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# A Common Monitoring & Evaluation Framework Guided by the Collective Impact Model: Recommendations to Enhance the Tobacco Control Effort in Sub-Saharan Africa

Meenu Anand

## Abstract

**Background**: Tobacco use is one of the most ubiquitous causes of death and disability worldwide. In sub-Saharan Africa, despite the rising trend the use of tobacco in generally low among adults - less than 10% in men and around 2% in women. As a result the region is viewed as being in the early stages of the four stage tobacco epidemic model. Projections suggest that the tobacco epidemic, if unchecked, can peak in Sub-Saharan Africa in the middle of this century. This offers the public health community an extraordinary opportunity – not only is the epidemic predicted so far in the future, there is knowledge on how to prevent it. The purpose of this study is to (a) research and assess case studies and theoretical frameworks used to guide global collaborative efforts in public health and development; (b) develop, administer, and summarize feedback collected from key stakeholders representing organizations critical in SSA tobacco control efforts; (c) analyze findings and identify gaps in the collective action; recommend opportunities to improve the systematic operations/capacity of all collaborating partners within SSA so that progress and collective impacts are maximized in the future.

**Methods**: Secondary data was first sorted using a comparative, thematic approach to detect themes related to M&E practices at individual (organizational) level and at the group (collective) level. The sorted data was then analyzed using hypothesized content analysis for alignment of individual and group perceptions across the five components necessary for a collaborative effort to achieve a collective impact - shared agenda, shared measurements, mutually reinforcing activities, on-going communications, and support organization.

**Results**: Current practices of M&E are perceived as sub-optimal both at individual and group levels. Even though the secondary data was focused primarily on *shared measurements*, the mapping of individual and group level perceptions against the five components of collective impact indicates that attributes of the other four components were organically included in the discussion in varied depths. Analysis of perception indicates general willingness to adopt a common monitoring and evaluation framework.

**Conclusions**: A common M&E framework remains a missing component of the collaborative effort striving to prevent the tobacco epidemic in sub-Saharan Africa. It is needed to learn from past successes and challenges and to inform strategy of current and future initiatives so that collaborating organizations are better able seize the unprecedented opportunity of preventing death and suffering from tobacco related illnesses in sub-Saharan Africa. It is important that such an M&E framework be thoughtfully conceptualized within the context of a common agenda, and supported by processes that facilitate mutually reinforcing activities and continuous communication among collaborators.

# A Common Monitoring & Evaluation Framework Guided by the Collective Impact Model: Recommendations to Enhance the Tobacco Control Effort in Sub-Saharan Africa

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A Common Monitoring & Evaluation Framework Guided by the Collective Impact Model:

Recommendations to Enhance the Tobacco Control Effort in Sub-Saharan Africa

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## Curriculum Vitae

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Meenu Anand is a senior management professional with an extensive experience in public health, business management and information systems. As a global health practitioner with the American Cancer Society, Meenu has successfully worked with all levels of executive management to develop and execute strategic initiatives. Her portfolio included leading globalization pilots for cancer information & workplace health promotion programs in India and implementation of a monitoring and evaluation framework for a multi-year, multi-country tobacco control program in Africa. She has negotiated on the behalf of the Society with donors, key stakeholders including the ministry of health, and has represented the Society at key conferences in India and the US.

### Professional Experience

| **The American Cancer Society** | **Atlanta, GA** |
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| *Director, Strategic Initiatives, Global Health* | *Jun '08 – Mar '13* |
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| *Director, CRM Projects* | *Feb '04 – May '06* |
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### Publications & Presentations

June 2011, "Cervical Cancer in India: partnering with primary care physicians in a community-based demonstration project to address a public health problem". 2011 International Conference of Global Health, Washington, DC

April 2010, "Role of Primary Prevention in Cancer Control in India". Regional Workshops on Education and Training Requirements for National Cancer Control Programmes, IAEA, Mumbai, India

Jan 2009, "Employee Health is a Company's Wealth". Johanna Ralston and Meenu Anand, American Cancer Society, EnCoRE, The Energy and Resources Institute (TERI), India

### Education

Masters in Public Health – 2013
Master of Science in Information Systems – 1994
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## Table of Contents

## List of Tables

## List of Figures

## Chapter I - Introduction

Tobacco use, the most preventable cause of death, is one of the most ubiquitous causes of death and disability worldwide. In 2011, almost 6 million people died of diseases attributed to tobacco use, of which 80% lived in the developing countries (Eriksen, Mackay, & Ross, 2012). Unfortunately, with the exception of few developed countries, the use of tobacco is rising globally. Projections indicate that if unchecked, by 2030, tobacco use will kill more than 8 million people annually and 1 billion people by the turn this century. A significant proportion of this burden will be borne by the developing world, including sub-Saharan Africa.

Over the last two decades, the countries in sub-Saharan Africa (SSA) have made significant strides in reducing mortality and prolonging life. Deaths from infectious diseases such as measles have substantially declined since 1990 and from malaria and HIV/AIDS peaked between 2000 and 2005 in most SSA countries. The burden of diseases between 1990 and 2010 is trending gradually towards those related to tobacco use and unhealthy lifestyles, particularly among upper-middle-income countries in the region. Smoking was one of the three top contributors to loss of health in many countries in sub-Saharan Africa; alcohol and high blood pressure being the other two (Institute for Health Metrics and Evaluation University of Washington, Human Development Network, & The World Bank, 2013).

Smoking data in the region is showing critical warning signs. While the prevalence among adult males remains generally low, smoking prevalence among boys in the WHO AFRO region is 9%, which is higher than in other developing regions comprised of countries in Southeast Asia and the Western Pacific. Smoking prevalence among girls in the region is higher than it is among women (Blecher & Ross, 2013).

**An opportunity in Sub-Saharan Africa**

Despite the rising trends, with the exception of a few countries, the use of tobacco in sub-Saharan Africa is generally low in adults - less than 10% in men and around 2% in women. As a result the region is viewed as being in the early stages of the four stage tobacco epidemic model (Eriksen et al., 2012).

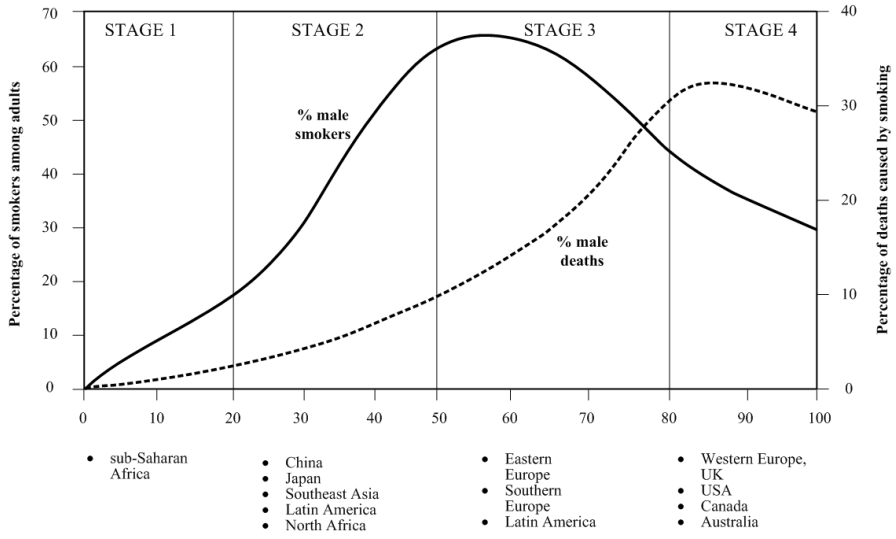


Figure 1. Four stages of tobacco epidemic; adapted from Lopez et al. (1994)

Projections indicate that these statistics will not remain low for too long. The tobacco industry is actively engaged in the region. Given that 40% of population in most countries in the region is below 15 years of age, the tobacco industry views the region as one of its last big global markets. Furthermore, increases in disposable income and adoption of western lifestyles driven by images in advertisements and movies portraying smoking as stylish activities are expected to increase prevalence of cigarette smoking (Glynn, Seffrin, Brawley, Grey, & Ross, 2010). If unchecked, the projected increase in smoking prevalence will increase the number of smokers from 77 million today to 572 million by 2100. The region's smoking prevalence will surpass

Americas in 2030 and Europe by 2050. By 2060, Africa could have second most smokers, behind only Asia (Blecher & Ross, 2013).

