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Outcomes of Policy-Oriented Research in the CGIAR

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Summary

Policy-oriented research—defined as research aimed at identifying new or improved policies, regulations, or institutions (or their management) that enhance economic, social, and environmental welfare (Raitzer and Ryan, 2008)—is an important and growing part of CGIAR portfolio. Its importance is reflected in CGIAR’s Strategy and Results Framework as a cross-cutting outcome on “improving the enabling environment” through better policies and institutions. To begin to document CGIAR’s contribution to this outcome, SPIA compiled data bases of 94 plausible policy outcomes of CGIAR research covering the period 2006-2014. Nearly all centers contributed outcomes, and they occurred at sub-national, national, regional and global scales. Outcomes range from the formulation of new policies to improving how existing policies are implemented. Overall, 57% of the outcomes reported focus on agricultural policies; 40% relate to NRM policies (including climate change); and the remainder comprise contributions to the implementation of social safety net policies. Over the same period, relatively few quantitative *ex post* impact assessments of policy-oriented research (POR) were conducted. While this likely reflects a rational assessment of the relative costs and benefits by research managers who would undertake such studies, there are still reasons to conduct such studies. Hence, the outcomes database can help to identify and prioritize outcomes—and type of outcomes—for which quantitative assessments could be most useful.

Policy Outcomes Databases

As something of a reaction to the dearth of quantitative POR impact assessment activity since SPIA’s last effort in 2006-2010 (Walker, T., J. Ryan, and T. Kelley. 2010), SPIA’s [SIAC project](#) called for the development of a mechanism for systematically and regularly tracking outcomes of CGIAR research that have influenced policy changes related to agriculture, food and nutrition, and natural resources at the regional, national or global level. The goal of this effort was to make available to CGIAR stakeholders the best available information on outcomes that are plausibly attributable to CGIAR policy research outputs. It was also hoped that development of a roster of outcomes might “prime the pump” for further quantitative IA work by establishing a set of candidates for such analysis.

Pursuant to this goal, [two databases of significant policy outcomes](#) linked to CGIAR research were compiled—one for the period 2006-2010 and the other for the period 2011-2014. These databases employ a common template which includes a description of the policy constraint or problem, a listing of key research outputs, a statement describing the outcome, and evidence connecting the research to the outcome.

The 2006-2010 database was compiled based on information contained in the Science Council’s (now-defunct) Performance Management System (PMS) database. The PMS required Centers to submit a set of “outcome statements” each year¹ as part of their annual management review². These outcome statements were then subjected to both internal and external peer review and scoring. From that database,

¹ Centers were asked to submit 5 outcome cases, and a description of 500 words (maximum). Documentation was kept to a minimum, and only direct evidence, not anecdotal, that explicitly documents the outcome and shows the link from the output to the outcome was considered.

² Over that five year period that the PMS was in operation, a total of 390 outcomes were reported. These represents a wealth of information of all types of outcomes emanating from CGIAR research (i.e., across all lines of research, not just policy research). The policy outcomes in the 2006-2010 database were drawn from that larger dataset.

67 policy outcomes were identified as having sufficient evidence of a plausible link between Center research outputs and a specific change in policy or practice (as well as having received a median or better review score). These are summarized in Table 1.

The PMS was discontinued after 2010, so since then there has been no externally-reviewed source for identifying policy outcomes attributable to CGIAR research. For the period 2011-2014, a careful review of Center and CGIAR Research Program (CRP) annual reports and websites was undertaken—by a consultant and a SPIA staff member—to identify and document purported policy outcomes from CGIAR research. Specifically, Centers and CRPs were asked to (a) verify that the outcomes contained in the database were accurate; (b) substantiate that new policies, changes in existing policies or prevention of negative policy change were plausibly linked to Center/CRP outputs; document what those specific outputs were; (c) provide a brief narrative description of how Center or CRP outputs contributed to the policy change, as well as the relative contribution of CGIAR research vis-à-vis other stakeholder inputs; and (d) provide plausible sources of evidence linking research outputs to the policy outcomes in question. Respondents were also offered the opportunity to submit comparable information for other outcomes that occurred during the 2011-2014 time frame. This list of candidate outcomes was distributed to the relevant Centers and CRP Research Directors for validation and substantiation. This process generated 27 policy outcomes (Table 2).

