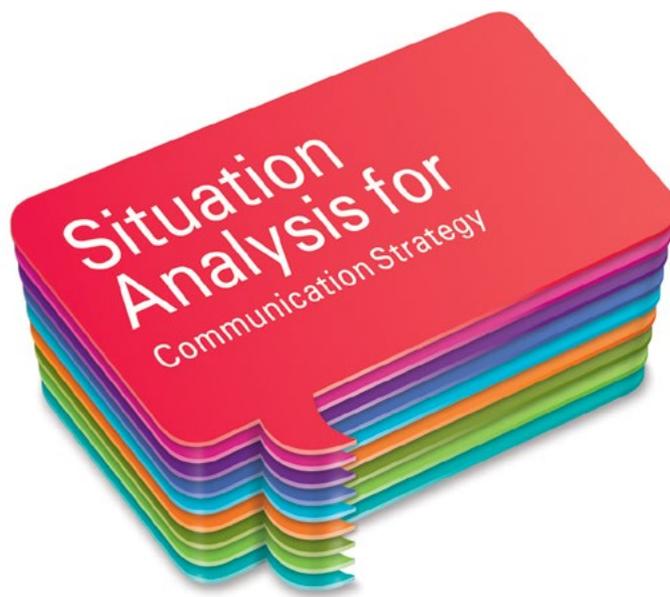


Communication for Social and Behaviour Change Learning Module Series

MODULE 1 MODULE 2 MODULE 3 MODULE 4 **MODULE 5** MODULE 6 MODULE 7 MODULE 8 MODULE 9



MODULE 5



Coordinators and leading contributors:

Paolo Mefalopulos is currently UNICEF Representative, Chile. He was the Chief of Communication for Development (C4D) at UNICEF India Country Office from June 2009 to March 2014. His expertise is in participatory communication research and planning. While working for FAO, Paolo was part of a team that developed an innovative methodology known as PRCA – Participatory Rural Communication Appraisal. He also taught at the University of Texas at Austin, where he obtained his Ph.D. in international communication. He authored several articles and books on communication for development. His most recent works, published by the World Bank are: *Development Communication Sourcebook: broadening the boundaries of communication* and *Participatory Communication: A practical guide*.

Mario Mosquera-Vasquez currently works as Regional Advisor, Communication for Development (Social Change); UNICEF's Europe and Central Asia Regional Office (ECARO). He worked as Chief C4D, India from Sept 2014-Mar 2019. He has over 20 years of experience working on a variety of health promotion, health communication, community mobilization interventions and research projects, primarily in Latin America and Asia. His doctorate in public health is from the London School of Hygiene and Tropical Medicine, UK. He worked as a visiting research scholar at Ohio University, USA, and consulted with European universities such as the University of Heidelberg, Germany, and the Liverpool School of Tropical Medicine, UK, in a Latin American Research Center. He has published research articles in international journals and authored in various books chapters.

Dr. Silvio Waisbord is a Professor in the School of Media and Public Affairs at George Washington University. He holds a Ph.D. in sociology from the University of California, San Diego. His most recent book (co-edited with Rafael Obregon) is *Handbook of Global Health Communication* (Wiley). He is editor-in-chief of the *International Journal of Press/Politics*. Dr. Waisbord has lectured and worked in more than 30 countries, has written or edited 8 books, and published more than 100 journal articles, book chapters, and newspaper columns. He has worked in communication for social change, particularly in program design and implementation, as well as capacity strengthening and training.

Chike Anyaegbunam is a Professor at School of Journalism and Telecommunications, College of Communication and Information in the University of Kentucky. He is the Director, Dissemination and Implementation Sciences Consortium (DISC). He earned a doctorate degree in journalism and mass communication from the University of Iowa. His areas of expertise are: participatory communication and people empowerment, public relations and integrated strategic communication, social marketing, international development and rural health communication. He has published extensively in peer review journals.

Developed 2013; Updated 2019.



MODULE 5



MODULE 5

Situation analysis for communication strategy



This module covers situation analysis, the first step in the design of communication for development strategies. It provides students with tools to conduct situation assessments that are informed by participatory, human-rights principles, and to analyse data to guide strategic decisions.

Key competencies

After this module, students should be able to demonstrate the following competencies:

- Knowledge of basic methodologies to produce situation analysis for communication for development programmes
- Critical analysis of key concepts and models
- Draft and implement situation analysis plans
- Analyse data
- Draw strategic implications of situation analysis

Unit 1 The socio-ecological model and situation analysis

Unit 2 Literature review

Unit 3 Formative research

Unit 4 Participatory research

Unit 5 Qualitative methods

Unit 6 Quantitative methods

Unit 7 Synthesising, analysing and reporting data

MODULE 5

UNIT 1

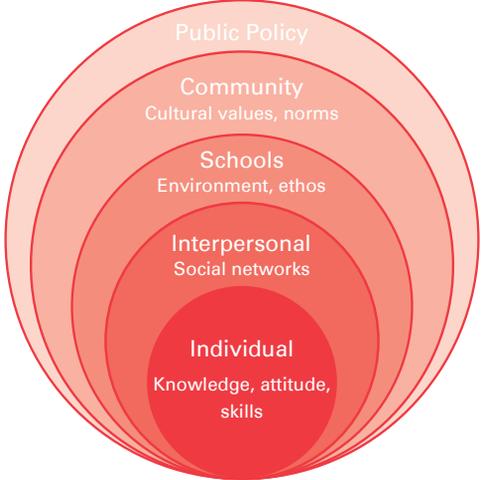
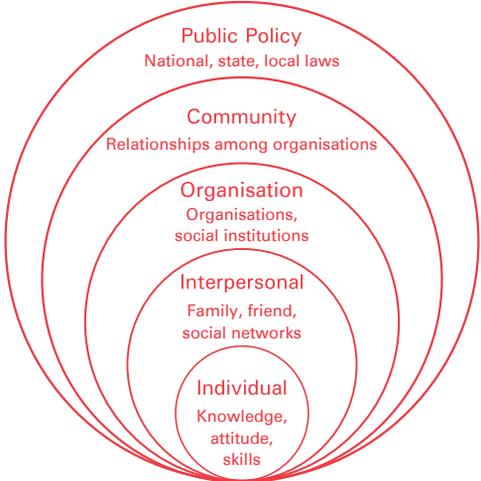
The socio-ecological model and situation analysis

General introduction

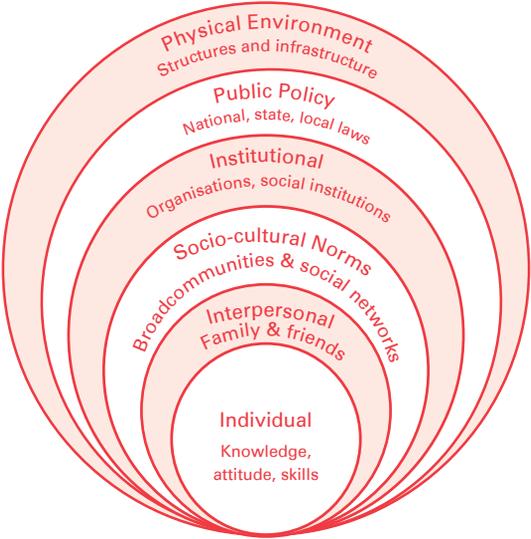
According to the socio-ecological model (SEM), any given development/social issue needs to be analysed in a multi-dimensional context. Development challenges are affected by obstacles and opportunities at various levels: individual, community, social and systems/structural. As a reaction against psychological model that assumed that obstacles and actions primarily lie at the level of the individual, the SEM stresses the importance of the social and political environment. SEM is not a theory in the sense that it does not provide explanations or predictions about what causes affect/explain specific problems or how they need to be addressed. Nor does SEM provide a series of action guidelines—what to do and how. Instead, it is an explanatory model that offers insights into levels that need to be considered to produce nuanced assessments of a given situation. This approach assumes that there is no single factor that determines behaviours, and that broad social change is needed to promote long-lasting transformations. These levels are not independent from each other, but rather, they are nestled in ways that they collectively affect a problem. So, any given problem – let's say low enrolment of girls in primary schools or poor hand-washing – is embedded in multiple factors that need to be carefully analysed.

