches (i.e., Openness, Rights, Inclusion, and Field-building). The operational definitions guiding this portion of the evaluation were as follows:

Outcome: changes in the behaviour, relationships, activities, or actions of the people, groups, and organizations with whom a program works directly.

Relevance: adequacy to developmental priorities and coherence with the organization's line of work, all sustained during the I&N program cycle.

Significance: having or contributing to a developmental influence, providing a benefit to the intended targets of a development intervention (program/project).

The five sub-questions guiding the review and assessment of the achievement of program outcomes, along with the unit(s) of analysis and the methods and sources used are set out in the table below:

Guiding Sub-Questions	Focus	Methods and Sources
9. To what extent were the outcomes to which I&N is said to have contributed **in line with the intent** (as expressed in the initial I&N prospectus) and the evolving program strategy?	• Major discrepancies or gaps • Unintended outcomes or consequences from the work of I&N	• Program documents, evaluation report • Interviews with key informants • Interviews with program management, network leaders
10. To what extent does the **evidence marshalled** in the FPR support the claims of outcomes?	• Verification of the documented evidence to determine plausibility of claimed outcomes	• Final prospectus, evaluation, program & project reports • Interviews with key informants
11. How has the **concept of relevance** been understood and managed at program and network level?	• Extent of shared understanding among program management, network leaders and members • Handling of issue of relevance at different program levels	• Program documents & reports • Interviews with program management, & network leaders
12. How have the **concepts of value and significance** been understood at program and network level?	• Extent of shared understanding in assessing program outcomes for reports and the final prospectus	• Interviews with program management & network leaders
13. To what extent are I&N's **outcomes relevant, valuable and significant to the goal of fostering** "a critical southern perspective to catalyse positive and inclusive benefits from information networks, as well as dampen their negative tendencies"	• Contribution of project outcomes to program outcomes • Contribution of program outcomes to catalysing positive and inclusive benefits from information networks and limiting their negative tendencies	• Program & project documents & reports; evaluation reports • Interviews with key informants • Interviews with program management, network leaders

Evaluation Question 4: **Strategic Implications for the IDRC Board of Governors**

The identification of issues that are of strategic importance to the Board of Governors were determined through the approaches outlined above and discussions with the Evaluation Unit.

The five sub-questions guiding the identification process, along with the unit(s) of analysis and the methods and sources used are set out in the table below:

Guiding Sub-Questions	Focus	Methods and Sources
14. In what ways and why has I&N been **influential,** given IDRC's mission and mandate?	• Final assessment of program outcomes, and their (likely) influence	• Synthesis of Review findings
15. Were any **outcomes absent** compared to expectations?	• Synthesis of program outcomes achieved versus intent	• Synthesis of Review findings
16. Are there **emerging issues** that need to be considered in IDRC programming?	• Listing of new/important issues that emerged during the Review	• Synthesis of Review findings
17. What **lessons can be learned** from the I&N **experience** that can **inform IDRC programming in future**?	• Synthesis of lessons from the Review	• Synthesis of Review findings
18. Based on all the evidence, what are the **main strategic recommendations** that can help guide IDRC programming in future?	• Strategic recommendations flowing from the Review	• Synthesis of Review findings

Appendix 5: Questionnaires

External Stakeholders

Name:	Organization:
Position in organization:	I&N Project (if relevant)
Country based:	Interview date:
Contact details:	

