

# Non-Communicable Disease Prevention

## Final Prospectus Report



Dieter Telemans/Panos Pictures

This report was prepared by the International Development Research Centre's (IDRC) Non-Communicable Disease Prevention program (2011-2016) as part of the program's external evaluation.

25 February 2015

**Note: some links in this report are not publicly accessible**



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## LIST OF ACRONYMS

Note for reader: in the text, to facilitate readability, we refer to research organizations by their (often better-known) acronym.

<b>Acronym</b>	<b>Definition</b>
APHRC	African Population And Health Research Centre
AUB	American University Of Beirut
CARICOM	Caribbean Community
CIHR	Canadian Institutes of Health Research
CRES	Consortium Pour La Recherche Économique Et Sociale
CTCA	Centre For Tobacco Control In Africa
ECOWAS	Economic Community Of West African States
FCTC	Framework Convention On Tobacco Control
GACD	Global Alliance for Chronic Disease
IAC	International Alcohol Control
IDRC	International Development Research Centre
INFORMAS	International Network For Food And Obesity/NCDs Research, Monitoring And Action Support
LMIC	Low And Middle Income Countries
NCD	Non-Communicable Disease
NCDP	Non-Communicable Disease Prevention
NGO	Non-Governmental Organization
PAHO	Pan-American Health Organization
RITC	Research For International Tobacco Control
UN	United Nations
WHO	World Health Organization

## SECTION 1: INTRODUCTION

This report describes the Non-Communicable Disease Prevention (NCDP) program for the purpose of the External Program Review (prospectus period 2011-2016). It provides an overview of the program strategies and implementation, presents examples of progress toward each of the three program outcome areas, and highlights some lessons learned and opportunities for future directions.

### 1.1 Strengthening Non-Communicable Disease Prevention

#### **Building on a rich tobacco-control experience**

The Non-Communicable Disease Prevention program was approved by IDRC's Board of Governors in June 2011. This new IDRC program aimed to support locally-led research designed to inform the adoption and effective implementation of policies and programs that are low cost but can have a high impact on reducing the common non-communicable disease (NCD) risk factors and improve overall population health in low- and middle-income countries (LMICs).

The program built on a strong base of evidence and experience from IDRC's Research for International Tobacco Control (RITC) program. The RITC program, which spanned from 1994 to 2011<sup>1</sup>, was one of the first development programs devoted to research in the area of non-communicable disease prevention in LMICs and many associates and grantees of the program were engaged in evidence-building and negotiations that led to the development of the World Health Organisation Framework Convention on Tobacco Control (WHO FCTC, adopted in May 2003, entered into force in February 2005). Subsequently, partnerships with the United Kingdom's Department for International Development and the Bill and Melinda Gates Foundation allowed the RITC program to fund an important portfolio of applied research in LMICs. The 2010 external review of the program stated, "despite limited resources [RITC] made significant, relevant and valuable contributions to global tobacco control during the 2005 – 2010 period"<sup>2</sup>. RITC's large number of diverse projects, which included studies that supported FCTC implementation in LMICs and studies that generated cutting-edge findings on lesser-known issues<sup>3</sup>, is illustrative of the program's important contributions to tobacco control.

Towards the end of the 2005 – 2010 round of programming, IDRC's Senior Management and Board of Governors wished to build on the Centre's tobacco-control expertise and expand its work on non-communicable disease prevention. The RITC program then became the Non-Communicable Disease Prevention program, which was allocated increased resources (annual budgets and personnel) to focus

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<sup>1</sup> For most of its history, RITC was not a standard IDRC program. It started as a multi-donor secretariat and was later included as a line of work under IDRC's Governance, Equity and Health program.

<sup>2</sup> See External Review of the Research for International Tobacco Control Program, Findings Brief, September 2010, p. 4: [http://ic.idrc.ca/programs/ghp/ncdp/\\_layouts/15/DocIdRedir.aspx?ID=IC01-2147-46](http://ic.idrc.ca/programs/ghp/ncdp/_layouts/15/DocIdRedir.aspx?ID=IC01-2147-46)

<sup>3</sup> Examples of lesser-known issues included tobacco control as a development issue, gender-sensitive approaches to tobacco control, understanding and overcoming the barriers to tobacco-control policies (including the industry's use of tobacco farmers and economic arguments to counter FCTC adoption), and identifying appropriate control measures for harmful and widely used non-cigarette products (e.g. waterpipe tobacco).

on the four main risk factors for NCDs (tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity), while maintaining a major focus on tobacco control.

### **Acting on the underlying conditions of the NCD epidemic**

The Non-Communicable Disease Prevention program's [prospectus](#) (

Annex 1) was developed during a period of intense international discussions and negotiations on non-communicable diseases, ahead of the first United Nations (UN) High-Level-Meeting on NCDs (held in September 2011). These discussions culminated in the adoption of the Political Declaration on Non-communicable Diseases by the UN General Assembly, which prioritized interventions for the prevention and control of non-communicable diseases. The World Health Organization (WHO) later developed the NCD Global Monitoring Framework to “enable global tracking of progress in preventing and controlling major non-communicable diseases - cardiovascular disease, cancer, chronic lung diseases and diabetes - and their key risk factors”<sup>4</sup>.

Strategically, it made sense for NCDP to align its programming with the United Nations’ prioritized interventions for the following reasons. First, IDRC had already acquired strong expertise through RITC in funding policy-relevant research that focused on reducing a major risk factor (tobacco use) for non-communicable disease prevention at the population level. NCDP was therefore building on a robust evidence base and was in a good position to apply the lessons learned from 16 years of programming to the development of a newer and broader field of intervention research for NCD prevention.

Second, considering how vast the NCD field can be and given the size of the program (which remained relatively small despite an increase from the RITC period), the team felt a need to limit its investments to primordial prevention and interventions that can have the greatest health impacts at the population level. The team felt that this approach would foster the development of a highly policy-relevant research portfolio in the aftermath of the United Nations High-Level-Meeting, which provided a monitoring framework comprised of global voluntary targets to achieve by 2025. Home to an alarming share (about 80%) of the global health burden from NCDs, LMICs need imminent solutions to offset the rates of premature morbidity and mortality from NCDs that continue to rise rapidly in their country. Unfortunately, this pressing need is not met with an adequate response from the international community.

As outlined in the NCDP prospectus, a number of misconceptions about the social determinants of NCDs and the solutions required to prevent and control their spread contribute to the current lack of global action and investments. The general absence of donors in this field, especially for population health intervention research, means that IDRC is “ahead of the curve” and one of a handful of organizations with dedicated funds for NCD prevention research. Similar to RITC in the past, NCDP covers a niche that is unfortunately not taken up by many other actors globally, which limits its potential impact. The 2011-2016 phase of NCDP programming was a first attempt to address this important gap and to invest

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<sup>4</sup> World Health Organization website (consulted on 11 February 2015): [http://www.who.int/nmh/global\\_monitoring\\_framework/en/](http://www.who.int/nmh/global_monitoring_framework/en/)

significant effort in joining forces and establishing partnerships with others to strengthen health benefits for all and put a stop to the spread of the NCD epidemic.

## 1.2 Program Mapping, Implementation and Evolution

The NCDP [Program Spreadsheet](#) (Annex 2) compiles high-level project and program information about NCDP. A [Projects Map](#) (Annex 3) is also available to the public on IDRC's website. At the time this report was submitted, NCDP's portfolio included a total of 81 projects (research projects, research support projects, and awards projects) for a combined value of CA\$24,237,636. Of this, CA\$21,068,986 and 67 projects were allocated since June 2011, 36 projects have been completed and closed, and 45 projects are still active. The program's thematic and geographic foci, modalities and funding evolution are presented below.

### **Thematic foci**

The team developed programming on interventions that target each one (or a combination) of the risk factors to increase knowledge on policy options to prevent NCDs. A number of strategic decisions were made in relation to thematic foci during the phase of prospectus development. Within the niche of NCD prevention, the team decided to dedicate approximately 50 percent of the program funding to tobacco-control research. The rationale for this decision included:

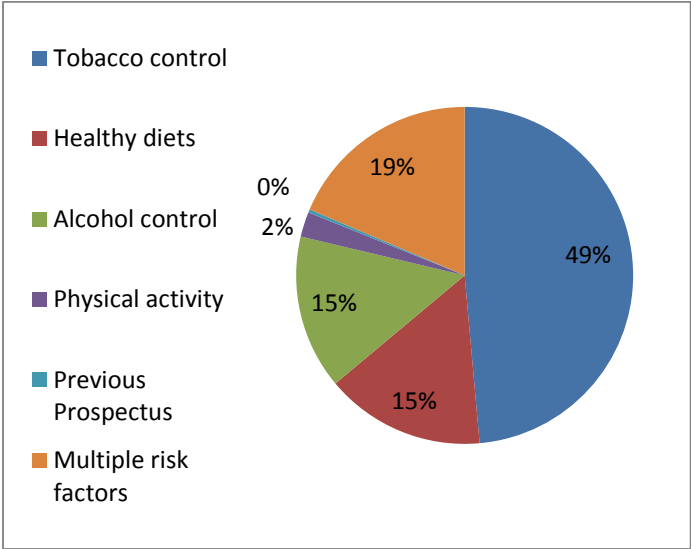
1. Based on current cost-effectiveness evidence, tobacco-control policies are clearly among the "best buys" of global public health, yet still require local evidence for adoption and effective implementation;
2. Tobacco use is rising in many LMICs, thus making tobacco control still very much an "unfinished business";
3. There are opportunities and momentum for rapid policy gains due to the presence of an international treaty (the WHO FCTC);
4. There was a clear opportunity to continue to work with tobacco-control researchers known to IDRC who were also interested in expanding their policy research to other NCD prevention issues.
5. IDRC had recently made public commitments to maintaining tobacco-control programming.

The team was conscious that the decision to devote approximately half of the program's funds to tobacco control would limit funding for programming related to the other risk factors. Given the global state of research on the whole range of issues, it still made sense to divide our funding this way to 1) maximize health benefits from large-scale tobacco-control interventions and 2) start exploring other types of NCD prevention interventions that are less prominent in the literature. In addition to generating new knowledge on risk-factor specific interventions, we believed this exploratory work would provide opportunities for cross-learning and encourage work across risk factors, disciplines, and across countries. Our long-term thinking was that this phase of programming would inform us on the interventions with the most potential, on which next phases of programming could build to increase the program's impact at scale.



Figure 1 illustrates the program’s thematic breakdown percentage at the end of the fourth year of programming (February 2015). The program achieved its target with tobacco control projects representing 49 percent of our portfolio, and this percentage excludes projects that are covering multiple risk factors (including tobacco). Clusters of projects on healthy diets and alcohol control, which were developed for the most part as results of competitive calls on each topic, each use 15% of NCDP’s total funding.

**Figure 1 Prospectus Thematic Areas Ratio (%)**



Programming on physical activity remains undeveloped, with only 2% of overall funding. Despite the rationale, made earlier, in relation to the importance of physical activity to NCD prevention, strategic decisions led to this being much less of a focus for NCDP. The intent to begin generating evidence around the potential to increase urban non-motorised transport was the subject of a consultative workshop of experts in this field in Washington D.C. in 2013 and also of discussions with researchers in Vietnam, India and several Latin American countries. This topic remains neglected, with significant potential to partner with agencies with common goals related to improving health, security and the environment in rapidly developing urban centres. This was not pursued in this prospectus period due to the lesser complementarity of this issue with other programmatic areas of the NCDP program. Intervention research related to active transport is methodologically challenging and requires a long-term horizon (e.g., to measure the effects of transport policy measures or infrastructure projects on physical activity levels).

Multiple risk-factor projects represent 19 percent of total funding (6 research projects, of a total worth of CA\$3,503,700), the most significant of which remain active, with few outputs and contributions to the outcomes in this report. The remaining funds for this category were used for six research support projects (total worth of 986,966\$), that covered a variety of objectives (at both program and project levels), such as funding the development of interdisciplinary proposals, publishing journal supplements, disseminating results at international events and organizing consultative meetings with regional experts.

## Geographic foci

As stated in the program's prospectus, "The determination of geographical focus for this program will not depend on the burden of disease or the prevalence of risk factors (which, in most LMICs, are increasing), but by the potential for learning and opportunities to advance innovative prevention efforts" (p.15). The team based this decision on previous successes that resulted from RITC's programming approach. In comparison to several donors in the tobacco-control field, who focus their efforts on large-population countries with high smoking prevalence, RITC's portfolio included smaller neglected countries that played a catalytic role for policy change in their region.

The program dashboard illustrates the regional distribution of NCDP's location of intended impact (countries in which research projects take place). This distribution is the result of a conscious effort to be responsive to local and regional needs expressed to us through different channels. It has also been determined by factors such as the state of the research and the availability of data, as well as existing capacity to conduct research on NCD prevention within regions. Latin America and the Caribbean, Africa and Asia are the regions where intended impact is most concentrated. It is important to note that program funding in the Middle-East and North Africa includes a large (\$4.5m) project ([106981](#)) made possible by additional internal funds<sup>5</sup> in 2012 and was an opportunity to help shape Public Health strategy for the entire region, including, but not limited to NCD issues. Also note that eight percent of the program funds had global intended impacts, and that this percentage should not be read as intended impacts for North America.

## Programming strategies

Through its history, the former RITC program had acquired very good intelligence about the tobacco control research community in LMICs. In the early days of the NCDP program, one of the priorities was to develop a similar sense of "who is doing what" in healthy diets, alcohol control, and physical activity research in LMICs. Three competitive calls for concept notes were used both as a way to get a deeper understanding of the research landscape on NCD prevention in LMICs and a way to assess research need and demand across regions. The calls were also used to promote the new program and its vision, which clearly positioned NCDs as an urgent development challenge.

NCDP launched the three calls within the first 18 months of programming. Calls on fiscal policies for tobacco control and healthy diets were launched first, and a call on alcohol harm reduction was launched a year later. The rationale to focus our tobacco-control efforts on fiscal policies was based on the priorities outlined in the prospectus.

Overall, 33 percent of NCDP portfolio funds<sup>6</sup> went to projects that were selected through these competitive calls. Other projects (44 percent of funds) were either projects that built on previous project phases or projects that were submitted to us through open invitations to submit concept notes on

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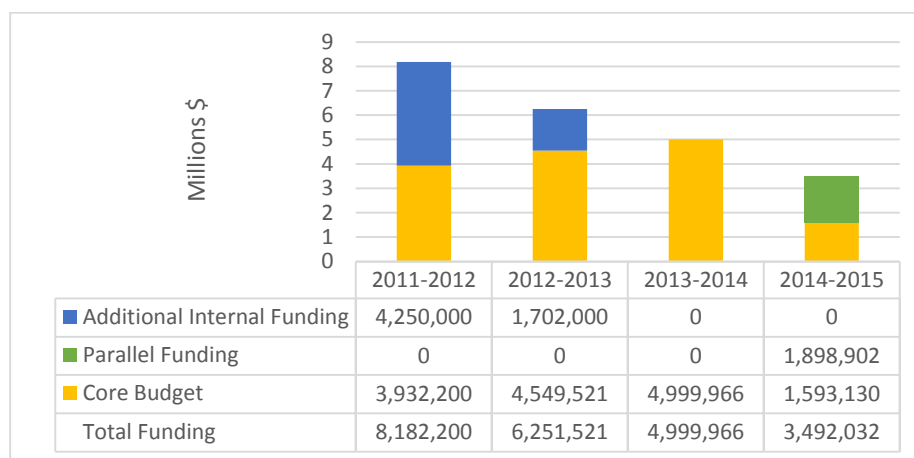
<sup>5</sup> See Figure 2 for NCDP's annual budget allocations.

<sup>6</sup> Note that the total portfolio funds used in this calculation (CA\$19,816,708) differs from the total of NCDP funds figuring on the Program Spreadsheet. Since the Spreadsheet total includes projects that were approved before the start of the program, as well as \$4,500,500 that came from additional internal funds (for a large Centre-wide project, [106981](#)), we excluded the amounts that did not represent allocations of project modalities approved between year 1 and year 4 of the NCDP program.

program priorities.<sup>7</sup> This strategy also allowed us to develop clusters of projects by theme during the same period, which will make synthesis efforts easier at the end of projects. Research support projects (9 percent) cover a variety of needs around the research process, from the development of multi-stakeholder proposals to results dissemination and publishing. Finally, 14 percent of funds were dedicated to fellowships and scholarships programs that were relevant to the three NCDP program outcomes, and were managed by our grantees.

Figure 2 shows the evolution of NCDP funding over the last four years. Since this programming cycle was the first for NCDP, support to a number of small-to-medium size projects (from \$60k to \$450k) that were exploring our priority areas in the early stages, was an approach to the transition from RITC programming which involved predominantly smaller grants. The small size of some grants is also explained by the fact that large grants are not always required to achieve the desired impact (e.g. secondary data analysis, econometric modelling). In year 2, the program started moving towards larger grants, in order to avoid being too dispersed (thematically and geographically). One approach to achieve greater efficiency and learning was to encourage multi-country studies when relevant and appropriate. We also designed some research projects around the principle of having a grantee serving as a “hub” and managing the relationships with a series of sub-grantees (e.g. project [107518](#)).

**Figure 2 Funding Evolution 2011-2015**



The additional internal funding for year one represents the total amount that was received from IDRC’s “Forward Planning Funds” towards project [106981](#): Shaping public health education, research and policy in the Arab World<sup>8</sup>. This represents an example of inter-program collaboration and leveraging of program resources to capitalise on an opportunity created through years of IDRC investments in the regional public health leadership of the American University of Beirut. Additional internal funds were also

<sup>7</sup> The program remained open to receive concept notes throughout the prospectus period, and actively disseminated information on funding opportunities (outside of calls) through IDRC’s website, mailing lists, and personal communications.