Literature has given different names to the different levels which fall within four broad categories: individual, interpersonal/community, society and structural/policy. The individual level refers to attitude, knowledge, beliefs, emotions, perceived risk and norms, personal skills and self-efficacy. The interpersonal/community level includes relationships with family, friends and peer—the social networks of influence and information sharing that regularly affect people's beliefs, choices and knowledge. The social level refers to socio-economic conditions, social norms, social capital (institutions and values), large-scale forms of information dissemination, collective efficacy and social trends. The structural level refers to legislation and policies underpinning certain practices as well as social services (e.g. geographical access, cost, quality).

Because there is no agreement on the levels, various graphics have been proposed to represent the SEM. Below are three illustrative samples.



Source: Centers for Disease Control, United States



Source: UNICEF

Despite the different names and number of levels, these graphics reveal important similarities, namely, a growing consensus in C4D about the need to address social, political and economic dimensions beyond individual factors. By placing individuals within their social environment and assuming the existence of complex interrelationships among factors, the SEM overcomes problems of traditional psychological approaches and calls for sophisticated analysis. The wide acceptance and use of the SEM across human development programmes globally indicate an important shift in the conceptualisation of social problems and social change. It calls attention to understanding a string of interrelated causes and actions. Whereas it opens up the analysis to social and political aspects, the SEM does not provide straight guidelines about strategic decisions and steps. It is an analytical tool, not a blueprint for action. It gives us a systemic view of a given problem. Research findings based on the SEM need to be considered to determine opportunities, likely changes and points of entry into the system.

The SEM offers a framework to produce a situation analysis that describe the particular development issue the programme is addressing such as childhood disease, malnutrition, child trafficking, maternal mortality, children orphaned by HIV/AIDS, or inadequate safe water and sanitation. The situation analysis should be based on data from research, programme documents and local knowledge. This information will be similar to that already included in the situation analysis of the programme. In addition to analysing immediate aspects of the problem, including the underlying social and cultural issues, the analysis should also describe what social structures and practices could contribute to desirable change.

The situation analysis should include only key information that is pertinent to the communication objectives and should cover key aspects in a few pages:

- Overview of the problem
- Pertinent instruments for addressing the problems at global/regional/local levels; country-specific description of the problem using available data, programme documents and local knowledge.
- Extent to which people are affected by the problem (e.g. how many people are affected by HIV/AIDS, what the school dropout rate is, how many children remain without immunization).
- Underlying causes of development problem to get an in-depth picture of the particular behaviours (i.e. what are people doing/not doing) that are contributing to the problem.
- Suggest from the data WHY people behave as they do.
- Research on current knowledge, attitudes, practices and beliefs among participant groups relevant to the development issue.
- Look into the socio-cultural and economic factors maintaining the existing behaviours; both positive and negative behaviours. This answers the 'why'

question. If the objective of a programme is to stop a harmful practice such as child marriage or employing child labour, it is important to discuss not only the harmful effects of the practice, but also who benefits and how (e.g. how families benefit from child marriage, how child labour contribute to the well-being of the family/employers). To be effective, the communication strategy will need to address both benefits and risks from harmful practices as well as the barriers to adopting positive practices. Break this description into intermediate, underlying and basic causes if it helps organise the information.

- Communication practices and places where people discuss issues related to the problem at stake.

Questions for discussion

- What are the main assumptions of the socio-ecological model?
- What are the strengths and limitations of the model?
- What examples illustrate the main assumptions of the model?
- How does the model guide situation assessments?

Reading list

Glanz, Karen and Barbara K. Rimer. 2005. Theory at a Glance: Application to Health Promotion and Health Behaviour (Second Edition). Washington, DC: NIH. Retrieved from <https://cissecure.nci.nih.gov/ncipubs/detail.aspx?prodid=T052>).

McLeroy K.R., Bibeau D., Steckler A. and Glanz K. 1988. An ecological perspective on health promotion programs, *Health Education Quarterly* 15:351–377.

Stokols, D. 1996. Translating social ecological theory into guidelines for community health promotion, *American Journal of Health Promotion*, 10(4), 282-295.

Waisbord, Silvio and Rafael Obregon, Perspectives on Communication and Global Health in Rafael Obregon and Silvio Waisbord, Editors. 2012. *Handbook of Global Health Communication*. Wiley.

Supplementary readings

Bandura, Albert. 1977. Self-efficacy: Toward a unifying theory of behavioural change, *Psychological Review*, 84, 191–215.

Bicchieri, Cristina. 2006. *The Grammar of Society: The Nature and Dynamics of Social Norms*. New York: Cambridge University Press.

Case study

UNICEF. Coordinated strategy to abandon female genital cutting in one generation, http://www.polisci.ucsd.edu/~gmackie/documents/unicef_coordinated_strategy_to_abandon.pdf

Learning activities

The learning activities should be aimed at developing the following competencies:

- Explain the principles of socio-ecological model
- Draft a situation assessment plan based on SEM
- Produce situation analysis based on SEM principles
- Undertake critical analysis of data gathered using SEM ideas
- Determine the implications of findings for strategic actions

Lectures, small group discussions and presentations

1. Discuss the applicability of the socio-ecological model to the analysis of a given development challenge. Explore factors that affect the problems (namely, the range of social determinants) and ways that it could be addressed by taking a multi-level approach.

2. Present a case that used the SEM to produce situation assessment and strategies.
3. Discuss ways to decide/recommend actions based on SEM situation analysis.
What are points of entry into a given problem that is affected by multiple causes?

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

MODULE 5

UNIT 2

Literature review

General introduction

A situation analysis needs to start with a good understanding of existing knowledge about the problem as well as past actions to deal with similar development problems. This is important to avoid various mistakes such as assuming that problems are new, ignoring previous efforts and failing to incorporate lessons learned in a strategic manner. Conducting a literature review is important to capitalise on existing knowledge, take advantage of successes and stay clear from past mistakes. Strategic design needs to be built on "the shoulders of giants"—past experiences and programmes which offer insights into the causes and solutions to a given challenge. No single development problem is strictly new. Not only it may have been addressed before, but it is likely to be linked to a broad set of issues. Education, health or environmental challenges, to name a few, are connected to broad set of social issues.

Literature review should not be the conventional exercise in academic scholarship that identifies arguments and gaps in previous research to set up a theoretical and/or research question. Here the interest is different: use knowledge for action. The purpose is to assess the academic literature and programmatic experiences to guide practice. This certainly includes academic literature, but the way this body of work is read and interpreted differs from academic scholarship. It is important to approach the literature review strategically in terms of assessing what is known about a given issue and analyse the accumulated knowledge and perspectives in order to inform programmatic directions.

The first step is to conduct research about the literature on a given topic. It could be a broad research (maternal health, disaster prevention, digital literacy) or specific research (what motivates families to have their children immunized or keep girls in school, or successful ways in which couples discuss reproductive health). The key theme and question should be clear in order to select relevant readings. Certainly, exploratory research may be needed at an early stage—what has been written and done on a given topic. But the search should be guided by a clear interest such as 'what do we know and what are the arguments about' a certain subject.

The sources can be original empirical, published accounts; scholarly and journalistic articles; existing literature reviews; meta-analysis of the findings; 'gray' literature such as programmatic documents and reports and others. Because the sources are multiple, it is important not to lose sight of the key interest. What we are trying to do is understand a problem better based on what people have already studied, and assess the ways in which those problems have been successfully (or not) addressed, even if the community/context may be different. Even if collected articles are different in terms of methodology, sampling, scope and other dimensions, it may be worth including them in the review. This could provide a broader picture about 'the state of the art' and help identify differences and similarities. A good rule of thumb is that recent, solid writings/research provides valuable, retrospective insights as they had to go through a similar process of assessing previous knowledge. Again, the purpose is not to judge the conceptual or methodological merits of available research/writings, but rather to find out what can be learned from them to bring into a new programme.

