



# Multidimensional Model for Change: Understanding Multiple Realities to Plan and Promote Social and Behavior Change

Paolo Mefalopulos

## Contents

Introduction .....	2
The Key Role of C4D in Achieving Change .....	4
The Multidimensional Model for Change (MMC) .....	6
Multidimensional Model for Change: Windows of Perceptions .....	14
Conclusions .....	14
References .....	16

## Abstract

This chapter introduces an innovative multidimensional model to manage change. It starts from a broader overview and assessment of the situation, engaging various groups of stakeholders. It then gradually zooms in critical issues mapping out perceived and real gaps and weaknesses while also identifying strengths and perceived benefits. This provides the inputs to design an effective strategic plan, which include a C4D strategy to promote the intended social and behavior change. The Multidimensional Model for Change, or MMC, allows to devise relatively simple strategies to promote social and behavior change based on complex analysis that assess the situation in a comprehensive, multi-dimensional, and cross-sectorial way, thus eliminating, or at least greatly reducing, mistakes of the past.

## Keywords

Multidimensional · Change · Communication for development · Interdisciplinary · Cross-sectorial · Participatory

---

P. Mefalopulos (✉)  
UNICEF, Montevideo, Uruguay  
e-mail: [pmefa@yahoo.com](mailto:pmefa@yahoo.com)

## Introduction

An in-depth review of the literature and project documentation of organizations operating in the field of development made in 2003 suggested that too many times failures of development initiatives are mostly due to lack of proper planning based on genuine communication among the various stakeholders (Mefalopulos 2003). Since then there have been some progress, even if rather moderate. The challenges posed by the findings of that study are still valid and can be summarized in the following questions: Why sound technical solutions are not enough to achieve the intended change? Why individuals resist changing behaviors even when they have the knowledge that the new behavior will benefit them? These questions provide the benchmark along which this chapter originates and develops, introducing a model for change that considers different dimensions needed to be addressed before a person can be expected to adopt a new behavior.

Communication for Development or C4D has a long tradition in the theory and practices of international development, originally applied “to modernize” the so-called underdeveloped or developing countries. It has been used under various denominations, but the main concept, as it originated soon after World War II, remained substantially consistent through time, i.e., use communication to promote betterment of life conditions. The way this should be achieved has gradually evolved from the one-way communication model of reference into a more horizontal, two-way and participatory model, as currently envisioned by most scholars and practitioners in this area. At first C4D, at the time better known as Development Support Communication, was closely associated with the belief that mass media were all powerful and could be used to assist in the modernization of developing countries. As its conception and applications evolved, there have been several attempts to institutionalize C4D in international organizations, including within the United Nations. In the 1960 Erskine Childers was instrumental in having it introduced in UNDP, and then toward the end of that decade, the Food and Agriculture Organization of the United Nations, or FAO, created its Development Support Communication Branch.

In the 1980s it was UNESCO that put communication at the top of the international agenda, with the New World Information and Communication Order. Subsequently UNICEF established its own Social and Behavior Communication Change (SBCC), currently renamed Communication for Development or C4D section. Even the World Bank at the beginning of the new millennium established a Development Communication Division, which became very active not only within the World Bank programs and operations but also in international fora, taking the lead in organizing the First World Congress on Communication for Development in 2006. It should be mentioned that since 1988 the UN had established the Inter-Agency Roundtables on Communication for Development, a mechanism that, chaired by UNESCO, was convening every 2 years, hosted by a different UN agency on a rotational basis.

The initial objectives of the C4D Roundtables were to exchange ideas and experiences and promote collaboration among United Nations agencies. At the beginning the attendance was mostly limited to agencies that had C4D units and in

some cases also saw some NGOs' participation. With time attendance by UN agencies increased and the scope of Roundtables also broadened, including advocacy efforts to institutionalized and strengthened C4D planning and implementation as a key component of most development programs and projects. The case for the need of dedicated funding to C4D was also strongly made using compelling evidence.

UNESCO had the task to compile the Secretary General Biannual Report on C4D that since 1996 was presented to the General Assembly, the UN Roundtables. This was the most important opportunity, if not the only one, to have issues and challenges that could be addressed by C4D presented to a global audience. It was with great surprise that in 2017, the C4D community learned, post-factum, of the UNESCO decision to ask for the suppression of this valuable mechanism. The lack of transparency and consultation leading to this decision was not only controversial but also raised questions of its legitimacy as UNESCO mandate was basically to chair the Inter-Agency Round Tables on Communication for Development and prepare the report for the Secretary General. Hence, many stakeholders saw the decision to suppress it without previous consultation with other UN agencies (some of which would have probably been ready to take up this role) as UNESCO stepping out of the institutional mandate and boundaries.