1. Are you familiar with IDRC's Information and Networks program, its ongoing global program in the areas of ICT and Development? If so, what is your perception of *the manner in which the program was conceived and how it evolved*?
2. One of the strategic areas for the I&N program was Openness/ Rights/Inclusion. From your knowledge of the program do you think they were responsive to the needs and challenges of the field in the global South?
3. Have any significant issues come up since 2011 that would merit modifying or adapting the Program, and if so what are they?
4. From an outsider's perspective, did the Program (implementation) appear coherent and consistent?
5. In your opinion, what are the main attributes of high quality development research?
6. Have I&N contributions to research been visible enough in the field? Have any of its research outputs/actions been influential for the field of Information & Networks for Development? For you, personally? Are the I&N Program's outputs and other contributions widely known? In your opinion, do they reach the ideal audiences?
7. Has the I&N Program made a significant difference in terms of development research? If so, how?
8. On your preferred topic, what significant changes (in activities, behavior or policies) do you think can/will be at least partially attributable to IDRC's contributions through the Program?
9. What are other key institutional players in the topic (s) of the Program, and is IDRC sufficiently engaged with them? Is there potential for expanded collaboration?
10. In your opinion, has the work carried out by the I&N Program (or IDRC) visibly contributed to its stated overall purpose of "*catalysing benefits from information networks for Human Development and to limiting any negative tendencies*"?
11. What do you think distinguishes the work supported by IDRC in ICT4D, if anything at all?
12. Were there any missed opportunities by the Program/IDRC? If so, please provide examples
13. What are the keys issues (emerging or already present) in the field of Information & Networks for Development which IDRC should consider working on during the next few years?

IDRC Grantees

Name:	Organization:
Position in organization:	I&N Project (if relevant)
Country based:	Interview date:
Contact details:	

1. What was your interpretation of the manner in which the program was conceived and how it evolved? From your point of view, how did this guide the management of the Program?
2. In your opinion, how did I&N's choices and priorities reflect and evolve with changes in the panorama of ICT for development?
3. To what extent did your project incorporate gender inclusiveness and/or support gender analysis in its work?
4. From your perspective as a partner, was the implementation of the program coherent – ie., did it make sense in terms of being intelligible, consistent and well integrated?
5. How was monitoring and evaluation applied to your project?
6. What lessons can be drawn from your project's implementation with regard to future programming efforts?
7. How did you interpret the concept of research quality within the context of the I&N Program? Were any research Quality Assurance mechanisms applied by I&N's management?
8. Were there specific instances of building research capacities for development researchers/actors in the project?
9. Who were the primary researchers for your project? Academics? Development practitioners? Others?
10. How would you characterize the research carried out by your project in terms of its
    - (i) Integrity (standards, methodology)
    - (ii) Legitimacy ('do no harm', inclusiveness, gender)
    - (iii) Importance (relevance, originality)
    - (iv) Positioning (knowledge accessibility, timeliness)
11. What were the most influential research results/activities emerging from your project?
12. In terms of Field-Building, has your project contributed Openness, Rights, and/or Inclusion? If so, were these contributions to Field-Building implicit to the project's work or explicit/deliberate?
13. What changes in the activities, behaviour or policies of the intended beneficiaries are attributable at least in part to the project? Which types of changes are likely to result in the short term? Which may be considered sustainable or likely to maintain their effects beyond the life of the project?

14. Are there any areas in which the project fell short of expectations? If so, why/how?
15. Did the intended target organizations/population find I&N activities valuable ? In what way(s)?
16. Did your project generate any unintended changes/consequences (positive or negative)? Please elaborate.
17. How did the project contribute to "*catalysing benefits from information networks for Human Development and to limiting any negative tendencies*"?
18. What do you think distinguishes the work supported by IDRC in in the realm of information and networks? (e.g. its approach to research, partnerships, choice of topics, project methodologies, type of beneficiaries, policy influence etc.)
19. Were there any missed opportunities?
20. What are the keys issues (emerging or already present) in the field of Information & Networks for Development that IDRC should prioritize over the next few years?

IDRC Staff

Name:	Organization:
Position in organization:	I&N Project (if relevant)
Country based:	Interview date:
Contact details:	

1. What is your interpretation/understanding of the manner in which the I&N Program was conceived and how it evolved? What was the logic driving the Program, and did that change over time?
2. To what extent did this logic guide the implementation and management of the Program?
3. To what extent does the overall portfolio of the I&N Program reflect the initial Prospectus?
4. If there were significant modifications, what were the reasons, internally (at IDRC) and/or externally (context)?
5. How did I&N's choices and priorities reflect and evolve with changes in the panorama of ICT for development and/or the overall development context?
6. To what extent was the Program able to manage foreseeable risks (as indicated in Prospectus)? Where there any unforeseen additional risks that affected the Program? If so, what were they and what effect did they have?
7. To what extent did the Program incorporate gender inclusiveness and support gender analysis for its outcomes?
8. Was the implementation of the Program coherent, ie., did it make sense in terms of being intelligible, consistent and well integrated? (Very much/Somewhat/Not much/Not sure)