Once the literature is collected, the next step is to analyse the information collected. Two questions should guide the analysis/interpretation:

- What does the literature say about a problem? Causes? Consequences?
- What does the literature say about interventions that have tackled the same or similar problem? Results?

The analysis should aim to identify central themes in the literature and positions/arguments about the causes and solutions. Here are some questions that may help guide the analysis: what evidence exists about a problem? What arguments have been made about the causes of the problem? What are their programmatic implications? What evidence is presented? Are the case studies comparable? What has worked? What has failed? Are arguments generalisable – applicable beyond one single case? How do we know? Have the arguments been tested? What propositions emerged out of the analysis? What are the gaps? What do we still don't know for certain or lack sufficient evidence to draw categorical conclusions?

The final step is to draft the review in ways that highlights the main arguments and their practical implications. Here it is important to determine to what extent knowledge/experiences about other cases are relevant to the specific focus of a programme. For example, existing research and arguments about environmental education in rural schools may not translate to urban settings, or lessons about child nutrition in settings with ample access to a diversity of foods may not apply to context with limited choices and so on. This is why it is important to weigh the relevance of the results and positions across the literature and cases.

The closing section should consist of practical, specific recommendations for communication planning emerging from the literature review. Each recommendation should be empirically informed; provide guides for actions that are properly based on past research and evidence. Where there are disagreements or missing evidence and no clear-cut recommendations can be made, the review should say so.

Questions for discussion

- What is the need and benefit of conducting a literature review?
- What sources should be included in the review?
- What questions should be kept in mind when analysing the literature?
- How does literature review guide situation assessments?

Reading list

Galvan, José. 2006. Writing Literature Reviews: A Guide for Students of the Social and Behavioural Sciences. Pyrczak Publishing.

Fink, Arlene. 2005. Conducting Research Literature Reviews: From the Internet to Paper, 2nd ed. Thousand Oaks, CA: SAGE.

Cronin P., Ryan F. and Coughlan M. 2008. Undertaking a literature review: a step-by-step approach. British Journal of Nursing, Vol 17, No 1. pp 38-43

Case studies

Ryan Edwards. Social Enterprise Development: Literature Review and Case Studies. The Foundation for Development Cooperation. 2009 http://ryanedwards.weebly.com/uploads/3/1/7/1/3171363/bsep_literature_review.pdf

Louise Dobbie and Morag Gillespie. Report for NHS Greater Glasgow and Clyde. Scottish Poverty Information Unit. Glasgow Caledonian University. May 2010 <http://www.equalitiesinhealth.org/documents/HealthBenefitsofFIfinalreport.pdf>

Learning activities

The learning activities should be aimed at developing the following competencies:

- Explain the purpose of the literature review
- Conduct literature review on a specific subject
- Identify the key arguments and evidence
- Determine the quality of arguments based on evidence, sampling and generalisability
- Draft literature review for programmatic action

Lectures, small group discussions and presentations

1. Conduct literature search on topics selected in agreement with the instructor, analyse findings and produce 10-15 page draft to be presented in class.
2. Critically analyse a C4D programme to determine its strategic assumptions and discuss whether its actions are justified based on the literature.

Unit assessment/evaluation methods

- In-class exercises
- Assignments: Oral and written presentations

MODULE 5

UNIT 3

Formative research

General introduction

Formative research is conducted before programme development to understand the situation in order to develop a communication for development strategy and action plan. Formative research provides insights into the issue the programme is trying to address from many perspectives, including evidence for action to guide and justify strategic decisions and specific recommendations. It is fundamental for improving the relevance, applicability, sustainability and effectiveness and efficiency of programmes.

Formative research comprises four tasks to understand the situation:

- Organise and summarise what is already known about the specific problem including how people are engaging with a particular issue (e.g. low use of tuberculosis services, spike in the number of cases of malaria, increase in reported cases of gender-based violence)
- Check assumptions by looking at existing research
- Review relevant SBCC theories for concepts that can inform and/or guide research.
- Identify gaps and plan and conduct formative research, if needed

A common misunderstanding is that for any new programme, there is a need to produce/conduct original field research to produce action-oriented guidelines. Formative research should not be narrowly identified with conducting original research in communities. It is broader than this as it refers to summarising the existing knowledge from various sources in ways that help guide strategic decisions. The formative research should offer a nuanced view of the problem grounded on different perspectives and sources of information, including affected individuals, community members and decision-makers.

A problem tree is a useful tool for analysing a situation. The problem tree is one way to document:

- What affected communities' belief/knowledge about a problem
- What experts in the problem and the community/region think they know about the situation
- What evidence needs to be collected to complete the analysis ('what we still don't know that needs to be known')

Using a problem tree encourages practitioners to take a deeper look at causes, along with a broader view of possible effects and ways to address the problem or situation most effectively. The trunk of the tree is used to state the core problem. The roots and branches exhibit the basic or underlying causes of the problem and the top of the tree states the effects of the problem.

The trunk and the top of the tree often correspond to the levels of analysis in the socio-ecological model looking at individual, interpersonal, community/organisational and the enabling environment. Cross-cutting factors, noted in the branches of the problem tree, serve as the bridge between the different levels. These include:

- Direct causes—knowledge, motivation and skills
- Indirect causes—access to materials and services
- Underlying causes—perceived norms and actual social norms, socio-economic factors, policies

The formative research should provide a complete picture that, among other issues, provides responses to questions such as:

- Who are the people most affected by development issues?
- What are the causes of the problem?
- How do affected people define the problem?
- What do experts know about causes and solutions to the problem?
- What has been in that locality/region to address the problem?
- How/whether/why people communicate about the problem?
- What institutional, human and funding resources exist to address the problem?
- Who has direct influence/control over the problem?

Formative research and its data collection, analysis and reporting tools can be adjusted to the needs of the programme. Also, formative research is not only to identify problems, it may also identify solutions such as indigenous knowledge of reaction and reflection of people to the challenges they face in health, education, child protection, WASH and nutrition.

Once the situation is fully understood, it is possible to decide how to:

- Focus a programme effectively on different groups of people—those affected and those influencing the situation
- Address the problem identified and its context through complementary SBCC strategies—advocacy, social mobilisation and/or behaviour change communication
- Work with partners, allies and/or gatekeepers

Traditionally, formative research has been conducted primarily through a mix of peer-reviewed literature, grey literature and field research. However, given the recent burst in digital media, it is also important to harness the vast amount of information available on digital platforms while doing a situation analysis. One method for analysing digital information is social listening. Social listening involves using tools to: (i) monitor social media channels for mentions of a certain issue (ii) analyse online conversations to gain insights into affected communities' beliefs, knowledge and perceptions and (iii) use gathered insights for designing effective communication. It also allows one to spot real-time changes in sentiments, which can be useful for testing communication-based interventions and tweaking communication strategies.¹

One way of deriving insights from social listening is through big data analytics. This is a new method of analysis that can be used to conduct formative research by collecting predictive models of consumer behaviour. It has mainly been used in the private sector by business leaders who collect, analyse and act on consumer information that allows them to improve their products. By using big data systems to understand people, today's enterprise leaders can refine their practices and deliver the right messages to the right audience and at the right time. Similarly, big data analytics can be used in the social sector to understand beneficiary behaviour and design interventions that cater to their preferences at all levels of the SEM.

Below is an example of how insights gathered during Step 1 can influence SBCC programme design.

Sample of situation analysis

The Expanded Programme on Immunization (EPI)

Global situation

Since the launch of the Expanded Programme on Immunization (EPI) in 1974, vaccination programmes have been one of the world's most cost-effective public health strategies. These programmes reduce the burden of infectious disease globally and serve as a key building block for health systems in the developing world.