<sup>8</sup> The purpose of the Forward Planning Funds is to fund projects that support cross-cutting, high-level corporate priorities, exploratory or emerging issues. Project 106981 emerged out of a long history of partnership with the American University of Beirut by multiple programs and the intention to build their role as a regional leader in public health.

made available to NCDP in year two, which we used as an emerging opportunity to develop a fellowship program with the African Population Health Research Centre (project [107209](#), further discussed below).

During the fourth year of programming, a number of challenges and opportunities influenced NCDP strategy and impacted our program's budget allocation. NCDP was merged with the Ecosystems and Human Health program, presenting the opportunity to develop a new strategy early with a bigger team and larger budget beyond 2015. This meant the early ending of this prospectus period, although the new strategy promises a renewed and more focused emphasis on NCDs. The departure of the two NCDP Senior Program Specialists created additional demands on program management and weakened the capacity of the team to synthesise program- and project-level information. The process of merging teams and the ongoing programming interests associated with Ecohealth (including development of a new partnership initiative in response to the Ebola epidemic) also created additional demands.

The 2014/15 fiscal year was also a year when IDRC programs faced extra budgetary constraints and commitments to donor partnerships. Further to this, part of the core budget for NCDP (CA\$2 million) was earmarked for parallel funding with the Canadian Institutes of Health Research (CIHR) for the Global Alliance for Chronic Disease (GACD) call on the prevention and control of type two diabetes. While this call did not generate projects fitting with the NCDP prospectus, the partnership with both CIHR and the GACD presents a promising future opportunity to give greater emphasis to population health intervention research by the GACD partners.

These circumstances prevented the program from investing significantly in the three main themes in the last year.

### 1.3 Contributing to Non-Communicable Disease Prevention in LMICs

Our goal was to demonstrate that low-cost solutions are available to LMICs and effective in preventing or reducing risks for non-communicable diseases. We hoped to make a modest contribution to the development of this field of research in LMICs. The NCDP program is also a concrete example of Canada's commitment to NCD prevention and control globally.<sup>9</sup>

Beyond the description of programmatic priorities in the NCDP prospectus, we further developed the program strategy by specifying the types of research it aimed to explore (see program [brochure](#) (Annex 4) and [website](#)). We focused on research that addressed gaps in local evidence for policies and laws that:

- Reduce demand for and supply of tobacco and alcohol products, and foods high in fat, salt, and sugar;
- Increase the affordability and availability of healthy foods such as fruits and vegetables;
- Encourage active transportation (walking and cycling) to boost physical activity levels;
- Protect public health policy development from commercial influence; and

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<sup>9</sup> In September 2011, during the United Nations High-level-Meeting on NCDs, the Honorable Leona Aglukkaq, then Minister of Health, referred to the NCDP program during her allocation as a recent and significant example of Canada's commitment to NCD prevention and control in LMICs.

- Strengthen tobacco control and health promotion efforts through innovative, sustainable financing

We also defined three cross-cutting themes central to our program and the research we support:

- Understanding the value and impact of NCD prevention policies on different social groups;
- Knowing how to mobilize a whole-of-government approach for NCD prevention; and
- Addressing the barriers posed by commercial influence to developing healthy public policies for NCD prevention.

We developed a set of graduated program outcomes that progress from “minimum”, to “medium”, to “high”, to nuance the degree to which the program would achieve success in relation to 1) capacity to conduct research and use research; 2) knowledge generation; and 3) policy influence. The NCDP program would be considered successful in fulfilling all of the “minimum” expected outcomes over the course of its five-year lifespan. Achievements in terms of “medium” and “high” level outcomes would be indicative of a very high degree of success for NCDP, although a small portion of the program’s project portfolio might have reached these levels.

The expected outcomes presented in the prospectus were revisited in 2011-2012 to better articulate what the program would aim to achieve at graduated levels of achievement. For example, the decision was made to change the wording of “*capacity to conduct and use research*” to “*capacity to conduct high quality research and engage with policy-makers*”. There is a critical need to increase research uptake skills in LMICs. This need can be met partly through a “learning by doing” approach by making sure that policy makers are engaged in different ways and at different stages of the research process. This speaks about the capacity of researchers to reach out to policy makers and respond to policy needs. As part of this first NCDP prospectus we did not envision issuing grants specifically for increasing the skills of policy makers for research uptake (e.g. workshops or training awards). We felt that this dimension would be best captured by focusing on the capacity of researchers to engage with policy makers. A number of the expected outcomes across the continuum from “minimal” to “high” were also slightly revised as a result of team discussions about the specific indicators that would best allow us to track progress. In order to refine our baseline assumptions, the NCDP program worked with one of its awardees<sup>10</sup> to conduct a [bibliometric analysis](#) (Annex 5) focusing on the degree of research intensity in LMICs related to NCD prevention issues. The results showed that there is a paucity of locally produced studies (i.e. LMIC researcher as a first author) on NCD prevention issues. A consultation meeting on research and capacity building for NCDs in Eastern and Southern Africa (Kenya, November 2011) also highlighted needs specific to Africa (see [meeting report](#)). The revised outcome table can be found [here](#) (Annex 6).

The program staff estimated the percentage of the NCDP portfolio that is relevant to each program outcome based on the proportional contribution of individual projects toward each outcome. While some projects are clearly more focused on capacity building objectives (scholarship programs for example), the average project was considered to contribute to each outcome in the proportions of 40% knowledge generation, 25% capacity to conduct and use research, and 35% policy influence.

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<sup>10</sup> Amanda Jones, Professional Development Awardee 2011-2012.

## SECTION 2: NCDP PROGRAM OUTCOMES

Section 2 presents a series of narratives that explain how the program progressed under each of its three [outcomes](#) over the prospectus period. These narratives were purposefully developed to capture the range of topics and regions covered by the program. It is important to note however that the evidence presented is partial, as only 44 percent (36 out of 81) of projects had been completed as of February 2015 (and this percentage includes research support projects, which have different objectives and yield a different type of result. The evidence of achievements presented below is drawn from a sample of 23 research projects that was selected based on stage of completion (availability of reports), regional and thematic representativeness and various levels of success. Project information was reviewed, coded and compared to pinpoint common threads, especially with regards to program strategies<sup>11</sup>. The narratives were then discussed and validated during team meetings.

### OUTCOME 1: CAPACITY BUILDING

NCDP's Outcome 1 outlines two capacity-building objectives. The first objective is to increase LMIC researchers' capacity to conduct high-quality research (Outcome 1a hereafter). The second objective is to increase LMIC researchers' capacity to engage with policy-makers (Outcome 1b hereafter). These objectives were based on the premises that:

- few researchers were active in the field of NCD prevention research and those who were often worked in isolation;
- researchers' engagement with policy makers was limited.

The two narratives below present the strategies and funding modalities that were adopted and enabled the program to reach its capacity-building objectives.

#### Outcome 1a: Increased capacity to conduct high-quality research

To address the important capacity gaps outlined in Section 1, we chose to "increase the capacity of LMIC researchers to conduct high-quality research on NCD prevention" as one of the three main program outcomes. As for all outcome areas, three levels of achievement were defined:

- Minimum level: attraction of new researchers to the field of NCD prevention;

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<sup>11</sup> An important additional analysis of sampled project outputs and outcomes was provided by NCDP's Professional Development Awardee (2014-2015), Kelly Garton. Kelly has coded data extracted from interim and final technical reports, project monitoring reports and project completion reports for all sample projects, using the software NVivo 10. This analysis gave us a good indication of the overall program's progress and level of achievement on each of the outcomes' indicators. See her full research report for more information (forthcoming).

- Moderate level: establishment of multi-disciplinary research collaborations within individual countries and institutions; and
- High level: existence of multinational and multi-disciplinary research collaborations, and recognition of some of the program's grantees as leaders in the field.

The program's main achievements with regards to Outcome 1a are presented below. Our assessment shows that success came from using a variety of approaches, which were either building on past investments or taking advantage of emerging opportunities.

### **Scaling-up a successful mentorship program in Central America**

At the minimal level, the program aimed to attract young investigators to the field of NCD prevention to increase, in the medium to long-term, the number of researchers working on these issues in LMICs. Past experience from RITC programming had shown that the capacity of students and young researchers was best built through learning-by-doing approaches as well as peer-to-peer and mentorship interactions. A mentorship program in Guatemala that began under RITC in 2008 and ended in 2012 ([105068](#)) had been very successful in recruiting young research fellows to conduct studies on tobacco-control issues. Although small (1-2 mentees per year), the project had started to build a critical mass of researchers with the necessary skill set to address NCD challenges in the country.

The success of the mentorship program was key to scaling it up in a second phase in early 2013 ([107213](#)<sup>12</sup>), which extended its scope from tobacco-control to NCD prevention more generally. In addition to the fellowship component, the new project includes a scholarship component for Masters' degrees and covers the whole of Central America, where research capacity in public health is particularly low. The core feature of the project revolves around the use of strong peer-to-peer and mentoring interactions. IDRC funds were often used to leverage additional resources for the fellows.

An evaluation of the project conducted in 2011-2012 by the project leader and a former participant highlighted a high degree of satisfaction with the mentorship model in place from the research fellows. Most of the fellows published their results in peer-reviewed journals and communicated their findings at international conferences (6 peer-reviewed publications and 11 presentations). Although the number of fellows and scholars enrolled into the program remains small (two fellows and three Masters students per year), the mentorship model is now being replicated in different universities in the region through a "train-the-trainer" approach (senior mentors are mentoring the academic supervisors of the selected students on how to become good mentors). We believe that the project offers a great model that can be replicated in regions with low research capacity, to build expertise and leadership as well as generate needed evidence on NCD prevention issues, just as this project does in Central America.

### **Seizing emerging opportunities to train scholars in Africa**

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<sup>12</sup> The new phase was launched in early 2013 with funding from NCDP and IDRC's Fellowship & Awards division (CA\$893,000 in total). Note that this project is primarily managed by the Fellowship & Awards division, and for that reason, it is not included in NCDP's Program Spreadsheet.

Public health programs in Africa tend to focus on epidemiological training and there is little capacity for the type of intervention research needed to advance NCD prevention policies in the region. Through project [107177](#), NCDP is supporting a tobacco-control research scholarship program at the Masters level that is managed by the Centre for Tobacco Control in Africa (CTCA), based at Makerere University in Uganda. The project also involves six schools of public health from the East African region and promotes tobacco-control research among students (12-15 scholarships over three years) and supervisors from faculties other than public health. This project builds on a long-term relationship between IDRC and Makerere University and investments made in institutional capacity building. However, CTCA had just emerged as a new tobacco-control centre in the region, established by the World Health Organization with funds from the Bill and Melinda Gates foundation. This new institution's capacity in tobacco control, linkages to other African academic institutions and ability to administer small grants provided an excellent opportunity to develop a scholarship program in Africa. Through this project, CTCA is able to support and promote connections between students, the larger tobacco-control community, longer-term study opportunities and to synthesize the program's cumulated evidence for use by decision makers. Their situation within Makerere University, networks with other African universities and mandate to support governments in their tobacco-control efforts positions them well to build this modest initiative into a larger source of capacity for tobacco control regionally. While it is not expected that the students will choose tobacco control as a career track (due to the lack of available funding), the program ensures that different cohorts of graduate students from diverse fields (public health, economics, agriculture, etc.) develop a sensitivity to tobacco control and the potential to contribute to it throughout their careers.

The African Population and Health Research Centre (APHRC) is another institution that has a long-standing relationship with IDRC in terms of institutional capacity building (through a Doctoral Dissertation Awards program). In 2012-13 we seized the opportunity to attract additional internal budget to devote to the design an African training program with APHRC that would look at ways to address the many challenges of implementing intersectoral action for NCD prevention in LMICs, which remained an important gap both in the literature and in the NCDP project portfolio. Through project [107209](#) (CA\$1.7 million), APHRC is managing a fellowship program in six African countries. The fellows are young to mid-career scientists (except for one experienced researcher that recently returned to research after working several years for an international organization) that are using a common case-study design and strategy to better understand the factors that enable or constrain intersectoral action for health. The role of a strong-capacity institution like APHRC is central to the management of such a program (running competition, bringing the six fellows together to conduct the cross-case analysis, etc.). For all the grantees, including APHRC, both the research topic and the methodological design represent a departure from their previous research and NCD-related work. Although their research results are yet to come, we expect that they will be highly relevant to current knowledge needs, provide useful and replicable methodological designs and offer insightful recommendations for increased intersectoral action.

### **Prioritizing interdisciplinary research to attract established researchers**

The scholarship programs described above were developed to strengthen capacity by increasing the overall number of scholars involved in NCD prevention research. For more short-term impacts, the program sought to bring established researchers from a variety of relevant disciplines into the field of



NCD prevention. The aim was also increase interdisciplinary, interinstitutional, and international research collaborations in the field (which correspond to moderate and high levels of achievement for Outcome 1a).

Most of the projects were selected through competitions where project concept notes were selected and invited to submit full proposals. Three calls were carried out, one each on [fiscal policies for tobacco control](#), [healthy diets](#) and [alcohol harm reduction](#). The calls specifically encouraged research collaborations between institutions and countries, and proved very effective in the development of projects that were well-aligned with these objectives. In terms of capacity building, these new collaborations modestly increased research intensity in the field in specific countries, helped reduce individual researchers' isolation and raise the profile of this type of research within and across a variety of institutions.

An example of the value of this approach is well-illustrated by project [106831](#). The project involved a collaboration between the Institute for Clinical Effectiveness in Argentina and economists and epidemiologists from six other countries in South America. The Institute for Clinical Effectiveness had some prior experience with using mathematical models to estimate the effects of tobacco-control interventions but this was new territory for the investigators of the other countries. In addition to generating outputs that directly addressed the knowledge needs of policy makers (i.e. healthcare costs associated with tobacco use and impact of tobacco price increases), this project contributed to the establishment of a small research community of practice on fiscal policies for tobacco control at the regional level. There is now a larger pool of researchers that have the necessary skill set to generate policy-relevant knowledge for tobacco control in these countries.

Another multi-country study in Argentina, Bolivia, and Chile ([106836](#)), is a good example of how the program was able to tap into existing expertise in health economics to generate new knowledge on tobacco-control policies. Dr. Guillermo Paraje, from the business school of the Universidad Adolfo Ibanez, led the study on the price-elasticity of demand for tobacco products in the three countries. For him and most of the co-investigators, this was a first experience in the area of tobacco control. Moreover, the project brought the lead investigators from each country to get more involved in dissemination activities (deliberative forums) involving policy makers than they had before, which led to an increased impact of the project. This additional project outcome is directly linked to NCDP's requirements for strong knowledge-translation strategies in all projects, which we developed to reach the program's second capacity-building objective of increasing researchers' engagement with policy makers. Progress on Outcome 1b is discussed under the next narrative.

## Outcome 1b: Increased capacity of researchers to engage with policy makers

The NCDP program has required strong integrated knowledge translation<sup>13</sup> strategy as a condition for funding (this requirement was integrated in the program’s proposal review criteria). The NCDP project portfolio has several examples on how early dialogues and collaborations between researchers and policy makers have positively shaped the research process and increased the likelihood of knowledge uptake. For example, the Consortium pour la Recherche Économique et Sociale (CRES) has worked closely with the Economic Community Of West African States (ECOWAS) Commission in all phases of its studies on fiscal policies for tobacco control ([106774](#); [107358](#)). Through the project, CRES staff gained experience and confidence in how to engage with policy makers coming from different sectors of government (health, finance, customs and trade). The latter project even gave way to the signature of a Memorandum of Understanding between CRES and ECOWAS, in which CRES is designated as the technical “partner of choice” to support ECOWAS in the implementation of a new directive on tobacco taxes in the region.

Other examples are projects on salt reduction ([106881](#), Argentina; [106888](#), Costa Rica) and trans-fat reduction (Argentina). In both cases, research objectives were based on existing national strategies and action plans on salt reduction. We were told by grantees that IDRC-funded studies are seen by policy makers as playing a crucial role to support and inform government action through the timely generation of evidence. These outcomes resulted from early engagement between research teams and policy makers - a strength that led to the selection of the projects in the first place - but was also due to facilitation and encouragement from the program staff.

In the case of Argentina, two academic institutions and one non-governmental organisation (with complementary research and knowledge-translation strengths and credible relations with government and the media) originally submitted separate proposals to our healthy diets call. Once pre-selected, we encouraged the three institutions to collaborate on one project, which they accepted and proved to be successful in establishing sustainable evidence platforms and a consortium of strong researchers who can communicate effectively with media and respond to the evidence needs of policy makers. In Costa Rica, the project team and the Ministry of Health have also entered into a voluntary agreement with the Costa Rica Food Association. The fact that the research team is playing an integral part in the development and implementation of the national action plan means that the Ministry of Health can rely on solid scientific evidence during negotiations with the food industry in regards to sodium reduction targets.

Strong encouragement and support to researchers, and a requirement that projects have a well-developed plan for knowledge translation and research use by policy makers has made a significant difference in many of the projects funded by NCDP, especially those that were led by scholars whose experience had almost entirely been with generating research results and academic outputs. One such scholar is Guillermo Paraje from Argentina (projects [106836](#), [107206](#)), who has made significant steps in

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<sup>13</sup> CIHR definition of integrated knowledge translation: “In integrated KT, stakeholders or potential research knowledge users are engaged in the entire research process. By doing integrated KT, researchers and research users work together to shape the research process by collaborating to determine the research questions, deciding on the methodology, being involved in data collection and tools development, interpreting the findings, and helping disseminate the research results. This approach, also known by such terms as collaborative research, action-oriented research, and co-production of knowledge, should produce research findings that are more likely be relevant to and used by the end users”.

this direction through his leadership of multi-country projects that involved his collaborators and him in many dissemination workshops, policy dialogues, media interviews and the provision of direct advice to Ministers of health and finance across countries of Latin America.