9. What is the approach to monitoring and evaluation adopted by the program? How is/was this approach implemented?
10. What were the main lessons learned during the implementation of the Program, and how do they relate to its theory of change?
11. How closely to the RQ+ framework was the concept of research quality understood and managed (i) at the Program level; (ii) by most of the projects?
12. How was the notion of building research capacities for development researchers/actors understood and implemented?
13. What Quality Assurance mechanisms are/were implemented by I&N's management team to ensure the production of high quality research outputs by I&N-supported projects and networks?
14. What has been the most influential research results/activities emerging from the Program?
15. To what extent are the outcomes to which I&N is said to have contributed in line with the intent as expressed in the initial I&N prospectus?
16. What are the salient changes in the activities, behaviour or policies of the intended beneficiaries that are attributable at least in part to the I&N Program? Which types of changes are likely to result in the short term? Which may be considered sustainable or likely to maintain their effects beyond the life of the project?
17. What unintended changes/consequences (positive or negative) did the Program generate?
18. Were there key institutional players with whom IDRC did not sufficiently engage for collaboration?
19. How did the Program contribute to "*catalysing benefits from information networks for Human Development and to limiting any negative tendencies*"?
20. What have been the 3-4 main accomplishments (effects/incidence/etc.) of the Program?
21. What do you think distinguishes the work supported by IDRC in the area of information and networks from other entities operating in this domain?
22. Were there any missed opportunities by the Program or IDRC?
23. What are the keys issues (emerging or already present) in the field of Information & Networks for Development which IDRC should consider working on during the next few years?

Appendix 6: Interview Participants

Key Informant: I&N Program Staff	Project No.	Rationale
1. Laurent Elder	N/A	I&N Program Leader
2. Ellie Onyango Osir	N/A	I&N Program Officer
3. Khaled Fourati	N/A	Former I&N Program Officer
4. Matthew Smith	N/A	I&N Program Officer
5. Fernando Perini	N/A	I&N Program Officer
6. Phet Sayo	N/A	I&N Program Officer

Key Informant(s): I&N Grantees*	Project No.	Rationale
7. Gus Hosein	107071	Project Leader
8. Roxana Barrantes	106990	Project Leader
9. Jeremy Malcolm	106658	Project Leader
10. Ron Deibert	106967	Project Leader
11. Anriette Esterhuysen	107488	Project Leader
12. Ricardo Ramirez & Dal Broadhead	107064	Project Co-Leaders
13. Tobias Schonwetter & Jeremy de Beers	106223	Project Co-Leaders
14. Jose M. Alonso & Savita Bailur	107075	Project Co-Leaders
15. Helani Galpaya	106233 / 107548	Project leader
16. Wang Yan Jian & Suchit Nandat	106236	Project Leader and co-manager
17. Gustavo Fischman	106660	Project Leader
18. Rebecca Chiao	106623	Project Leader
19. Peter G Veit**	106389	Project Leader
20. Alison Gillwald	106231	Project Leader
21. Eve Gray**	105716	Project Leader
22. Vignesh Ilavasaran	107385	Project Leader
23. Rohan Samarajiva	106233 / 106333 / 107548	Project Leader
24. Joe Karaganis	106657	Project Leader
25. Helena Barnard	107384	Grantee – alternate for Mark Graham, Project Leader

* Project Leaders not interviewed:

Hopeton Dunn (106624) – no response to repeated requests for an interview; and
Alicia Spengler, Antonio Lopez, Eduardo Tarrago (106459) – unable to contact