Country situation

EPI in country xxx was inaugurated on 7 April 1979. In 2006, more than 3.5 million children under 1 year of age were targeted for vaccination against the seven diseases covered under EPI. Although there have been tangible changes in the mortality and morbidity rates due to the intervention since 1979, national coverage has remained around 60 per cent for the last few years. Accessibility to vaccination is almost

¹<https://blog.hootsuite.com/social-listening-business/>

universal, as evidenced by 95 per cent coverage of BCG—the first vaccination after birth. Significant gaps remain, however, in achieving full vaccination at the right age and intervals.

According to data available from the Coverage Evaluation Survey (CES) in 2000, while nationally, 96 per cent of the parents knew that children should be fully immunized by their first birthday, only 53 per cent were translating the knowledge into action. Recent research (National EPI Survey, 2005) has indicated that although the awareness level of the importance of the vaccination is very high (96 per cent), accurate knowledge regarding the number of doses, correct intervals, expected side effects, places where services are offered and right age for measles vaccination was found to be significantly low. Reports also show that a considerably high number of parents are aware of the importance of the vaccination and its schedules, yet they are reluctant to take their children to the vaccination sites at the right age and right interval, because they have their own traditional beliefs. In addition, outreach services are often unpredictable and health workers usually vaccinate without speaking to the guardian about the child's next visit per the schedule.

This indicates that drop-outs (leaving the programme of their own choice) and left-outs (those who are not reached because of lack of adequate outreach) pose the greatest challenge.

As part of the Reaching Every District Approach (RED) promoted by WHO/UNICEF, the national EPI programme with UNICEF support has launched a special initiative focusing on the 15 lowest performing districts (those with completion rates below 60 per cent). The purpose is to fine-tune solutions to the local problems impeding full coverage of all eligible children. Special micro-planning sessions at the district level have produced action plans for sub-district teams.

The situation analysis has described the broad areas of a development issue and its underlying causes at the country level. This chapter in the strategy document should analyse the specific programme designed to respond to the problem and for which the communication strategy is being developed. The purpose is to find programme structures that can be adapted or strengthened for communication purposes and/or where communication can help the programme achieve some of its objectives.

Below are the suggested areas to include, but this analysis should focus on issues relevant to social and behaviour change. These analyses are to help build the rationale for a communication strategy.

- Describe briefly what has been the national response to this problem up to present time
- Describe the contribution of government, UNICEF (and other UN agencies), donors, NGOs, other major initiatives and the private sector. Include these programme achievements, constraints, lessons learned and challenges

- If the communication strategy is to cover a 'phase-II' of an ongoing initiative, include a brief description of phase-I focusing on objectives, accomplishments and lessons learned
- Include a discussion of communication initiatives to date, including a list of all communication materials that have been produced so far; how they have been used and how effective they have been
- Identify national goals and objectives and how this programme/project fits into the national plan and/or how it supports the Sustainable Development Goals (SDGs) and list the goals and specific objectives of the programme and results expected, taken directly from the programme documents
- Identify stakeholders involved in the programme at various national, sub-national and community levels. Include frontline workers from government, NGOs and CBOs who are significant participants in the programme. Describe their roles, skill levels, support/ supervision, constraints/strengths. Include community participation. To what extent has the community been involved in the programme? What roles and outcomes are expected from the community?
- Describe the extent to which the existing service delivery is available and used (discuss access issues as well as quality of service). Description of service delivery agents can come here if not covered elsewhere (role, skill level, support/ supervision, constraints/ strengths).
- Resource mobilisation must be looked into to see if there are any new resources, partners and channels being introduced in the current programme? Any relevance to the programme's ability to achieve its objectives?
- Review supply and delivery issues by taking into account facilities, hardware, equipment, materials (mention these only if they are a constraint to communication, participants' behaviour change or if infrastructure building is a significant aspect of the programme such as establishing and equipping drop-in centres for an HIV/AIDS programme where peer education and counselling is provided
- Describe the extent to which the programme addresses the social and behavioural factors described in the situation analysis. What are the gaps in the data?

Questions for discussion

- What added value does formative research provide in identifying challenges and solutions affecting communities?
- What are the possible information sources for formative research?
- What methods can be used for information-gathering, analysing and reporting?
- What questions should be answered with the information gathered and analysed?
- How is the research connected to programmatic recommendations?

Reading list

Mosquera, Mario. Formative Research Concept Note, typescript. New Delhi: UNICEF.

Oxford Policy Management http://www.opml.co.uk/sites/opml/files/KAP%20Report%20Final%20Comments%2011%20June%202010_Final_0.pdf

UNICEF Essentials for Excellence http://www.unicef.org/spanish/cbsc/files/Essentials_for_excellence.pdf

FHI 360 – C-Change. 2011. Understanding the Situation. CModules: A Learning Package for Social and Behaviour Change (SBCC).
http://c-changeproject.org/sites/default/files/sbcc_module1_facilitator.pdf

Menon P., Ruel M.T., Loechl C., and Pelto G. 2003. From Research to Programme Design: Use of Formative Research in Haiti to Develop a Behavior Change Communication Programme to Prevent Malnutrition. International Food Policy Research Institute.
<http://www.ifpri.org/sites/default/files/pubs/divs/fcnd/dp/papers/fcndp170.pdf>

Mohammad Ahmadi, Parthasarati Dileepan & Kathleen K. Wheatley (2016): A SWOT analysis of big data, Journal of Education for Business, DOI: 10.1080/08832323.2016.1181045

Case studies

UNICEF. Coordinated Strategy to Abandon Female Genital Cutting in One Generation, http://www.polisci.ucsd.edu/~gmackie/documents/unicef_coordinated_strategy_to_abandon.pdf

Formative Research Delaying Marriage for Girls in India <http://www.icrw.org/files/publications/Delaying-Marriage-for-Girls-in-India-UNICEF-ICRW.pdf>

Roberts, P. 2018. Social listening case studies – three brands who nailed it. <https://oursocialtimes.com/social-listening-case-studies/>

Learning activities

The learning activities should be aimed at developing the following competencies:

- Explain the goals and applicability of formative research
- Produce formative research plans
- Conduct formative research
- Analyse findings from formative research
- Identify strategic implications of formative research
- Identify the ethical dimensions of social science research

Lectures, small group discussions and presentations

1. Discuss the applicability of the socio-ecological model to the analysis of a given development challenge. Explore factors that affect the problems (namely, the range of social determinants) and ways that it could be addressed by taking a multilevel approach.
2. Present a case that used the SEM to produce situation assessment and strategies.
3. Discuss ways to decide/recommend actions based on SEM situation analysis. What are the points of entry into a given problem that is affected by multiple causes?
4. Conduct 'mock' small-scale formative research in class.
5. Write a critical review of formative research studies included in the module.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

MODULE 5

UNIT 4

Participatory research

General introduction

Participatory research is premised on the notion that people affected by a given issue are best positioned to understand challenges and solutions through being actively involved in the process of change. This approach is philosophically grounded on arguments that question whether powerful actors and technical experts are best-suited to produce nuanced understandings of situations that affect communities. Specifically, this approach is based on critical approaches interested in questioning dominant power structures and constructivist models that understand that human agency is fundamental for social change and that it requires peoples becoming actively involved. Also, it is rooted in a phenomenological approach that views people in terms of how they make sense of their surroundings and construct meaning about themselves and others.

Participatory research also draws from educational/pedagogical approaches that emphasise the merits of experiential learning to lead to successful, long-lasting knowledge that influences practices and a sense of ownership. Self-reflective inquiry is central to this process in ways that help people understand their conditions better and identify appropriate solutions and define outcomes. Community action is grounded on previous learning about people's conditions. Such approach leads to raising critical consciousness, as argued by Brazilian educator Paulo Freire, who pioneered this approach to encourage communities to understand structural reasons for oppression and opportunities for liberation. Beyond the specific results, the main outcome of participatory research is the development of sense of empowerment and control over situations and lives. Both reflection and action are linked to Freire's approach to education and knowledge. This basic principle underlies participatory research.