It is sadly ironic, and shortsighted, that the C4D Round tables were suppressed just when the importance of social and behavior change was being increasingly recognized as a crucial component of development initiatives. The key role of C4D in the successful handling of polio (which in 2008 was certified to be fully eradicated from India) as well as in other health emergencies such as avian flu and Ebola confirmed the value of rigorous social and behavior communication strategies in achieving the intended change. Even the World Bank in its World Development Report of 2015, titled *Mind, Society, and Behavior* (World Bank 2016), acknowledged that human behavior is not always rationally driven and focused on the importance of understanding the drivers for social and behavior change.

The evolution and growth of C4D went through some ups and down. Unfortunately, despite an increasing acknowledgment by many key actors of the importance of addressing social and behavior determinants to achieve the intended change, within the UN family, C4D is currently thriving only at UNICEF. The model of reference which was increasingly used in UNICEF, starting by the team of the India Country Office and then adopted more systematically at a global level, was an adaptation of the socio-ecological model (SEM), which forms the basis of the Multidimensional Model for Change presented in this chapter.

The Multidimensional Model for Change – MMC – is derived from Bronfenbrenner's ecological framework for human development (Bronfenbrenner 1979). The main differences consist in the framing and the number of the dimensions to be considered, which now are four, each composed by three basic components, devised to assess strengths, weaknesses, and gaps needed to be addressed in the planning of the communication strategy aimed at achieving the intended change. The aim is to steer C4D interventions away from the exclusive focus on individual behavior, which characterized many initiatives of the past, and adopt a broader

and intersectorial view of the whole situation, a view that includes a holistic assessment of the factors needed to achieve change, and then consider how, and which ones, communication can address.

---

## The Key Role of C4D in Achieving Change

The main causes for the many failures of development initiatives have been addressed in the presentation, *Why Sound Technical Solutions Are Not Enough: The Role of Communication in Development Initiatives* (Mefalopulos 2010), delivered for the 11th Raushni Deshpande Memorial Oration at the Lady Irwin College in New Delhi, India. If knowledge of solutions that would improve life conditions is not enough to make people change behaviors, what would then be the best way to achieve it? The vast literature evaluating development projects and programs indicate that there are a number of factors that affect the adoption of innovations and new behaviors. Many of such factors have been often neglected to a significant degree.

Too many development initiatives were doomed before they even started being implemented, due to their vertical, techno-driven sectorial planning design, a design that was usually devised by a few experts, often knowing little of the local context and culture, and even more often based on the (flawed) belief that if people knew that the new behavior was beneficial they would embrace it; thus the emphasis was on the production of messages to be disseminated in the media. The role and limited effectiveness of communication were often influenced by such design and the flaws related to it. To be truly effective and loyal to its core values, C4D had to be critical of modernization-driven approaches, which adopted linear and top-down approaches, where communication was mainly used to disseminate information. That is when two-way communication approaches started to increasingly gain ground.

Many publications such as of Jan Servaes (2003), Nobuya Inagaki (2007), and Emile McAnany (2012) help to understand some of the main challenges C4D faced in making the case to prove its value, not only in promoting the needed change but also in assessing the overall situation, as a prerequisite to identify the gaps and drivers for change. The challenge was to rethink theoretical and practical approaches to understand better how change occurs. A broader perspective on how individuals think and act was needed, abandoning the assumption that behaviors are rationally driven and reflecting on what would be the determinants of change shaping human behaviors.

Hence, C4D had not only to adopt a more horizontal and participatory-driven approach, but it had also to broaden its functions, adding assessment and planning to the communicating one. Most important C4D officers in major international organizations had to become advocate for a cross-sectorial approach that should replace the traditional, limited sectorial planning and implementation. The cross-sectorial approach enhances significantly the effectiveness of development initiatives and allows to apply C4D methods and tools at their best. A simple example can further clarify this assertion.

When facing the Ebola crises, the first approach was driven strictly by technical (i.e., medical) considerations. However, that proved to be highly ineffective as the virus was spreading fast due to cultural norms and habits (such as those associated to the burial of the death) that people would not accept changing just based on technically appropriate information, coming from external experts. The situation started to change when C4D specialists went in the affected areas to work with communities in order to reduce the risks of contracting the virus and addressed with them possible alternatives to reduce the risks of contamination.

Participatory Rural Communication Appraisal, or PRCA, is a methodology that was developed and applied along similar lines. It was devised in the 1990s by an FAO team working in Southern Africa, and it combines participatory techniques with communication research, and planning methods were devised. PRCA laid the foundations of an innovative approach, which started to be gradually adopted in projects across the world. It was defined as “a first step in the design of cost-effective and appropriate communication programmes, and materials for development projects . . . a flexible, multidisciplinary and participatory way to conduct communication research” (Anyaebugunam et al. 2004). PRCA was one of the first systematic attempts to bridge and apply participatory approaches with dialogical communication processes and tools, drawing from scholars and practitioners such as Orlando Fals Borda, Luis Ramiro Beltran, Robert Chambers, Paulo Freire, Bella Mody, and many more.