Analysis of policy outcomes

It is clear that there is no shortage of policy outcomes that can be linked to the research activities of the various CGIAR centers and programs. Not surprisingly, Centers with explicit policy mandates—IFPRI, CIFOR, IWMI, and Bioversity—accounted for the majority of these; however, all but one of the other Centers reported at least one policy outcome for which they could plausibly claim some credit.

The mix of topic areas for the reported outcomes corresponds in a general way to the Center and CRP mandates—i.e., Centers like CIFOR, ICRAF, and IWMI generally report outcomes related to natural resource management (NRM), while outcomes produced by Centers with commodity-oriented mandates (e.g., ILRI, IITA, WorldFish) tended to be related to agriculture. Overall, 57% of the 94 outcomes reported focus on agricultural policies, regulations and investments; 40% relate to NRM policies and regulations; and the remainder comprise contributions to the implementation of social safety net policies.

In terms of geography, 14% of the 94 outcomes were related to global policies, 27% happened in more than one country and the rest took place in a single country or, in a few cases, institutions (multilateral or donors organizations). Of the 64 policy outcomes that were regional or national, 42% were in sub-Saharan Africa (SSA), 36% in South, South-east and Central Asia, 20% in Latin America and the Caribbean (LAC), and the rest (1%) in Middle-east and North Africa (MENA).³

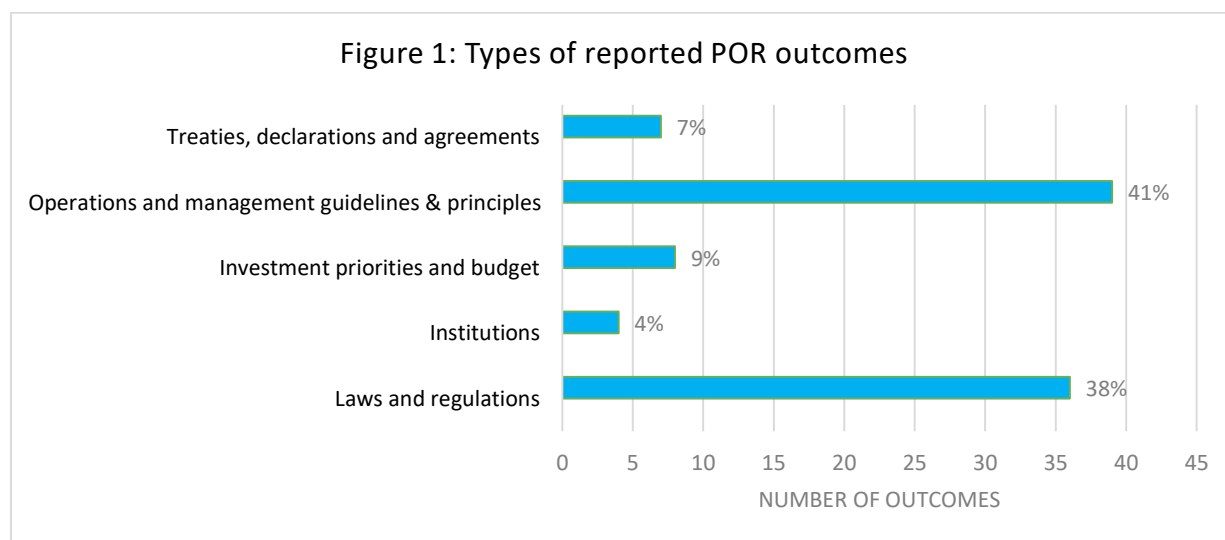
Consistent with the POR definition, the reported outcomes span a range of policy change types:

- ***changes in laws and regulations governing economic incentives in agriculture or natural resource management***—for example, agricultural, macro, trade, nutrition/health policies, and environmental policies;

³ Seven policy outcomes spanned multiple countries across geographical regions.