Participatory research is different from conventional methods in three ways. First, it is research designed to promote and facilitate action. It is not simply to gather information or produce knowledge for its own sake. Rather, it is intended to lead to specific actions that help communities as researchers to modify their environment. Second, it is sensitive to power relationship in the process for it aims to bring out the voices of people in the community and the overall process that otherwise are ignored. It is designed to erase strict boundaries between the researchers and the 'researched'

people by equipping everyone with critical tools and analytical skills. There is no clear-cut distinctions between those who produce knowledge and those who are subjects of knowledge. By doing so, participatory research proposes a new model of knowledge that questions the classic model anchored on individuals and unequal power relations. Finally, participatory research foregrounds the idea of contextual knowledge for it places the purpose/methods of knowledge within a specific context. It is about understanding a given context better and, in turn, incorporating the context in the act of knowledge.

Participatory research questions the purpose of research and knowledge, the relation between researchers and communities/publics, the criteria used to determine effective data-gathering methodologies, the process of data analysis and the assessment of results and impact. By doing so, it challenges the notions of technical dominance in terms of understanding and defining problems. It rejects the notion that knowledge is power over others that facilitate control. Instead, it inverts the terms of expertise/lay knowledge and control/decision-making in the process of knowing by acting. Not only does it push communities to reflect critically about their lives, it also nudges researchers to think critically and seriously about their own approach to knowledge, result and performance. Participatory research leads to a critical reflection on professional practice – a transformation in the way professional researchers think about their own work.

There is no question that participatory research has become widely used by a wide range of development and academic programmes in the past decades worldwide. Because it comprises multiple methods that can be adapted to contrasting circumstances, it is flexible and is applicable to produce knowledge and action on agricultural, health, education, environment and other issues. It has been used in both developed and developing countries, in urban and rural settings.

One key innovation of participatory research is that it brings out new ways of thinking about evaluation. Because it opens up new dimensions and issues as a consequence of the research process itself, it cannot be simply evaluated in terms of changes in 'technical' indicators (e.g. rates of immunization, nutrition knowledge, proper use of insecticide-treated nets) for this misses out the empowerment aspects. Consequently, innovative evaluation approaches and methodologies need to be used to capture the impact of participatory research. Assessing self-reported impact/change by communities is critical to measure outcomes.

Another important issue that participatory research brings up is that the outcomes are less predictable than in conventional research. One really doesn't know what would happen when people themselves produce knowledge, raise questions and come up with possible courses of action. Neither results nor interventions can be neatly predetermined. Here lies the richness of this approach: to provide guidelines that stimulate conversations and critical thinking whose ultimate results are not known *ex ante*.

Core ideas of this approach is that the community is the unit of study/identity – whether a geographical area, people who shared similar interest/problems and a sense of belonging. Also, it draws from local resources broadly defined to conduct research and improve lives. It is premised on the importance of partnership throughout the research process as many actors/individuals/institutions can act in different ways towards a common goal.

Questions for discussion

- What is the purpose of participatory research?
- What are its philosophical premises?
- How is it different from conventional research?
- What innovations and challenges does it bring up?

Reading list

Fals-Borda, Orlando. 1987. The Application of Participatory Action-Research in Latin America, *International Sociology* 2.

Minkler, M. and Wallerstein N. eds. 2003. Community based participatory research for health. San Francisco: Jossey Bass.

Tandon, R. 1996. The historical roots and contemporary tendencies in participatory research: implications for practice. In K. de Koning and M. Martin, eds. *Participatory research in health: issues and experiences*. London: Zed Books.

Supplementary readings

Freire, Paulo. 1972. *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Crotty, M. 1998. *The foundations of social research: Meaning and perspective in the research process*. St. Leonards: Allen and Unwin.

de Koning K, and M. Martin, Editors, 1996. *Participatory research in health: issues and experiences*. London: Zed Books.

Case studies

Clacherty G and, J Kistner. 2001. Evaluating the Zimiseleni researchers' project: participatory research as intervention with 'hard-to-reach' boys, *PLA Notes*.

Learning activities

The learning activities should be aimed at developing the following competencies:

- Understand the basic premises of participatory research
- Critical thinking about the implications of participatory research
- Assess the strengths and limitations of participatory research
- Develop guidelines for participatory research

Lectures, small group discussions and presentations

1. Analyse a case study to determine the contributions of participatory research and compare it to conventional studies on the same subject.
2. Group discussion about the strengths and limitations of participatory research. Prepare responses to potential critiques and role play debate about the subject.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

MODULE 5

UNIT 5

Qualitative methods

General introduction

Qualitative research is an umbrella term that refers to a range of methodologies that are helpful to examine people's experiences and sense-making activities. More than a collection of specific methods, this kind of research gives the opportunity to understand issues from the perspective of specific groups of people, their interpretation and meaning on any given set of issues, practices and objects. For example, if a project/study wants to understand how people live with a given illness, qualitative research allows us to get a sense of their experience with disease, coping methods, expectations, sense of self and other dimensions of their lives. If a study wants to understand how parents make decisions about schooling, qualitative research offers a unique window into the decision-making process to assess how they view schooling, its importance vis -a-vis other priorities, expectations about children and so on. Qualitative research gives insights into people's lives in their natural settings. It examines how their socio-economic, cultural and political context affect their views, thoughts and feelings on specific matters. Common methods include in-depth interviews, focus groups discussions, observation, content analysis, visual methods, case studies, participant observation and life histories. These methods require researchers to have an open and curious attitude as well as to exercise interpretative skills.

Additionally, methods like Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), conversational interviewing, frame analysis and ethnographic research have emerged rapidly. Grounded Theory is an inductive form of qualitative research that was first introduced by Glaser and Strauss (1967). It is a research approach in which the theory is developed from the data, rather than the other way around. Data collection and analysis are consciously combined and initial data analysis is used to shape continuing data collection. Sociological research has been greatly influenced by Grounded Theory and the method of coding-based constant comparison and the theoretical sampling strategy is widely accepted. In recent years, further variations of the grounded theory methodology have emerged.

Qualitative Methods	
Participatory Rural/Urban Appraisal (PRA) and Participatory Learning and Action (PLA)	<p>PRA and PLA utilise field-based interviews and group work to generate information for the monitoring of C4D interventions, including tools such as:</p> <ul style="list-style-type: none"> ■ key informant interviews ■ focus group discussion ■ social mapping ■ transect walks ■ card sorting and pocket or voting charts
Ethnographic Research	<p>Ethnographic research consists of an immersion process in a community, group or organisation in a specific geographical location to generate information for monitoring C4D intervention implementation and understanding causes for barriers and bottlenecks. The principal tool is participant observation.</p>
Media Review	<p>Media review is the process of studying newspaper articles, letters to the editor, television or radio broadcasts (including advertisements), Internet outlets (including websites, blogs, social networks) and other types of media as applicable, in order to classify media content and to understand the climate of opinion around a specific issue of concern.</p>
Case Study	<p>Case studies involve collection of detailed information about a particular process or situation. Case comparison provides insight into <i>why or why not</i> a certain outcome may occur under specific types of social conditions but is not generalisable to the whole population. The principal tool is case description and analysis.</p>
Most Significant Change (MSC)	<p>MCS involves the collection of significant change stories written or taped by primary stakeholders of a programme. Panels of designated stakeholders systematically select the most significant components of their stories. People sit together, read the selected stories aloud and discuss the value of these reported changes and eventually they focus on programme impact.</p>
Appreciative Inquiry	<p>Appreciative inquiry is a method of having stakeholders focus on visions of positive change, shifting away from problems to the positive and the possible. The method works on the premise that in any programme, organisation or relationship, there have been times when good things were happening. Appreciative inquiry builds on these successes to create a more successful future.</p>

A key question is when to use qualitative research. Qualitative methods are useful when a project needs in-depth understanding of how people 'live with' a given issue – how they see, interpret it. They give information about why people act in certain ways, particularly around complex issues, social/cultural norms and beliefs/attitudes. They are also helpful to gather information about sensitive topics such as violence and personal relationships which they may feel uncomfortable responding to in a survey or other methods. Obviously, this demands the right conditions and skillful moderator/interviewer to make people comfortable. When projects need to disentangle complex subjects and search for different nuances and details, qualitative research provides valuable approaches for they aim to understand how issues are seen 'from within' by people. Putting it differently, findings reveal insiders' perspectives on a given issue.