**Interviewed for project that was later removed from sample.

Key Informant(s): External	Organization	Rationale
26. Martin Hilbert, Assistant Professor	University of Southern California, Davis / UN Economic Commission for Latin America and the Caribbean	Specialist in digital technologies and development
27. Valeria Betancourt, Coordinator of Communication and Information Policy Programme in Latin America	Association for Progressive Communications, Ecuador	Internationally renowned campaigner/specialist of information and communication technologies for development
28. Ismael Peña Lopez, Professor	Universitat Oberta de Catalunya, Barcelona	Leading scholar in e-learning and empowerment: digital capacity building and literacy, e-Portfolios, Open Access, Open Science, Access to Knowledge
29. Dafne Sabanes Plou, Regional Coordinator of Programa de Apoyo a las Redes de Mujeres	Association for Progressive Communications	Gender and Development expert
30. Paul Maassen, Director for Civil Society Engagement	Open Government Partnership / Dutch development agency Hivos.	Active in the area of Rights and Voice; recommended by Loe Schout, Director of Hivos ICT program
31. Mario Castillo, Chief, Information Society – Division of Productive and Enterprise Development	UN Economic Commission for Latin America and the Caribbean	Significant previous involvement with IDRC
32. Eric Sears, Program Officer	MacArthur Foundation	Recommended by I&N Team
33. Ignacio Mas, Senior Research Fellow	Saïd Business School, University of Oxford	Expert on mobile money
34. Rasheda Sultana, Senior Specialist	Grameenphone Ltd	Experienced with mobile banking and access in emerging markets
35. Daniel Radcliffe, Senior Program Officer	Bill & Melinda Gates Foundation	Expert on mobile money in developing countries

Key Informant(s): External	Organization	Rationale
36. Jonathan Donner, Consultant	Independent Consultant	Recommended by I&N Team
37. Andrew John Rens, SJD Candidate	Duke University School of Law	Expertise about complexities of access to information within the context of developing countries and intellectual property law
38. Jose L. Cervera Ferri, External Consultant	UN Economic Commission for Latin America and the Caribbean	Expert in ICT indicators
39. Tim Kelly, Lead ICT Policy Specialist	World Bank, ICT sector Department	Recommended by I&N Team
40. Sunil Abraham, Executive Director	Centre for Internet and Society	Familiar, but not directly involved with I&N program. Recommended by Rohan Samarajiva
41. Arpan Kumar Kar, Assistant Professor	Indian Institute of Technology, Delhi	Familiar, but not directly involved with I&N program. Recommended by Vignesh Ilavarasan
42. Debbie Budlender, External Consultant	Association for Progressive Communications	Familiar, but not directly involved with I&N program. Recommended by Anriette Esterhuysen

Key Informant(s): Others	Organization	Rationale
43. Ben Petrazzini	IDRC	Director of the formerIDRC Connectivity and Equity in the Americas/Institute for Connectivity in the Americas program
44. George Sciadas		I&N Interdisciplinary Champion (quantitative methods)
45. Ineke Buskens	Gender Research in Africa and the Middle East into ICTs for Empowerment (GRACE), South Africa	Interdisciplinary Champion (gender) – corresponded by email.
46. Sonal Zaveri, Mentor	Developing Evaluation and Communication Capacity in Information Society Research (DECI-2)	Project partner
47. Sukaina Walji	ROER4D communication, Cape Town	DECI-2 network partner
48. Morris Lipson	External Consultant	Evaluator of the I&N program's Digital Rights Networking Approach

Appendix 7: Project Sample List

Project number	Project Title	Outcome Area	Region	Budget ($)	Budget (category)	Active/ closed
106223	African Innovation Research on Intellectual Property's Role in Open Development (Open A.I.R.)	Openness	ROSSA	2,043,600	> $1 million	Active
107075	From Data to Development: Exploring the Emerging Impact of Open Government Data in Developing Countries	Openness	Global	1,177,100	> $1 million	Active
106624	Open Business Models: New Compensation Mechanisms for Creativity and Inclusion	Openness	LACRO	830,530	$500,000 - $999,999	Closed
107548	Building Research Capacity for Systematic Reviews	Openness	ARO & MERO	536,300	$500,000 - $999,999	Active
106660	Quality, Reach and Impact of Open Scholarly Publishing in Latin America	Openness	LACRO	449,700	$100,000 - 499,999	Closed
106623	HarassMap: Using Crowd Sourced Data in the Social Sciences	Openness	MERO	361,000	$100,000 - 499,999	Closed
107071	Protecting Privacy in an Increasingly Digital Developing World	Rights	Global	2,085,200	> $1 million	Active
104927	Privacy and the IS in Asia	Rights	ARO	1,153,600	> $1 million	Closed
106967	Understanding Southern Influence in Cyberspace Security and Governance: Towards a Global Network of South-based Cyber Stewards	Rights	Global	1,126,000	> $1 million	Active
107488	A Rights Based Approach to Internet Policy and Governance for the Advancement of Economic, Social and Cultural Rights	Rights	MERO	435,700	$100,000 - 499,999	Active
106658	Adding A2K Principles to the UN Guidelines for Consumer Protection	Rights	Global	203,800	$100,000 - 499,999	Closed
107288	Mapping the Latin American Digital Rights Landscape	Rights	LACRO	50,000	< $100,000	Closed