It is also important to mention the projects that were not as successful in engaging with policy makers, especially during the critical phase of proposal development. For example, a project led by the InterAmerican Heart Foundation ([106841](#)) on fiscal policies for tobacco control could not achieve all of its objectives due to difficulties in accessing government databases (which are under the responsibility of national statistical agencies). It served as a lesson for NCDP staff to be asking for more solid evidence of interactions between researchers and policy makers at the onset of a research study to ensure access to essential data. While this was primarily an issue of access to data related to the feasibility of planned research outputs, it is also perhaps an example of how early engagement with relevant government representatives might have enabled better knowledge translation upon the maturity of the evidence.

In sum, the NCDP program made important contributions to the training and development of new scholars and to attract established researchers into the field of NCD prevention, especially within a context of minimal global attention and resources available for this type of research in LMICs. While Latin America and Africa are well covered by NCDP projects and training programs, capacity-building efforts are also needed in Asia, and this remains a gap in the NCDP portfolio at this stage. We believe that NCDP has provided for some useful models in strengthening the capacity to conduct and use research. This is the case across our portfolio, but in particular through individual projects that had capacity building as a primary emphasis, and that focused their efforts on engaging, mentoring, training or increasing the volume of researchers and research users involved. These approaches are not unique, but are, like the NCDP program, establishing some momentum and providing for some leadership in a neglected area of public health. Since this research is critical to tackle alarming and fast-increasing NCD health burdens in LMICs, capacity-building efforts made by NCDP are an important contribution towards the adoption of low-cost solutions to prevent NCDs in LMICs.

## **OUTCOME 2: KNOWLEDGE GENERATION**

Baseline information on knowledge generation suggested limited or no local evidence available on the effectiveness of NCD prevention interventions in LMICs (which was confirmed by Jones and Geneau's bibliometric analysis). In particular, evidence did not address equity and economic concerns. The three levels of achievement defined were:

- Minimum level: research generates new knowledge across program themes and cross-cutting issues, and results are accessible at the local level to relevant stakeholders;
- Moderate level: new evidence on NCD prevention interventions addressing cross-cutting issues is available for comparison, consolidation and use across several countries; and
- High level: a broad range of evidence on NCD prevention interventions in different contexts and on different population groups are consolidated, synthesized, peer reviewed, and cited internationally.

Although the NCDP portfolio now covers a broad range of themes and cross-cutting issues, the program has funded clusters of projects on sub-themes, to build evidence for priority interventions that has so far been lacking in LMICs. The most developed of these clusters focuses on fiscal policies for tobacco control. Another cluster of healthy-diets projects investigate the regulation of marketing and labelling of unhealthy food and beverages, while three projects focus on salt and fat reduction in Latin America. Another cluster focuses on evaluating and modelling the regulatory approaches to alcohol control, including tax and pricing policies.

As a legacy of the RITC program and in response to a need identified by researchers, advocates, and the WHO, NCDP continued work on the consolidation of evidence resulting from a cluster of projects focusing on alternative livelihoods to tobacco farming. This work contributed to filling an important gap in tobacco-control research, and has recently been consolidated in the form of an [edited volume](#).

Given the lack of international attention to NCD prevention research, the NCDP program's portfolio reflects a significant portion of the evidence base being developed globally through policy-focused research. This therefore further exposes the remaining major gaps in the evidence that is being called for in order to advance national, multisectoral responses and meet the targets of the Global Action Plan for the Prevention and Control of NCDs. Besides the limited support that is being provided to some LMICs for epidemiological research to expose the burden of NCDs and costs of inaction, there remain almost no other sources of support to knowledge generation on the low-cost interventions that are needed to prevent or reduce this burden. As was indicated in the RITC external evaluation (2010) and the bibliometric analysis (2012), some aspects of tobacco-control research are an exception, given the contributions made by the Bloomberg Initiative, Bill and Melinda Gates Foundation, US National Institutes of Health and the International Tobacco Control study (CIHR-funded), but these are geographically limited and give limited emphasis to research led by LMIC investigators.

The rationale for decisions that were made on the thematic scope of the program is mostly provided in the background section. Acknowledging that there remains a somewhat dispersed portfolio of projects across themes and geographic regions, there has been a modest but significant increase in knowledge products on selected priority issues that have been and will be valuable at country level and to a lesser extent, regional or global level. The research spans many of the thematic and policy issues that the NCDP program set out to build evidence on and has provided for lessons on where to focus in future programming, considering IDRC's strengths and partnerships with the research community and other donors. This includes a greater emphasis on exploring food systems solutions to improving access to healthy foods as a complement to the regulatory approaches that are increasingly being considered and challenged.

Although it is too soon for high-level achievements, early collections of evidence are now available for consolidation across the fiscal-policies and healthy-diets project clusters and efforts are underway to do so, or will soon be. The alcohol-control projects will also soon lend themselves to consolidation and valuable lessons that can be communicated at country and global levels. Efforts will be made to finalize and consolidate project outputs, which will feed into decisions about future IDRC programming and inform prioritization of other donors.

## Outcome 2a: Tobacco Control

The WHO, and to a lesser extent, the World Bank have been promoting the same tobacco-control measures for the past 20 years, and yet despite the almost universal adoption of the FCTC, tobacco control remains insufficient, especially in LMICs. Among the barriers to adopting effective measures is the lack of local evidence relating to the interventions that can elevate tobacco as a priority concern and address often misinformed economic interests.

Taxation is widely recognized as one of the most effective measures to reduce tobacco use, and is indeed the basis of the FCTC Article 6. The lack of evidence in LMICs, particularly addressing a few common misconceptions related to tobacco taxation, has impeded its implementation in many countries. The call on fiscal policies for tobacco control aimed to fill this gap in the global knowledge base. The results generated by this cluster of projects are consistent with the global evidence already available in high-income countries, and have helped to develop a critical mass of evidence across regions to dispel the misconceptions that hinder progress on tobacco taxation.

The geographic focus of NCDP's fiscal-policy programming has largely responded to the demand and the research capacity demonstrated through the call on this theme. At the time of the call, each region was at a different stage, with different needs. A large number of strong proposals came from Latin America, where capacity to conduct this type of research was already higher than in other regions, as well as the quality of data available. There now exists a wealth of information from a large number of Latin American countries that allows for international collaboration and comparison of evidence.

In West Africa, the state of research was less advanced. Now, fifteen countries of the Economic Community Of West African States (ECOWAS) have access to comparisons of the tax systems across these countries and to evidence that will remove a large barrier to implementation of higher tobacco taxes in these countries.

Less projects were funded in Asia, where there is great variability in capacity and sources of data as well as differing levels of support from other funders of tobacco control (India, China, the Philippines and Indonesia have been favoured by Bloomberg and/or Bill and Melinda Gates Foundation initiatives). Projects funded by NCDP in China ([106839](#)), India ([106412-004](#)) and the Philippines ([106832](#)) all provided valuable lessons and met evidence gaps within the context of much better resourced civil society campaigns and government programs. If resources can be leveraged through partnerships in the future, the program will endeavour to close the gap in capacity and the evidence base in lower-income countries of South and South-East Asia.

### **Findings from tobacco control research**

#### *Convincing evidence for tobacco tax increases*

The program has advanced the availability of local evidence particularly in relation to the potential impacts of tobacco tax policies. Project [106412-004](#), the first of its kind to analyze tobacco taxation across Indian states, showed the potential to both maximize revenue and reduce consumption by increasing and

unifying tobacco taxes across the states and all tobacco products. In China, project [106839](#) has met a demand for evidence that will contribute soon to long-awaited and significant tobacco tax increases. Their findings have demonstrated the impact of tax increases on government revenues, industry behaviour, health and the differential responsiveness to price of consumers of different education and income levels. Project [106831](#), generated estimates in seven Latin American countries of the health and economic impacts of tobacco price increases. Project [106841](#) generated new evidence on price and income elasticities for El Salvador and Honduras, which they used to develop a proposal for new legislation on cigarette taxes, benchmarked to prices and tax burdens in Panama and Costa Rica. The team also modeled the effects of this proposed tax increase on consumption and fiscal revenue.

Project [106774](#) produced the first document with reliable and recent regional information on the contexts of 15 West African countries, the tobacco industry, background and actors in tobacco control, and on tobacco taxation. The resulting *argumentaire* produced in the second phase of the project ([107358](#)) presented evidence on the potential impacts of tax increases on illicit trade in tobacco, changes in consumption (prevalence and intensity) of tobacco products, and state revenues. A new regional directive will remove barriers to the 15 countries of ECOWAS to significantly raise excise tax on tobacco products.

#### *Health disparity impacts of policy*

One of the common concerns that delay progress on tobacco taxation is that tax increases, like other consumption taxes, can be regressive because they disproportionately harm the poor. Several projects (e.g. [106836](#), [106839](#), [106954](#).) therefore sought to generate much-needed evidence explicitly examining the effects of tobacco taxation on different population groups by analyzing individual- and household-level data. It is often argued that low-income individuals are paying a disproportionate share of their disposable income on a product that is addictive, leading to increased economic harm for those who will continue to smoke. Most of the studies that have examined this issue found (as high-income-country studies have) that the poor in fact reduce their tobacco consumption more, in general across the population, in response to tobacco price increases. While this does not apply to all individuals, there is generally a greater decline in consumption across the low-income population. Furthermore, case studies show that taxation revenue can be put toward other tobacco-control measures, including smoking cessation assistance, or toward universal health coverage ([106832](#)).

#### *Countering illicit trade arguments*

Another concern about tobacco tax policy, and argued strongly by the tobacco industry, is that tobacco price increases will cause more illicit trade. Several projects therefore sought to produce the evidence needed locally to address this. Examples of projects that considered this issue include projects [106774](#) and [107358](#) in West Africa, [106837](#) (Eastern Europe), [106840](#) (Eritrea) and [106842](#) in Panama. Most researchers have concluded that illicit trade will take place, and increased taxes may provide increased incentive, however, the way to address this is not by avoiding tax increases that benefit public health, but address smuggling at the source by introducing better controls. Even with modest increases in smuggling as a result of increased tobacco taxes, there will still be increases in revenue and reductions in consumption. Studies examining these issues have largely relied on the international evidence and the basic arguments that are made in the international literature and have found exploring the issue challenging at the local level due to scarcity of data and methodological limitations.

### *Feasibility of alternative mechanisms in financing tobacco control*

A project led by the South Centre (Geneva, Switzerland, [106412-005](#)) studied the feasibility and acceptability of available alternative mechanisms for sustainable and increased financing of FCTC-related tobacco-control interventions. Besides nationally focused tax-based mechanisms, they drew attention to the value and feasibility of a Solidarity Tax Levy and Taxes on Repatriated Tobacco Profits. Their results showed that, even with the participation of only a few countries, such mechanisms could significantly increase global resources for FCTC implementation in LMICs. This project provided direct input to the United Nations' Interagency Taskforce on mechanisms to finance the FCTC.

Several other tobacco-control projects (not directly related to fiscal policies) have been funded during this period because they were either building on prior outcomes or were considered strategic investments for knowledge generation at the regional or global level. One example is an ongoing project in Vietnam ([107516](#)) using an innovative methodology to assess the impact of new warnings on tobacco packaging. This methodology lends itself to use in other countries in the region where new packaging laws are also being considered or adopted. Other examples include studies (Vietnam, 103771<sup>14</sup> and Cambodia, [106766](#)) that have developed methods to determine the health costs of tobacco-caused diseases in countries where inadequate health information systems make such estimates difficult.

### *Outcome 2b: Healthy Diets*

The portfolio of NCDP projects on healthy diets generated evidence on several of the main dimensions of the food environment - food composition (salt, trans-fat), food promotion (marketing to children), food labelling and to a lesser extent, taxation. The newly approved International Network For Food And Obesity/NCDs Research, Monitoring And Action Support (INFORMAS) project ([107731](#), Mexico, Chile) have not yet resulted in research outputs but will address all of the above dimensions as well as food prices, the food retail environment and food trade and investments. The evidence generated so far provides support for policy interventions in a small number of countries in regards to the prevention of hypertension and obesity. At a programmatic level there has not been an opportunity yet to support a synthesis of the evidence for the different clusters (e.g. salt, marketing, and labelling) for wider dissemination in different regions. The NCDP program did support journal articles (an *Obesity Reviews* supplement) on diet-related issues in LMICs that did not come from NCDP-funded projects.

### *Marketing and advertising of unhealthy food and drinks*

The WHO recently called for tighter controls of marketing and advertising of unhealthy foods, especially to children. The need for evidence is especially critical in LMICs, where little is known about the effectiveness of interventions or on the sustainability of interventions over time<sup>15</sup>. NCDP projects related to the impact of food marketing on children's food preferences or the relationships between different

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<sup>14</sup> There is no link to this project in Sharepoint, as it is archived in an older database.

<sup>15</sup> WHO Europe. Marketing of foods high in fat, salt and sugar to children: update 2012-2013. WHO: Copenhagen, Denmark. June 2013.

characteristics of the food environment and dietary patterns in general are good examples of studies that can contribute to increase the level of buy-in for food-marketing restrictions in LMICs.

Project [106883](#) for the first time reported on how food marketing is targeting Guatemalan children, how licensed characters influence children's preferences and food choices, how children perceive food packaging, and which products are the most widely available in stores around public schools. The evidence provided by this study justifies policies designed to restrict the use of child-targeted practices that promote high-energy, low-nutrient diets. Only recently completed, project [106886](#) has produced evidence on the frequency and nature of children's exposure to food and beverage advertisements in Peru. The team has developed preliminary recommendations for regulations and educational initiatives for parents. The study is also helping to understand the barriers that may arise during policy implementation. Project [107459](#) in Argentina is generating new evidence on Argentinean children's exposure to television food and beverage advertisements. This project will share methodology and results with investigators of INFORMAS (Chile, Mexico) and the project in Guatemala.

#### *Salt and trans-fat reduction*

Several projects are generating evidence to inform the implementation process of population-level salt reduction initiatives: [106881](#) (Argentina), [106888](#) (Costa Rica), [106889](#) (Brazil), [107262](#) (global). In each country, the evidence generated is useful for the development of meaningful and sustainable salt/sodium reduction voluntary targets, and will also serve as a baseline as part of ongoing and future monitoring efforts. The research teams work closely with government officials and are connected to the dialogues taking place with food industry representatives. It is expected that future research outputs will be able to reflect on the factors that facilitate or constrain sustainable multi-sectoral action in this area. The project in Argentina ([106881](#)) also generated evidence about the health impact of reducing trans-fatty acids in the food supply.

These first efforts to develop research in relation to population-based nutrition interventions were exploratory and have helped to identify countries where efforts have begun with such interventions, where policy experiments are taking place and are being challenged by industry and policy makers. A concentration of projects were funded in Latin America and South Africa. It is apparent that in many other countries there is a dearth of basic evidence on the extent and nature of the diet-related NCD burden and where the idea of bold policy change or major intervention is remote (especially in Africa).

#### *Outcome 2c: Reducing Harmful Use of Alcohol*

NCDP's call for research on reducing the harmful use of alcohol was the first, globally, to target the problem in LMICs. Launched in 2012, the initiative stimulated a strong response from researchers in all regions, particularly Africa. None of the projects have yet reached completion but are showing promise of similar levels of achievement in terms of valuable knowledge generation that will help to prioritise the population-based solutions to excessive alcohol consumption.

#### *International Alcohol Control (IAC)/Alcohol Environment Protocol Projects*



While still in early stages of implementation, four out of the ten research projects funded on alcohol control are trialling and adapting the multi-country International Alcohol Control (IAC) study in LMICs. This international research collaboration originally involved seven countries – New Zealand, Scotland, England, South Korea, Thailand, Mongolia, and Australia – and uses two tools with qualitative and quantitative measures that allow cross-country comparison. The Alcohol Environment Protocol focuses on availability, taxation and influences on alcohol prices, drinking and driving, and marketing and promotion. The IAC Survey contains other outcome measures, such as alcohol consumption and the volume of alcohol consumed, as well as mediating variables likely to be affected by alcohol policy. NCDP support is allowing for the IAC study to be trialled in several additional countries: Vietnam (project [107199](#)); Peru and St. Kitts and Nevis (project [107205](#)); Benin, Kenya, Uganda, Nigeria, and South Africa ([107518](#), [107198](#)). The knowledge gained by these projects will inform international comparisons and are likely to drive innovation in public policy development and implementation to prevent alcohol-related disease and injury, and reduce alcohol-related harm.

This exploration in research on alcohol control policies has demonstrated the great demand and need for evidence. It has helped to highlight similar and different challenges between tobacco and alcohol control, with several of the successful grantees coming from a background in tobacco-control research (those from Chile, India, Lebanon, Kenya, Vietnam, and Nigeria). The eventual consolidation of evidence and lessons from these projects promises to generate greater interest in this neglected and multifaceted area of public health.

### **OUTCOME 3: POLICY INFLUENCE**

The third outcome area of the program is related to policy influence. As was outlined in Section 1, the program aimed to develop a portfolio of research projects that was relevant to policies associated with NCD risk factor reduction. These are also relevant to some of the proposed targets of the WHO Global Monitoring Framework.

Although NCDs present a complex picture of associated risk factors and causes (individual, societal and environmental) there is a broad consensus that they are largely preventable by means of interventions that can be low-cost for countries to develop and implement. A focus on policy interventions has allowed us to promote actions at a scale that target whole populations (as opposed to scaling up community-based programs to national-level policies).

This consensus was expressed in the UN Political Declaration on NCDs, with the effect of encouraging more focused actions by governments, civil society and the private sector for NCD prevention and control. However, combatting NCDs remain a significant challenge globally, and especially in developing countries. Some of the important barriers are a lack of global financial resources, a lack of research capacity, access to reliable data at the local and national level, the difficulty of developing and implementing complex multi-sectoral interventions, and conflicting political and commercial interests.

At the start of the program, the baseline situation was that NCD prevention policies were absent or adopted, but poorly implemented. Policy debates were often confused by commercial and economic concerns. The three levels of achievement defined were:

- Minimum level: NCDP-funded projects should contribute to raising the political profile of NCDs and NCD prevention policies among stakeholders across government and society.
- Moderate level: projects contribute to discursive commitments by actors from different sectors of government and society for NCD prevention policy uptake and implementation.
- High level: NCDP projects contribute to policy and legislative change for successful NCD prevention policies at the national, regional, or global levels.