An underlying premise of qualitative research is the social construction of reality through people's interaction with others, within specific contexts. The inter-subjectivity of social life – how people develop ideas and interpretations – is a basic premise of qualitative research. This opens up the existence of multiple perspectives on a given issue. The same issue or problem is constructed differently by people according to beliefs, knowledge, norms and other social factors. Another consideration that is important is whether people reflect upon their own beliefs, practices and issues that can be captured through qualitative methods. Not only do researchers reflect upon the meaning of the findings, but also, if it is important to assess whether people exercise reflexivity on their practices and attitudes and whether they do so alone or with others. This data offers insights about whether people think an issue is important and with whom they discuss or develop ideas and interpretations.

Consequently, research questions need to reflect the kind of issues that can be approached through qualitative methodologies. For example, by studying reproductive health issues, a programme could understand couples' perceptions about having children, how they make decisions, who influences decisions, how decisions are embedded in broad social-cultural and economic context and perceived influences in decision about child rearing. These methods cannot answer, or are not the right way of getting information about number of children, effects of education on having children and the like. Rather, they offer a way to understand the meaning of children within specific contexts—the value of children in their communities, social discourses/narratives about children and so on. To understand these issues, researchers could use in-depth interviews to identify perceptions and feelings, conduct focus groups discussions to assess opinions and community norms and participant observation to get a sense of how people interact in certain social situations. Each method has advantages and disadvantages. Some provide feedback from others and in-depth information, others do not; some are useful to gather data about sensitive, personal issues and others are not. Understanding these differences is critical to use suitable methodologies.

It is also important to assess the limitations of qualitative research. Findings cannot be easily replicated, conclusions are hard to extrapolate to entire populations and inter analysts reliability is more challenging than with quantitative methods. In summary, qualitative research is critical to assess how people live and make sense of any given issue. It tells about 'how' and 'why' people think in certain ways, or make decisions, or what factors shape their views and practice. All these factors need to be understood by getting a sense of how people explain/justify their attitudes and behaviours.

Questions for discussion

- What is the added value of qualitative research?
- What are its philosophical premises?
- What are its limitations?
- What questions can be answered through qualitative research?
- What methods exemplify qualitative research? Why?

Reading list

Selections from N. K. Denzin and Y. S. Lincoln, Editors, 2008. The Landscape of Qualitative Research. Thousand Oaks, CA: SAGE.

Babbie, Earl. 2007. The Practice of Social Research. Belmont, CA: Thomson Wadsworth. Selected chapters.

Fink, Arlene. 2005. How to Conduct Surveys: A Step-by-Step Guide. Thousand Oaks, CA: SAGE.

Lindlof TR and Taylor BC. 2002. Qualitative Communication Research Methods. SAGE Publications. London.

Charmaz, Kathy (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. London: SAGE.

Clarke, Adele E. (2005). Situational Analysis: Grounded Theory After the Postmodern Turn. London: SAGE.

Case study

Arvind Singhal and Elizabeth Rattine-Flaherty. 2006. Pencils and Photos as Tool of Communicative Research and Praxis: Analysing Minga Perú's Quest for Social Justice in the Amazon, *International Communication Gazette* 68(4): 313–330

Learning activities

The learning activities should be aimed at developing the following competencies:

- Understand the basic premises of qualitative research
- Critical thinking about the principles of participatory research
- Assess the strengths and limitations of participatory research
- Develop qualitative research project
- Design and conduct community resource mapping
- Design and conduct in-depth interviews
- Moderate focus group discussion

Lectures, small group discussions and presentations

1. Select two scholarly articles that use qualitative research. Analyse them by considering the following questions:

- Is the question suitable for qualitative research?
- What methods are used?

- Is there a distinction between people's and researchers' interpretations?
 - How does the method give researchers insights into people's context?
 - What are the advantages of this type of research? What are the areas of enquiry that a quantitative method can provide information on?
2. Discuss the strengths and limitations of qualitative research to analyse a given social/development issue. What methods would be applicable?
 3. Discuss how the case study illustrates the principles and strengths of qualitative research.
 4. Draft possible questions that could be researched with qualitative methods and others that cannot.
 5. Field assignment: Draft a small-scale, qualitative research project and identify a research problem, questions and suitable data-gathering methodologies.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

MODULE 5

UNIT 6

Quantitative research

General introduction

Quantitative research allows to measure phenomena by gathering information about a sample of the population. The purpose is to collect numeric data from respondents to offer a representation of the state of a problem. In C4D, this approach has been typically used to assess knowledge, attitudes and practices in a given population. The data is gathered through various methods including surveys, polls and interviews. There exist multiple secondary data sources, including government or sector-specific sources.

Through statistical analysis, researchers identify the prevalence and patterns about certain beliefs and knowledge. Quantitative research is premised on the idea that analysis can be performed in a detached manner and that social phenomena can be documented numerically in ways that the data can help researchers draw conclusions about causality and significance. It features specific methods for data collection to understand causality and responses to certain stimuli, as in the case of experimental research. It widely uses sampling methods to collect representative groups on the premise that findings/results from that group can be extrapolated to the general population. Because it typically deals with large quantities of data, it uses computerised data analysis and specific statistical software. It is primarily of interest in findings related to large trends in a population that can be based in statistical tests to check for significance and validity of results.

Survey	Surveys allow us to gather empirical data or real world observations that describe a given population based on a sample of that population. Survey methodology involves construction of survey questionnaires and statistical analyses.
Cost-benefit/cost effectiveness analysis	Cost-benefit and cost-effectiveness analysis are tools for assessing whether or not the costs of an activity can be justified by the outputs, outcomes and impacts. Cost-benefit analysis measures both inputs and outputs in monetary terms. Cost-effectiveness analysis estimates inputs in monetary terms and other resources and outcomes in non-monetary terms that can be measured in quantitative (e.g., improvement in test scores on knowledge, attitude and adoption level) and qualitative terms (improvement in the level of participation, sense of ownership, empowerment.)

Survey research is a widely used example of quantitative research. It is a method of data collection in which information is obtained directly from individuals and provides the basis for making inferences about a larger population. Various methods can be used to collect information: mailed or self-administered questionnaires, face-to-face or telephonic interviews and online surveys. It is conventionally agreed that surveys provide information about facts, perceptions, attitudes, opinions and reported behaviours. Survey demands going through distinct steps that include: conceptualising the research problem (hypothesis, concepts, operationalise concepts); survey design (sample, procedures); instrumentation (draft questions, identify visual aids, format of instrument); plan survey management/administration; sampling according to goals and resources; training interviewers; pretesting the instrument with a small sample to ensure clarity and suitability; surveying or actual use of the instrument; monitoring to ensure proper application; data coding; data processing; data analysis; and reporting findings. Surveys can be used to gain information to formulate research questions and refine hypothesis, provide measurement of variables and test causal hypothesis and rule out competing explanations. Instrumentation refers to the selection of the survey instrument—questionnaire, interview schedule to determine the content, form, wording and order of questions. Questions can be open-ended or close-ended depending on the issue at stake and the interests of the researchers. Question wording is critical for it can lead respondents in certain directions or confuse them. Likewise, the order of the question is important. There are different kinds of questions relating to warm-up, demographic, substantive, preceded by the explanation of the purpose of the study.