Project number	Project Title	Outcome Area	Region	Budget ($)	Budget (category)	Active/ closed
106231	Evidence-based ICT Policy for Development and Innovation	Inclusion	ROSSA	2,922,100	> $1 million	Closed
106233	Innovations for Inclusive Knowledge Based Economies in Asia - LIRNEasia Phase III	Inclusion	ARO	1,375,500	> $1 million	Closed
105818	Networks for Development: the Caribbean Information and Communication Technologies Research Programme	Inclusion	LACRO	808,229	$500,000 - $999,999	Closed
105717	Consolidating Research and Education Networking Phase II	Inclusion	ROSSA	564,600	$500,000 - $999,999	Closed
107384	Microwork and Virtual Production Networks in Sub-Saharan Africa and South East Asia	Inclusion	ROSSA & ARO	468,600	$100,000 - 499,999	Active
106990	Broadband adoption and poverty: Evidence and new research directions from Latin America	Inclusion	LACRO	283,200	$100,000 - 499,999	Closed
106459	Mobile Money and Local Development	Inclusion	ARO	260,900	$100,000 - 499,999	Closed
107385	Comparing the Impact of Microloans, Mobile Phones, and Business Training on Micro-enterprises owned by Women in India	Inclusion	ARO	217,600	$100,000 - 499,999	Active
106236	The Open Crowd-Sourced, On-line Digital Review of Asia Pacific (e-DirAP)	Inclusion	Global	175,800	$100,000 - 499,999	Closed
106333	Communication for Policy Research (CPR) South-South	Field building	Global	1,263,500	> $1 million	Closed
107064	Developing Evaluation and Communication Capacity in Information Society Research (DECI-2)	Field building	Global	405,160	$100,000 - 499,999	Active
106410	Open Development Edited Volume	Field building	Global	26,000	< $100,000	Active

Appendix 8: Assessment of Research Quality Plus (RQ+) Assessment Tool:

The RQ+ tool was designed by the by IDRC's Policy and Evaluation Division to provide external reviewers with a systematic approach for answering a key external program review question - "Overall, was the quality of the research supported by the program acceptable?" Based on our experience working with the tool, there are two aspects we find particularly problematic especially when the tool is provided as an excel spreadsheet: (i) The bundling of criteria within particular metrics; and (ii) interpreting the assessment criteria.

1. *The Bundling of Criteria*

The bundling of multiple definitional criteria within a single metric leads to inconsistencies in the evaluation of research outputs wherein one reviewer may focus foremost on one component while another focuses on a different component. Various components the RQ+ tool direct evaluators to check multiple variables not all of which are logically related to the issue they are meant to describe.

Three examples illustrate this concern:

i. *The Research Integrity metric*: Here, the focus is meant to be on research design and methodology, literature review, data gathering and analysis. In evaluating research outputs on the basis of the criteria provided, different evaluators can very easily and soundly value one component over another. Moreover, there are no grounds upon which to expect each of these components to be present in every research output. The current components adhere to an idealized notion of academic output that fails to account for the diversity of discipline-based publication norms; not to mention the differences in particular types of research outputs (e.g. policy briefs, working papers, government reports, books, etc). This is no one standard format to publishing research.

ii. *Knowledge Accessibility and sharing sub-dimension*. Here, we see a conflating of: understanding of the context within which the results are likely to be used, stakeholder or user mapping, and attention to making research findings available. The latter are independent considerations that should be assessed as such. In addition, knowledge accessibility and sharing are distinct considerations requiring different capacities.

iii. *The combining of 'Not Applicable' with the 'Insufficient Detail to Assess' categories*. Despite the RQ+ documentation offering different definitions of these terms, in the excel-based tool they are grouped into one category. The latter are not synonymous. They have very different implications when applied as an element of research quality assessment.