### Outcome 3a: Responding to requests for evidence from policy-makers

At the program level, we have seen greater evidence of policy influence in regards to tobacco taxation and salt reduction initiatives. Projects in these two clusters were embedded in policy initiatives and the expertise of IDRC grantees was sought out by policy-makers. Such examples provide for potential “quick” wins. A good example of a very successful project in that regard is the work of the Consortium pour la Recherche Économique et Sociale (CRES) in close collaboration with the Economic Community Of West African States (ECOWAS) Commission. Within the ECOWAS membership, there was a recognition that restrictions included in ECOWAS taxation policies were limiting the individual countries’ capacity to increase tobacco taxation and significantly reduce tobacco consumption nationally. Concerted effort was therefore required to develop a new evidence-based ECOWAS tax directive on tobacco products that would be beneficial for all its membership and that would have a significant positive health impact in the region.

Throughout the two phases of this project ([106774](#) and [107358](#)), CRES worked in collaboration with all the relevant actors and sectors at the regional and national levels to generate the knowledge needed to inform a change in policy by the ECOWAS Commission, enabling and promoting its member states to take stronger action on tobacco taxation. CRES created research cells (comprised of both scholars and policy makers) in 15 countries to look at tobacco consumption, taxation, and industry at the national level. The research team shared both individual country and regional results with the ECOWAS community<sup>16</sup> and a host of African and international organizations<sup>17</sup> during regional meetings and throughout the duration of the projects.

ECOWAS’ discursive commitments in favour of a new tax directive was widely mediatized, and CRES was given the mandate to develop the technical document (*argumentaire*) that would outline the rationale for the new tax directive and the main parameters for its implementation regionally. The *argumentaire*

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<sup>16</sup> Each country had sent three representatives, typically from Health, Finance and Trade and Customs departments.

<sup>17</sup> The event, supported financially both by IDRC and the ECOWAS Commission, also featured contributions from regional and international NGOs, the World Health Organization and the World Bank. Regional economic blocks, the West African Monetary Union and the Central African Economic and Monetary Community, were also involved.

was presented to the ECOWAS community during meetings in Abidjan in February 2014, made a convincing case for the new directive and provided clear answers to the concerns of non-health officials about the impact of raising tobacco taxes. A draft directive was then developed with representatives from the 15 countries. There was broad media coverage of the events and ECOWAS high-ranking officials made a strong plea for the adoption of the new directive during their closing remarks.

Although the directive has not yet been adopted by the Council of Ministers due to external circumstances<sup>18</sup>, there are strong indications that adoption is imminent and this demonstrates that the project already achieved a high level of policy influence. The research team has already developed new research objectives to accompany West African countries in the implementation of optimal taxation policies at the national level, in keeping with the regional directive.

This project provides important lessons for policy influence at the regional level. Lessons specific to this project include:

- Long-term (IDRC's funding relationship with CRES dates back to RITC) and flexible (being able to respond rapidly to emerging information needs associated with policy processes) research investments can be beneficial.
- Both project phases illustrate how crucial it is for researchers to engage with policy-makers at every stage of the research process and to keep communications channels open with stakeholders at the country, regional and global levels to increase validity of results and legitimacy of processes.
- Pre-existing level of trust between research and political institutions (in this case CRES and ECOWAS) working in collaboration toward a policy objective is critical.
- The project's approach to building an "argumentaire" based on local and international evidence is replicable and other NCDP grantees are considering the approach for regional action in Latin America.
- There is potential to work with other IDRC-funded Think Tanks (such as CRES) on the economic issues related to NCD prevention.

NCDP's projects on salt reduction ([106881](#) Argentina, [106888](#) Costa Rica, [106889](#) Brazil, [106882](#) South Africa) are also good examples of how research can feed needed information into existing policy processes to have positive, population-wide health impacts. As noted in Section 2, the evidence generated is useful for the development of meaningful and sustainable salt/sodium reduction voluntary targets, and will also serve as a baseline as part of ongoing and future monitoring efforts. The research teams work closely with government officials and are connected to the dialogues taking place with food industry representatives.

In the Caribbean, a project ([107604](#)) approved in 2014 aims at evaluating the progress made by countries in regards to the implementation of the 2007 Port of Spain Declaration on NCDs (signed by Heads of States). The project team at the University of West Indies works closely with the CARICOM (Caribbean Community) Secretariat and the new Caribbean Public Health Agency in order to meet the policy makers' needs for research evidence.

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<sup>18</sup> As of February 2015, the directive is awaiting review and approval by the ECOWAS Council of Ministers. The meeting of the Council was scheduled for the fall of 2014, but was postponed due to the Ebola outbreak.

### Outcome 3b: Influencing policy agendas when political will is lacking

Contrary to the scenarios outlined above, many NCDP projects operate in a policy environment where the demand for evidence is low and where the goal of policy influence is to gain initial recognition on the policy-making agenda. Some of the NCDP-funded teams worked in very unreceptive policy environments. While Ministries of Health are generally easy to reach and receptive to research results related to NCD prevention, it is understandably common to observe a lack of interest, demand, or motivation from other government sectors to receive and act upon results.

Of course, many factors and challenges contribute to the level of priority and receptiveness given by policy makers to research findings in general, including on major public health issues. Many such factors have been the expressed experience of researchers funded by NCDP. Those that may be considered specific to NCD prevention issues are related to the lack of awareness of the burden and causes of disease; the normalisation of behavioural risk factors (tobacco, alcohol, diet); the perception that nothing can be done in the face of industrial growth and influence; and beliefs that these risk factors are an inevitable result of economic development and free trade.

Despite these challenges, increased chances of success were seen when researchers established early engagement of policy makers in identifying the needs for evidence and the research questions; developed partnerships with other credible institutions and individuals (multiplying voices); and showed a willingness to collaborate within and across borders to enable comparison of data and experiences. Association with IDRC was also noted as a useful source of credibility, support and strengthened capacity to the benefit of policy influence. More detailed reference to the barriers, challenges and success factors in policy influence found in project reports is made in a separate Professional Development Award report (by Kelly Garton, upcoming).

An example of policy influence under adverse circumstances where political will was lacking is through IDRC's long-term work with the American University of Beirut (AUB) in Lebanon. It also serves as an example of the value of sustained support to achieving policy outcomes. The RITC-funded Tobacco Control Research Group of AUB is a multidisciplinary team of professionals from the Health Sciences, Medicine, Chemistry and Engineering departments. Their innovative and leading research on waterpipe smoking contributed to the World Health Organization issuing a Health Advisory on waterpipe smoking and the research findings have been extensively published and referenced in peer-reviewed journals.

Disseminating to “non-scientific” audiences such as policymakers, NGOs and the lay public in Lebanon and the Middle-East proved more challenging. Project [105792](#) was developed to address that challenge and enabled AUB to lead the engagement of other researchers, NGOs and policymakers in successful knowledge translation and policy dialogues. The Tobacco Control Research Group also initiated and supported a regional network of tobacco-control researchers to build a common agenda and set research priorities that would contribute to expanding the evidence base on tobacco control in the region. The outcomes of their work included the adoption of a new law and national policy on tobacco control in 2011 and preventing attempts to weaken it in 2012-2013. This very positive experience has, in part, led to a much larger initiative in the Faculty of Health Sciences ([106981](#)) which includes building a Centre for

Knowledge to Policy for Health, staffed by the key figures involved in [105792](#), as part of a strategy for building regional capacity in public health.

Most of the projects in the NCDP portfolio represent examples, to varying degrees of attempts, to present evidence in adverse circumstances, low political will or where direct or indirect opposition from industries made it necessary to do more than simply release results. Projects in India ([106412-004](#)), China ([106839](#)), Chile, Bolivia and Argentina ([106836](#)) and the Philippines ([106832](#)) have involved the researchers in high-level discussions where there was both demand and strong industry opposition to evidence-based policy proposals on tobacco taxation. Several of these researchers also contributed advice to the FCTC Article 6 Working Group negotiations. The multi-component project [106412](#) included support to Latin American economic researchers to contribute to a regional meeting of Ministers of Finance and Health hosted by the Panamanian government and the Pan-American Health Organization (PAHO). The Brazilian ([106889](#)) project brought evidence and balance to debates on the effectiveness of both regulatory and voluntary approaches to salt and to food labelling and marketing in discussions among government players who had no means to evaluate policies that had largely been developed under food industry guidance.

Several South African projects in relation to healthy diets and alcohol control have provided for strong evidence in relation to regulatory approaches. Project [106882](#) (economic and health impacts of legislative fiscal policies to improve nutrition in South Africa) has had early involvement from decision makers with an Advisory Group that includes key government officials. Based on an initial review of global evidence, the team chose to focus on taxation of sugar sweetened beverages as “low-hanging fruit” due to the growing international precedents and evidence of support from the government. The team had already conducted a salt reduction study, which fed into new legislation that was to come into effect in 2013. The project results suggested that given the trade of South African products in the region, this could potentially have an effect throughout the continent.

### **Conclusions on level of achievement toward policy influence**

There is evidence to support the view that the minimum-level of Outcome 3 has been achieved, although we are not able to use a scale/instrument and data to demonstrate that the “political profile” of NCDs was raised from one level to another. The majority of projects completed so far have successfully disseminated their findings through the media, reports and research papers as well as presentations to policy makers. Our assumption is that exposure to study results about the burden of NCDs and the policy options available to reduce this burden will have an impact on people’s (including policy makers) understanding of and attitudes towards NCDs, especially in the many LMICs where NCDs have not yet been a visible issue on the political agenda and in the media.

The evidence that the moderate and high-level program outcomes have been achieved is more limited at this point in time, although it depends on how the notion of discursive commitments is contextualized and defined. Projects discussed above reflect situations where policy makers have made a public commitment to a policy. The influence that could be attributed to the NCDP project/project leader is either relatively direct (e.g. tobacco taxation in West Africa) or more indirect (e.g. tobacco taxes in Chile

and China).<sup>19</sup> In some cases the policy has already been adopted, which is tied to our high-level program outcome (e.g. tobacco taxes in Chile, salt regulation in Argentina). There is more evidence of discursive commitments made outside of the public domain, for example in meetings and workshops. Not all discursive commitments, whether made in public or in internal technical meetings, can be expected to translate into policy adoption and implementation. But our hypothesis is that the presence of robust evidence coupled with repeated discursive commitments can eventually improve the conditions for policy adoption in the long term.

At the global level, we don't yet have evidence of policy influence from NCDP projects or the NCDP program as a whole. This will take more sustained and focused investments in specific issues that lend themselves to more consolidation of evidence and building of the field across countries. We have early evidence of some outputs informing the global conversation on specific issues, for example on tobacco farming and innovative financing mechanisms for health. More generally, through the NCDP program IDRC has also raised its reputation as an early responder and "player" in the area of NCD prevention and control and contributed to raising the global profile of NCDs as a development issue.

### SECTION 3: LESSONS AND CONCLUSIONS

The approval of the NCDP program came at a time of optimism that building a program of research around NCD prevention was the right thing to do for a number of reasons. First, broadening the scope beyond tobacco control in order to promote an integrated approach for NCD prevention would justify and strengthen the resource base, including through donor partnerships. The approach of the program was also aligned well with what was being called for by the WHO and high level political declarations and being built into global and regional plans. This has given IDRC a leading position in this field, at a time of increased recognition and action globally on NCDs. However, the field has not attracted resources or political action as quickly as was hoped for and IDRC's reach and recognition for its contributions to the field have been modest, given the resources that could be made available during this short period of time. Additional effort might have been made to promote the approaches of the program and explore partnerships with known and lesser known donors with complementary interests, including, for example those focused on other public health nutrition issues.

IDRC, through the NCDP program, has been an almost solitary leader on the issues and approach to NCD prevention, a situation that may change in the post-Millennium Development Goals era, since many LMICs have been vocal about the need to address NCDs as part of the next development agenda and this will remain a main thrust of the new program. We have explored a variety of opportunities for impact in a new field that has relevant research questions and great needs for evidence across the globe. The next steps should take this further, more deliberately identifying points of intervention that offer greater potential for impact and lessons that may be transferred after they have matured. Opportunities to do so have been created by the NCDP portfolio that has been exploratory, but also one in which thematic clusters of projects (e.g. fiscal policies (especially tobacco), salt and fat reduction/regulation and intersectoral action) emerged that allow us to build on in future programming.

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<sup>19</sup> The degree of directedness needs to be seen as a continuum.

Further opportunities for synthesis will still be pursued, including a current investment in an overview of the work on fiscal policies for tobacco control. Additional effort will also be made to identify new donor partners with shared interests in taking population health interventions to much greater scale in favourable LMIC policy environments.

From the existing analysis of the first four years of NCDP programming, we feel we can draw the following lessons from our experience in this field:

### **Lesson 1: Rising local demand for solutions-oriented research to address NCDs**

We now have a clearer picture of the causes of mortality and morbidity across the globe, by way of the international global burden of disease study and strengthened national disease surveillance systems in LMICs. These efforts have raised the level of awareness about the epidemiological transition in LMICs and the fact that NCDs affect the poor and women disproportionately. A manifestation of this growing acknowledgement is found in the increasing number of calls for evidence and action by LMIC policy makers (e.g. regional political declarations, etc.). NCDP staff, through field visits and interactions with national and regional policy makers, have experienced this shift in discourse and attitudes in recent years in regards to NCDs as a development issue. LMIC researchers and policy makers are now teaming up to address NCDs. The NCDP program has experienced an increase in concept notes and proposals over the past four years, either as unsolicited proposals or through our Calls for Concept Notes. A simple important lesson and conclusion from this is a confirmation/validation that the “niche” of the NCDP program is perceived as being highly relevant by LMIC policy makers and researchers. Given the current projections about rising NCD rates in LMICs, there will be increasing demands for research evidence and policy-relevant knowledge in this area in the future.

### **Lesson 2: Population health intervention research on low-cost solutions needs greater acceptance in the scientific community**

There is a common perception among policy makers, and even within the scientific community, that public health evidence for the effectiveness of interventions is generally weak and that policy recommendations often go “beyond” the available evidence. This perception is based on the traditional definitions of “evidence-based policy or practice” that adopt the view that there is a clear hierarchy of evidence, with evidence from randomized-controlled trials (RCTs) and derivatives at the top. This has created a strong “settings bias” in the scientific evidence(1), for example for school-based or health service interventions that lend themselves to RCTs. Many experts have called for a change of paradigm, recognizing that traditional definitions of what should be considered “evidence-based” are too narrow to be of use in several areas of public health, such as for NCD prevention. Non-randomized studies may represent the best available, and sometimes the only, evidence of effectiveness(2). The urgency to take action to reduce the burden of NCDs also means that we cannot wait for the “perfect proof of what works, especially in the many areas where interventions are low risk”(1). In order to generate policy-relevant knowledge, experts have highlighted the need to move beyond correlational studies and to support population health intervention research(3), for example by taking advantage of natural experiments to evaluate environmental and policy changes(4)(5). However, financial support for this type of research is still very limited, and this is particularly true in LMICs. The NCDP program has begun to fill an important gap in the scientific evidence to inform the adoption and implementation of population-level interventions for NCD prevention. The program has been purposefully seeking out projects that would contribute to strengthen

this field of research in LMICs. The IAC and INFORMAS studies are good examples of such projects. Several international experts have commended IDRC for having prioritized the promotion of a population health approach.

### **Lesson 3: Research can bridge the divide between individual and collective responsibility**

The promotion of a population-health approach to prevent NCDs is often met with skepticism by those who view health primarily as a matter of personal responsibility. Arguments about the erosion of personal freedoms are commonly used to oppose population-based NCD prevention measures. This view undermines the significant influence that contextual conditions have on individuals and leads to measures that focus solely on modifying behaviours (counselling, education campaigns, etc.). These measures are necessary, but certainly not sufficient to slow down the NCD epidemic. There is a need to bridge the divide between views based on individual and collective responsibility.

The NCDP portfolio contributed to addressing this challenge. Funded-research generated knowledge on how contextual conditions influence health behaviors. Our focus on questions of equity has also generated knowledge on the different exposure of population groups to certain conditions and the impact of policies. This understanding, often presented for the first time in LMICs, contributes to increase the acceptability of population-level interventions, including among policy makers. NCDP projects related to the impact of food marketing on children or the relationships between different characteristics of the food environment and dietary patterns are good examples of studies that increase interest in these types of interventions.

### **Lesson 4: Long-term investments yield greater policy influence, locally and globally**

The process of influencing the adoption and implementation of effective policies for the prevention of NCDs through research cannot be expected to have a certain starting and ending time. It is not possible to estimate an “average lag time” for research evidence to have an impact on public policies and there are complex factors behind the creation (and closing) of windows of opportunity for policy change. What can be “controlled” to a certain extent is the presence of research capacity and expertise that could spring into action or be tapped in a timely fashion to provide evidence for change. But the lack of research investments by national and international agencies for the type of public health research targeted by the NCDP program means that this research capacity is still absent or low in many LMICs. NCDP grantees still have limited funding options available to them to build and sustain a long term research program. This has implications on the scope and quality of the evidence base available to stimulate and inform policy change. As has been found by numerous programs over the years, more sustained efforts in building leadership and evidence within a field generates greater prospects for change.

### **Lesson 5: IDRC’s expertise adds value to capacity building, knowledge generation and policy influence efforts**

Despite that internal funding and human resources remained static with no more than two Program Officers devoted to the program since 2011 (justifying the recent amalgamation of NCDP and Ecohealth teams), NCDP staff have been able to act as brokers of research partnerships and networking among grantees, as well as between researchers and policy makers. The final composition of research teams was often influenced by networking opportunities initiated by NCDP staff (e.g. the three institutions involved in Argentinian project [106881](#)). Good project ideas from one part of the world have also been exported



to other regions through the brokering role of the NCDP program, such as the proposed regional consolidation of evidence and an “argumentaire” in Latin America as has been done in West Africa.