Moreover, PRCA was innovative because it was promoting a broader interdisciplinary approach to sectorial project design. For most areas of work in international development, such as health, nutrition, sanitation, education, etc., working vertically within its own sector has been the norm for a long time. However, cross-sectorial work is an imperative for C4D, because its functions and objectives are intrinsically embedded in those of health, nutrition, education, etc. There is not an ultimate communication goal per se, but there are communication objectives aiming at supporting behavior change to achieve education, health, and other sector goals. That is why C4D can provide the broader assessment, exploring and linking different areas and sectors, which absence is often considered to be the weak element of planning. A single, specific behavior change to occur often requires that several other factors across various areas/sectors be in place.

For instance, let us take the case of a project set up to introduce a new crop, more economically valuable. To increase the income and the living conditions of farmers in a district where farmers are living at subsistence level, the Rural Ministry decided to promote the adoption of the new income-generating crop. The innovation in their cropping system seemed a sound idea, and once an investigation confirmed that the new crop could be grown well in places where staple food is currently grown, the project begins its activities and extensionists are sent to disseminate the message and information about the new crop. To the experts' surprise, several farmers resisted the innovation. In those cases where the new crop has been adopted, problems aroused, such as lack of marketing skills to price and sell the product and lack of transport to access markets; decrease in staple

food, which is being substituted by the income-generating crop, led to higher malnutrition of children (Anyaebugnam et al. 2004).

Examples such as this have been quite common in past development initiatives and are due mostly to the lack of two-way communication among project managers and experts on one side and the ultimate stakeholders (in the past labeled beneficiaries) on the other. Another common flow is the limited technical focus on the issue itself, in this case the adoption and growth of a new crop, which neglects other needed elements of the equation, such the knowledge of markets, availability of transport, change in dietary habits, etc. All, or most, of these issues could have been addressed if a genuine two-way communication would have occurred during the assessment and the planning phases of the project (Anyaebugnam et al. 2004).

Before discussing the MMC or Multidimensional Model for Change, it is worthwhile highlighting how C4D scholars and practitioners are becoming increasingly aware of the importance of social pressure in the adoption or rejection of a given behavior. Human behavior is not always guided by “rational” considerations, or maybe rationality does not have a universal applicable standard. What is rational in India might not be rational in Germany, and what is rational for a 20-year-old might not be rational for a 60-year-old.

Social norms, interdisciplinary overview, infrastructure strengths, and institutional capacities are some of the elements that should be considered when planning for behavior change. Hence, a more comprehensive but agile approach is needed to make sure that all key components of a certain situation are taken into consideration and assessed before designing effective strategies leading to social and/or behavior change. This is at the core of the model presented next.

---

## **The Multidimensional Model for Change (MMC)**

Knowing the rationale behind the development of the Multidimensional Model for Change or MMC helps to understand why and how to use it. A literature review of international experiences plus lessons learned and documented failures about trying to eradicate open defecation in India were instrumental in helping to refine this model. Its main rationale is to ensure that all dimensions and related components that can promote and facilitate change would be considered when developing a C4D strategy. Open defecation usually falls under the domain of the Water and Sanitation sector but affects a number of other sectors such as health, nutrition, and education. Hence adopting a strict sectorial approach would not bear the intended results, while the intersectorial and integrated focus of the MMC can be of much greater value.

MMC combines the insights of participatory communication research and planning with the comprehensive overview and assessment allowed by the contextual framework of the socio-ecological model. This helps to break out from the rigid unilinear approaches of the past. Clearly to successfully eliminate open defecation, the key behavior to be adopted virtually by every individual has to do with the systematic use of latrines. It is of little wonder then to see that the many

communication campaigns aimed at promoting the use of latrines both in urban and in rural settings had a very limited effect overall.

This is mostly due to the fact that such communication campaigns have been often devised and implemented with an information-bias approach, that is, focusing on the message to be given to people regardless of other factors of relevance to audiences/stakeholders. To be effective in promoting the behavior of latrines, communication campaigns should be weighed against factors that are likely, if not certain, to affect the adoption of the new behavior. Among these are latrine-friendly policies requiring toilets in public places; number of and access of latrines available; number and qualifications of line workers at community level promoting the building, maintenance, and proper use of latrines; and, last but not least, the presence of social norms, cultural beliefs, and customs that support the use of latrines, as peer pressure could be a crucial factor in accepting or rejecting the adoption of a new behavior.