The global health community has rightly recognized this situation as an opportunity and a moral imperative to intervene and curb the looming tobacco epidemic while it is still in its early stages. Most countries in sub-Saharan Africa have signed the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC). The governments of these countries have a legal obligation to implement and manage tobacco control according the FCTC guidelines. The WHO has, in addition, introduced the MPOWER package to help countries effectively scale up the implement of interventions included in the FCTC to reduce the demand for tobacco. This package comprises six comprehensive evidence-based tobacco control measures: (m)onitor tobacco use and prevention policies, (p)rotect people from tobacco smoke, (o)ffer help to quit tobacco use, (w)arn about dangers for tobacco, (e)nforce bans on tobacco advertising, promotion, and sponsorship, and (r)aise taxes on tobacco. These policies, if implemented, can reverse the tobacco epidemic.

In the last decade prominent global funders such as the Bloomberg Foundation and the Bill and Melinda Gates Foundation have prioritized tobacco control on their global health agenda. The influx of money has resulted in increased activities in the region by local and international agencies. A larger network of researchers, advocates, and to some extent, policymakers in the region are now advocating for FCTC compliant tobacco control policies and programs. Positive strides, such as the enactment of tobacco control law in Kenya and Gabon, and successful implementation of increased taxes on cigarettes in Togo, are testament to a growing support for advancing tobacco control efforts in SSA.

**Problem definition**

The dynamics of tobacco use management, as depicted in Figure 2, involves two key opposing forces – the tobacco industry and the tobacco control community, applying levers at the system level – the government, and at the individual level – the public.

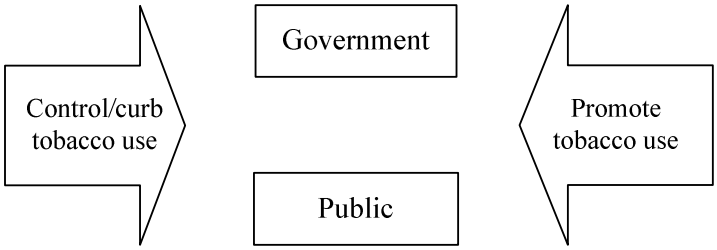


Figure 2. The opposing forces of tobacco use management; adapted from Borland et al. (2010)

The tobacco industry is in the business of promoting tobacco use. It is strong, financially and politically, and is driven by the fundamental objective to maximize shareholder value – a measure that is assessed on a quarterly basis. It is rational to expect that establishing its product in one of its last untapped market in the world would hold utmost strategic importance for long-term wellbeing of the companies. With defined strategies to fulfill their targets for new customer acquisition and customer retention, the industry effectively adapts and refines its strategies as well as counters those that try to reduce tobacco use (Yach & Bettcher, 2000).

In the public, normalization of tobacco use and addictiveness of tobacco drives tobacco use higher (Borland, Young, Coghill, & Zhang, 2010). Low literacy levels in the SSA region makes the public extremely vulnerable to tobacco industry's subtle and sophisticated marketing tactics intended to lure new customers (Patel, Okechukwu, Collin, & Hughes, 2009).

Local governments in sub-Saharan Africa, with the exception of a few countries, are weak and burdened by many competing social and health priorities ranging from economic

development, poverty eradication, lack of education, burden of infectious disease, and a weak healthcare system. Resources needed to control rising tobacco use must compete with these other pressing priorities (Bitton, Green, & Colbert, 2011).

Thus, the profit-driven tobacco industry and overburdened African governments in simple terms explain the problem of rising tobacco use in SSA. The opportunity for preventing a tobacco epidemic in SSA has a limited window. Projections suggest that the tobacco epidemic can peak in Sub-Saharan Africa in the middle of this century. Saloojee emphasizes how extraordinary it is for an epidemic to be predicted so far in the future and to have the knowledge to prevent it (Corrao, Guindon, Sharma, & Shakoohi, 2000)(WHO, 2003). The tobacco control community must work with and through governments to seize this opportunity by keeping tobacco initiation low in the short term while working to establish system controls for sustained low levels of tobacco use in the long-term. The limited resources available for tobacco control necessitates that the community be strategic, nimble, and that it maximizes its return on interventions to counter the powerful tobacco industry. A well-defined framework of objectives, outcomes and indicators, and value-added monitoring not only facilitates efficiency and performance it also provides a systematic way to assess progress and make timely changes. Such a framework remains a missing component in the tobacco control initiative in SSA.

**Purpose of the study**

The purpose of this study is to (a) research and assess case studies and theoretical frameworks used to guide global collaborative efforts in public health and development; (b) develop, administer, and summarize feedback collected from key stakeholders representing organizations critical in SSA tobacco control efforts; (c) analyze findings and identify gaps in the collective action; recommend opportunities to improve the systematic operations/capacity of all

collaborating partners within SSA so that progress and collective impacts are maximized in the future.

## Chapter II - Review of Literature

The problem of preventing increase in tobacco use among populations in SSA is highly complex. The complexity can be attributed in part to low resources, weak governments and the tobacco industry's strong business interest in the region. These along with the fact that tobacco use is intricately linked to several other equally urgent social, economical, ecological, and political issues in the region, presents varied challenges to tobacco control efforts. This paper takes a systematic approach to assess previous work/research dedicated to the problem of tobacco use and control, and examine the unique role of the tobacco industry. The second step is to review frameworks, tools, and approaches that others have utilized to effectively engage and sustain collaboration among varied stakeholders working towards a common goal. The insights gained from the review of literature have guided the process of eliciting gaps in key stakeholders' feedback regarding deficiencies and opportunities to improve the overall tobacco control efforts in SSA, which are detailed in subsequent chapters.

### Tobacco control is a "wicked problem"

As Rittel & Webber (1973) characterized it, wicked problems are dynamic multi-faceted issues with many stakeholders across varied interest groups. The complex interdependencies between elements make it impossible to have a right solution to such problems because a solution that is optimal for one interest group may threaten the interest of others. These solutions move along a continuum and follow an incremental rather than a rational approach with the objective to reach a stage where the level of problem is acceptable.

True to the nature of "wicked" problems, is the issue of growing tobacco use and more particularly cigarette consumption – the most widespread and the most harmful form of tobacco consumption. It is influenced by multiple interacting systems – social, ecological, and economic

– and is further complicated by various social and institutional uncertainties (Young, Borland, & Coghill, 2012) Individual choice in the matter of tobacco use, say cigarette smoking, is only a small part of what determines someone's smoking status. Layers of cause and effect of tobacco use are entwined in society's other social problems, such as poverty, gender inequality, unemployment, education, and housing (Dorfman & Wallack, 1993).

The environment of tobacco use is filled with competing interests, values, and established position of institutions. Further complicating are personal ambitions and significant divergence between the tobacco control advocates and the tobacco industry in terms of power, capacity, and influence. The health policies directed towards addressing the wicked problem of tobacco control, therefore, have and will need significant thoughtful analysis of the various components and meaningful strategies to drive results (Kickbusch, 2010; Lindblom, 2010; Scott Jr., 2010).

**The vector of tobacco-related disease poses a unique challenge**

Like all epidemics tobacco related diseases also have a contagion – the vector that transmits disease, disability, and death. As depicted in the epidemiologic triad in Figure 3, it is, however, not a virus or a bacterium, but an industry whose business strategy is solely driven by its impetus to maximize shareholder value. To do so, they have not hesitated to resort to deceptive and unethical practices in the past. They continue to do the same in low and middle income countries where the host (the tobacco user) remains unaware of the harms of tobacco and the environment is conducive to market penetration with less stable and less developed political system and economic systems, weak tobacco control policies, and social acceptability of tobacco use (Bialous & Peeters, 2012; King III & Siegel, 2001; Lee, Ling, & Glantz, 2012).