In summary, survey research is the most efficient way to collect information about beliefs, knowledge and attitudes among a large population. Different types of survey methodologies (from polls to intercept surveys) have strengths and limitations. It provides a considerable amount of data to determine baselines, plan actions and assess progress. Survey data gives a basic understanding about certain problems and it offers markers. Although there are low-cost techniques, survey methods can be costly, time consuming and labour intensive. Their use requires expertise in application and participation, which demands trained people and careful pre- and post-planning and scheduling. They offer data that is understood among policy makers and donors for whom numerical data is the 'golden standard' and mandatory to demonstrate rigour and impact. The limitations are that survey methods do not grasp the texture of specific contexts, people's complex relation with various social/development issues, and a tendency to miss details required to understand how people 'live' a given challenge/ problem.

Aside from surveys, other quantitative methodologies commonly used in C4D include basic experimental designs and pre-test/post-test control group. Experimental methods are designed to test the effect/impact of certain stimuli (e.g. messages) on knowledge/ attitudes. Participants are surveyed before and after experiments to identify possible variations that can be attributed to the intervention (stimuli). This methodology is useful to assess changes in ideational factors that may lead to behaviour/social change.

Pre-test/post-test control group are used to determine whether differences before and after can be explained by a given programme. For example, a communication programme to promote primary education enrolment in one district is compared to another district where no programme was implemented. Differences between both districts at the beginning and the end of a specific time period can be analysed and may be attributed to the intervention.

To sum up, deciding on an appropriate research design helps guide the research process. While a plethora of research designs is available, there are broadly four main types of quantitative research: descriptive, correlational, quasi-experimental and experimental. The differences between the four types primarily relates to the degree the researcher design the research, for control of the variables in the experiment.

Following is a brief description of each type of quantitative research design, as well as chart, comparing and contrasting the approaches:

- A Descriptive Design seeks to describe the current status of a variable or phenomenon. The researcher does not begin with a hypothesis, but typically develops one after the data is collected. Data collection is mostly observational in nature.
- A Correlational Design explores the relationship between variables using statistical analyses. However, it does not look for cause and effect and therefore, is also mostly observational in terms of data collection.
- A Quasi-Experimental Design (often referred to as Causal-Comparative) seeks to establish a cause-effect relationship between two or more variables. The researcher does not assign groups and does not manipulate the independent variable. Control groups are identified and exposed to the variable. Results are compared with results from groups not exposed to the variable.
- Experimental Designs, often called true experimentation, use the scientific method to establish cause-effect relationship among a group of variables in a research study. Researchers make an effort to control all the variables except the one being manipulated (the independent variable). The effects of the independent variable on the dependent variable are collected and analysed for a relationship.

Questions for discussion

- What are the advantages and limitations of quantitative methods?
- What are the steps in the design and implementation of survey methods?
- What resources are needed to conduct survey method?

Reading list

Babbie, Earl. 2007. The Practice of Social Research. Belmont, CA: Thomson Wadsworth. Selected chapters.

Fink, Arlene. 2005. How to Conduct Surveys: A Step-by-Step Guide. Thousand Oaks, CA: SAGE.

Wrech, Jason S. et al. 2009. Quantitative Research Methods for Communication. Oxford University Press.

Bernard, H. R., & Bernard, H. R. (2012). Social research methods: Qualitative and quantitative approaches. SAGE.

Creswell, J. W. (2013). Research design: Qualitative, quantitative and mixed methods approaches. SAGE.

Case study

Ubaid Hameed Shah, Sumaiyah Yousuf, Kamran Afzal, M Ashraf Malik. 2009. Short communication: Knowledge, attitude and practice study of families on vaccine preventable diseases in urban slum of north India, Current Pediatric Research 13 (1).

Learning activities

The learning activities should be aimed at developing the following competencies:

- Understand the basic principles of quantitative research
- Critical thinking about the uses of quantitative research
- Assess the strengths and limitations of quantitative research
- Develop guidelines for quantitative research
- Design and conduct small-scale survey research
- Design and conduct interviews

Lectures, small group discussions and presentations

1. In groups of two or three people, conduct a mini-survey among classmates about a given issue. In designing the survey, identify a causal relation between two phenomena (independent and dependent variables) in social development. Define a hypothesis that explains the relationship. Design a survey to assess whether that relationship holds by gathering information through questionnaires. Make sure the wording of the questions is correct. Students can use internet survey sites (such as SurveyMonkey or SurveyGizmo) to collect responses.
2. Discuss a case study (or other article that features quantitative methods applied to understanding C4D issues) in terms of suitability of methods to analyse the research problem, gathering appropriate data, study design, methods used and analysis/implications.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

MODULE 5

UNIT 7

Synthesising, analysing and reporting data

General introduction

Once data are collected through various methods, the next step is to analyse and interpret the findings. The purpose of this step is to understand a situation/ problem, as well as obstacles and opportunities, and to assess progress and challenges. The goal of the analysis varies according to the objectives of any given programme as well as the specific stage in programme design and implementation. In line with participatory principles, it is necessary that data analysis and reporting be conducted in collaboration with key participants and stakeholders to promote ownership and participation, foster diversity of perspectives on the significance of the findings, improve rigour and maximise the use of findings. A strong analysis should reflect various views that exist/converge in a given programme. The data does not lead to specific results – it all depends on the interpretation, interests and views that participants bring into the analysis. Sensitivity to questions of power in a programme – who has the authority to provide assessments and interpretations of the findings as well as who determines who/when to participate – is important to fully integrate various perspectives. Programmes need to understand the value of collective, multi-perspective analysis and find mechanisms and specific moments for this exercise. This is what 'systems thinking' means in this context—bringing together various interests and perspectives around a common problem to produce analysis and recommendations that reflect collective thinking (not just a single set of priorities).

This approach is also necessary to avoid false dichotomies between quantitative or qualitative methodologies. There is no reason not to think that well-grounded, sophisticated analysis demands considering a variety of data and perspectives. A mixed method approach that foregrounds stakeholders' participation and is pragmatically oriented to identifying courses of action is needed.

Collective analysis can be guided and formalised through various techniques. One option is to use the Theory of Change which refers to critical thinking exercises to produce a comprehensive picture of expected changes, sequences and ultimate objectives. This is valuable to flesh out assumptions about why/how change will happen.

Too often the logical sequence, embedded in theoretical models of behaviour/social change, is not fully discussed or even known among participants. Theory of Change forces participants to have clear, honest and realistic expectations. Steps include identifying long-term goals, determining preconditions needed to achieve the goals, linking interventions to results, identifying indicators of results and producing a short narrative to summarise chain of changes. Also, 'problem tree' analysis is helpful to systematise data, produce analysis and move forward with planning. It helps to understand the causes and consequence of problems and identify solutions. It allows participants to break down a problem in different parts, identify facts and factors, assess causal connections, identify key groups/populations, provide a diagnosis of needs/data and develop credible solutions. The fact that problem tree analysis requires conversation/participation from stakeholders contributes to building a shared sense of understanding, action and objectives. It is a team-building exercise as well as a roadmap for action. The table below suggests some questions that can be used for problem tree analysis.

Questions	Analysis
What and how is it happening?	
What is the problem? Why is it a problem?	
What are the causes of a problem? What is the cause of the problem?	
Who is directly and indirectly affected by the problem?	
Who/what is influencing the situation? How and where?	
Who can do what and how to address the situation?	
Who has done what and how to address the problem? Description of solution.	
Problem statement	
Necessary changes	
Actions (solutions)	

Certainly, it is important to remember that several 'analytical frameworks' (e.g. the logical frame) commonly used in C4D and international/human development assume that all events/data can be neatly analysed and boxed in a model. Here, it is important to remember that the model should not narrow the analysis or be the priority. Instead, what is needed is to use models/approaches that help to streamline the analysis in ways that stakeholders understand the underlying model of change.