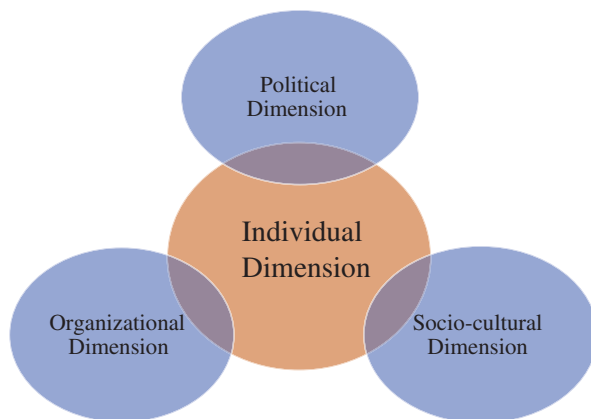
Many of these “side factors” have been underestimated, if not completely missing, when designing and implementing campaigns aimed at promoting the adoption of the new behavior (something required in virtually any type of innovation or change initiatives), thus explaining to a large degree the reasons for the many failures in the adoption of the latrines by individuals. The MMC has been devised to avoid this kind of shortfalls and promote a comprehensive and cross-sectorial assessment that would then allow to plan and adopt communication approaches, methods, and tools in needed components of each dimension. Hence, the Multidimensional Model for Change is an approach that, starting from an identified situation that needs to be improved, helps to make a comprehensive assessment of the context related to the situation in question. Next, it allows the planning of the overall intervention as well as to devise the parallel communication strategy aimed at ensuring that the intended behaviors will be adopted.

The MMC comprises four dimensions, three of which define the enabling socio-economic environment conducive to change, and the fourth entails the components to be addressed at the individual level for promoting the adoption of the required new behavior. The first dimension is the political one. It has been labeled this way because its components are mostly shaped in the political arena as they are: budget (financial and human resources at disposal), infrastructure (availability and quality), and public policies (laws facilitating or impeding change). The second is the organizational dimension intended to assess the strengths and weaknesses of organized groups and institutions that are linked to the intended change. These organizations or institutions may belong to the state, public, civic society, or private sector. The third dimension is the sociocultural one. Its components are norms, media, and networks of reference. In other words, they are components that can greatly influence decisions taken by individuals, either through media or peer pressure.

In order to ensure that the enabling environment is in place, or to identify what is needed to achieve it, the assessment of the components in these three dimensions needs to precede the last one. If all prerequisites are satisfactorily met, behavior change is much more likely to occur. Hence, the fourth dimension of the MMC is the individual one. Here is where the actual behavior change is expected to occur; hence

**Fig. 1** MMC dimensions.

(Source: Author)



the components are those directly linked to the individual. The first is about the influential sources in the life of the individual, could be a farmer, a priest, the mother-in-law, etc., and the next is about her/his inner circle, including family members and close friends. The last component is a composite one that includes the basic components needed to embrace the new behavior, i.e., AKAP. In much of the communication literature, Awareness, Knowledge, Attitude, and Practice constitute the ladder to achieve and sustain new behaviors, even if recent studies indicate that social norm pressure often has a stronger impact on the adoption of new behaviors. Figure 1 presents the basic MMC dimensions in graphic form.

Before illustrating each dimension in detail, we should mention that the MMC comprises three basic steps or phases. The first phase entails carrying out an assessment of what are the components needed to have the ideal situation (e.g. a polio-free country), following the four dimensions highlighted in Table 1. It can be achieved reviewing the available literature and complementing it with interviews and/or brainstorming with experts and other key stakeholders. The aim is to identify, as exhaustively as possible, all the elements needed to have the intended situation, that is why is named “ideal mapping”. Then, the second phase can begin, which follows the same steps described in Table 1 but now addressing and investigating the situation as it in reality. That is, rather than defining what are the ideal elements needed, it focuses on the hard evidence available to give an accurate picture of the current situation, that is why is named “factual mapping”.

Comparing and contrasting the findings of the ideal mapping and the factual mapping provides the basis for planning. This is the third phase of the MMC, where the strategy to achieve the intended change is developed. It is intended to give a clear understanding of what is missing and should be addressed in order to achieve the intended change. The MMC allows to draw a broad strategy covering various sectors of intervention, but it also provides the framework for developing a C4D strategy, which is in sync with the broader one, addressing the social and/or behavior change in question.