- **creation of institutions**—for example, the formation of the Ethiopian Commodity Exchange or the agreement between India, Nepal, and Bangladesh to share rice varietal evaluation data among their respective countries to facilitate more rapid release and commercialization;
- **changes in government investment priorities and budget allocations**—for example, increases in the share of budgets devoted to agricultural research associated with the Comprehensive Africa Agriculture Development Programme (CAADP);
- **innovations to the operations and management (O&M) for government agencies and programs**—for example, monitoring and evaluation activities associated with operating social safety net programs like the Mexican PROGRESA conditional cash transfer program or the Ethiopian Productive Safety Nets Programme;
- **international treaties, declarations, or agreements among parties reached at major policy conferences**—for example, contributions of IFPRI’s trade policy research to the DOHA round of the WTO or the substantial involvement of CCAFS (via multiple Centers) in crafting international climate treaties.

Figure 1 provides a breakdown of how the reported outcomes are distributed across these types of interventions. A large fraction of these outcomes involved changes in laws or regulations. Many reported outcomes relate to some aspect of global climate change, mainly from the latter period. To some extent, this likely reflects an increasing urgency with which scientists at multiple Centers have engaged in research focusing on climate change adaptation/mitigation strategies.⁴



⁴ Note, however, that the reported outcomes for the 2011-2014 were submitted voluntarily. That is, they do not constitute a representative random sample of all policy outcomes related to the research taking place across the member Centers and CRPs. Rather, they reflect to some degree the differing levels of enthusiasm with which Center or CRP research administrators responded to the call for outcome statements. For example, research leaders from CCAFS were particularly responsive, hence the relatively large number of outcomes related to climate change research. By contrast, each Center was required by the Science Council to report a set number of outcomes for 2006-2010—typically five, although that number varied a bit by Center and by year.

Also of interest is the large number of reported policy outcomes related to operations and management (O&M) across a variety of institutional dimensions, including government agencies, NGOs, and international donor organizations. This is perhaps not surprising since, in this phase of the policy process, technical input from research may be especially influential. Research-based innovations on how government agencies and/or programs are operated are commonly linked substantially to a specific policy research provider—for example, IFPRI’s work with monitoring and evaluation of social safety net programs. Given that the 2006-2010 database is likely to be more representative of CGIAR POR outcomes as a whole, it is likely that O&M is a major way that CGIAR POR contributes to better enabling environments.

Research related to O&M generally tends to have clearer, if more limited, impacts on specific stakeholders, and hence be more appropriate for and amenable to quantitative impact analysis. In fact, of the 12 CGIAR policy outcomes that have been the subject of quantitative *ex post* Impact Assessments (epIAs)⁵—one each from Bioversity, and IMWI, two from CIFOR and the rest from IFPRI—five are of this type. Exceptions are two global treaties—the International Treaty on Plant Genetic Resources for Food and Agriculture (Bioversity) and the DOHA round of the WTO (IFPRI). In general, policy outcomes relating to international agreements will involve a larger number of actors and institutions than regulatory or legal policy outcomes occurring nationally or sub-nationally. Correspondingly, disentangling the contributions of various actors to international agreements would be expected to be more formidable in general. That said, one reason that these have been the subject of epIAs could be that the role of research is less likely to be seen as infringing on national sovereignty or engaging in national politics.

Implications for *ex post* impact assessment

Writing in 2010 on the heels of the PORIA Case Studies, Walker, Ryan, and Kelley threw down the following gauntlet:

Now that the concern about the paucity of (quantitative impact assessments of POR) in international agricultural research has been highlighted and some good-practice examples have been nurtured and developed, the number of similar studies forthcoming in the next 5 years should be a good indicator of the impact of this initiative. Five years from now we should be in a good position to determine whether these first-generation case studies were the tip of an iceberg or the bottom of the barrel. (Walker, Ryan, and Kelley 2010, p. 1459)