Simple models are often unable to capture the dynamic nature of social change; yet it is important to agree upon a parsimonious model that serves as a guide and common point of reference for all parties involved.

In statistical applications, data analysis can be divided into descriptive statistics, exploratory data analysis (EDA) and confirmatory data analysis (CDA). EDA focuses on discovering new features in the data while CDA focuses on confirming or falsifying existing hypotheses. Many statistical tools and software are available for data analysis including more commonly used ones like SPSS or R Programming which is being heavily used for Big Data Analytics. Data reporting needs to be open and effective in ways that stimulate further discussion and feedback. It is not simply about what the 'data suggest' but rather, about how findings can be analysed to define priorities and progress and keep stakeholders informed and involved in the process. Recent studies show the importance of having innovative practices to report data and analysis. Old-fashioned written reports and 'experts' meetings' may be insufficient and do not tap into new opportunities opened up by the availability of digital technologies. Updates through social media, digital storytelling (short videos, interviews), discussions/feedback promoted by email messages, community dialogue, data visualisation techniques and other methods can be used to generate ideas and responses. Just like in other steps of the strategy, it is important to keep doors open to solicit/encourage community dialogue and feedback.

Questions for discussion

- What is the purpose of data synthesis, analysis and reporting?
- What methods can be used to guide the process of analysis?
- What principles should be central to data analysis?
- How can data analysis be conducted in innovative and participatory ways?

Reading list

Overseas Development Institute. 2005. Problem Tree Analysis. <http://www.odi.org.uk/resources/docs/6461.pdf>

Department for International Development (DFID). 2005. Monitoring and Evaluating Information for Communication for Development Programmes [http://www.oecd.org/dev/communication and development/46388330.pdf](http://www.oecd.org/dev/communication%20and%20development/46388330.pdf)

Lennie, June and Jo Tacchi. 2012. Evaluating Communication for Development: A Framework for Social Change. London: Routledge.

Supplementary reading

UNICEF. 2005 Strategic communication for behaviour and social change. http://www.unicef.org/rosa/Strategic_Communication_for_Behaviour_and_Social_Change.pdf

Case study

UNICEF 2012, A study to understand reasons for irregular school attendance, Uttar Pradesh http://www.kcci.org.in/_layouts/ContentManagement/KnowledgeRepository.aspx?Theme=Communication

Learning activities

The learning activities should be aimed at developing the following competencies:

- Understand the basic premises of data analysis and reporting
- Critical thinking about models of data analysis
- Develop guidelines for data analysis
- Conduct data processing and analysis
- Identify different perspectives in data analysis

Lectures, small group discussions and presentations

1. Conduct 'problem tree analysis' and/or 'theory of change' analysis of a given dataset to identify potential perspectives around a given issue, competing/similar analysis, ways to facilitate collective critical thinking.
2. Conduct role play in which different students in class play the part of different stakeholders around a given problem. Each sub-group needs to present their position on the problem at stake and the group as a whole needs to produce a common analysis and identify ways to report the results.
3. Pick up any published data or heavy report and convert it into a more user-friendly report by using various techniques of storytelling and data visualisation.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

NOTES:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

NOTES:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

NOTES:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Key contributors:

1. Abhijit Bora, Professor & Head of Department, Tezpur University
2. Abid Husain, Assistant Professor Jamia Millia Islamia
3. Alka Gadgil (Dr.), Head & Faculty, Xavier Institute of Communication, Mumbai, Maharashtra
4. Alka Malhotra, Communication for Development Specialist, UNICEF Delhi
5. Anant Kumar (Dr.), Associate Professor, Xavier Institute of Social Sciences (XISS), Ranchi
6. Anjali Capila (Dr.), Associate Professor, Dept. of Development Communication & Extension, Lady Irwin College, Delhi
7. Aparna Khanna, Associate Professor, Lady Irwin College, Delhi University
8. Arbind Sinha (Dr.), Advisor, MICA - Centre for Development Management and Communication, Mudra Institute of Communication Ahmedabad (MICA)
9. Archana Kumar, Associate Professor, Development Communication and Extension, Lady Irwin College, Delhi University
10. Arupa Shukla, Communication for Development Specialist, UNICEF Delhi
11. David Mould (Dr.), Professor Emeritus, Media Arts & Studies, Ohio University
12. Diwakar Shukla, Director, Jagran School of Journalism and Communication, Bhopal
13. Elnur Aliyev, Communication for Development Specialist, UNICEF Delhi
14. I Arul Aram (Dr.), Associate Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
15. Ila Patel (Dr.), Professor, Social Science, Institute of Rural Management, Anand, Gujarat
16. Joya Chakraborty, Senior Assistant Professor, Tezpur University
17. Kanchan K. Malik (Dr.), Associate Professor in Communication, University of Hyderabad, Andhra Pradesh
18. Kulveen Trehan, Senior Faculty, University School of Mass Communication, Indraprastha University
19. M. H. Ansari (Dr.), Professor & Head of Department, Rural Management, Xavier Institute of Social Services (XISS), Ranchi
20. Manjaree Pant, Communication for Development Specialist, UNICEF Rajasthan
21. Manukonda Rabrindranath, Dean Faculty of Communication and Media studies, Head of Journalism and Mass Communication, Indira Gandhi National Tribal University, Madhya Pradesh
22. Narendranath Chowdary, Consultant, Monitoring & Evaluation, UNICEF Delhi
23. Neela Saldanha, Director, Center for Social and Behaviour Change, Ashoka University
24. Neelam Yadava (Dr.), Assistant Professor, Mudra Institute of Communication Ahmadabad, Gujarat
25. Purnima Mehrotra, Center for Social and Behaviour Change, Ashoka University
26. R Lavanya (Dr.), Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
27. Rachana Sharma, Communication for Development Specialist, UNICEF Delhi
28. Raj Shree Verma (Dr.), Associate Professor, Rural Management, XISS
29. Rashmi Jain, Assistant Professor, Department of Social Work, Jamia Millia Islamia
30. Rudrajit Das, Communication for Development Specialist, UNICEF Delhi
31. S. Arulchelvan (Dr.), Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
32. S. Devaraj (Dr.), Research Assistant, Dept. of Extension Education, Gandhigram Rural Institute, Tamil Nadu
33. Salman Khan, Research Associate, School of Social Work, Jamia Millia Islamia
34. Sanjay Singh, Communication for Development Specialist, UNICEF Madhya Pradesh
35. Sant Kumar (Dr.), Associate Professor, Rural Management, Xavier Institute of Social Services (XISS), Ranchi
36. Santosh Kumar Patra (Dr.), Assistant Professor, Media Studies, Mudra Institute of Communication, Ahmadabad
37. Seema Kumar, Communication for Development Specialist, UNICEF Andhra Pradesh & Karnataka
38. Shivani Saraf, Center for Social and Behaviour Change, Ashoka University
39. Siddartha Shrestha, Chief, Communication for Development, UNICEF Delhi
40. S.K. Gopal (Dr.), Programme Coordinator, Krishi Vigyan Kendra, Gandhigram Rural Institute, Tamil Nadu
41. Sunitha Don, Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
42. Tisha Srivastav, Assistant Professor, Film and Media Studies, Ashoka University
43. U.T. Rao (Dr.), Professor, General Management, Mudra Institute of Communication, Ahmadabad, Gujarat
44. Uma Maheshwari P., Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
45. Vaiju Naravane, Professor, Journalism and Media Studies, Ashoka University
46. Vasuki Belavadi, Associate Professor in Communication, University of Hyderabad
47. Vinod Pavarala (Dr.), Professor in Communication, UNESCO Chair on Community Media, University of Hyderabad

unicef  | for every child

For more copies contact:

Communication for Development Section
United Nations Children's Fund

73 Lodi Estate, New Delhi 110 003, India

Phone : +91-11-24690401

Email : newdelhi@unicef.org

Web : www.unicef.org

www.unicef.org/india/

www.unicefiec.org