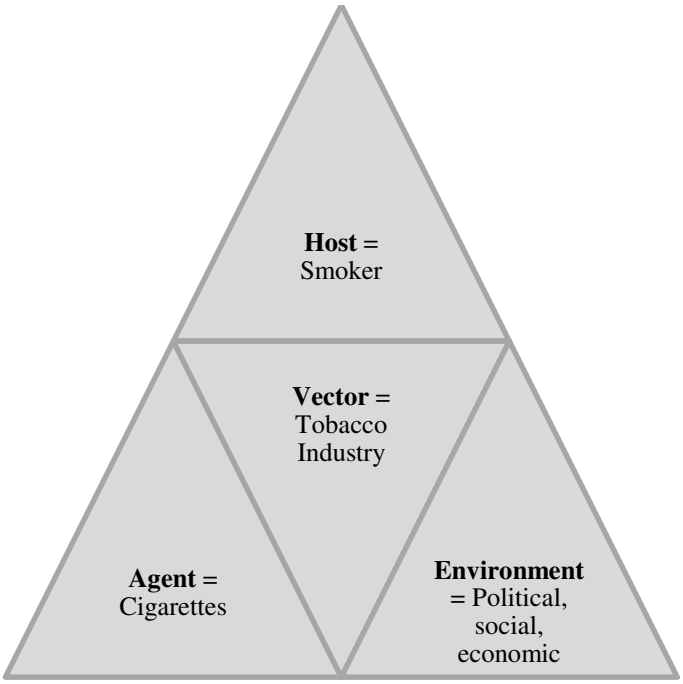


Figure 3. The epidemiologic-triad of tobacco related diseases

Over the last two decades the tobacco industry has morphed in response to two significant phenomenons. First, the political and social environment in countries such as the US, Canada, and UK has changed as a result of effective tobacco control policy and change in social norms against tobacco use. Secondly, the trends in globalized free trade have opened up markets for corporations to sell their products beyond their national boundaries which have resulted in greater economic, financial, trade and communication integration across non-permeable geographic boundaries of the past. These shifts have given rise to a handful of transnational tobacco companies (TTC) that are more powerful and prosperous. As a result, not only are they able to exert influence on the ongoing development of international trade and policy systems in their favor, they have also been able to successfully establish strong international brands. This has given these TTC an additional edge in exploiting the vulnerable low and middle income countries where populations aspire the opulent western lifestyle and the policy environment is

not yet responding effectively to fight the proliferation of tobacco products (Yach & Bettcher, 2000).

To take advantage of this highly "fertile" situation in low and middle income countries the tobacco industry has deployed a multi-prong strategy to penetrate the market endemically. They infiltrate the political system to exert influence to delay and weaken tobacco control policies; they use their financial might to position themselves as a partner in country's economic development both with local government as well as global financial institutions; they create demand using sophisticated marketing research and tailoring aggressive marketing and promotion strategies aimed at the most vulnerable – children, adolescents, and women. They also use illegal practices such as smuggling to fulfill demand, and fund counter research through inbred organizations such as the International Tobacco Information Center whose mission is to cast doubt on the scientific evidence of harms of tobacco (Lee et al., 2012).

In summary, the tobacco industry is powerful both financially and politically and it seeks only to increase its shareholder value. Despite widespread evidence of their use of illegal and unethical practices in most developed countries in the world, the industry continues to aggressively leverage these same practices in the developing and underdeveloped countries while they remain somewhat weak, uncontrolled and unmonitored.

**Frameworks for fostering collective impact**

The global community faces many challenging, complex problems today. These problem map varyingly across the continuum of tame to wicked problems and they slide over the continuum in time as policy and social environment change within a country (Commonwealth of Australia, 2007). Based upon how the power is dispersed among stakeholder, (Roberts, 2000) theorizes three different strategies for coping with a wicked problem. First, where the power is

with a small number of stakeholders, she recommends authoritative strategies, to facilitate a small group of experts from relevant stakeholders to take control of the solution process. Second, where the power is contested and the stakeholders seek a win or loss outcome, she recommends a competitive strategy, to facilitate innovation and choice. And third, where the power is dispersed among stakeholder but not contested and part of the solution requires behavioral change by many stakeholders and possibly citizens, she recommends a collaborative strategy. Even though collaboration has been long viewed as a win-win strategy for tackling multifaceted problems in public health and other social issues, collaborating to achieve a collective impact remains a challenge at a practical level, despite its wide acceptance at an intellectual level (Kania & Kramer, 2011).

**Systems-thinking and social ecological system of tobacco control**. While traditional thinking advocates analysis of individual parts of a complete problem, the approach to systems thinking is grounded in the holistic view of an issue with emphasis on understanding the interactions between individual components that make up the complete problem. The effect of individual components is amplified or diminished by its interactions with other components in the system thereby resulting in a system outcome that is greater than or less than the sum of its parts (Aronson, 1996). Best et al. applied systems thinking to tobacco control to conclude that if key tobacco control stakeholders – the practitioners, the researchers, the advocate, the leaders, and the policy makers, linked their shared goals and took action with knowledge and understanding of each other's successes and agenda; and, if each stakeholder group shared a collective vision, agreed on a participatory strategy and action, and measured collective success towards the shared goal, they could amplify the impact of their individual action (Best, Pamela Clark, Scott Leischow, & William Trochim, 2007).

Borland and colleagues leveraged system thinking to develop a strategic framework for analyzing the "wicked" problem of tobacco use management that may be leveraged to understand gaps in the strategy and organization of tobacco control efforts. They theorize that the dynamic social ecology of tobacco use is comprised of four subsystems: (a) the individual, the smoker (or tobacco user), a social being vulnerable to nicotine dependence, (b) the regulatory subsystem of tobacco control, (c) the tobacco use control subsystem, comprised of a large number of varied institutions and actors that pursue reduction of tobacco use through solutions that may be driven by a profit making agenda as in the case of pharmaceutical companies with nicotine cessation products, or a public health agenda like the civil society, and (d) the tobacco industry subsystem, comprised of a handful of tobacco product manufacturers and marketers focused on increasing tobacco use through increasing demand, increasing supply, and slowing down tobacco control efforts.

The four subsystems presented by Borland were described as being influenced by the broader government system that prioritizes issues and allocates funding and the overall economic system that puts pressure on each subsystem in favor of or against tobacco use. The urgent reforms recommended by the authors to the tobacco use management system in order to reduce and/or eliminate tobacco use included (1) outlining a clear goal of tobacco control, creating strategic capacity to coordinate various stakeholders, and building ability for dynamic action, in the tobacco control subsystem, (2) strengthening and adding dynamic capacity to pursue solutions that changes the playing field for the tobacco industry, in the regulatory subsystem. (Borland et al., 2010).

Leischow et al. provided a conceptual understanding of systems thinking as a rubric for organizing stakeholders. They described four key priority areas: (1) System knowledge – the

explicit and tacit knowledge shared and exchanged among the stakeholders of a system that form the basis of their interaction. (2) System network – the relationships between diverse groups and individuals that are harnessed to realize the goals and objectives. (3) System methods – understanding of the behavior of action and reactions of the complex adaptive system that is used it to improve strategic decision making. (4) System organizing – a participatory model mapped on continuum of a formal organization to partnerships and/or collaboration that facilitates a learning environment through effective evaluation of systems complexity, dynamics and performance. The authors suggest that while no one organization leads, a strong facilitative role is warranted to provide leadership for developing and sustaining a common framework for action (Leischow et al., 2008).

**Collaborating to create for collective impact.** Public health has fostered partnerships and collaborations over its history. John Kania and Mark Kramer argue that those attempting to address multifaceted social problems have been largely unsuccessful in producing the expected collective impact because they lack the necessary five conditions for collective success: (1) A common agenda for the desired change shared by all stakeholders. (2) A common measurement system to assess and report progress towards an agreed upon set of indicators of success. (3) Mutually reinforcing activities picked by stakeholder to leverage and further each other's effort. (4) Ongoing communication among stakeholders to develop trust and respect for each other, realize that individual interests will be treated fairly, and that decisions are made objectively based on evidence. (5) A "backbone" support organization and staff separate from participating organizations that facilitates planning, management and support of the initiative, with the sole purpose of effectively managing the many moving parts and people in the collaboration to realize the collective goal. The authors present a case for funders to take a leadership role in bringing

about a social change by committing to a longer-term funding and more engaged role that facilitates collaboration to produce collective impact through grant requirements and performance-based levers (Kania & Kramer, 2011). Easterling makes a similar case for a more hands-on engagement by funders in forging collective action to produce collective impact (Easterling, 2013).