After seven years, it is clear that those authors’ hopes for a proliferation of quantitative, *ex post* impact assessments of the CGIAR’s policy-oriented research remains unfulfilled. The dearth of such studies since 2010 is striking. Instead, evaluative work over that time period has focused on isolating institutional contributions to policy outcomes and qualitative assessments of outcome pathways. In this regard, an insight gleaned from a session on donor perspectives and interests at the 2014 IFPRI-PIM-SPIA workshop on best practices in POR impact assessment is interesting:

Quantitative assessments, which allow for comparison with impacts from other types of investment such as plant breeding, would be nice. But what donors most need are evidence-based narratives that are convincing within their agencies, bearing in mind that most of their staff are not economists (Place and Hazell 2015, p. 13).

⁵ These are the ones the author and SPIA are aware of—since Centers and CRPs did not make additional submissions in reviewing the database.

Reflections

Since 2006, the CGIAR has made plausible contribution to at least 94 policy changes in different countries, regions and thematic areas. Many more claims of influence were made, and identifying and incentivizing use of good practice in documenting claims could significantly expand the evidence of CGIAR influence. Institutionalizing a system for compiling such outcomes would incentivize their documentation and provide a more representative picture of CGIAR contribution to a better enabling environment. Efforts are underway to this end at both system and CRP level.⁶ Analysis of a large set of policy outcomes could yield important lessons about how influence happens, which in turn could be useful in enhancing the influence of future POR. A better understanding of where research was a necessary condition for influence would be particularly important in terms of justifying POR investment.

While achieving policy influence is a crucial and challenging step along the research to impact pathway (Renkow, 2017), it is not sufficient for demonstrating impact on welfare outcomes nor enabling comparison of returns to POR versus other areas of research. Experience since publication of the PORIA case studies suggests that in the absence of external support, quantitative studies are unlikely to be conducted. The policy outcomes database is an obvious source for such studies in the future, and also suggests which types of outcomes might best lend themselves to quantitative assessment. It would appear that policy outcomes with a more limited geographical or institutional footprint—in particular, outcomes related to operations and management of programs or agencies—are probably more fertile choices for quantitative *ex post* impact assessment activities in the future. For these sorts of programs, the relatively linear pathway from research outputs to policy formulation (or reformulation) simplifies issues associated with disentangling who contributed to the outcome. Moreover, the outcomes produced tend to revolve around improving the effectiveness with which benefits transfers are made to limited resource and/or impoverished people—key target groups for the CGIAR. And the measurement and evaluation protocols used to bring about those improvements lend themselves readily to quantitative impact assessment.

It is important to note that many outputs of POR may provide benefits beyond immediate changes in policy decisions. Much POR produces new knowledge and data that influence future generations of research. Over time this new knowledge may also serve to modify ideological beliefs as well, although this process likely plays out over a rather long period of time. In a similar vein, POR conducted in some CGIAR Centers also has had a strong focus on capacity building at the country level, which should ultimately lead to better policy decisions as well.

Of course, even though quantification—especially, *ex post* quantification—of key welfare impacts from specific policy research activities may be impossible, consumers and funders of such research clearly value such research very highly. Indeed, continuing and increasing funding of CGIAR Centers and CRPs for conducting such research provides *prima facie* evidence thereto. To the extent that outcome “stories” are a useful for keeping funding streams for POR flowing, the outcomes database thus represent a useful resource for funders and managers of research within the CGIAR regardless of whether or not they stimulate more *ex post* quantitative impact assessments in the future.

⁶ At system-level, all CRPs will report policy outcomes as part of the standardized reporting indicators starting in 2018. At CRP level, a group of CRPs is developing a common outcome template that will include all the elements from the 2006-2010 PMS.