**Table 1** Ideal v. Reality mapping window

Dimensions	Components	Key questions
<b>Political</b>	<i>Infrastructure</i>	What infrastructure would be needed to be able to support the adoption of the innovation/new behavior?
	<i>Public policies/laws</i>	Which policies or laws should be in place to promote the adoption of the innovation/new behavior?
	<i>Budget/resources</i>	What is the needed budget and what number and type of human resources are needed to promote effectively the adoption of the innovation/new behavior?
<b>Organizational</b>	<i>State/public institutions (mandate and capacity)</i>	Which type of state institutions would be required to promote the adoption of the innovation/new behavior? And with what mandate and technical capacity?
	<i>Civil society (NGOs, academia, foundations)</i>	Which CSOs (NGOs, academia, foundations) would be required to promote the adoption of the innovation/new behavior? And with what technical capacity?
	<i>Private sector</i>	How could the private sector support the adoption of the innovation/new behavior? And which firms could be involved?
<b>Sociocultural</b>	<i>Norms</i>	Which sociocultural norms, beliefs, and habits would facilitate the adoption of the innovation/new behavior?
	<i>Media</i>	What kind of themes and messages should the media present, discuss, and disseminate?
	<i>Networks of reference</i>	What kind of themes and messages should be introduced, discussed, and disseminated?
<b>Individual</b>	<i>Influential sources</i>	What themes and messages should influential sources focus on?
	<i>Interpersonal inner circle</i>	What themes and messages should inner circle individuals focus on?
	<i>Individual AKAP</i>	What knowledge, which attitudes, and which behaviors are required to achieve the intended change?

Source: Author

1. The political dimension entails components that, to a great extent, are in control or influenced by the state and are needed to facilitate the intended change, namely, policies, infrastructure, and resources available (both financial and human resources). Thus, as stated above, the first step is to sit at a table brainstorming about which of these components would be needed to achieve our objective. Next the factual (that is evidence-based) assessment process can begin in order to

compare and contrast how far away are we from such ideal situation and what can be done to address the challenges identified.

To make this clearer, let us refer to the open defecation example. Once it has been decided that the end goal is to eliminate open defecation, the MMC approach assesses the various components of each dimension, starting with the political one. To facilitate the adoption of latrines, there should be laws and policies that strengthen the requirements of building and maintaining toilets in all public places and that give rewards or fiscal incentives to individual building latrines in their homes. Infrastructure wise the state needs to ensure that there are enough quality toilets or latrines available in public spaces as well as in institutions of relevance, such as schools, hospitals, public offices, etc. Finally, the budget needs to be assessed against current availability of toilets and latrines in private and public places and what would be needed. Considerations about the cost of having the needed human resources in place should be addressed as well.

Too many times communication campaigns trying to have people abandon the practice of open defecation have been designed and implemented even though many people did not have access to latrines. Everybody can easily see how this is a sure recipe for disaster. Technical experts have not always taken what seems obvious into account. Nowadays, it is still possible to see nicely crafted media campaigns, appealing to the eye but totally useless for reducing the problem of open defecation.

2. The organizational dimension refers to organizations, institutions, or groups' alliances, either national or international, which are capable and willing to support the required behavior change. The components of this dimension have been labeled as (1) state/public institutions, such as line ministries, departments, or specialized state agencies; (2) civil society organizations, including non-governmental organizations, academia, and no-profit foundations; and (3) private sector, which basically can include firms and entrepreneurs which are interested in getting actively engaged in activities to promote the achievement of the set objective.

Hence, in the case of organizations, capacity is not the only factor to be assessed but also the mandate, and the adherence of practice to that mandate, because as Quarry and Ramirez (2009) stated "organizations are half the methodology." Continuing with the open defecation example, the factual assessment would first have to focus on the demographics about the open defecation problem. Where does it happen the most (e.g., urban vs. rural areas)? Is it evenly spread by age, gender, and socioeconomic status? This data will help understand better the specifics of the problem and identify what kind of institutional presence would be needed in the field.

Starting with the first component, the following questions should be posed to understand what would be needed to put in place an effective behavior change strategy. Which public/state institutions have the mandate to operate in this area? And do they have the financial and human resources to support the needed behavior change? If gaps are identified, they need to be addressed before launching a communication campaign to promote the adoption of latrines. A

similar process should be followed for the other components. The one of civil society would require an appraisal of NGOs working in relevant areas as well as of academic centers able and willing to support the strategy to eliminate open defecation.

3. The sociocultural dimension is the one that has been most neglected in the past and is probably the one most effective in promoting or blocking the adoption of new behaviors. The components of this dimension are (1) social norms, which are the behaviors that people are expected (by other people) to apply in specific social situations, which clearly vary from culture to culture. It is becoming increasingly evident how social norms, through peer pressure, can be the main factor in making individuals accepting or rejecting new behaviors; (2) media, refers to all channels of communication that address messages and themes either in a monologic or dialogic manner. They can be mass media, social media, or even traditional media such as popular theater or flip charts. These are channels that have the main function of mostly passing or exchanging information, even if in some cases they can stimulate dialogue and discussion, e.g., social media; and (3) networks of reference, which refers to networks of people, which can affect individual's decisions, such as a farmers' unions, a national association of pediatricians, or in the case of open defecation an academician network of universities having water and sanitation programs and courses. These three components have one thing in common. They are all effective instruments capable of influencing and shaping the individual's decisions in embracing change and adopting new behaviors.