**Managing multi-stakeholder engagement.** The Figure 3 below depicts the variety of stakeholders that impact the use of tobacco in a SSA country.

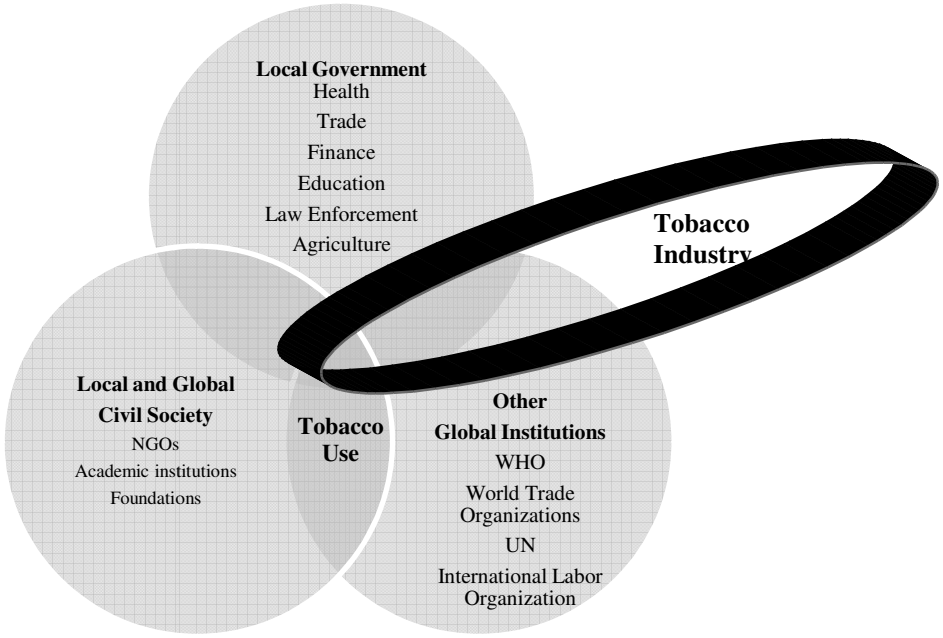


Figure 4. Myriad stakeholders effecting use of tobacco in a country

While most SSA countries have ratified the FCTC, the majority of them lag behind in the delivery of the policy and program obligations for preventing its citizens from initiating tobacco use. Low rates of tobacco use in these countries make a powerful case for prevention but, it fails to make an urgent case for action for governments who are dealing with other health, economic and development priorities. Hence, a small international donor community has emerged as a key

stakeholder and therefore holds significant leverage in shaping the tobacco control initiative in SSA seeking to prevent the tobacco epidemic.

Peterson, working with sustainable development projects, examined the relevance of multi-stakeholder engagements (MSE) in the context of the wicked problem of sustainability and analyzed 30 cases, projects that were required to have multi-stakeholders coalitions and therefore managed MSEs, to find how MSEs may be managed efficiently. In the study he highlights the term "engagement" for MSEs to stress that these don't require mere but necessitate "progressing past conflict and compromise to co-creation, learning, and action". To assess the relevance of MSEs he mapped the cases on a continuum from 'less wicked', ' wicked' , and 'more wicked' based on the level of conflict involved in the scope of the project. He then cross referenced this categorization against the project performance to find out that mandating MSEs were less successful for less wicked projects and were a value-add for more wicked projects. To evaluate the performance of MSE Peterson chose two types of performance outcomes: (a) system outcomes – focused on tangible changes to system components that are desired by the stakeholders and are realized as a result of the project. (b) Process outcomes – represented the ability to implement system change in order to achieve desired system outcome. With the input of 8 expert individuals, he assessed the performance of each project based on a 14 system and process outcomes as well as the influence of 76 performance related explanatory attributes that included many addressing MSE practices. Based on the findings of this analysis, Peterson proposes five fundamental principles of managing MSEs for any wicked problem: (1) System outcomes and process outcomes are complementary and not substitutes therefore focus on both. (2) How projects get initiated impacts performance therefore manage initiating conditions. (3) The level of engagement of stakeholders has substantial influence of project performance

therefore engage stakeholders through the duration of the project. (4) Innovation practices enhance project performances therefore manage to foster innovation. And, (5) Process monitoring and reflection have a significant impact on performance, therefore incorporate monitoring and reflection into management. While these principles may seem intuitive for any complex project, Peterson contends that MSEs are critical to coping with wicked problems and they pose a significant challenge due to inherently conflicting values and therefore managing MSEs efficiently and successfully are imperative to making progress on any wicked problem (Peterson, 2013).

In review of different frameworks for highly complex issues emphasize the fact that multi-faceted issues such as rising use of tobacco can only be addressed through a broad engagement of many stakeholders that may have conflicting values. The integrated nature of varied interventions needed to advance solutions at macro and micro levels necessitates that the stakeholders adopt a shared agenda and implement processes that facilitate mutually reinforcing activities and ensure ongoing communication. To create a high performing collaboration the stakeholders need a common measurement framework as well as an independent entity that can objectively and efficiently manage the collaboration.

**Case study: The Global Fund**

**Background:** The AIDS epidemic grew globally in 1980s and 90s. By the end of the 1990s, public health experts identified a number of highly effective interventions to prevent and treat AIDS. The scale of this epidemic and a deeper understanding of the complex causal links among poverty, development and disease pushed HIV as an international issue of public health and along with tuberculosis and malaria it was put in the center of the world's development agenda. As a result, in 2001 the United Nations convened a special General Assembly Session to

accelerate and intensify global action as well as mobilize resources. The session ended with a call to create a global fund and the Global Fund, a funding entity based in Geneva, was established in 2002, with the purpose to attract, manage, and disburse collective resources from a new multi-stakeholder partnership created to make sustainable and significant contribution to reduction of disease, death and disability from HIV/AIDS, tuberculosis, and malaria. ("History," n.d.)

**The Global Fund:** A dedicated group of staff based in Geneva tasked with managing varied aspects of collaboration. It seeks donation from varied stakeholders, public and private, and manages spending based on the Fund's 5-year strategy. It also manages the consistent measurement framework leveraged for all disbursed grants in addition to the ongoing monitoring and evaluation of the grants. Furthermore, it facilitates ongoing communication among stakeholders and reports progress.

Key findings for varied aspects of the Fund in its 5-year evaluation report included the following ("Synthesis Report," n.d.):

**Shared agenda:** The Fund's strategy articulates measurable goals and targets for the next 5 years. It is defined by a Board comprised of 22 voting members who are representatives from donor and recipient governments, civil society, the private sector, private foundations, and communities living with and affected by the diseases and 5 non voting members who represent the WHO, World Bank, UNAIDS, and the Roll Back Malaria partnership.

**Performance based funding system:** The Fund's performance based funding model has created a strong focus on results however; there remains a capacity gap at country level for monitoring and evaluation and appropriate information systems as well as the experience to manage grants for results.

**Mutually reinforcing activities**: The Fund requires a broad collaborative network in-country as a precondition for request for funding.

**Collective progress reporting:** The Fund has successfully created a forum for partnership from broad range of organizations that have a stake in the multi-faceted problem of disease control – poverty, development, health systems, etc. The impact of the Fund activities is not directly attributed to any one stakeholder but, to all involved as well as to the operating strategies and principles.

**The impact of Global Fund:** The collective action of varied stakeholders through Global Fund with a performance-based approach has resulted in increased service availability, better coverage and reduction of disease burden in a short span of 5 years ("Synthesis Report," n.d.).