2. *Interpreting Assessment Criteria*

A key challenge with using this tool stems from the fact that the RQ+ framework asks reviewers to assess research outputs at macro and micro levels simultaneously. At the macro level, users are asked to assess research outputs while bearing in mind the contexts within which produced. These are identified as key influences that measure the maturity of the research field, researcher capacity strengthening, as well as risk in the data, research and political environment. Therefore, the research outputs must be read and assessed in the light of information contained in project-level documents (i.e., Project approval documents, and technical reports). An important

shortcoming that comes immediately to light when undertaking this exercise is that in the absence of on-site project visits, project-level documents offer only a rudimentary sense of the actual context within the research is taking place and the outputs are produced. It also raises issues pertaining to whether research work from particular contexts is to be assessed on the basis of some different yet undefined standard. Moreover, given the time and resource constraints under which both external evaluators and project grantees must operate, and bearing in mind the depth of issues to be covered during the interview sessions, there is little time to delve into matters relating to individual research outputs.

At the micro level the difficulty stems from the manner in which indicators are interpreted both by researchers in their research design and, then, by external evaluators. Gender and inclusion are exemplary in this regard. One interpretation is for the research to be about gender or populations of interest. Another interpretation places an onus on whether and how these populations benefit through the research finding, and yet another interpretation is for those populations to be part of the research team. These three interpretations all emerged from interviews with grantees the analysis project approval documents and then our own analyses. It is far from clear which interpretation is meant to be the principal consideration for external reviewers.

We recognize that any evaluative instrument must carefully consider the relation between the details/accuracy of the expected findings, the effort invested to obtain them and the resources devoted to it. And, having each engaged in program reviews in the past, we state unequivocally that having the RQ+ tool is better than our earlier experiences in which no clear guidelines were provided for assessing research quality. Nonetheless, in the light of what we have learned working with the current incarnation of the RQ+ tool we believe further fine-tuning is required. Among the requisite adjustments we advise revisiting how the constitutive elements of research quality are operationalized in the RQ+ tool in order to ensure that it actually assesses what its meant to assess. To this end, we believe it would be prudent to: (i) separate out the context-centric criteria (i.e., key influences, research legitimacy and positioning for use) which are better suited to evaluating research proposals and projects than individual research outputs; and (ii) continue adjusting quality-centric criteria in a manner that more clearly distinguishes the independent criteria that constitute the metrics

Appendix 9: Assessment of research outputs

RQ+ Dimensions	Reviewers' aggregate scores			Overall mean	Standard deviation
	Inclusion	*Openness*	*Rights*		
Key Influences					
Maturity of the research field	2.00	2.33	2.40	2.24	0.21
Researcher capacity strengthening	1.82	2.75	2.80	2.46	0.55
Risk in the data environment	1.84	1.44	1.20	1.49	0.32
Risk in the research environment	1.72	1.33	1.00	1.35	0.36
Risk in the political environment	1.30	1.33	1.80	1.48	0.27
Research integrity	5.68	6.24	6.3	6.1	0.32
Research Legitimacy					
Addressing potentially negative consequences	4.25		6.5	5.4	1.55
Gender-responsiveness	2.88	3.67	2.9	3.1	0.46
Inclusiveness	6.00	5.50	4.0	5.2	1.01
Engagement with local knowledge	6.50	6.91	6.3	6.6	0.29
Research Importance					
Originality	5.59	6.79	6.4	6.3	0.61
Relevance	6.33	6.39	6.8	6.5	0.24
Positioning for Use					
Knowledge accessibility and sharing	4.67	6.12	6.7	5.8	1.06
Timeliness and actionability	5.24	6.65	6.4	6.1	0.75