References

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Appendix Table 1. Policy Outcomes Plausibly Attributable to CGIAR Research, 2006-2010

Center/ Year ¹	Outcome	Venue	Type
ARC 2010	Effective responses by AfricaRice member states to the rice crisis leading to significant increase in rice production	Africa	Laws and regulations
BIO 1 2006	Decisions Adopted by the Conference of the Parties to the Convention on Biological Diversity at its Seventh Meeting	Global	Treaty
BIO 2 2007	Nepal Seed Law modified to allow the release of farmer varieties	Nepal	Laws and regulations
BIO 3 2008	Peruvian national seed certification authority agrees to facilitate the process for seed certification for varieties included in the national register of indigenous crops	Peru	Laws and regulations
BIO 4 2009	Ministry of Agricultural and Rural Development of Vietnam to recognize, encourage and impose quality conditions to informal seed systems	Vietnam	Laws and regulations
BIO 5 2009*	Influence of Bioversity on the Governing Body of the Int'l Treaty on Plant Genetic Resources for Food and Agriculture (and use of the Standard Material Transfer Agreement by CGIAR Centres)	Global	Treaty
BIO 6 2009	Bioversity influences the Peruvian Ministry of Agriculture to officially recognize a National Registry of Potato Varieties	Peru	Laws and regulations
BIO 7 2010	Draft of revised EU novel Food Regulation that accommodates developing country concerns in terms of reduced food safety requirements for the admission to the EU market of biodiversity-derived food products	EU	Laws and regulations
BIO 8 2010	Use of management plans for conserving Crop Wild Relatives in protected areas by five countries	Armenia, Uzbekistan, Madagascar, Bolivia, Sri Lanka	Operations and management
CIAT 2010	US Patent and Trademark decision to revoke an existing patent on the Enola bean patent	US	Laws and regulations
CIFOR 1 2006	Policymakers in Indonesia are persuaded by CIFOR's research to remove a ban on rattan export that threatened livelihood options for poor rattan farmers	Indonesia	Laws and regulations
CIFOR 2 2007	Restrictive regulations on the transport of forest products in Brazil is abolished	Brazil	Laws and regulations
CIFOR 3 2007	CIFOR's research helps to target the World Bank's Indonesia Forest Strategy	World Bank	Investment and budget
CIFOR 4 2008	Freeing up the transport of forest products derived from smallholder and community forestry in Indonesia	Indonesia	Laws and regulations
CIFOR 5 2009	New approaches improve conservation planning for millions of hectares via use of Multidisciplinary Landscape Assessment approach	Indonesia	Operations and management
CIFOR 6 2009	Changing Cameroon's legal framework on forest management	Cameroon	Laws and regulations
CIFOR 7 2009*	Regulatory reform: Equity for half a million forest people in the Brazilian Amazon	Brazil	Laws and regulations

Appendix Table 1 (continued)

Center/ Year	Outcome	Venue	Type
CIFOR 8 2009*	Reforming participatory forest management in Guinea and beyond	Guinea (with int'l spillovers)	Operations and management
CIFOR 9 2010	CIFOR research and capacity building enabled forest and land-use managers to implement strategies for addressing climate change mitigation in Latin America	Latin America	Operations and management
CIFOR 10 2010	CIFOR research on biodiversity and logging made a fundamental contribution 2009 ITTO/IUCN Guidelines for the Conservation and Sustainable Use of Biodiversity in Tropical Timber Production Forests	Global	Operations and management
CIFOR 11 2010	CIFOR research informed recommendations adopted by the Indonesian Central Bank in its policy and legal framework for preventing money laundering and terrorist financing funded by illegal logging and timber trade	Indonesia	Laws and regulations
CIP 1 2008	CIP's policy influence on reforms of laws governing urban farming in Kenya and Peru	Kenya, Peru	Laws and regulations
CIP 2 2009	Adoption of the farmer field school method by governmental and non-governmental research and development oriented institutions	Peru	Operations and management
ICARDA 2008	Dryland agro-biodiversity project promotes use of native fruit tree wild species in afforestation and introduction of biodiversity conservation into educational curricula	Jordan, Syria, Lebanon, and the Palestinian Authority	Operations and management
ICRAF 1 2008	ICRAF research on the importance of trees in farming landscapes to adaptation and mitigation feed into deliberations and reports of the UNFCCC and IPCC.	Africa	Treaty
ICRAF 2 2008	Influence on Indonesia's Ministry of Forestry plans for implementing REDD mechanisms at the 13th Conference of Parties in the UN Framework Convention on Climate Change (UNFCCC)	Indonesia	Treaty
ICRAF 3 2008	Use of a GIS tool for the mapping and analysis of rainwater harvesting potentials applied in 12 African countries and 10 cities	Africa	Operations and management
ICRAF 4 2009	Research on potential and constraints of agroforestry for mitigation and adaptation to climate change used by the IPCC and the UN Framework Convention on Climate Change	Global	Treaty
ICRAF 5 2010	World Bank adopts the ASB Opportunity Cost analysis of Reducing Emissions from Deforestation and Land Use Change as part of its FCPF Capacity Building Program for REDD implementation	World Bank	Operations and management
ICRISAT 2008	Adoption of the watershed consortium approach developed by ICRISAT and its NARS partners for enhancement of rainfed areas in 250 drought prone districts in India	India	Operations and management
IFPRI 1 2006*	Expansion of coverage and benefits for Conditional Cash Transfer Programs	Mexico, Nicaragua	Operations and management