**A key area of improvement:** Even though the Funds has been largely successful in securing participation of many stakeholders, both at global-level and country-level, it aspires to translate their participation into value-add engagement in the initiative

## Chapter III - Methods and Procedures

Two host organizations formulated a conceptual framework grounded in systems thinking. The framework highlighted the integrated nature of interventions carried out by different organizations in varied areas including policy, advocacy, research, media, tobacco use surveillance, tobacco industry monitoring, and capacity building. An open-ended survey that assessed stakeholders' perceptions of their role in tobacco control included items related to the systems thinking framework and the practice of data informed strategy and operation of the ongoing effort in SSA. The survey was distributed among a purposive sample comprised of leaders in 12 collaborating organizations who fund, implement, and/or provide technical assistance to tobacco control interventions in the region. The list of organizations included the following: (a) from Africa – the African Tobacco Control Alliance, the Center for Tobacco Control in Africa, the WHO AFRO, and the University of Pretoria, (b) outside of Africa – the American Cancer Society, the Campaign for Tobacco Free Kids, the Union Against Tuberculosis and Lung Disease, the Framework Convention Alliance, the Tobacco Free Initiative, the Centers of Disease Control, the International Development Research Center and the Gates Foundation. The participants were then invited for a facilitated workshop for a more in-depth discussion. Representatives from 10 of the 12 organizations attended the facilitated workshop. The workshop re-iterated the integrated nature of interventions in opening remarks as well as used a break out session to further illustrate the dependencies among interventions by mapping current efforts of all collaborators in a SSA country. In addition, the workshop highlighted individual perceptions of the practice of monitoring and evaluation in the region. It engaged participants in discussions to gain a group perception and further a dialog to understand if the perceived problem was true or a symptom of another problem. De-identified secondary data from the

survey and the workshop was obtained by the student investigator in the form of consolidated survey responses and workshop minutes.

**Data Sources**

The data utilized in this study consisted of two files: (i) A consolidated report on survey responses of leaders and managers from organizations (n=12) that were currently working towards the shared goal of preventing the tobacco epidemic in SSA. (ii) Meeting minutes from a facilitated group session with representatives from 10 different organizations. The other 2 organizations did not attend the group session. The consolidated survey report did not list all individual comments but, highlighted comments that were representative of the overall perceptions on each topic. Similarly, the workshop minutes were consolidated comments to capture the gist of the group discussion.

**Data Analysis**

The transcribed reports in the dataset were first read and re-read carefully. The data was sorted using a comparative, thematic approach focusing on the detection of themes. Four topical areas were created based on the survey questions that respondents were asked to reflect on and workshop discussions that participants were engaged in.

1. Common framework shared by all collaborating organizations in SSA. This theme addressed questions/discussion topics such as "What is your understanding of the state of practice (quality, reach, use…) of monitoring and evaluation of tobacco control activities with which you are involved?" and "With respect to the various dimensions of tobacco control monitoring and evaluation, what do you see as the strengths and critical gaps in terms of strategic and/or collaborative approaches being used?"

2. Organizational M&E frameworks, tools and practices. This theme was derived from questions/discussions topics such as "What are you currently doing or supporting in M&E and how are you doing it? What have you not been able to do but would like to do?"
3. Dissemination of results from M&E. This theme addressed the question / discussion topic "How do you disseminate the information produced from your monitoring and evaluation efforts?"
4. Barriers to M&E. This theme was derived from question/discussion topics such as "What do you see as the main barriers for not being able to do M&E as you want to?"

The data was then analyzed using directed content analysis to determine alignment of expressed themes against the five components necessary for a collaborative effort to achieve collective impact as discovered in the literature review (Hsieh & Shannon, 2005). These five components are – a shared agenda, a common measurement framework, distinct yet mutually reinforcing activities, ongoing communications, and a support entity to coordinate collaborating organizations (Kania & Kramer, 2011). Participant perceptions were assessed for key attributes of each of the five components at individual and group level. This assessment had two levels: first, if the attribute was discussed or not, and second, if there was support for the attribute or if it was inconclusive. The judgment at individual level was made based on whether or not the consolidated survey report cited multiple comments related to the attribute. Since the report on survey documented sample comments and not individual comments as the means to capture overall perception of respondents, more than one comment was considered adequate to judge at both levels of assessment. The judgment at group level was similarly made based on whether or not the consolidated workshop minutes cited multiple comments related to the attribute.

Following key phrases identified based on component attributes were used as the basis of assessment: "common goal", "on-going communication", "common measures and/or objectives and/or indicators", "plan together", "collective progress", "M&E infrastructure", "coordination among actors", and "established indicators". Additional supporting phrases accounted for in the analysis were: "lack of" when discussing current barriers to M&E, "we agree", "it would be great" and "we need to". These additional phrases were identified from their literal meaning and frequency, as expressions of support for component attributes.

Attributes with explicit recording in the survey report and workshop minutes with an indication of support are scored as "discussed and expressed support"; those with explicit recording but with conflicting expressions of support are scored as "discussed but inconclusive"; those with no explicit recording are scored as "not discussed".

Based on the findings, the investigator developed recommendations for how to advance the current practices of monitoring and evaluation (M&E) towards a desired collective framework. These results are presented in Chapter 4 and recommendations, based on the results of the review of literature and analysis of data regarding the enhancement of collective impact for tobacco control efforts in SSA are discussed in Chapter 5.

## Chapter IV – Results

Surveys were collected from 12 key organizations collaborating to prevent the tobacco epidemic in SSA. Representatives from ten of these organizations were subsequently engaged in a faciliatated group discussion. Tables 1 through 4 below summarize relevant responses from the survey and comments from the group discussion.

Table 1

*Common framework shared by all collaborating organizations in Africa*

| Relevant participant response to pre-workshop questionnaire | Comments recorded in workshop minutes |
|---|---|
| "Not aware of a collaborative approach in Africa (or globally) being used in terms of tobacco control M&A"<br><br>"There is none. This why this conference is sorely needed"<br><br>"it would be great for partners to identify some common measures / indicators to monitor and evaluate over collective progress"<br><br>"Although there are generic TC priority areas identified in the BI and Gates partnerships, there are no agreed upon benchmarks for monitoring and/or evaluating progress"<br><br>"Data is being collected by several international agencies using different data collection systems – that should be harmonized"<br><br>"The number of country level interventions have increased but, we don't know which ones are effective or ineffective and why? In absence of that that kind knowledge, how do we know that we are not just doing things that we know how to do well over and over again, but, are not necessarily the most effective?" | General comments:<br>People must be humble enough to say that their work is just a piece of a bigger picture.<br>We need to clearly understand and agree on what we want to measure.<br>We need to decide on whether there is a set of outcomes that we all want to achieve in Africa.<br>We need to measure the effectiveness of soft networks that have been created.<br>It was suggested that different outcomes will require different indicators.<br>We need to document the process of implementing tobacco control programs, not just the final outcome/impact.<br><br>There is a need for us to plan together to create a common framework<br>Currently, projects are happening in a vacuum. It is important to have information about what other organizations are doing, so that they can be complimentary, rather than crowding each other<br>It is essential that we have regular communication and flow of information.<br><br>We should look at the M&E framework in terms of interventions implemented to achieve the tobacco control goal, rather than who (the different organizations) is implementing them. Public health requires contributions from many entities. We need to look at how each intervention is moving us forward toward the common goal<br><br>We are all supporting or implementing specific interventions with a common goal. In other words, it is the common goal that brings us together.<br><br>[Facilitator question] Do we agree that it is possible that we can come up with a unified way of thinking?<br>Group response: Yes<br><br>[Facilitator question] Do we agree that being from different organizations who are working at different levels of tobacco control action does not inhibit us from coming up with a common framework for monitoring and evaluation for our work?<br>Group response: Yes<br><br>It was suggested that we talk about planning from a program perspective at another forum. And, focus on coordinating M&E at this meeting<br><br>[Facilitator comment] While it is ideal to plan together if we are |

| Relevant participant response to pre-workshop questionnaire | Comments recorded in workshop minutes |
|---|---|
| | coming up with a common framework, it is not imperative that we do so. |

Table 1 is a summary of participant perceptions with the regards to a common framework for M&E shared by all organizations collaborating to achieve the common goal of preventing the tobacco epidemic in the region. Both, the survey response and workshop minutes, indicate a general agreement among stakeholders that a common measurement framework is necessary but, remains missing. The group discussion suggests a need for stakeholders to document and share learnings and to collectively monitor progress towards the common goal. Additionally, comments from the workshop suggest a perception that ongoing communication and coordination among stakeholder is irregular which may be resulting in 'crowding' rather than 'complementing' each other's efforts.