### **Lesson 6: Donor partnership in this emerging field has been challenging and requires more in-depth discussion on shared goals with former and non-traditional partners**

Despite the commitments made at the UN High-Level-Meeting on NCDs in 2011 and the updated evidence from the Global Burden of Disease Study (which shows an accelerating epidemiological transition even in poor countries), donors have been slow to recognize the growing economic, social and personal burden of NCDs in LMICs.

The resources of the NCDP program could not meet demand. However, we have been an early responder to the call for research funding on low-cost solutions that will allow us to build on strengths and knowledge of the field and to lead the way globally to establish IDRC as a key contributor and mobilizer of investment on this issue. The lack of global donors in this field, especially for population health intervention research, means that IDRC is leading as one of a small handful of international organizations with dedicated funds for NCD prevention research.

The NCDP program was unsuccessful in attracting additional funding partnerships during this period, despite protracted negotiations with DFID UK on a partnership for tobacco control research. This partnership still shows promise and may be further strengthened by additional and renewed collaboration with the Bill and Melinda Gates Foundation. Renewed efforts are underway to increase collaboration, coordination and leveraging among the current tobacco-control donors, recently led by the cancer research agencies of the USA and UK.

The Global Alliance for Chronic Disease ([GACD](#), an alliance of national health funding agencies, including the Canadian Institute for Health Research) has shown strong interest in an ongoing collaboration with IDRC through its competitions. Our contributions to their two separate initiatives on the prevention and control of hypertension and diabetes have led to discussions on their next call on lung health, which entertains a focus on tobacco control. So far, the results of these calls have led to projects spread thinly across NCD issues and attracted (or approved) projects almost entirely focused on primary healthcare and clinical research. However, there is growing commitment to a more preventive and population-health focus.

The Bloomberg Initiative has been, for the past three years, supporting focused efforts in Mexico (now the nation with the world’s highest rates of obesity and diabetes) to raise the profile of NCD prevention and particularly policy interventions to reduce the consumption of obesogenic foods. Opportunities for collaboration and scalable impact may increase if this initiative is expanded.

Given the strategic decision to increase our future focus on food system innovations and policies for NCD prevention, more effort will need to be made to reach out to partners engaged in public health nutrition and food security, while framing the issues more broadly in the context of the double burden of malnutrition. This could open the door to new funding opportunities and the use of integrated approaches for solving concurrent and complex development challenges.

### **Conclusion and Future Directions**

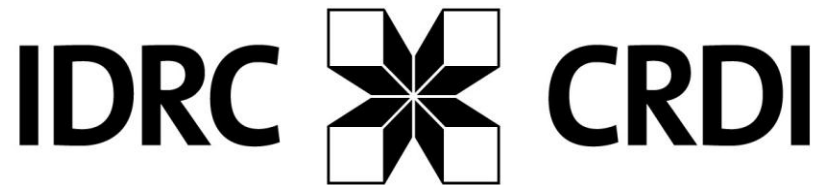
The degree to which current and future policy change for NCD prevention and control may be attributable to IDRC-funded projects varies greatly across our portfolio. However, several examples of policy change that are significantly resulting from the NCDP program promise to have very large scale impact on the health (quality and longevity) of millions of people. Population-health interventions and the research associated with it will always struggle to point to a life that has been saved or a livelihood that has improved as a direct result of those interventions. Stronger efforts will need to continue to demonstrate this impact through research and more meaningful messaging of the results. With increased focus and success in leveraging resources through partnership, there is great potential to have much greater impact.

The new strategic plan and implementation framework of IDRC already takes into account the major lessons learned from NCDP and Ecohealth health programing and further refinement of this strategy over the coming year will benefit from the results of explorations and projects yet to be completed.

Some clear decisions have been made about these foci and explorations, with the major theme being on testing innovations in local food systems and in national policy to improve health outcomes. The new Health, Environments and Food program, will break new ground on this under-funded issue and contribute new ideas and applications to address the social, environmental, economic and technical drivers of non-communicable diseases, finding innovations and low-cost strategies for better prevention.

## REFERENCES

1. Lobstein T, Swinburn B. Health promotion to prevent obesity. Global perspectives on health promotion effectiveness. New York: Springer; 2007. p. 125–50.
2. Armstrong R, Waters E, Doyle J. Reviews in public health and health promotion. Cochrane handbook for systematic reviews of interventions. Chichester, UK: Wiley-Blackwell; 2008.
3. Potvin L, Petticrew M, Cohen ERM. Population health intervention research: developing a much needed science of solutions. *Prev Med*. 2014 Apr;61:114–5.
4. Petticrew M, Cummins S, Ferrell C, Findlay A, Higgins C, Hoy C, et al. Natural experiments: an underused tool for public health? *Public Health*. 2005;119:751–7.
5. Craig P, Cooper C, Gunnell D, Haw S, Lawson K, Macintyre S, et al. Using natural experiments to evaluate population health interventions: new Medical Research Council guidance. *J Epidemiol Community Health*. 2012 Dec;66(12):1182–6.



# **Non-Communicable Disease Prevention**

## **Program Prospectus for 2011-2016**

For Presentation to the IDRC Board of Governors

Program and Partnership Branch  
International Development Research Centre

June 21, 2011

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**List of Acronyms**

CGTCF	Canadian Global Tobacco Control Forum
CIET	Centro de Investigación para la epidemia del tabaquismo
COP	Conference of the Parties
DALY	Disability Adjusted Life Years
FCTC	Framework Convention on Tobacco Control
GACD	Global Alliance for Chronic Disease
GEHS	Governance for Equity in Health Systems
GHRI	Global Health Research Initiative
HLM	High-Level Meeting
IDB	Inter-American Development Bank
ITCFF	International Tobacco Control Funders Forum
LMICs	Low- and middle-income countries
LAC	Latin America and the Caribbean
MDGs	Millennium Development Goals
NCD	Non-communicable disease
NCDP	Non-communicable Disease Prevention
RITC	Research for International Tobacco Control
UN	United Nations
UN HLM	United Nations High-Level Meeting
WHO	World Health Organization

## Executive Summary

This program provides an IDRC response to the major development challenges associated with the rapid rise in non-communicable diseases (NCDs) in low-and middle-income countries (LMICs). These diseases, especially cardiovascular diseases, diabetes, cancer, and chronic obstructive respiratory diseases, are among the leading causes of premature death and morbidity in LMICs, with significant consequences for households, health systems, and national economies. The main modifiable non-communicable diseases risk factors are the same in all countries – tobacco use, unhealthy diet, alcohol misuse, and physical inactivity – and in all countries the poor are disproportionately exposed and affected.

So far, the response to the rising burden of non-communicable diseases in LMICs has not kept pace with the epidemic. While donors and LMIC governments still commit few resources to NCDs, notable advances in the global recognition of NCDs as an urgent threat and of effective action to address them offer hope that efforts will be accelerated. The widespread adoption of the World Health Organization's Framework Convention on Tobacco Control (FCTC) and a United Nations High-Level Meeting (UN HLM) on NCDs (to be held in September 2011) are examples of promising developments. These recognize the challenges faced by LMICs and place a significant emphasis on primary prevention through the development of healthy public policies – i.e. addressing the NCD risk factors and their determinants. Primary prevention offers the greatest potential for improvement and a number of low-cost and effective interventions are available but lack local evidence to spur adoption and implementation in LMICs.

The goal of the Non-Communicable Disease Prevention (NCDP) program is to support LMIC-led research designed to influence the adoption and implementation of cost-effective non-communicable disease prevention policies.

Building on the strong evidence base for tobacco control policy and the lessons from IDRC's Research for International Tobacco Control (RITC) program, the NCDP program has a focus on intervention research relevant to the major NCD modifiable risk factors that can be addressed through similar or complementary policy solutions. A variety of granting modalities will be used to forge partnerships and build an interdisciplinary field of expertise for the generation of high-quality local evidence. Initial program activities will focus on: (1) fiscal policies; (2) innovative regulation related to the marketing and supply of tobacco, alcohol, and unhealthy foods and (3) understanding the barriers to evidence-informed NCD policies. Indicative programming is included in the annexes. Two cross-cutting areas of research are also central to the program: (1) understanding the impact of NCD prevention policies on different social groups and (2) understanding how best to mobilize intersectoral action for effective NCD prevention –the epidemic cannot be tackled by the health sector alone.

The next five years will bring new opportunities for IDRC to influence development and global health efforts as governments and donors intensify their efforts to address the non-communicable disease epidemic. The program will generate the knowledge necessary for sustainable and cost-effective non-communicable disease prevention in low and middle income countries, with a focus on pro-poor policies.

## 1. Context and Background

### a. Development Challenge and Situational Analysis

In May 2010, the UN General Assembly adopted a resolution<sup>1</sup> to prevent and control non-communicable diseases (NCDs) and will host a High-Level Meeting (HLM) on this topic in September 2011, with a particular focus on developmental challenges faced by low- and middle-income countries (LMICs) (United Nations, 2010). This UN HLM is a watershed moment in the fight against NCDs – it signals that there is now a global recognition that NCDs represent a major development challenge.

The increasing global crisis in NCDs is a barrier to development goals including poverty reduction, health equity, economic stability, and human security (Beaglehole et al., 2011). NCDs are recognized as factors in almost every Millennium Development Goal (MDG). NCDs and their risk factors and determinants are closely related to poverty and mutually reinforce each other (United Nations Economic and Social Council, 2009). Pro-poor initiatives, like the MDGs, will have limited impact if they do not address the full set of threats – including NCDs – that trap poor households in cycles of debt and illness (David Stuckler, Basu, & McKee, 2010).

#### *The NCD crisis in LMICs*

NCDs, especially cardiovascular diseases, diabetes, cancer, and chronic obstructive respiratory diseases, are the leading causes of death and disability around the world and will be responsible for more than 75% of all deaths in 2030 (Mathers & Loncar, 2006; World Health Organization, 2008b). Of the 33 million people who died from NCDs in 2008 (58% of all deaths worldwide), half were under 70 years of age and half were women. Approximately 80% of all NCD-related deaths occurred in LMICs (Alwan et al., 2010), indicating that the burden is not limited to high-income countries. NCDs are already the major cause of death in lower-middle and upper-middle-income countries, and will also become the leading cause of death in low-income countries by 2015 (The World Bank, 2007). The same is true for mortality among those of working age. NCDs also account for 46% of the disease burden in LMICs as measured in disability-adjusted life years (DALYs) (Abegunde, Mathers, Adam, Ortegón, & Strong, 2007).

The underlying causes of NCDs are modifiable risk factors that are the same in all countries – tobacco use, alcohol misuse, physical inactivity, and unhealthy diet. These causes are expressed through the intermediate risk factors of raised blood pressure, raised glucose levels, abnormal blood lipids, overweight, and obesity. The prevalence of the main NCD risk factors is rising rapidly in LMICs – with children and youth being increasingly at risk – due to a range of societal and global determinants.

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<sup>1</sup> 130 States cosponsored the resolution. The scope and nature of the UN HLM on NCDs are analogous to the UN General Assembly Special Session on HIV infection and AIDS in 2000, which concluded that dealing with the disease was central to the development agenda.



These determinants – like rapid globalization, unplanned urbanization, and global trade and agricultural policies – compromise people’s ability to make healthy choices (Lloyd-Williams et al., 2008). Private sector involvement in public policy development is another important factor. In the case of tobacco, the FCTC obligates Parties to protect public health policies from commercial and other vested interests of the tobacco industry. Still, the tobacco industry has used calls for individual responsibility – as well as unsubstantiated economic arguments – to prevent regulation and secure policy environments that allow tobacco to be aggressively marketed (Brownell & Warner, 2009). As a result, tobacco use is now rising rapidly in many LMICs, with a prevalence of more than 25% in adolescents in some countries (Kin, 2009). In the case of the food industry, the evidence is mixed about the benefits/drawbacks of involving the private sector in intersectoral action for health initiatives. While a number of experts have commented on how multinational food companies and large agricultural producers have successfully lobbied against reforms that could improve health and the environment (Jowitt, 2010), there are also examples of successful partnerships to increase the availability of healthy food products.

An economic perspective: NCDs are among the most significant causes of illness and death among working-age populations in LMICs. NCDs can push/keep households into a poverty trap as a result of health care expenses and income losses due to disability or the premature death of an income-earner family member (de-Graft Aikins et al., 2010; Jha & Chen, 2007). In India, for example, 25% of families in which a member suffers from cardiovascular disease (the leading cause of death in the country) experience catastrophic expenditures and 10% are driven into poverty (Mahal, Karan, & Engelgau, 2010). For two of the most important NCD risk factors – tobacco use and alcohol misuse – the associated opportunity costs diminish a family’s ability to meet basic needs and contribute to household chronic poverty.

Household costs of NCDs have a substantial macroeconomic effect. Premature deaths and disability from NCDs lead to substantial losses in national incomes. Studies have shown that for every 10% rise in mortality from NCDs at a country level, the yearly economic growth is estimated to be reduced by 0-5% (D. Stuckler, 2008). NCDs also pose a severe threat to the global economic system. The World Economic Forum recently highlighted NCDs as one of the three most likely and severe risks to the global economy, alongside fiscal crises and asset bubbles (a form of inflation) (World Economic Forum, 2009).

An equity perspective: The myth that NCDs affect mostly the wealthy has been debunked by scientific evidence. NCDs are diseases of poverty. The World Bank estimates that one-third of the poorest 40% of the population (people living on US\$1-2 a day) in LMICs die prematurely of NCDs (The World Bank, 2007). In all but the least developed countries of the world, poor people are more likely than the wealthy to develop NCDs, and everywhere are more likely to die as a result (World Health Organization, 2005). In high-income countries, NCD risk factors are predominantly concentrated among the poor (The Oxford Alliance, 2006). Similar trends are observed in LMICs, with solid evidence in the case of smoking and alcohol misuse. There is increasing evidence from specific LMICs that obesity rates are rising faster among the urban poor than in any other groups (R. Nugent, 2008; Ziraba, Fotso, & Ochako, 2009).

There are two reasons why the poor are disproportionately affected. First, they are more likely to live in regions where policies to tackle NCDs are either non-existent or inadequate. This increases their chances of being exposed to common NCD risk factors. Second, the poor have inadequate access to free or affordable disease prevention and treatment services because of weak health systems that cannot adequately face a double burden of communicable and non-communicable diseases.

### *Reversing the neglect of NCDs in LMICs*

So far, the response to the rising burden of NCDs in LMICs has not kept pace with the epidemic. Despite numerous Calls to Action and regional declarations on the urgency of tackling NCDs, the resources to do so have not yet materialized due to persistent misconceptions (see Box 1). Funds for development assistance for health are provided by a few institutions that still exclude NCDs from their agendas. Despite a continuous increase in funds for development assistance for health—from \$5-6 billion in 1990 to \$21.8 billion in 2007—donors still commit few resources to NCDs. In terms of the burden of disease, donors provided about \$0.78/DALY attributable to NCDs in developing countries in 2007, compared to \$23.9/DALY attributable to HIV, TB, and malaria (Rachel Nugent & Feigl, 2010). Overall, less than 3% of Development Assistance for Health, less than 15% of WHO's budget, and less than 2% of the total health budget of the World Bank and the Bill & Melinda Gates Foundation are directed to NCD prevention and control. LMIC governments are now increasing domestic expenditure for health—although in several sub-Saharan countries Development Assistance for Health is replacing some of this spending—but there is little evidence of sustained investment for NCD prevention (Geneau et al., 2010; Ravishankar et al., 2009). New developments such as the UN HLM may lead to greater attention being paid to NCDs.

#### **Box 1: Misconceptions and facts about NCDs**

##### **Misconception #1: NCDs mainly affect the rich and elderly in high income countries**

**Fact:** The NCD epidemic originates from poverty and disproportionately affects the poor in all countries. NCDs are among the leading causes of premature death and morbidity in LMICs. People in LMICs tend to be affected by NCDs at younger ages, suffer longer—often with preventable complications— and die sooner than those in high-income countries.

##### **Misconception #2: NCDs are simply the results of individual choices**

**Fact:** Social determinants of health interact with and influence individual health behaviors. Governments have a crucial role to play to provide equitable access to a healthy life and to reduce the risks of NCDs, especially for vulnerable groups.

##### **Misconception #3: NCDs are too expensive to prevent and treat**

**Fact:** A wide range of NCD interventions are very cost-effective for all regions of the world, including for sub-Saharan Africa.

##### **Misconception #4: LMICs should control infectious diseases and target maternal and child health first**

**Fact:** The NCD epidemic limits the ability of countries to reach the health MDGs. All threats that trap poor households in cycles of debt and illness need to be addressed simultaneously rather than in a sequential manner.

This neglect of NCDs cannot be explained by the lack of available effective solutions. If the major NCD risk factors were eliminated, a large proportion of premature deaths and disability from cancers, heart disease, stroke, and type 2 diabetes would be prevented globally (World Health Organization, 2005). Implementing whole-population strategies to reduce salt intake (e.g., a 15% reduction) and control tobacco use (e.g. implementing the key components

of the WHO Framework Convention on Tobacco Control) in LMICs would prevent millions of deaths each year at a cost of less than \$1 per person per year (Asaria, Chisholm, Mathers, Ezzati, & Beaglehole, 2007).

The importance of local evidence to inform an integrated NCD strategy: Research has a crucial role to play to influence NCD-related policies in LMICs where the uptake and implementation of cost-effective interventions, like policies to reduce salt intake and tobacco use, remain low. Local evidence is needed to convince policymakers to invest in NCD primary prevention. This requires generating evidence about: (1) the problem and its context-specific causes; (2) the most effective implementation strategies, and (3) the differential impact of NCD prevention interventions. Since scientific evidence is only one of several determinants of political priorities, the involvement of local researchers with strong knowledge translation skills is also essential in order to increase the role of evidence in policymaking.