Appendix Table 1 (continued)

Center/ Year ¹	Outcome	Venue	Type
IFPRI 2 2006*	IFPRI's Gender and Intra-household Analysis assists in the development of policies, programs, and projects that take into account gender and other intra-household resource allocation processes	Global	Operations and management
IFPRI 3 2007	Ethiopian Market Reforms and formation of the Ethiopian Commodity Exchange	Ethiopia	Institutions
IFPRI 4 2007*	Regional HIV/AIDS Network (RENEWAL) influences the U.S. Presidential Emergency Plan for AIDS Relief and a WHO Resolution	Malawi, Zambia Uganda, Kenya, South Africa,	Institutions
IFPRI 5 2007*	IFPRI contributions to Doha Round WTO negotiations	Global	Treaty
IFPRI 6 2008*	IFPRI research affects composition of government investment portfolio to Uganda's Poverty Reduction Strategy	Uganda	Investment and budget
IFPRI 7 2008*	IFPRI contributions to the Comprehensive Africa Agriculture Development Programme (CAADP)	Africa	Laws and regulations
IFPRI 8 2009*	IFPRI support to governments in responding to the 2008 food price crisis	Global	Laws and regulations
IFPRI 9 2009	Investment in early childhood nutrition is now one of the most common interventions in poor countries & guides World Bank and UNICEF activities	World Bank, UNICEF	Operations and management
IFPRI 10 2010	Developing Population-Level Indicators of the Quality of Infant and Young Child Feeding Practices used by WHO, USAID and many NGOs	WHO, USAID, NGOs	Operations and management
IFPRI 11 2010*	2020 Vision for Food, Agriculture, and the Environment conferences affect policy debates within multilateral and bilateral donors and NGOs	Global	Operations and management
IFPRI 12 2010	Uganda Strategy Support Program contributes to design of the Plan for the Modernization of Agriculture	Uganda	Investment and budget
IFPRI 13 2009	East Africa biosafety programs instrumental in passage of Kenyan Biosafety Bill and approval of confined field trials for banana and cotton in Uganda and cotton in Malawi and Kenya	Uganda, Kenya, Malawi	Laws and regulations
IFPRI 14 2008	IFPRI study on World Vision program impacts alters USAID Title II program orientation	NGOs, USAID	Operations and management
IITA 1 2007	Reduction of child labor incidents on cocoa farms in Ghana	Ghana	Operations and management
IITA 2 2008	Strengthening the National Committee on Food and Nutrition and Establishment of the Nigeria National Nutrition Council	Nigeria	Institutions
ILRI 1 2006	ILRI's poverty and livestock dynamics analysis methodology adopted by governments of Peru and Kenya	Peru, Kenya	Operations and management
ILRI 2 2006	ILRI Research helps targeting IFAD dairy investment in Kenya	Kenya	Operations and management
ILRI 3 2007	Poor pastoral communities in Kenya and Tanzania use ILRI's research evidence in negotiations with policy makers to change land use and policy regulations and livestock improvement efforts	Kenya, Tanzania	Laws and regulations