Recently, the influence of social norms in shaping behaviors has gradually become more and more important. Evidence shows how most individuals are prone to adapt or adopt certain behaviors if they feel others in their community of reference are expecting them to do so and if they are expected to reciprocate. The work of Bicchieri (2017) on the role of expectations in social norms provides interesting insights in this area. The importance of peer pressure in making individuals change their behavior has been documented in many cases, but I find of particular interest the instance described by Rosenberg (2011).

In her book, among the many examples, one stood out as providing a great insight on how to influence behavior change. The author investigates why traditional anti-smoking campaigns that worked with adults (even if after a long time) did not work for teens. It became clear that a key reason was the fact that teens are by nature rebellious and not particularly keen to listen to advice by grown-ups. Things change when the approach was switched to appeal to their rebelliousness, having as the main target not health issues but the big tobacco companies and the way they manipulated marketing message to lure teens to smoke. This approach was made even more effective by the fact that groups of teens themselves were the ones spearheading debates and actions related to this issue in schools and other places where teens would usually convene.

To make clearer the functions of the components in this dimension, let us revert to the open defecation example. The initial step would be to investigate and assess available norms and beliefs related to this practice. If it turns out to be (as it

is the case in some places) that open defecation is not only tolerated but also socially acceptable, it becomes clear that before promoting change of individual behaviors, there is the need to address and change perceptions and expectations of the community. In this respect, mapping the media landscape is a useful exercise as it can help to raise awareness about issues and promote change, even if change is usually more effectively achieved through interpersonal communication. Social media can also be quite effective in promoting change given their potential for dialogic communication, as illustrated in the *Development Communication Sourcebook* (Mefalopoulos 2008).

Media campaigns can provide valuable contributions toward the goal of eliminating open defecation, but only if research and message design are done in a dialogic and participatory manner. Finally, the third component has a similar function as media, but on a more interpersonal level. Networks of reference are powerful channel through which individuals receive and exchange information while also forming and/or reinforcing their worldviews and opinions; thus they can be effectively used to engage individuals at community level. For instance, in parts of India, C4D strategies have relied successfully on religious leaders in having people accepting to vaccinate their children. The use of religious networks has been of great help in reassuring people who were hesitant or suspicious.

4. The individual dimension is where change is expected to take place, activated by the perceived benefits expected, the pressure of close family and friends, and the inner process of knowing what does it take to adopt the change and have the motivations to act upon it. The three dimensions presented above constitute the whole of the enabling environment, which can greatly facilitate or impede the adoption of the new behavior. This last dimension instead is directly related to the actual decision of embracing the intended change. Hence, the three components of this dimension are meant to be directly capable of achieving the adoption of the new behavior.

The first component is (1) perceived benefits, meant to verify if all stakeholders know about the benefits of the new behavior and if the perceptions of the benefits are consistent among different groups. That is why the Windows of Perception tool is applied again in this step. It ensures that the benefits' perceptions of the experts are shared by other stakeholders, for instance, rural farmers. Too many times projects and programs have failed due to gaps in the understanding and miscommunication among the various parties (Anyabgunam et al. 2004), resulting in distinct groups of stakeholders having radically different perceptions on the objectives and expected benefits of the development initiative. The other component is (2) the inner circle, which is composed by persons, either family or friends, who are very close to the individual and, thus, have a profound influence in affecting the decision whether to adopt the new behavior. Key persons of the inner circle can be addressed and engaged in cases where other media are not so effective or with individuals who resist to engage in communication with external sources.

Finally, the last component is AKAP, or Awareness, Knowledge, Attitude, and Practice, that is the process leading an individual to adopt a specific innovation or

a behavior. Even if its linear approach has been critiqued, the AKAP ladder still provides a good basic reference on individual factors providing useful predictors that change is likely to occur. Awareness is the first step intended to acquire consciousness that change is needed. Knowledge goes a step further bringing detailed information and inputs about the issue, its pro and contra. Most of the channels and tools in the third dimension are used with all relevant stakeholders to ensure awareness and knowledge are properly addressed.

Attitude is a tougher factor to assess and address. It refers to a stance, viewpoint, or state of mind toward a certain issue or situation. When having to shift people's attitudes, usually from a negative stance to a more positive one, evidence suggests that dialogic, interpersonal communication is more effective than media or monologic communication. Practice is the last part of this change ladder. It is about acting upon the decision to adopt the intended change. It should be kept in mind that this ladder of change is only one way, as behavior can also be adopted due to social pressure or other factors, not always easily explainable rationally.