A key research gap concerns the delivery and evaluation of complex interventions for NCD prevention and control. Governments need to adopt a package of interventions in order to significantly decrease the NCD burden — this is often referred to as the use of an “integrated strategy”. An integrated strategy implies targeting multiple NCD risk factors through intersectoral action and multi-level interventions. Working on different levels means using a combination of strategies targeting both the entire population (whole-population strategies) and high-risk individuals.

The implementation of whole-population strategies requires strong intersectoral action mechanisms in order to mobilize different sectors of government (whole-of-government approach) and, when relevant and appropriate, the private sector and civil society organizations. There is a need for enhanced knowledge on the coordination and accountability mechanisms that lead to sustained and successful intersectoral action. As an example, there is currently little evidence as to whether or not voluntary approaches that typically lack an accountability component are effective in changing the food industry’s practices in regards to the quantity of sodium in processed food (Cobiac, Vos, & Veerman, 2010).

Interventions targeting high-risk individuals are also necessary in order to reduce the risk associated with the development and progression of disabling complications from NCDs, for people with type 2 diabetes for example (blindness and amputations). NCD management at the primary health care level should be an important component of a country-level NCD strategy but its implementation is tied to efforts to strengthen health systems and to ensure universal health care coverage. For example, recent studies have warned that individual high-risk strategies, if used alone, could actually widen health inequalities since disadvantaged groups face more barriers to care (screening and access to primary care) (Capewell & Graham, 2010).

In summary, an integrated NCD strategy targeting multiple risk factors and relying on interventions at both the population and individual levels can generate larger health gains than would risk factor specific interventions at only one level (Cecchini et al., 2010; World Health Organization, 2008a). Finding the most cost-effective package of interventions in low-resource settings remains a critical issue for LMIC governments and international donors.

Current evidence suggests that a key strategy is to seek low-cost approaches with a high potential return on investment to achieve structural and behavioural changes to reduce risk (Institute of Medicine, 2010). Primary prevention<sup>2</sup> through the development of healthy public policies offers the greatest potential for improvement and a number of “best buys” need the attention of researchers and policymakers involved in global health and development initiatives. This will be the niche of the Non-communicable Disease Prevention (NCDP) program given the current level of resources available.

IDRC and the NCDP program are well positioned to fill this niche. The global evidence about cost-effective interventions needs to be supported by high-quality local evidence, which currently is lacking due to lack of research funding in this area. Moreover, both global and local evidence need to be presented to policymakers through knowledge translation strategies that are tailored to the local context. Therefore, the NCDP program will focus on supporting research leadership in the field of NCD prevention in LMICs. In doing so, this new program will harvest the lessons learned from the Research for International Tobacco Control (RITC) program over the past 15 years.

b. About the Program

*Learning from past RITC programming*

The NCDP program will use lessons learned from RITC, and the field of tobacco control in general, in planning and designing future activities. The main lessons are interrelated and described as follows.

Demonstrating how tobacco use is a development issue: There is a growing recognition today of the double burden of communicable and non-communicable diseases (NCDs) that is plaguing LMICs. IDRC’s RITC program was one of the early pioneers that recognized this with its focus on the leading risk factor for NCDs – tobacco consumption. RITC did so not “just” from the conventional health perspective but rather from a broader development one, by arguing that as devastating as the health impact of the tobacco epidemic may be on LMICs, there are also serious social and economic impacts that need addressing as well. In that regard, RITC has placed an emphasis on debunking the tobacco companies’ claim about the supposed negative economic impacts of tobacco control. This has been particularly important for tobacco-producing countries – the bulk of whom are LMICs. RITC has been the prime funder in supporting research that exposed the myths surrounding how lucrative tobacco farming is and the claim that no viable alternatives for smallholder farmers exist. This niche has been and still remains largely unique today. Similar development challenges are associated with other preventable NCD risk factors including the barriers to public health policy resulting from economic concerns. For example, the economic “value” associated with the production and marketing of certain foods will enter into debates about regulation.

Tackling the societal determinants: Studies have clearly shown that a low socio-economic status (income and education) is a strong predictor of higher rates of tobacco use. The social context has a strong influence on individual behaviours and changing it

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<sup>2</sup> Primary prevention strategies intend to avoid the development of disease.

requires adopting stiff measures against the tobacco industry. Tobacco use has been intentionally built into the social structure and environment of most societies by an industry that profits from continued trade in tobacco products (World Health Organization, 2010). Evidence-based advocacy can be effective in reducing the social acceptability of tobacco use and in increasing the acceptability of tobacco control as a global public good. The lessons learned from tobacco control in this area may be adapted to meet the needs of addressing unhealthy diets, the harmful use of alcohol, and physical inactivity.

The need for intersectoral action: During RITC's existence, the recognition of the need to tackle the tobacco epidemic through an intersectoral approach has grown considerably. WHO's first global health treaty – the Framework Convention on Tobacco Control (FCTC) – has been ratified by more than 170 countries. In each country, the ratification process involved not only the Ministry of Health but also several sectors of government through a whole-of-government approach, as well as civil society organizations. The use of intersectoral action is also required for the implementation of all recommended policies for curbing the demand for tobacco products. The FCTC provided, and continues to provide, a powerful framework for action. RITC has funded several country-level case studies on the ratification and implementation of the FCTC — the findings about the factors that enable/constrain intersectoral action will strengthen the overall “grants plus” approach in the area of NCD prevention.

Identifying and addressing gaps: RITC has been attentive to the funding landscape in tobacco control in order to address important but neglected gaps. RITC put an emphasis on “cutting edge” issues that addressed key gaps that were not tackled by other donors; for example, other forms of tobacco consumption (such as the waterpipe) which in many regions equal and sometimes dwarf cigarette consumption. In addition to supporting ground-breaking work in this area, RITC also tried, among other issues, to put the gendered impacts of tobacco control on the development agenda. Funding in the area of tobacco control in LMICs has, according to one study, amounted to less than \$11m/annum over the last decade — this includes the large infusion of funds in recent years from the Bloomberg and Bill & Melinda Gates Foundations. The foundations' funds have tended not to focus on research but rather on supporting advocacy, which, in some cases, has nicely complemented the RITC-funded research. While the foundations have leaned towards large-population countries with high smoking prevalence, RITC has focused on some of the smaller neglected countries and those that have the potential to play a catalytic role in their regions.

Approaches to field building: There are also important lessons learned from RITC's approach to building the field of tobacco control research. These include: working in catalytic countries; supporting and networking isolated researchers; informing research and policy priorities via situation analyses; supporting timely research in response to opening policy windows; the necessity of interdisciplinary research; the importance of supporting knowledge transfer; long-term consistent support for capacity building; being well-informed of other donors' priorities; addressing the role of industry and the barriers to effective interventions; and, being willing to take risks as well as being collaborative, responsive, and adaptable to change. These lessons will be important as the NCDP program starts to explore the other risk factors.

*IDRC niche and program evolution*

The NCDP program will contribute to reframe the debate at global and national levels around preventable NCDs and the role of public policy in addressing their social, economic, and political determinants. It will include a continued focus on tobacco use as the leading NCD risk factor. It will demonstrate to governments and their development partners that sustainable public policy solutions exist to control the epidemic. This will require framing intersectoral investments in healthy public policy as consistent with health, development, and economic goals. The program purposefully excludes important issues such as mental health, injury prevention, cancer by infectious agents and indoor and outdoor air pollutants as risk factors for lung cancer and heart disease on the basis that a different package of interventions/policies is needed<sup>3</sup>. This program also excludes funding research on interventions focusing only on individuals at high risk of NCDs or those already affected. Research to strengthen health systems is crucial to the success of comprehensive efforts to reduce the burden of NCDs, but given the limited budget of the NCDP program, a strategic decision was made to restrict the scope of the program in the first five years to research on the most immediate priority interventions in LMICs. The strengthening of health systems to address NCDs is relevant to the objectives of the other IDRC Health programs (namely, GEHS and GHRI) and will allow for complementary collaboration between programs.

The last five years of RITC programming focused on five core themes:

- Health Systems and Policy
- Alternative Livelihoods to Tobacco Farming
- Poverty and Tobacco
- Globalization, Trade, and Tobacco
- Alternative Forms of Tobacco Consumption

In addition, grants were provided for research that would lead to the ratification and implementation of the FCTC in individual LMICs and two special initiatives were supported – one investigating the gendered aspects of tobacco control while the other focused on a situation analysis of a range of African countries.

The development of the NCDP program allows for RITC to expand and retain an identity within the program, with dedicated resources for tobacco control research. Indeed, there is much work to be done in the area of tobacco control and this new program will build on RITC's past efforts by focusing on a number of key entry points where IDRC has a comparative advantage and that could be applied to the other key NCD risk factors. As the NCDP program moves forward, the following entry points for the ongoing tobacco control work will also enable new exploration and learning for addressing other NCD risk factors:

1. Fiscal Policies: Despite there being abundant evidence of how effective fiscal policies can be, in most LMICs this is a neglected strategy and a major research area in which capacity needs to be enhanced. RITC has demonstrated experience

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<sup>3</sup> There are still important co-benefits associated with the approach taken by the NCDP program. For example, alcohol control policies could contribute not only to reduce the prevalence of several cancers but also to reduce the burden of road traffic accidents attributable to alcohol. Generating knowledge about intersectoral action can also inform the development of policies designed to reduce indoor and outdoor air pollutants.

and reputation in this area and will build on successful previous work and partnerships. This will be of relevance to some of the other risk factors (e.g. fiscal policies to deter the consumption of unhealthy products and tax credits and subsidies for healthy products).

2. Production and supply issues: A major barrier to tobacco control is the perceived economic dependence on tobacco growing, production, distribution, and sale. This is a key neglected area according to the WHO and one where IDRC has demonstrated experience and leadership (for example, RITC is organizing an international workshop on tobacco farming and alternative livelihoods in June 2011). The perceived economic benefits of the production and supply of other unhealthy products is a clear link to the other risk factors. While much of the work to date in tobacco control has focused on demand-side issues, this entry point will allow also for the exploration of innovative supply-side regulations that promote and enhance the accessibility of healthy choices.
3. Commercial influence and marketing: Industry opposition has been a major barrier to successful implementation of FCTC provisions, especially in LMICs. Limited research, however, has been done in LMICs on how industry influences public health policy and is a clear area of need as expressed by a number of RITC partners. Governance issues are a natural fit for IDRC and this builds on previous RITC work. LMICs are also ill-equipped with regulation and policy to respond to the commercial influence on consumers and policymakers of sophisticated marketing and corporate social responsibility campaigns. There are natural links to other risk factors with, for example, the emergence of the food industry as a powerful lobby.

Much of tobacco control has focused on cigarettes. RITC's support for research on alternative forms of tobacco use mentioned earlier will continue under the above three themes as there is a need to build on the momentum and relationship with researchers in the Middle East on waterpipes. There is a growing need, especially in South and Southeast Asia, to support work on other products such as bidis, kreteks, etc.

Two major cross-cutting issues will also be central to this program. The first relates to health inequities. There is a need to study the impact of NCD-related policies on different social groups – particularly the poor and marginalized – which has been neglected to date by others in the field of tobacco control. Equity has been and will continue to be an important focus for the program and this will build on the gender exploration initiated by RITC. As NCDs disproportionately affect the poor, this is a natural entry point for work on the other risk factors as well. The other main cross-cutting issue concerns intersectoral action. The lack of capacity for intersectoral action for health is an important barrier to policy uptake and implementation. The lessons learned from tobacco control can be applied to other risk factors.

## 2. Approach to Programming

### a. Program Goal

The goal of the NCDP program is to support LMIC-led research designed to influence the adoption and implementation of effective NCD prevention policies. Within selected priority themes, local researchers will demonstrate what priority policy actions are needed for sustainable and cost-effective effective NCD prevention.

This program is committed to supporting innovative approaches that will continue to strengthen IDRC's work on tobacco control. This program is building on the strong evidence base for tobacco control policy to inform similar complex strategies for addressing other preventable risk factors associated with food, alcohol, and sedentary living.

### b. Program Outcomes

The NCDP program outcomes are expected in terms of research capacity, knowledge generation, and influence on policy. The following table summarizes these according to what can be reasonably expected in the prospectus time frame. Minimum and high levels of achievement are described, reflecting what should be expected, depending on the resource base and success in risk mitigation. A discussion of the risks to the achievement of these outcomes follows the table.

As the global public health and development communities turn much needed attention to the issues of NCDs and development, the NCDP program will need to be agile and consider emerging issues, opportunities, and neglected areas for research. The expected outcomes will be reviewed accordingly over the prospectus period and strategic decisions will be made about where IDRC can make a difference as the situation evolves. There is a clear role for research to inform decisions about development efforts for NCD prevention, for IDRC to demonstrate what can be done and to lead efforts in our areas of strength.

- Ultimately, NCDP program-funded research will inform debates about policies for NCD prevention by generating evidence on 1) the extent to which different prevention strategies are economically sound and are of greatest value to the poor in a variety of contexts and 2) the intersectoral mechanisms needed for successfully addressing the societal determinants of NCDs. The evidence is already clear that health education and individual behaviour change models have limited or negligible success and are costly. Evidence from local research can assist in the prioritization of action within the sometimes competing influence of global, societal, and corporate forces.



Table 1: Summary of Expected Program Outcomes

	Baseline	Minimum	Moderate	High
Capacity to conduct and use research	Few isolated LMIC researchers engaged in interdisciplinary NCD prevention research.	NCDP-funded projects show evidence of interdisciplinary collaborations within and beyond the health sector.	NCD interdisciplinary research collaborations established within individual countries.	Evidence that interdisciplinary research for NCD prevention has been institutionalized in countries.
	Researchers and research users often lack skills for gender and equity analysis.	NCDP-funded projects have embedded components focusing on gender and equity issues.	Samples of demonstration projects that utilize innovative methodologies for gender and social analysis of NCD-related policies.	Research tools and methods for equity-oriented research and analysis are adopted by NCDP-supported researchers and showcased among a wider community of researchers.
Knowledge generation	Lack of local evidence for intersectoral NCD prevention that promotes health equity. LMICs often reliant on high income country experience. Economic and commercial concerns act as barriers to policies for health.	New LMIC evidence on the health and economic costs of at least one of the major NCD risk factors and cost-effectiveness of intersectoral interventions for NCD prevention.	Increased understanding among policy makers of the socioeconomic impacts of major NCD risk factors and the cost-effectiveness of NCD policy interventions in different contexts and in addressing health inequities.	Consolidation, synthesis and effective transfer of new evidence about the cost-effectiveness of intersectoral action on NCDs in different contexts and on different population groups.
Policy influence	NCDs commonly perceived as diseases of affluence- the social, economic and environmental determinants are rarely exposed or discussed.	NCDP-funded projects in each region have components that directly address some of the broader determinants of NCDs and highlight their relationships with development issues.	NCDP grantees are involved in national, regional and global deliberative forums on health and development.	In response to NCDP-funded research and knowledge translation strategies, LMIC governments and development agencies include NCD prevention as a key priority in order to achieve development goals.
	Absence of NCD policies or policy prescriptions (such as the FCTC) adopted but poorly implemented. Policy debate confused by commercial and economic concerns	Research results contributing to local or regional debate on priority policy adoption and implementation, including on fiscal policies and innovative policy solutions.	Deliberative forums informed by NCDP-generated evidence and involving multiple sectors have contributed to the adoption and implementation of NCD policies in a number of countries.	NCDP-funded projects show a regional influence in informing the uptake and implementation of effective intersectoral NCD policies.

### c. Potential Risks

Carving a niche (external and internal): With growing attention to NCDs in LMICs, there is a risk that IDRC's niche may not be clear or distinctive. However, the current position of the RITC program and the focus of this prospectus are distinct from those of other donor organizations. NCD prevention and control remains severely neglected in LMICs and among development agencies. Those whose attention is being turned to NCDs—in part, as a result of the upcoming UN High-Level Meeting (UN HLM) on NCDs—will take time to determine their niche and entry points for development assistance. While the importance of primary prevention will surely be stressed at the UN HLM, there will also likely be a strong emphasis on access to essential drugs and technologies. This is a critical time to be advancing research on NCD prevention in order to inform decisions and ensure that whole-population strategies and primary prevention are not neglected. The program is sufficiently well connected to others currently engaged in this area and will remain attentive to the direction that follows agenda-setting events such as the UN HLM in order to make strategic decisions about IDRC's niche.

There is also a risk that potential partners will be confused about the relative roles of IDRC Health programs with respect to NCDs. Both GHRI and GEHS are funding/will fund projects related to NCD management and control, while the NCDP program will focus on multi-sectoral “policies for prevention”. There will be clear communication internally and externally about each program's strategy and their differing foci.

Making an impact with a small budget: As the program's portfolio broadens to include issues other than tobacco control, there is a risk that it will develop with projects that do not relate to each other and that program level outcomes will lack depth, especially given the relatively small budget of the program. This prospectus outlines the strategic decisions that have been made on focus and entry points for NCD prevention, as well as on themes that the program will not attempt to cover. It also provides the connections between outcomes and the development of bodies of knowledge as a result of the program inputs. RITC is also an example of a program that has had a significant impact with limited resources and contributed, over a sustained period, to putting tobacco control on the development agenda. Targeted research can continue to do the same in the broader area of NCD prevention. Little of the current funding for tobacco control or NCD prevention is devoted to research and even less to enabling LMICs find their own answers to problems associated with NCDs. There is a great potential for partnerships to be developed to increase our and others' contributions to this issue over the next five years.

Building the field of NCD research: There is currently limited capacity in LMICs for interdisciplinary research on policies for NCD prevention. There is a need to build the field with both new and existing researchers. The NCDP program will explore a variety of modalities for strengthening research capacity in various regions of the world, including those that have been successful for RITC and other programs within IDRC. Mentoring, training, and networking opportunities will continue to be explored and coupled with the drive for high-quality research and policy-relevant results.