Appendix Table 1 (continued)

Center/ Year ¹	Outcome	Venue	Type
ILRI 4 2007	Policy-makers and regulators adopt new institutional approaches and appropriate technologies to harmonize standards and improvement of informal milk markets across the region.	Uganda, Tanzania, Rwanda,	Laws and regulations
ILRI 5 2009	Using African climate vulnerability and poverty maps to inform national, regional and global R&D priorities and efforts aimed at sustainable poverty reduction	Africa	Investment and budget
ILRI 6 2010	Approval of 18 new methane emission factors for African domestic ruminants for inclusion in the IPCC's Emissions Factor Database	Global	Operations and management
ILRI 7 2010	An action plan improves the policy environment for smallholder dairy farmers	East Africa, India	Operations and management
IRRI 2006	'Three Reductions, Three Gains' practices adopted and up-scaled by Vietnamese Government.	Vietnam	Operations and management
IWMI 1 2006	Revision of WHO guidelines for safe use of wastewater in agriculture	WHO	Operations and management
IWMI 2 2006	Improved protection of public health and long-term livelihoods of cadmium exposed communities in north-western Thailand.	Thailand	Operations and management
IWMI 3 2007	Water User Associations Transform Canal Management in Central Asia	Central Asia	Operations and management
IWMI 4 2007*	Gujarat institutes IWMI recommendations on co-management of electricity and groundwater	India	Operations and management
IWMI 5 2008	Promoting the Multiple Use water Services approach for integrated water resource management at local and global scales	Bolivia, Ethiopia, Thailand, Nepal, India, Colombia, South Africa, Zimbabwe	Operations and management
IWMI 6 2009	Integrated and informed emergency relief and post-tsunami water supply rehabilitation in Sri Lanka	Sri Lanka	Operations and management
IWMI 7 2009	IWMI's Global Environmental Flow Calculator informs water resources assessments and planning at multiple scales	EU, WWF	Operations and management
IWMI 8 2010	Enactment of the Punjab preservation of Sub-Soil Water Act improved groundwater governance	India	Laws and regulations
WF 1 2006	Contribution to Indonesian Strategy for rehabilitation and restoration of capture fisheries, leading to improved fisheries livelihoods for coastal communities and improved fisheries management.	Indonesia	Operations and management
WF 2 2006	Government of Malawi actively promotes Integrated Aquaculture-Agriculture as a priority investment in the national food security program and civil society organizations respond	Malawi	Operations and management

Appendix Table 1 (continued)

Center/ Year	Outcome	Venue	Type
WF 3 2010	WorldFish research and policy partnerships strengthen development investment in Fisheries and Aquaculture in Africa under CAADP	Africa	Investment and budget
WF 4 2010	WorldFish's insights on post-tsunami rehabilitation of fisheries and aquaculture in Aceh and Bangladesh incorporated into emergency planning for multiple countries	Bangladesh	Operations and management
WF 5 2010	Inclusion of Community- Based Fisheries Management in the Bangladesh Department of Fisheries Inland Capture Fisheries Strategy and implementation program informs its operational and strategic directions for inland fisheries management	Bangladesh	Operations and management

Note: * Indicates POR outcomes that have been the subject of quantitative IAs.

Appendix Table 2. Policy Outcomes Plausibly Attributable to CGIAR Research, 2011-2014