Table 2

*Organizational M&E frameworks, tools, and practices*

| Relevant participant response to pre-workshop questionnaire | Relevant comments recorded in workshop minutes |
|---|---|
| "Plan to develop our own M&E framework"<br><br>"Finalizing the overall M&E framework for the project"<br><br>"had started outlining indicators and an M&E framework but this was all halted as it wasn't seen as priority"<br><br>"Finalizing the overall M&E framework. Country-level monitoring and evaluation has been integrated with and through the proposal and grants process. We have struggled through the process of coming up with common indicators across programs. And, grantee partners struggle with providing a cohesive M&E plan with the proposal as well as how will be project be monitored". | We need to focus on creating a demand for M&E across all stakeholders<br><br>A key issue discussed with regard to intermediate indicators such as creating networks, strengthening capacity, etc. was that funders and senior management want solid outcomes with visible impacts, such as reduced prevalence, new policies, etc., rather than soft changes, such as capacity building.<br><br>We need to educate our internal and external stakeholders to obtain their buy-in on recognizing successes such as building networks and building capacity as intermediate wins that are necessary to achieve the ultimate outcomes of policy |
| **What we do:**<br><br>"Grantee self-assessment"<br><br>"Progress reports from grantees, when received, are further analyzed linking spending to activities and outputs/outcomes. Intended and unintended outcomes are identified. Any policy challenges are recorded and addressed appropriately together with grantees to ensure project is on track to achieving policy goals"<br><br>"Use project monitoring and trip reports, project technical and scientific reports, completion reports etc."<br><br>"Grantee narrative and financial reports at mid-term and end of term submitted along with monitoring toolkits that record common indicators of program activities, Grantee Systems Assessment conducted by external evaluator"<br><br>“Provide technical support and funding to tobacco surveys in many African countries “.<br><br>**What we would like to do:**<br><br>"For each tobacco control campaign, a specific M&E concept is developed and incorporated in advance into the activity work plans"<br><br>"Find a way to link the objectives for the short-term, 12 month advocacy& communication and capacity strengthening projects with medium and long term objectives for a country" | M&E should be incorporated into the program lifecycle, including: program planning, implementation, assessments of impacts, and it should feed into new programs/projects. It is critical to assess and learn from M&E, on an ongoing basis.<br><br>The M&E should not be disjointed from programming. |

| Relevant participant response to pre-workshop questionnaire | Relevant comments recorded in workshop minutes |
|---|---|
| "Assess the change in public opinion as a result of project activity, when relevant" | |
| "Consolidate the learning that results from research and knowledge across policy issues" | |
| "Explore how inter-sectoral action can be evaluated in order to demonstrate it can happen more effectively" | |

Table 2 summarizes participant perceptions of the state of M&E framework, tools and practices of their organization. The subtitles "what we do" and "'what we would like to do" as outlined in the consolidate survey response and included here capture individual perceptions of the current and desired state of M&E practice in collaborating organizations. The responses/comments suggest varied yet generally weak practice of on-going measurement of efforts across all organizations as a result of organizational leadership not fully supporting and/or valuing robust measurement practices. , Both survey response and workshop comments indicate a general support for strengthening the practice to map program outcomes against country level outcomes to assess overall progress.

Table 3

*Dissemination of M&E results*

| Relevant participant response to pre-workshop questionnaire | Relevant comments recorded in workshop minutes |
|---|---|
| "Irregularly, through workshops with partners. Some reports are accessible through organizational website" | |
| "Grantee self-assessment is translated in spreadsheets that is used by some collaborating partners" | |

Table 3 is a summary of how the M&E results are disseminated by collaborating organizations. The survey responses reiterate that the practice of assessing, documenting and sharing results and lessons learnt remains weak. The collaborating organizations do not seem to have an agreed upon process for documenting and sharing results.

Table 4

*Barriers to M&E*

| Relevant participant response to pre-workshop questionnaire | Relevant comments recorded in workshop minutes |
|---|---|
| "lack of funding and commitment by senior leadership"<br><br>" lack of funding and technical expertise in African countries"<br><br>"Time, tools, personnel"<br><br>"lack of funds resulting in inadequate capacity"<br><br>"lack of coordination among various actors present in the countries where we work"<br><br>"lack of established indicators for desired tobacco control outcome that we all seek"<br><br>"lack of public dissemination of data and learning by all partners" | **Lack of funding**<br>"There is a lack of funding for M&E infrastructure (administrative support, supplies, etc.)"<br><br>[Facilitator summary ] While there may be sufficient funds for M&E, there is often a lack of recognition of its importance and as a result the funds are not clearly set aside for M&E.<br><br>**Lack of technical expertise**<br>"If you don't know what you want, it doesn't matter what I give you, it's never enough because you don't know what you need."<br><br>[Facilitator summary] We agree there is a gap in technical expertise for M&E of tobacco control efforts in African Countries.<br><br>**Lack of up valid, reliable, up to date data**<br>[Facilitator summary] There is data available but it is not being disseminated. There is also a lack of local capacity in translating data into information<br><br>**Lack of coordination among actors**<br>[Facilitator summary] The lack of coordination at the program level is a barrier to M&E. Better coordination would lead to better M&E that in turn would improve coordination and so on.<br><br>**Lack of established indicators**<br>[Facilitator summary] A lack of common indicators is a barrier to M&E as well as communication among tobacco control actors. |

Table 4 is a summary of perceived barriers to M&E as expressed in the survey response and discussed further in-depth in the workshop. Both the workshop comments as well as the survey responses suggest that even though funding is perceived as barrier to optimal practice of M&E, what is likely contributing to the sub-optimal practice of measurement and shared learning is the lack of leadership support, need for on-going communication and better coordination among collaborating organizations and the lack of common measurements framework.

**Analysis/Assessment of Survey and Workshop**

The matrix below lists key attributes the five components necessary for a collaborative effort to achieve a collective impact.

Table 5

*Assessment of key stakeholder perceptions against the five components necessary to achieve a collective impact*

| Five components of collective action | Component attributes | Discussed and expressed support | | Discussed but, inconclusive | | Not Discussed |
|---|---|---|---|---|---|---|
| | | Individual | Group | Individual | Group | |
| Common Agenda | Shared goal | x | x | | | |
| | Leadership buy-in and support of all collaborating organizations | | | | | x |
| | Collective strategy | | | | x | |
| | Shared and on-going view of progress | | | | x | |
| Common Measurements | Clearly defined shared objectives | x | x | | | |
| | Common indicators for assessing results and progress | x | x | | | |
| | Shared learning | x | | | x | |
| Mutually reinforcing activities | Mutually reinforcing activities | x | x | | | |
| | Accountability to other collaborating organizations | | | | | x |
| Ongoing communication | On-going communication between collaborating members | x | x | | | |
| A independent setup / "backbone support" organization | To coordinate collaborating organizations | | * | | | x |

Note: * this attribute partially discussed

The mapping of responses/comments of key stakeholders against the five components of collective action above suggests a unanimous support among collaborating organizations to adopt common measurements and enhance shared learning for the effort. There is also a consensus among organizations for improving communication and coordination among them.

With regards to having an independent support entity, the group discussion suggest the need for having resources for M&E infrastructure but, the comments do not refer to a new entity with responsibility for coordination across various key activities. Key attributes for a *common agenda* were not discussed or were discussed but were inconclusive. A shared goal was given but, discussions on collective strategy and ongoing view of progress was pushed to a future unplanned session which is probably the right forum to discuss organizational leadership buy-in for the five components of collective model.

## Chapter V - Discussion and Conclusion

### Discussion

Africa played a vital role by coming together as a block to push for the adoption of the FCTC in 2003. After such a concerted action by the region, it would seem reasonable to expect that in the decade since the countries in the region would have made significant progress in enacting tobacco control laws. However, with the exception of a few strategic countries such as Kenya, Mauritius, and South Africa, only a handful of countries such as Ghana, Togo, Uganda, Nigeria, Benin and Senegal show some promise. The tobacco growing countries like Tanzania, Malawi, Zimbabwe and Zambia lag significantly and remain a major source of concern. On the other hand, the tobacco industry is getting more and more entrenched on the continent and successfully exploiting the myth of economic impact of tobacco farming to further strengthen its position.