IDRC's reputation within the public health community: IDRC remains highly credible to its partners and the wider public health community. The IDRC Board Chairman's former connection to the tobacco industry represented a risk to the meaningful engagement of a number of potential research partners and donors; however, the concern for this issue has abated through active engagement and communication with partners, including the World Health Organization. The strengthening of programming and financial commitment to this program and its tobacco control focus will contribute to allaying residual concerns. Positive communications about good governance and promotion of global learning about implementation of the FCTC should be well received.

### **3. Program Strategy**

#### *Programming choices*

Given the current level of resources available, the program will concentrate on primary prevention through the development of healthy public policies that address the main NCD risk factors and their societal determinants. In terms of risk factors, as mentioned in the background section, the NCDP program will focus on the four major risk factors: tobacco, unhealthy diet, alcohol misuse, and physical inactivity. As mentioned previously, this will mean excluding work on issues such as mental health, injury prevention, cancer by infectious agents and indoor and outdoor air pollutants as risk factors for lung cancer and heart disease on the basis that a different package of interventions/policies is needed. As a result, primary health care interventions, as important as they are, will also not be part of the programmatic priorities unless there is a significant increase in the resources available to the NCDP program. This new program still addresses several of the research priorities identified by international experts during recent preparatory consultations to the UN HLM on non-communicable diseases. (World Health Organization, 2011)

There are a number of important centre-wide cross-cutting issues that will inform programming choices such as global governance and the differential impacts, including the gendered-impacts, of NCD-related policies (building on the recent training workshop for researchers and research supported by RITC). Global governance is of particular importance as the FCTC continues to help frame the interventions in the field of tobacco control and offers potential guidance for action on the other risk factors. The results of much of the policy research work will help inform the FCTC, for example, through the Conference of the Parties (COP) to the FCTC meetings and RITC's involvement in some of the WHO working groups.

Careful attention will be paid to the upcoming UN HLM on NCDs and any potential move to develop new global governance mechanisms for reducing other key risk factors. Should that happen, the NCDP program may support research to inform the development, adoption, and implementation of such mechanisms possibly using a small grants program similar to the one undertaken by RITC in relation to the FCTC. Lessons from that program indicate that such grants need to be targeted to specific policy issues and/or regions in order to generate significant bodies of knowledge and the emergence of sustainable communities of practice.

As the field is a relatively new one, the team is particularly conscious of the need to keep abreast of emerging issues and be ready to respond to new opportunities. Fortunately, the team is well connected with both the tobacco control community and the emerging broader NCD community. In addition, major events like this year's UN High-Level Meeting on NCDs will be closely followed and the program adapted accordingly. Furthermore, NCDP program staff intends to do an annual stock-taking, while IDRC research award recipients will be encouraged to help the team follow the developing trends.

While the bulk of the funds will be earmarked for the key risk factors and the three core themes (fiscal policies; production and supply issues; and, commercial influence and marketing), funds will be set aside for the exploration of or responding to new streams of inquiry.

Important, too, will be the need to be aware of what the Global Alliance for Chronic Disease and other donors are funding to ensure there is no replication and to assess possible synergies and what complementary research might be needed. RITC's experience of helping set up the International Tobacco Control Funders Forum (ITCFF) will be considered and there is a strong possibility that the NCDP program could lead similar efforts to promote cooperation among the broader NCD donor community.

#### *Program implementation*

Although there is a growing community of practice of LMIC tobacco control researchers – in large part due to RITC – there are gaps in crucial areas such as fiscal policies. In the case of the other risk factors, in a number of regions there are no real communities of practice, and researchers are few and often isolated. Building those communities of practice will, therefore, be an important role the NCDP program will need to play. In part, this will likely be done by bringing together researchers (both new to the field and experienced) through workshops and targeted small grant programs focused on specific themes relevant to those regions.

While tobacco use is the primary risk factor for NCDs, there is a pressing need to support policy research on interventions targeting the other three key risk factors. Enhancing the capacity of existing researchers and drawing new researchers into the field of NCD prevention will be an important aspect of the program. In addition to workshops and small grant programs, providing funding for experienced researchers to mentor young researchers in their projects and providing doctoral awards are strategies that will be explored.

Grant-making modalities will vary as much will depend on the risk factor and the region. In most areas in the field of tobacco control, it is reasonable to expect unsolicited proposals. In specific areas where there is less capacity – e.g. around fiscal policies for tobacco control – a call for proposals to a broader audience and/or the holding of workshops to generate interest in the topic will be pursued. Similar strategies will be used to attract researchers to work on the other risk factors. In addition, many of the tobacco control researchers are likely to be interested in taking their skills into a new field as will be some among the extensive network of researchers associated with

IDRC's Health programs. The Canadian Global Tobacco Control Forum (CGTCF) has agreed to help generate partners in the field of fiscal policies, and new partners are already emerging from a RITC-funded workshop on fiscal policies in West Africa. Modalities will then, by necessity, range from commissioned research to calls for proposals to responding to unsolicited proposals. Given the strong policy focus and the difficulty of predicting when policy intervention opportunities will open up, a rapid-response fund mechanism, such as that used successfully by RITC, will also be used for short-term, quick-turnaround, policy intervention research.

### *Program organization*

As mentioned below, in the section on "regional and thematic priorities", the program will be largely represented in all regions in which IDRC operates, with a particular focus on catalytic countries in each region and countries that are under-supported by other donors.

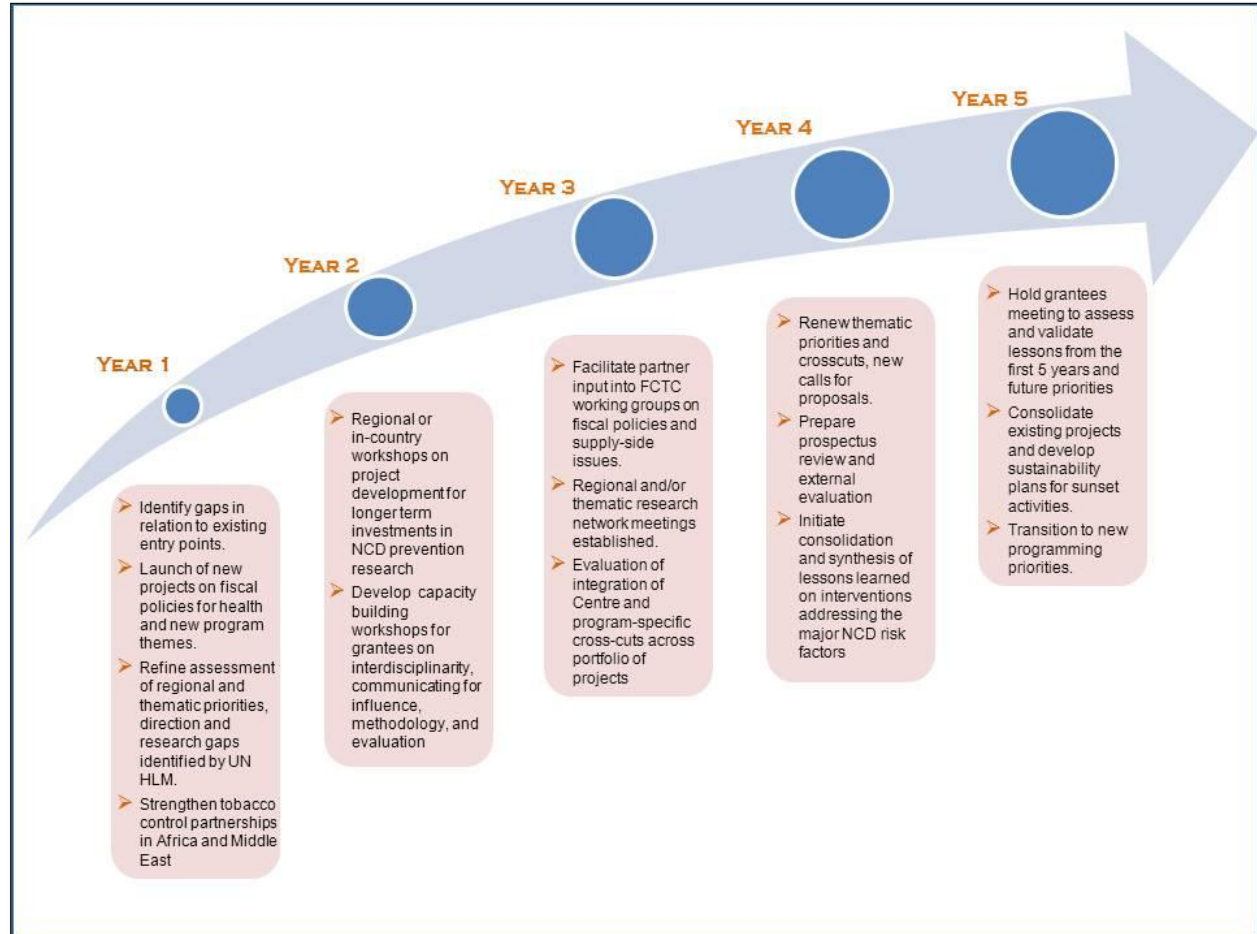
The team has broad expertise in the field of tobacco control and NCD prevention, suitable to the program's focus on intersectoral action for health and policy research in general. Where the team lacks specific expertise, such as in the field of economics, it will draw on external experts and/or other programs to complement and strengthen internal capacity in this area. The division of programming among team members will likely be done according to particular themes, though not exclusively, as opposed to individuals focusing on a particular region.

The team will also actively seek external funding and, if successful, this could lead to increasing the staff complement and possibly expanding its representation beyond Ottawa to one or more of the regional offices. Should that happen, the various foci of the program staff may be reassigned and the occasion used to add to the skill set of the team (what additional skills the team might require will become more apparent after the first year of the program).

### *Initial program development*

As a number of RITC initiatives have recently come to a close and as the new program refocuses, there will be a deliberate effort to accelerate new projects and partnership development. Projects that will contribute to the shape of the future program in the first year are outlined in the annexes. The program team will also be engaged with key informants and in international meetings that will inform strategic decisions in response to emerging issues, consideration for the developing foci of other donors and the results of the UN HLM on NCDs in September 2011. Where needed, situation analysis will be done across regions and countries about the policy priorities, research gaps, and entry points for IDRC.

Figure 1. Overview of NCDP Program implementation



#### 4. Regional and Thematic Priorities

The NCD crisis is a global threat, with countries and regions at various stages of the epidemic and with vastly variable research and policy capacities. The determination of geographical focus for this program will not depend on the burden of disease or the prevalence of risk factors (which, in most LMICs are increasing), but by the potential for learning and opportunities to advance innovative prevention efforts. Other initiatives funded by development agencies and philanthropists have focused on “high burden” countries, or those with the largest populations of smokers. Experience with tobacco control has shown how sometimes smaller countries can lead global learning and policy development, setting precedents and catalyzing waves of action.

Our programming foci will differ by region; however we will be cognizant that for the benefit of global learning and networking, countries from different regions can sometimes be more similar than with their regional neighbours. Lessons from past programming demonstrated the value of linking partners from countries around the world.

RITC has worked with research partners in every region and the NCDP program intends to continue to do so. While there are some dramatic differences within regions with respect to the burden of NCDs, research capacity, policy progress and opportunities for partnership, there are some generalizations that can be made to help guide programming.

It is difficult to generalize about differences in the epidemiology between regions due to large differences within regions. In Latin America, the Caribbean and the Middle East, the burden of NCDs is growing rapidly, with obesity and tobacco use having been high for some time. South Asia is in the midst of a heavy double burden of both communicable and non-communicable diseases with the latter increasing dramatically. Tobacco consumption has been very high in South and East Asia, but obesity is now increasing at a fast pace while there is also a recognition that alcohol misuse represents an important public health problem. In contrast, many Sub-Saharan African low-income countries are at the early stages of the epidemic but with clear signs of increasing tobacco consumption and obesity. This represents an opportunity for early prevention efforts to minimize the impact of the double burden of communicable and non-communicable disease on fragile health systems.

In terms of progress with policies and prevention efforts, countries vary dramatically across the world and there are few generalisations that can be made about regions. In each region, there are policy leaders; such as in Thailand and Singapore in South East Asia, Uruguay in Latin America and the Caribbean (LAC), and South Africa and Mauritius in Africa. In the Middle East, Lebanon is a potential catalytic country with respect to research capacity and knowledge translation. While these countries often serve as examples to their neighbours, context-specific research remains important.

In Sub-Saharan Africa, RITC has developed significant partnerships and supported the development of the tobacco control community that is leading to new and valuable opportunities for research. In particular, a new initiative is developing to advance intersectoral fiscal policies for tobacco control in West Africa that could generate lessons learned for the development of similar policies addressing other risk factors. The NCDP program will also be pursuing opportunities for research on this theme in all regions.

In LAC, RITC has worked with a number of partners throughout the region, especially with the Centro de Investigación para la Epidemia del Tabaquismo (CIET) in Uruguay, on a number of projects that have advanced tobacco control policy. RITC also supported influential research that led to tobacco tax increases in Jamaica. More recent expressions of political commitment to NCD prevention policies in the Caribbean suggest there is potential for further work there. Recently the Inter-American Development Bank (IDB) has begun some work on NCD surveillance and expressed a growing interest in policy research as well as support for primary health care interventions. The NCDP program will explore opportunities for cooperation that could advance policy, especially in neglected countries of the region.

## 5. Concluding Comments

This program is providing a timely IDRC response to a major development problem that requires research to inform policy adoption and implementation. The next five years will be an exciting period of change as global recognition of non-communicable diseases increases and countries intensify their prevention efforts to address the epidemic. The opportunities are great for IDRC to influence development efforts by generating the knowledge necessary to guide policy interventions. Much is known, but much more needs to be learned at country and community level about the policies that work and how to implement them. Taking lessons from decades of tobacco control research and 16 years of tobacco control programming at IDRC, the Non-communicable Disease Prevention program will build on RITC's reputation and global connections to explore new emerging issues and opportunities and will play a catalytic role in advancing sustainable policy solutions for non-communicable disease prevention.



## 6. References

- Abegunde, D. O., Mathers, C. D., Adam, T., Ortegon, M., & Strong, K. (2007). The burden and costs of chronic diseases in low-income and middle-income countries. *Lancet*, 370(9603), 1929-1938.
- Alwan, A., Maclean, D. R., Riley, L. M., d'Espaignet, E. T., Mathers, C. D., Stevens, G. A., et al. (2010). Monitoring and surveillance of chronic non-communicable diseases: progress and capacity in high-burden countries. *Lancet*, 376(9755), 1861-1868.
- Asaria, P., Chisholm, D., Mathers, C., Ezzati, M., & Beaglehole, R. (2007). Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use. *Lancet*, 370(9604), 2044-2053.
- Beaglehole, R., Bonita, R., Horton, R., Adams, C., Alleyne, G., Asaria, P., et al. (2011). Priority actions for the non-communicable disease crisis. *Lancet*.
- Brownell, K. D., & Warner, K. E. (2009). The perils of ignoring history: Big Tobacco played dirty and millions died. How similar is Big Food? *Milbank Q*, 87(1), 259-294.
- Capewell, S., & Graham, H. (2010). Will cardiovascular disease prevention widen health inequalities? *PLoS Med*, 7(8), e1000320.
- Cecchini, M., Sassi, F., Lauer, J. A., Lee, Y. Y., Guajardo-Barron, V., & Chisholm, D. (2010). Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness *Lancet* (Vol. 376, pp. 1775-1784). England: 2010 Elsevier Ltd.
- Cobiac, L. J., Vos, T., & Veerman, J. L. (2010). Cost-effectiveness of interventions to reduce dietary salt intake. *Heart*, 96(23), 1920-1925.
- de-Graft Aikins, A., Unwin, N., Agyemang, C., Allotey, P., Campbell, C., & Arhinful, D. (2010). Tackling Africa's chronic disease burden: from the local to the global. *Global Health*, 6, 5.
- Geneau, R., Stuckler, D., Stachenko, S., Shah, E., Chockalingham, A., McKee, M., et al. (2010). Raising the priority of preventing chronic diseases: a political process. *The Lancet*, *In Press*.
- Institute of Medicine. (2010). *Promoting Cardiovascular Health in the Developing World: A Critical Challenge to Achieve Global Health*. Washington: Institute of Medicine.
- Jha, P., & Chen, Z. (2007). Poverty and chronic diseases in Asia: challenges and opportunities. *CMAJ*, 177(9), 1059-1062.
- Jowitt, J. (2010, Wednesday, September 22). Corporate lobbying is blocking food reforms, senior UN official warns. *The Guardian*.
- Kin, F. (2009). *Smoking among girls and young women in asean countries: a regional summary*. Phnom Penh: Southeast Asia Tobacco Control Alliance.

Lloyd-Williams, F., O'Flaherty, M., Mwatsama, M., Birt, C., Ireland, R., & Capewell, S. (2008). Estimating the cardiovascular mortality burden attributable to the European Common Agricultural Policy on dietary saturated fats. *Bull World Health Organ*, 86(7), 535-541A.

Mahal, A., Karan, A., & Engelgau, M. (2010). *The economic implications of noncommunicable diseases in India*. Washington: The World Bank.

Mathers, C. D., & Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*, 3(11), e442.

Nugent, R. (2008). Chronic diseases in developing countries: health and economic burdens. *Ann N Y Acad Sci*, 1136, 70-79.

Nugent, R., & Feigl, A. (2010). *Where have all the donors gone? Scarce donor funding for non-communicable diseases*. Washington: Centre for Global Development.

Ravishankar, N., Gubbins, P., Cooley, R. J., Leach-Kemon, K., Michaud, C. M., Jamison, D. T., et al. (2009). Financing of global health: tracking development assistance for health from 1990 to 2007. *Lancet*, 373(9681), 2113-2124.

Stuckler, D. (2008). Population causes and consequences of leading chronic diseases: A comparative analysis of prevailing explanations. *Milbank Quarterly*, 86(2), 273-326.