In the open defecation example, the C4D strategy should start to focus on the behavior change element only at this point, while the components of previous dimensions were preparing the ground. In the first dimension, C4D can be used to advocate for ensuring adequate infrastructure, enabling policies and enough resources needed to facilitate the intended change. In the second dimension, C4D can still advocate to have relevant institutions and organizations supporting the actions needed to promote the change. Moreover, C4D experts should also strengthen capacities of these organizations/institutions to effectively use communication and participatory approaches to promote and engage people in the reasons and the need for the change. Finally, they should assist in devising C4D strategies conducive to the adoption of the new behaviors.

In the sociocultural dimension, the last of the "enabling" dimensions, the emphasis is on social norms. Social pressure, recognition, and inclination to conform to the expectations of the rest of the community are elements that have been often underestimated in behavior change. The basic structure of the MMC approach is reflected in the next table, which when used and compared among different groups of stakeholders compose a tool named "windows of perceptions" originally developed as part of the PRCA toolkit (Anyabegunam et al. 2004). The initial table, named ideal situation mapping, is based on evidence and is expected to be used to map the situation defining the "best case scenario" that is as it should be, i.e., the ideal situation. This can be assessed through rigorous review of available literature eventually complemented by brainstorming sessions with key stakeholders. The other table (which is the same in its format) is filled with inputs from the situation in the field and by consultations with all relevant stakeholders. It is called "reality mapping" and by comparing it and contrasting it with the first table is expected to define the gaps and disjunctures between the situation as is intended to be from the way it is currently. These gaps will form the basis of the strategy leading to the intended change. It should be noted that in the case of the second table, it is not only factual reality that should be assessed but

also stakeholders' perceptions of the situation, as perceptions are often the major impediments to achieve change.

## **Multidimensional Model for Change: Windows of Perceptions**

See Table 1.

---

## **Conclusions**

To summarize, let us briefly review the entire process, leading from the situation assessment to the planning of a C4D strategy, keeping in mind that such C4D strategy is part of the broader strategy. Such broader strategy to achieve the intended change can still be devised through the MMC. Thus, the first step is to fill as much as possible the ideal mapping window as per Table 1, which would then be compared and contrasted with the reality of the situation on the ground uncovered in the factual mapping. Hence, the actual review of the evidence-based assessment of the various components of each dimension begins, investigating the issues and questions presented in Table 1. After having reviewed and assessed to what degree adequate public policies, infrastructure, and resources are in place, we can move to the organizational dimension. Mandate and capacities of state and public institutions, as well as of NGOs and other no-profit organizations, should be reviewed and assessed. Private sector opportunities and alliance should also be considered.

In the sociocultural dimension, beliefs and norms of relevance should be thoroughly investigated and assessed to see if they are neutral, if they facilitate, or if they impede the intended change. Media and networks of reference need to undergo the same kind of scrutiny, to assess which can be of value and how they can be used effectively. Finally, in the individual dimension, the perceived benefits as understood by the various groups of stakeholders are assessed and compared. The next component to be investigated is the inner circle, to find out if some persons can be of use in promoting change, e.g., the mother-in-law. The last component is one directly addressing the behavior change at an individual level. Do individuals have the required knowledge about intended the change? And what is their attitude about it? Are they prone to adopt the new behavior? And if not, how can they be engaged in a dialogue about why is the intended change expected to improve life conditions?

The Multidimensional Model for Change has been already applied in practice, and it has shown that by identifying broader dimensions of analysis, it helps to have a more comprehensive and intersectorial approach. It also avoid neglecting major gaps and by comparing the ideal versus the actual it provides helpful insights needed to develop effective strategies, where communication for social and behavior change can be instrumental to achieve the intended results. The following is the summary of its pro and cons, starting with the former. First and foremost, the MMC comprehensive overview of the situation allows considering and assessing all major elements of

a given situation, minimizing the risks faced by many past initiatives that failed due to their unilateral sectorial focus. It provides a sort of checklist with all key factors that should be considered when devising a strategy aimed to achieve social and/or behavior change. It also highlights gaps and weaknesses where the strategy needs to focus. The fact that some of these factors are not strictly related to the eventual C4D strategy is another strength, as new behaviors cannot be adopted without a conducive environment. For example, it does not make sense to have a highly appealing media campaign promoting the use of latrines, if there are not enough latrines to respond to the eventual growth to the demand for the use of latrines.

The fact that the MMC allows a broader oversight entailing different areas and sectors is another strength when developing a C4D strategies, since C4D is cross-sectorial and can be used not only across sectors but also for distinct functions, as illustrated clearly in the *Development Communication Sourcebook* (Mefalopulos 2008). The overall C4D strategy can, for instance, be used for advocacy purposes in advocating for certain policies, or to have more resources allocated, it could be used for capacity strengthening of certain institutions or for building alliances between public and private stakeholders, for instance. Naturally, it would be also expected to include media campaigns, participatory approaches, social mobilization, and other approaches with the aim to achieve the intended social and behavior change. The comparison and contrast of the ideal situation vs. the factual one provides valuable inputs in identifying gaps and critical points, thus making it easier where to focus the strategy and how to fit it in a proper timeframe.