The problem of tobacco use management has been widely characterized as a "wicked" problem in the literature. In SSA, the complex layers of cause and effect of tobacco use are intertwined in society's many social and economic problems, such as poverty, gender inequality, unemployment, education, and housing. Individual choice, while important, makes up only a small part of what determines someone's tobacco use status. Addressing such problems require engaging many stakeholders in varied sectors – local and national government, academia, local and global civil society. These stakeholders typically have diverse interests, agendas and institutional positions. Literature supports that a collaborative structure to engage such a diverse group of stakeholders is a win-win strategy for tackling multifaceted problems that warrant multipronged action to achieve a collective impact. Several theories for collaborative problem solving highlight the importance of three critical components: a shared agenda, mutually

reinforcing activities and ongoing communications among collaborators. The model of collective impact advances these theories by adding two additional components to the list: having a shared approach to measuring progress, and creating a "backbone support" organization that coordinates the work (Easterling, 2013). Establishing such collaborations for collective action is challenging at a practical level despite its wide appeal at an intellectual level. However, when such a collaborative action is institutionalized successfully it has demonstrated to have a significant impact in addressing multi-faceted multi-stakeholder issues in public health, economic development, agriculture, and education.

Monitoring and evaluation (M&E), often described as the backbone of public health programs, is the only way to scientifically connect the dots between action and expected impact, as depicted in Figure 4. The tools and techniques of M&E provide systematic methods to judge if a strategy was appropriate, if the plan that supported the strategy was effective, if the process that implemented the plan was appropriate and efficient, and if actions that were carried out were done in the most proficient manner. These learnings are critical and foster an environment of continuous improvement; a trait vital for realizing the goal in a cost-effective manner and strengthening the trust of public and funder.

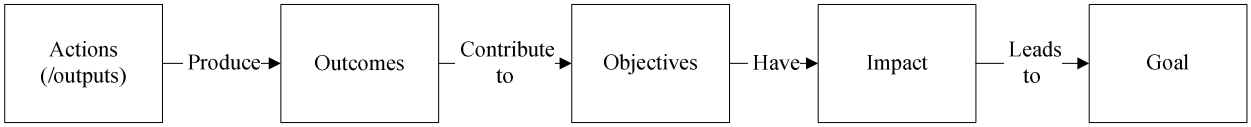


Figure 5. Connecting the dots from action to impact

In the case of collaborative tobacco control efforts in SSA, the M&E function is even more critical for one fundamental reason – the goal of "preventing" the tobacco epidemic has not

been pursued at a population level in any prior global tobacco control efforts; it has mostly been "controlling" the tobacco epidemic.

The SSA region with a generally weak and often corrupt political system faces many competing issues that are critical for the health and development of its citizens. While the use of tobacco remains low across most countries in the SSA, both among men and women, the trends indicate rising use of tobacco in the population. The two main opposing forces impacting tobacco use – one exerted by the tobacco industry to promote the use among population, and the other exerted by the tobacco control community to reduce tobacco use, are unequally matched, not only in terms of financial resources, but more importantly in terms of strategic action.

The tobacco industry over the last 2-3 decades has emerged as a powerful international oligopoly with significant resources and influence. To survive in the face of strong tobacco control movement in the western countries, despite the market forces of competition that drive a profit-driven industry, the tobacco companies collaborated to create institutions such as the International Tobacco Information Centre to collectively counter effective political and communications effort of the tobacco control community. This does not imply that tobacco companies don't compete anymore but, merely highlight the fact that they are primarily driven by the goal of maximizing their shareholder value, are nimble, and they navigate strategically and shrewdly. After making tobacco use pervasive across countries in Asia, the tobacco companies now view countries in SSA as its next global market, and probably one of the last ones, to acquire new users. Given the weak governments and uninformed population with low levels of literacy and high levels of poverty, the tobacco companies sees the region as a fertile environment to push its agenda.

The tobacco control community, with limited funds predominantly from two global foundations – the Bill and Melinda Gates Foundation and the Bloomberg Philanthropies, has expanded in the last decade, but its overall size and capacity still remains low. Its many local and global stakeholders are currently structured to compete for funds, which further complicates the already challenging process of fostering collective action. One could argue that healthy competition would promote efficiency and innovation, which in theory is correct. But, in practice, it requires a comprehensive measurement framework to assess the outcome of many actions that progressively lead up to the desired impact over time. In the current situation, however, the competitive positioning of collaborating organizations has been a probable cause of duplicate action especially in situations when a desired impact is imminent. This could rationalize the need suggested by stakeholders to raise the importance of measuring intermediate outcomes so that there is method for appropriate attribution of the final outcome to all deserving. In order to make optimal progress towards its shared goal of preventing the tobacco epidemic in the region, the tobacco control community has to structure itself in way that allows it to act strategically and innovatively while maximizing impact on every intervention.

Participant quotes in the dataset such as, "*there is none, that is why this conference is sorely needed*", and "*we need to focus on creating demand for M&E across all stakeholders*" clearly indicates that M&E, both at collective level and organizational level, is perceived as sub-optimal, if not absent, by the collaborating organizations. However, the comment *"Finalizing the overall M&E framework. Country-level monitoring and evaluation has been integrated with and through the proposal and grants process"* indicates some effort on creating an M&E framework probably at project and/or organizational level. The discussion on a common M&E framework also includes a participant quote "*not aware of a collaborative approach in Africa (or globally)*

*in terms of tobacco control M&E*". This quote may allude to a possible perception that the tobacco control community has not needed a collaborative M&E framework. Even if that were the case, it does not give the basis to conclude that one may not be needed for the ongoing efforts in Africa. In fact, the diverse tobacco control community aspiring for a time-bound goal in SSA, with limited resources, needs not only to act fast but prudently. This study and the literature review underscores the importance of conceptualizing such a framework within the context of five components of collective impact model.

The first component - *a common agenda*, requires collaborating organizations to have a shared goal/vision, a common understanding of the problem and a joint strategic approach to addressing it through agreed upon actions. In addition to a general agreement on the shared goal, comments such as "*we need to decide whether there is a set of outcomes that we all want to achieve in Africa*" and "*Currently projects are happening in vacuum. It is important to have information about what other organizations are doing so that they can be complimentary*" indicate a positive perception among some participants to pursue a dialog on shared strategy which is viewed as needed but missing. The summary comment in the workshop minutes, "*It was suggested that we talk about planning from a program perspective at another forum. And, focus on coordinating M&E at this meeting*" suggests that participants may or may not be fully supportive of joint strategic planning. However, the fact that the topic organically made it into the discussions when neither the survey nor the workshop explicitly pursued it is indicative that it effects how the M&E framework is conceptualized in this effort. Future studies should attempt to understand individual and group perceptions of different component attributes to a *common agenda* as it would provide valuable insights for creating an M&E framework.

The second component – *common* measurements, addressed the need for consistent data collection and measurement of results across all collaborating organizations. The participants discussed and unanimously agreed upon the need for defining common outcomes and indicators for different tobacco control interventions. Several comments suggest a unanimous support for shared measurement among participants: "*We should look at the M&E framework in terms of interventions implemented to achieve the tobacco control goal, rather than who (the different organizations) is implementing them. Public health requires contributions from many entities. We need to look at how each intervention is moving us forward toward the common goal*", "*it would be great for partners to identify common measures and indicator to monitor and evaluate collective progress*", "*lack of common indicators is a barrier to M&E*". With that said, there are M&E frameworks that exist within project and/or organization as suggested by comments such as, "*Finalizing the overall M&E framework. Country-level monitoring and evaluation has been integrated with and through the proposal and grants process*" and , "*Grantee narrative and financial reports at mid-term and end of term submitted along with monitoring toolkits that record common indicators of program activities, Grantee Systems Assessment conducted by external evaluator".* These could serve as a starting point for defining a common measurement framework for the collaborative effort.