Stuckler, D., Basu, S., & McKee, M. (2010). Drivers of inequality in Millennium Development Goal progress: A statistical analysis. *PLOS Medicine*, 7(3), e1000241. doi:1000210.1001371/journal.pmed.1000241.

The Oxford Alliance. (2006). *Chronic disease: an economic perspective*. London: The Oxford Alliance.

The World Bank. (2007). *Public policy and the challenge of chronic noncommunicable diseases*. Washington: The World Bank.

United Nations. (2010). UN Agency lauds Assembly resolution on non-communicable diseases. Retrieved July 3 2010, 2010, from <http://www.un.org/apps/news/story.asp?NewsID=34698&Cr=who&Cr1=disease>

United Nations Economic and Social Council. (2009). *Ministerial Declaration- 2009 High-Level Segment: Implementing the international agreed goals and commitments in regard to global public health*.

World Economic Forum. (2009). *Global Risks 2009: A Global Risk Network Report*. Geneva: World Economic Forum.

World Health Organization. (2005). *Preventing Chronic Diseases: A Vital Investment*. Geneva: World Health Organization.

World Health Organization. (2008a). *Prevention and control of noncommunicable diseases: implementation of the global strategy*. Geneva: World Health Organization.

World Health Organization. (2008b). *The Global Burden of Disease- 2004 update*. Geneva: World Health Organization.

World Health Organization. (2010). *Equity, social determinants and public health programmes*. Geneva: World Health Organization.

World Health Organization. (2011). *A Prioritized Agenda for Prevention and Control of Noncommunicable Diseases*. Geneva: World Health Organization.

Ziraba, A. K., Fotso, J. C., & Ochako, R. (2009). Overweight and obesity in urban Africa: A problem of the rich or the poor? *BMC Public Health*, 9, 465.

## ANNEXES

### ANNEX 1: Key Projects Already Shaping Future Programming

#### 1. Expanding fiscal policies for global and national tobacco control

In the struggle to control the growing tobacco epidemic, fiscal policy (the use of government spending and revenue generation powers) is a powerful tool available to governments to influence individual behaviours and community outcomes. Such policies include implementing appropriate tobacco taxes, establishing effective tobacco control budgets and tapping into the tobacco economy to raise funds for public health. Yet there are knowledge gaps and structural barriers which hinder the development of effective fiscal policies to reduce tobacco use, particularly in low and middle income countries (LMICs). Few countries have set tobacco tax rates with health outcomes in mind. Fewer still have made optimal investments in tobacco control or explored additional fiscal measures to influence tobacco supply or demand. In the vast majority of countries, there is a general lack of integration of fiscal and health policies.

This project will be jointly managed by the Global Tobacco Control Forum (a coalition of eight Canadian tobacco control NGOs) and IDRC. The overall objective of this project is to accelerate the adoption of effective fiscal policies for public health by generating knowledge needed by policy makers in LMICs for tobacco control. The first phase of this project will focus on identifying the research needs through networking with researchers and supporting short-term targeted research.

Specifically, the project will:

- 1) Identify key potential researchers in LMICs working in tobacco control and/or on innovative financing mechanisms.
- 2) Support short-term targeted research.
- 3) Enhance capacity in LMICs to work in this area.
- 4) Identify key research areas for additional research to be supported in a possible second phase.

#### **Project objective and impact on future programming**

The overall objective of this project is to accelerate the adoption of effective fiscal policies for public health by generating knowledge needed by fiscal policy makers in LMICs for tobacco control and in the FCTC process. The first phase of this project will focus on identifying the research needs through networking with researchers and supporting short-term targeted research. Fiscal policies for health is one of the three key entry points for the program and while this will address an important gap in tobacco control, the lessons learned will likely be of relevance for dealing with some of the other risk factors.

#### **Recipient Institution:**

(Various, to be identified through a call for proposals)

## 2. Consolidation of research on alternative livelihoods to tobacco farming

In an attempt to block policies aimed at reducing the demand for tobacco products, tobacco companies claim that the implementation of such policies will have a negative impact on employment and the economy – particularly in tobacco farming countries. Being able to demonstrate that these claims are not only false, but also that viable sustainable alternatives exist for farmers, is, therefore, crucial.

It is not, however, solely from a tobacco control point of view that alternatives need to be found. It is also essential from a development perspective. Tobacco is farmed in more than 120 countries and the negative environmental, health; social and economic impacts associated with it are legion.

IDRC has supported work in a number of different countries addressing these issues including in Argentina, Bangladesh, Brazil, India, Kenya, Malawi, Lebanon and Vietnam. The aim of this project is to consolidate and disseminate the lessons learned from these and other similar projects as well as identify further areas for research.

Specifically, the project will:

- 1) Summarize knowledge to date on:
  - Health, environmental and social impacts of tobacco farming
  - Economic conditions of tobacco farmers
  - Tobacco industry strategies
  - Crop diversification successes and obstacles
- 2) Identify knowledge gaps
- 3) Develop a strategy to address the gaps
- 4) Assess other key production issues that need to be addressed
- 5) Plan a dissemination strategy of knowledge to date
- 6) Initiate the first stages of the dissemination plan

### **Project objective and impact on future programming**

The overall objective is address the claims by tobacco companies that tobacco control policies will negatively affect the economy and employment - particularly among smallholder tobacco farmers - through consolidating the research to date on the impacts of tobacco farming and assessing key gaps for future research. This fits in well with the key entry point “Production and Supply Issues” and will likely generate research priorities relevant to future programming.

### **Recipient Institution:**

This is an IDRC run workshop with approximately 30 participants, largely LMIC researchers.

### **3. Workshop on the taxation of tobacco products in West Africa**

This workshop will support the development of a research proposal on the taxation of tobacco products in West Africa. It will be the first step of a program of research in the region that will tackle in depth and in a wide range of countries one of the principal causes of death throughout the world, including in Africa. The research proposal will be developed and key partners will be selected during this workshop to assess, for the first time, the impact of fiscal measures on the consumption of tobacco products and on the prevalence of tobacco use. The research will contribute to a better understanding of the economic impact of these measures as well as their impact on poverty. The research will provide solid data on the tobacco epidemic and information on effective interventions for local and national authorities as well as for civil society.

#### **Project objective and impact on future programming**

The overall objective is to organize a workshop in order to develop a multidisciplinary research project focused on helping promote taxation policies as a weapon in the fight against the tobacco use in West Africa. As in the first project above, fiscal policies for health are one of the three key entry points for the program which this addresses. It focuses on a region that has been neglected in terms of tobacco control and will draw economists from across the region into the field of fiscal policies for health.

#### **Recipient Institution:**

Consortium pour la Recherche Économique et Sociale (CRES)  
Dakar, Sénégal

**ANNEX 2: List of Year 1 and Continuing Projects**

<b>New Projects or Ideas under Development</b>				
<b>Outcome Area</b>	<b>Project Title</b>	<b>Duration (months)</b>	<b>Total Funding (CAD)</b>	<b>Country / region</b>
Capacity to conduct and use research	Health costs of tobacco-related diseases: Cambodia	tbd	115,000	Cambodia
	Support for UICC World Cancer Conference 2012	tbd	50,000	Global
	Support for tobacco control research, dissemination and networking in Lebanon and the Middle East (Phase II)	tbd	300,000	Middle East
	Support for the 2012 World Conference on Tobacco or Health	tbd	200,000	Global
Knowledge generation	Alternative Crops to Tobacco in India	tbd	160,000	India
	Open call for proposals on non-communicable disease prevention	tbd	1,000,000	Global
	School-based intervention in Palestine to prevent NCDs	tbd	100,000	Palestine
	Expanding fiscal policies for global and national tobacco control (Phase II)	tbd	1,000,000	Global
Policy influence	Addressing Research Gaps in Alternative Livelihoods	tbd	300,000	Global
	Taking research and practice funds from for-profit corporations: Assessing the attitudes and practices of public health professionals	tbd	30,000	Lebanon/USA
	Fiscal Policies for Tobacco Control: West Africa	tbd	200,000	West Africa

<b>Continuing Projects</b>				
<b>Project Title</b>	<b>Duration (months)</b>	<b>Total Funding (CAD)</b>	<b>Country / region</b>	<b>Planned completion (dd/mm/yy)</b>
Consolidation of research on alternative livelihoods to tobacco farming	18	347,250	Global	22/05/12
Regional Tobacco Control Research Initiative (Latin America) (2 components)	42	340,000	Latin America	10/12/11
Evaluation of an integrated intervention to stop tobacco use among patients suspected of tuberculosis (Pakistan) (2 components)	42	426,700	Pakistan	17/06/12
Chronic Disease Control Fellowship Program	36	207,900	Guatemala	29/01/12
Rapid Response Fund (5 components)	36	150,000	Global	24/09/12
Bamboo production as an alternative crop for smallholder tobacco farmers	36	398,400	Kenya	18/12/12
Support for tobacco control research, dissemination and networking in Lebanon	24	207,600	Lebanon and the Middle East	01/02/12
Expanding fiscal policies for global and national tobacco control	24	398,650	Global	16/02/13



NCDP OUTCOME 1a		CAPACITY TO CONDUCT HIGH-QUALITY RESEARCH (CB1)	
Baseline	Minimum	Moderate	High
Few researchers active in the field and very isolated.	Researchers, new to the field, attracted.	Multi-disciplinary research collaborations established within individual countries and institutions.	Multinational, multi-disciplinary research collaboration exists and partners are considered to be leaders in the field.
	<b>Indicators</b>		
	<b>CB1a.</b> Established researchers brought into NCD field	<b>CB1d.</b> Project with multi-disciplinary or inter-institutional research collaborations	<b>CB1g.</b> Multinational collaborative projects
	<b>CB1b.</b> Graduate students and new researchers involved in projects	<b>CB1e.</b> New programs focused on NCDs established	
	<b>CB1c.</b> New peer-to-peer or mentorship networks established	<b>CB1f.</b> Grantees are able to leverage additional funding	

NCDP OUTCOME 1b		CAPACITY TO ENGAGE WITH POLICY MAKERS (CB2)	
Baseline	Minimum	Moderate	High
Researcher engagement with policy makers is limited.	Projects show evidence of researchers reaching out to policy makers.	Country-focused NCDP-funded research shows growing involvement by the researchers of policy makers in project development.	NCDP-funded projects successfully involve and influence policy makers and the researchers are increasingly sought out by policy makers.
	<b>Indicators</b>		
	<b>CB2a.</b> Projects attempting to disseminate results to policy makers	<b>CB2d.</b> Project involves policy makers in the development	<b>CB2e.</b> Researchers sought out by policy makers for advice
	<b>CB2b.</b> # of policy briefs produced by projects		
	<b>CB2c.</b> Relationships built with other stakeholders, e.g. advocates, civil society, industry		

NCDP OUTCOME 2		KNOWLEDGE GENERATION (KG)	
Baseline	Minimum	Moderate	High
<p>Limited or no local evidence on the effectiveness of NCD prevention interventions. In particular, evidence does not address equity and economic concerns.</p>	<p>Research across the breadth of program themes and cross-cutting issues is completed and results are accessible at the local level to relevant stakeholders.</p>	<p>New evidence on one or more NCD prevention interventions addressing NCDP cross-cutting issues is available for comparison, consolidation and use across several countries.</p>	<p>New evidence on a broad range of NCD prevention interventions in various contexts and on different population groups is consolidated, synthesized, peer reviewed and cited internationally.</p>
	<b>Indicators</b>		
	<p><b>KGa.</b> Completed research projects on NCP themes and cross-cutting issues available at local / country level</p>	<p><b>KGe.</b> Knowledge outputs that cover NCDP themes and cross-cutting issues useable for cross-country comparison (availability &amp; suitability)</p>	<p><b>KGj.</b> NCDP themes and cross-cuts covered in internationally recognized knowledge outputs as a result of the project</p>
	<p><b>KGb.</b> # of knowledge products available at local level</p>	<p><b>KGf.</b> # of presentations at international meetings and conferences</p>	<p><b>KGk.</b> International meetings at which NCDP-funded research outputs are a source of evidence for discussion, strategy development, and policy proposals</p>
	<p><b>KGc.</b> # of peer-reviewed publications</p>	<p><b>KGg.</b> # of peer-reviewed publications including multi-country studies</p>	<p><b>KGi.</b> # of publications sourcing multiple NCDP-funded projects</p>
	<p><b>KGd.</b> Evidence of local use of project outputs by health or non-health actors</p>	<p><b>KGh.</b> Reports and publications using multiple NCDP-funded research projects for cross-country comparison or consolidation of policy evidence</p>	<p><b>KGm.</b> # of references / citations of NCDP-funded research by international agencies</p>
		<p><b>KGi.</b> # of presentations at international meetings involving comparisons of evidence on common policy issues</p>	

NCDP OUTCOME 3		POLICY INFLUENCE (PI)	
Baseline	Minimum	Moderate	High
NCD prevention policies are absent or are adopted but poorly implemented. Policy debates are confused by commercial and economic concerns.	NCDP-funded projects contribute to raising the political profile of NCDs and NCD prevention policies among stakeholders across government and society (attitudinal change)	NCDP projects contribute to bringing discursive commitments from actors from different sectors of government and society for NCD prevention policy uptake and implementation (behavioural and procedural change, and discursive commitments)	NCDP projects contribute to policy and legislative change for successful NCD prevention policies at the national, regional, or global levels (change in policy content and regimes)
	<b>Indicators</b>		
	<b>PIa.</b> Examples of policy-makers, advocates and media representatives mentioning or discussing in the public domain evidence from NCDP projects	<b>PId.</b> Examples of NCDP projects and grantees informing policy processes and dialogues in the area of NCD prevention through evidence and advice, or contributing to secure discursive commitments from key actors for NCD policy uptake and implementation	<b>PIg.</b> Examples of NCDP projects affecting policy content and regimes for NCD prevention policies (uptake and implementation) at the national and regional levels
	<b>PIb.</b> # of media citations involving NCDP grantees or citing evidence from NCDP projects	<b>PIe.</b> # of strategic and policy documents from governments and organizations from other sectors of society that mention evidence generated by NCDP projects	<b>PIh.</b> # of legislations, bills or policies that can be credibly linked to NCDP evidence and processes
	<b>PIc.</b> # of official speeches / conference reports mentioning NCDP projects or grantees	<b>PIf.</b> # of official speeches / conference reports mentioning NCDP projects or grantees that contain discursive commitments	

## Program Timeline - Non-Communicable Disease Prevention

Key Program Actions	Program Events
<b>2011</b>	
<ul style="list-style-type: none"> <li>▪ Prospectus approved by the Board in June 2011</li> <li>▪ Launched Competitive Call on Fiscal Policies for Tobacco Control (July 2011)</li> <li>▪ Launched Competitive Call on Healthy Diets Promotion (July 2012)</li> <li>▪ Commissioned baseline research on NCDs in LMICs (RAR 2011-2012)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Workshop on Alternative Livelihoods to Tobacco Production (June 2011)</li> <li>▪ NCDP staff participated in the United Nations' High-Level Meeting on Non-Communicable Diseases (New York, September 2011)</li> <li>▪ Meeting of internal and external review panel for call on fiscal policies (October 2011)</li> <li>▪ Held workshop in Kenya on research needs for NCD prevention (November 2011)</li> </ul>
<b>2012</b>	
<ul style="list-style-type: none"> <li>▪ Initiated negotiations with DFID on Tobacco-Control Partnership Initiative (Feb 2012)</li> <li>▪ Launched Competitive Call on Alcohol Control (May 2012)</li> </ul>	<ul style="list-style-type: none"> <li>▪ NCDP staff held a symposium at the World Congress of Public Health Conference in Addis Ababa (March 2012)</li> <li>▪ NCDP staff participated in a regional meeting on tobacco taxation, attended by CRES and ECOWAS (December 2012)</li> <li>▪ 4-days Annual Planning Meeting (April 2012)</li> </ul>
<b>2013</b>	
<ul style="list-style-type: none"> <li>▪ Continued partnership negotiations with DFID</li> <li>▪ Actively support the development of projects and visit projects for monitoring</li> </ul>	<ul style="list-style-type: none"> <li>▪ 4-days Annual Planning Meeting (April 2013)</li> <li>▪ Consultation workshop on Active Transport Research in LMICs (Washington, June 2013)</li> <li>▪ Program Leader participated in Belagio meeting "Program and Policy Options for Preventing Obesity in Low, Middle, and Transitional Income Countries" (June 2013)</li> <li>▪ NCDP staff attended the Global Alcohol Policy Conference in Seoul and meetings were held with research teams involved in the IDRC International Alcohol Control Study (October 2013)</li> </ul>
<b>2014</b>	
<ul style="list-style-type: none"> <li>▪ Merging of NCDP and Ecohealth Program teams</li> <li>▪ NCDP initiated External Review process</li> <li>▪ NCDP and Ecohealth developed new joint strategy for 2015-2020</li> <li>▪ Published edited volume on tobacco farming (September 2014)</li> <li>▪ Departure of NCDP Program Officers <ul style="list-style-type: none"> <li>○ Wardie Leppan (June 2014)</li> <li>○ Robert Geneau (October 2014)</li> </ul> </li> <li>▪ Start of new Program Officer <ul style="list-style-type: none"> <li>○ Jean-Claude Moubarac (September 2014)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ NCDP participated in workshops on the development of a new regional tobacco tax directive organized by CRES and ECOWAS (Ivory Coast, February 2014)</li> <li>▪ 4-days Annual Planning Meeting (NCDP-Ecohealth, September 2014)</li> </ul>
<b>2015 (foreseen)</b>	
<ul style="list-style-type: none"> <li>▪ Launch Competitive Call on Food System Solutions (March 2015)</li> <li>▪ Undergo External Review (NCDP)</li> <li>▪ Continue partnership exploration with DFID and BMGF (for tobacco control) and other partners on other themes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Edited volume launch and symposium on Tobacco Farming at WCTOH 2015 (Abu Dhabi, March 2015)</li> </ul>