Lastly, the MMC allows focusing the strategy on the specific behavior change framing it within the overall multidimensional context, and in this respect other factors become of relevance. The one about social norms is probably the most critical. There is increasing evidence on how social pressure and especially peer pressure are major determinants when deciding if adopting a new behavior, as illustrated effectively by Rosenberg (2011). Social norms have been not fully understood and applied in C4D strategies of the past, but they are now acquiring the relevance they deserve.

On the cons, it should be mentioned the challenges deriving from having to carry out a broader assessment at various levels. Prioritizing these challenges in terms of importance is not always easy, but devising a solid theory of change for the intended change should help in ranking priorities. Time needed to carry out a MMC assessment is another factor that can apparently be a disadvantage. However, the time spent in the initial assessment is recuperated with interest in term not only of time saving but also of planning effectiveness when developing the strategy.

A multidimensional approach, with a strong interdisciplinary connotation, is always challenging. Most of us have been brought up thinking in a linear way, and most academic careers aim at an in-depth specialization on a specific discipline or topic, gradually narrowing the path from broader knowledge to specific areas of specialization. It is only natural that we find challenging to adopt a broader multidimensional and intersectorial approach, having to assess and prioritize among several factors. However, as stated above, devising a sound theory of change



helps to guide the design of a multidimensional strategy that can successfully achieve the intended change.

The apparent complexity of the MMC does not necessarily signify that strategies to achieve change must be complicated; on the contrary they could be rather simple and straightforward, once challenges and gaps are properly identified and agreed upon. However, it should be noted that simple solutions often require complex analysis. To ensure that such analysis is done in an effective and empowering manner, MMC should be carried out following the basic C4D principles, having at its core the use of dialogic (i.e., two-way) communication (Mefalopulos 2008), which ensures stakeholder participation throughout all the phases of the change initiative. Applied in this way, MMC has proven to minimize errors in planning the strategy due to misperceptions among stakeholders; errors of neglecting factors not directly linked to the behavior, but still necessary to have the behavior adopted; and errors due to a narrow focus that impedes broader approaches and alliances instrumental to the success of the strategy. In other words, MMC has proven to be an effective tool to develop and design even complex interventions aimed at social and behavior change.

MMC provides an overview of key dimensions constituting the environment of a given situation. Such multidimensional overview allows an interdisciplinary and exhaustive assessment, which provides insights and inputs for a better planning and related strategy, and not just for the C4D strategy. C4D methods and tools are part of the investigation and assessment process of the MMC, using dialogue to engage stakeholders and empower them in the decision-making process. It also ensures that the C4D strategy is closely aligned to the overall strategy, thus greatly enhancing its chances of success. In conclusion, the Multidimensional Model for Change is another powerful approach within the Communication for Development family. It is an approach that can greatly enhance at the same time the overall multidimensional strategy and the C4D strategy to achieve specific social and behavior change, while at the same time engaging and empowering stakeholders. Finally, the MMC provides another vision about the understating of a situation and planning for change: a vision that leaves behind older unilinear strategy design in favor of a multidimensional, cross-sectorial, and interdisciplinary design, taking into full account different realities and their perceptions by the various stakeholders' groups.

---

## References

- Anyabegunam C, Mefalopulos P, Moetsabi T (2004) Participatory rural communication appraisal: starting with the people, 2nd edn. FAO/SADC, Rome
- Bicchieri C (2017) Norms in the wild. Oxford University Press, New York
- Bronfenbrenner U (1979) The ecology of human development: experiments by nature and design. Harvard University Press, Cambridge, MA
- Inagaki N (2007) Communicating the impact of communication for development. The World Bank, Washington, DC
- McAnany EG (2012) Saving the world: a brief history of communication for development and social change. University of Illinois Press, Urbana



- 
- Mefalopulos P (2003) Theory and practice of participatory communication: the case of the FAO Project "Communication for Development in Southern Africa." Dissertation. Austin, TX: University of Texas at Austin.
- Mefalopulos P (2008) Development communication sourcebook: broadening the boundaries of communication. The World Bank, Washington, DC
- Mefalopulos P (2010) Why sound technical solutions are not enough: the role of communication in development initiatives. In the Oration at New Delhi, India: Lady Irwin College, University of Delhi, XX Nov 2010
- Quarry W, Ramirez R (2009) Communication for another development: listening before telling. Zed Books, London
- Rosenberg T (2011) How peer pressure can transform the world. W. W. Norton & Company, INC, New York
- Servaes J (ed) (2003) Approaches to development: studies on communication for development. UNESCO, Paris
- World Bank (2016) World development report 2015: mind, society and behavior. The World Bank, Washington, DC