The third component, *mutually reinforcing activities*, states the need for distinct yet coordinated activities of collaborating organizations to facilitate creating a whole that is bigger than its parts. Survey responses and workshop comment recognize the integrated nature of varied interventions carried out by different organizations. There is a general support for a tighter coordination among collaborating organizations. Supporting comments include, "*The lack of coordination at the program level is a barrier to M&E*" and "*it is important to have*

*information about what other organizations are doing, so that they can be complimentary*". The other component attribute for conceptualizing mutually reinforcing activities – accountability to other collaborating organizations, was not discussed but should be understood in future studies, as this subtle aspect is vital for building synergy across collaborating organizations.

The fourth component, *continuous communication*, addresses the need to build and sustain trust and transparency among organizations. This is a yet another subtle but critical attribute for collective action. Workshop minutes have several group comments such as *"it is essential that we have regular communications and flow of information*" which illustrates its relevance towards creating a common M&E framework. Future studies are important to understand the perceptions of participants at individual and group levels about different aspects of communication such as optimal level, mode, frequency, etc. as it will provide valuable input towards shaping a common M&E framework.

The fifth component, *an independent setup to coordinate collaborating organizations*, of collective impact addresses the need for dedicated staff that is tasked with managing the different facets of coordination across organizations to ensure the necessary and continuous focus is maintained. The survey did not seek stakeholder reflection on this aspect but, a workshop comment "*There is a lack of funding for M&E infrastructure*" indicates its relevance to a common M&E framework. Furthermore, the suggested sub-optimal state of on-going communication, mutually reinforcing activities and barriers to flow and adoption of good practices across organizations strengthens the argument for having an independent setup for the tobacco control initiative in SSA. The Global Fund case study exemplifies the importance of implementing a common measurement framework and facilitating coordination for achieving collective impact. Even though the number of collaborators in the case of SSA tobacco control

effort is limited, these collaborators come from varied sectors with not only different approaches to problem solving but also with different values. They differ in organizational size and perceived global stature and they have individual mandates. A common goal brings these world-class collaborating organizations together but the potential of this collaborative effort is probably not being fully realized. Research suggests that effective management of multi-stakeholder collaborations is critical and time consuming as well as it is hard to navigate from within (Peterson, 2013; Kania & Kramer, 2011). An independent entity can foster the objectivity necessary for data-informed strategy and progress reporting, improve mutual accountability and confidence necessary to avoid duplication and drive efficiency by facilitating timely and unbiased resolution of conflicts and stalemates.

Bill Gates, in his book, comments that "how you gather, manage, and use information will determine whether you win or lose"(Gates & Hemingway, 1999). A robust M&E framework to gather and share relevant data consistently across all collaborating organizations will not only facilitate effective data-informed strategies but also provide a forum for driving collective action. The five component model of collective impact provides the comprehensive basis necessary for conceptualizing and implementing such a framework. It would require resources, both financial and personnel, as well as a strong and committed leader to facilitate a productive dialog on creating a common framework of measurement among collaborating organizations with possibly competing aspirations. Funders, particularly foundations, with their traditionally successful role in convening and funding collaborative groups to achieve ambitious goals could provide the critical leadership directly or through other mechanisms (Easterling, 2013). Their role may be particularly promising in the case of tobacco control effort in SSA as

there are only two funders, both foundations, that currently fund the activities and they have close working relationships.

**Limitations**

This study is limited by its access to consolidated data in the form of synopsis of survey response and meeting minutes. The sorting and assessment of data has been solely done by the student investigator which may have introduced bias. The study makes reasonable judgments with regarding a high-level feasibility of the recommended framework based on participant perceptions. Additional qualitative research with the collaborating organizations is needed to confirm their perceptions and to accurately assess their buy-in for leveraging the proposed five component model of collective impact as the basis of advancing their work.

**Conclusions**

While still low, the trends indicate rising tobacco use in SSA. In the four stage conceptual model of the tobacco epidemic, the region still maps into phase 1, characterized by smoking prevalence below 20% in men and minimal smoking in women. If the region were to follow the same pattern as observed in the developed countries, the tobacco epidemic in SSA would likely peak the middle of this century. Seldom is there the ability to predict an epidemic so far in advance and have the knowledge to prevent it.

The vector of tobacco diseases – the tobacco industry, is powerful and uses ethical and unethical practices to increase the use of tobacco in the region in an effort to maximize its shareholder value. Almost 44% of the population in the region is below the age of 15 years as indicated by the World Bank data. This offers a great incentive to the tobacco industry to act fast as the industry is well aware that naïve experimentation by young kids often develops into a strong addiction well before they turn 18 years of age, which is very hard to break. This gives

the industry loyal customers for 40 – 50 years. Consider this situation in the environment of weak tobacco control policy, generally low levels of literacy and high levels of poverty in the population and it becomes clear on why the industry is aggressively going after its last big global market.

The governments in the region are weak and burdened by many competing priorities in the area of health, development, and other social and economical issues. Most countries in the region lag in its follow-up activities to signing the WHO-FCTC. Tobacco is widely cultivated, is easily available and makes up a significant proportion of export earnings in several countries in SSA. Furthermore, the tobacco control community in the region, while having increased in number and capacity over the last decade, remains nascent and has limited resources, primarily from global funders.

A large imbalance is evident between the forces that are trying to increase tobacco use versus those that are trying to decrease tobacco use in the region. This necessitates that the global tobacco control community working towards preventing the looming tobacco epidemic in SSA to critically examine the strategy, structure, and operational rules of its collaborative efforts. A structure that promises to create a collective whole that is greater than the sum of its parts would be necessary to change the odds of winning. The current collaborative structure is missing a key component of collective impact – a common M&E framework. Such a framework should be thoughtfully conceptualized within the context of a common agenda, and supported by processes that facilitate mutually reinforcing activities and continuous communication among collaborators. An independent organizational setup, another key component of collective impact model, ,may be needed to define and implement strategy that is independent of individual

mandates and to sustain coordination among collaborators effectively by building trust and accountability, avoiding duplication of efforts, and maintain an on-going communication.

Borrowing words from Aliko Dangote, Co-Chair of the World Economic Forum on Africa in 2008, "Progress will not happen by accident." An effective M&E will help learn from past successes and challenges and inform strategy of current and future initiatives so that they are better able seize the unprecedented opportunity of preventing death and suffering from tobacco related illnesses in sub-Saharan Africa. The study suggests a perceived willingness among collaborating organizations to adopt a common M&E framework. If confirmed, it must be seized to make the urgently needed progress on addressing the missing component of the tobacco control efforts. Additionally, the Gates Foundations should assess the feasibility of making an investment to establish a "backbone support" organization to coordinate collective action for tobacco control in sub-Saharan Africa.

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## Appendix A

### Definitions

**WHO FCTC** – The World Health Organization Framework Convention on Tobacco Control is the first international health treaty developed in response to the enormity of the global tobacco epidemic. The treaty includes both supply- and demand-reduction measures for tobacco control. Like with any other treaty, the WHO FCTC confers legal obligations on its Parties – that is, on the countries that have formally ratified it ("WHO | The WHO Framework Convention on Tobacco Control (WHO FCTC)," n.d.). Among these obligations are those to:

- Protect public health policies from commercial and other vested interests of the tobacco industry.
- Adopt price and tax measures to reduce the demand for tobacco.
- Support economically viable alternative to tobacco growing.
- Protect people from exposure to tobacco smoke.
- Regulate tobacco product disclosures.
- Regulate the packaging and labeling of tobacco products.
- Ban tobacco advertising, promotion and sponsorship.
- Ban sales to and by minors.

**MPOWER** – The MPOWER package includes technical measures and resources, each of which addresses one or more of the demand reduction provisions of the WHO FCTC. MPOWER has been developed by the WHO to help countries build their capacity to implement these provisions ("WHO | MPOWER," n.d.). The six measures included in the package are:

1. Monitor tobacco use and prevention policies
2. Protect people from tobacco smoke

3. Offer people help to quit tobacco use
4. Warn people about the dangers of tobacco
5. Enforce bans on tobacco advertising, promotion, and sponsorship
6. Raise taxes on tobacco

**Sub-Saharan Africa** – The designation sub-Saharan Africa is commonly used to indicate all of Africa except northern Africa, with the Sudan included in sub-Saharan Africa ("WHO | Definition of region groupings," n.d.).