Center/ Year	Outcome	Venue	Type
ARC 2011-14	AfricaRice strengthened policies to increase rice production and achieve rice self-sufficiency in ARC member countries and regional organizations	Sub-Saharan Africa	Laws and regulations
BIO 1 2013	Bioversity contributions to developing legal mechanisms for participation in ITPGRFA	Global	Treaty
BIO 2 2014	Food Security Bill Supports Climate-Smart Agriculture in India through Sourcing of Climate-Resilient, Nutritious Cereals (Reported by CCAFS)	India	Laws and regulations
CIAT 1 2013-14	Contribution to establishing PES Scheme in Peru's Cañete River Basin	Peru	Operations and management
CIAT 2 2013	CIAT science influences national adaptation policy in Nicaragua, which leverages a large scale IFAD investment to support adaptation policy (Reported by CCAFS)	Nicaragua	Laws and regulations
CIAT 3 2014	Using CIAT science, Colombian government prioritizes Nationally Appropriate Mitigation Action (NAMA) for reconverting pastures into fruit crops (Reported by CCAFS)	Colombia	Laws and regulations
CIP 1 2012	Promoting non-conventional seed production (Peru, Ecuador)	Peru, Ecuador	Laws and regulations
CIP 2 2008-12	Including native potato varieties in seed registries in Peru	Peru	Laws and regulations
CIP 3 2014	Including native-potatoes in Peru's National Strategy for Food Security and Nutrition 2013-2021	Peru	Laws and regulations
CIP 4 2004-12	Promoting inclusion of biofortified foods (OFSP) in National Agricultural Policies for Mozambique, Tanzania and Nigeria	Mozambique, Tanzania, Nigeria	Laws and regulations
CIP 5 2012	Formal seed certification of sweet potato planting material in Ethiopia	Ethiopia	Operations and management
ICRAF 2014	Bringing the National Agro-forestry Policy of India forward (Reported by CCAFS)	India	Laws and regulations
IFPRI 1 2011, 2013	Contributions to management and operations of Conditional Cash Transfer programs in Tanzania and Bangladesh (Also reported by PIM)	Bangladesh, Tanzania	Operations and management
IFPRI 2 2013-14	Contributions of the Program for Biosafety (PBS) to policy change in Vietnam, Kenya, Uganda, Malawi, and Tanzania (Also reported by PIM)	Global	Laws and regulations
IFPRI 3	Contributions to lifting of maize export ban in Tanzania (Also reported by PIM)	Tanzania	Laws and regulations
IFPRI 4 2014	Contributions to Nigeria's decision to lower its rice tariff (Also reported by PIM)	Nigeria	Laws and regulations
IFPRI 5 2012	Contribution to EU Biofuels Policy reform (Also reported by PIM)	EU	Laws and regulations
IFPRI 6 2012	Monitoring and evaluation of programs under Ethiopia's Ag. Growth Programme	Ethiopia	Operations and management

Appendix Table 2 (continued)

Center/ Year	Outcome	Venue	Type
IRRI 1 2014	Historic agreement between India, Nepal, and Bangladesh Cooperative Agreement on the joint evaluation rice varietal data for release and commercialization in those countries	Bangladesh, India, Nepal	Institutions
IRRI 2 2013	Integration of Alternate Wetting and Drying (AWD) irrigation management into Vietnam's climate change mitigation campaign (e.g. 20-20-20 strategy) (Reported by CCAFS)	Vietnam	Operations and management
IWMI 1 2014	IWMI's Vulnerability Mapping included into Sri Lanka National Climate Change Adaptation Strategy for 2011-2016 (Reported by CCAFS)	Sri Lanka	Operations and management
IWMI 2 2014	Contributions to National Irrigation Management Fund priorities and commitments pursuant to India's 12th Five Year Plan (2012-2017) (Also reported by WLE)	India	Investment and budget
WF 2012-13	From Conflict to Collaboration in Zambia: STARGO has helped lake communities in Zambia, Cambodia and Uganda lay a foundation for sustainable management of natural resources.	Zambia	Operations and management
CCAFS 1 2012	Findings from Commission on Sustainable Agriculture and Climate Change penetrate diverse policy forums: Mexico, Kenya, CFS	Mexico, Kenya, Global	Laws and regulations
CCAFS 2 2012	Taking Forward the Implementation of the Agricultural Priority Actions in the Kenya National Climate Change Action Plan (NCCAP) 2013 – 2017 (Multi-center)	Kenya	Laws and regulations
CCAFS 3 2012	CCAFS informs large-scale global and national investments in food security and CC	Global	Investment and budget
CCAFS 4 2012	Cambodian Climate Change Priorities Action Plan for Agriculture (CCPAP)	Cambodia	Laws and regulations