

Qualitative research to make practical sense of sustainability in primary health care projects implemented by non-governmental organizations

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SUMMARY

Sustainability continues to be a serious concern for Primary Health Care (PHC) interventions targeting the death of millions of children in developing countries each year. Our work with over 30 Non-Governmental Organizations (NGOs) implementing USAID's Child Survival and Health Grants Program (CSHGP)-funded projects revealed the need for a study to develop a framework for sustainability assessment in these projects. We surveyed NGO informants and project managers through semi-structured interviews and questionnaires. This paper summarizes our study findings.

The NGOs share key values about sustainability, but are skeptical about approaches perceived as disconnected from field reality. In their experience, sustainable achievements occur through the interaction of capable local stakeholders and communities. This depends strongly on enabling conditions, which NGO projects should advance. Sustainability assessment is multidimensional, value-based and embeds health within a larger sustainable development perspective. It reduces, but does not eliminate, the unpredictability of long-term outcomes. It should start with the consideration of the 'local systems' which need to develop a common purpose.

Our ability to address the complexity inherent to sustainability thinking rests with the validity of the models used to design interventions. A participant, qualitative research approach helped us make sense of sustainability in NGO field practice. Copyright © 2004 John Wiley & Sons, Ltd.

KEY WORDS: sustainability; evaluation; primary health care; non-governmental organizations; qualitative research

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Contract/grant sponsor: Bureau for Global Health USAID; contract/grant number: FAO-C-00-98-00079-00.

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INTRODUCTION

The problem of high child mortality continues to be a pressing public health concern with an estimated 10.8 million children under the age of 5 still dying every year in developing countries, most of them from treatable or preventable illnesses (Ahmad *et al.*, 2000; Black *et al.*, 2003).

Following the Alma-Ata declaration on Primary Health Care (PHC) (WHO, 1978), the United States Agency for International Development (USAID) initiated the Child Survival and Health Grants Program (CSHGP) in 1985. The CSHGP works to address excess child mortality through grants to US-based Non-Governmental Organizations (NGOs) that implement Child Survival projects at the community level. At the onset of our study, in 2000, the CSHGP was supporting 72 Child Survival Projects (CSPs) operated by 29 NGOs in 36 countries.

Three factors motivated our study: the recognized need for a common language about sustainability; the absence of specific tools/frameworks that can be used in planning for it; and the danger of identifying 'sustainability indicators' without valid analytical models. This paper presents a predominantly qualitative research approach for eliciting definitions and models of sustainability from professionals in order to create a framework for improving the evaluation and the planning of sustainability in child health interventions.

The framework itself is presented in a companion paper in this issue (Sarriot *et al.*, 2004). This paper presents the methods and results that informed the development of the framework.

BACKGROUND

Sustainability has been a major concern of international health program professionals, most notably since the 1990s, with the general observation that sustainability of health programs in developing countries remains an unresolved issue in many ways (Bossert, 1990; Claeson *et al.*, 2000; Shediak-Rizkallah and Bone, 1998). The value of sustainability, in health as in other sectors of development, is based largely on concerns for the welfare of future generations in a universe with finite resources at our disposal (Bossel, 1999; World Commission on Environment and Development, 1987; IISD, 1997; Meadows, 1998; Olsen, 1998; Shediak-Rizkallah and Bone, 1998).

Research on sustainability has progressed on two fronts: identifying factors of sustainability, and providing definitions and models to make the concept relevant.

Bossert (1990) and Lafond (1995) identified national program-level and external aid factors of sustainability through systematic case studies. A number of individual case studies and reviews of groups of projects have provided additional insight into factors of sustainability in community-based interventions (Amendola and Lundgren, 1994; Shiff *et al.*, 1997; Bhattacharyya *et al.*, 1997; De Maza, 1997; Gubler and Clark, 1996; Jere and Rubardt, 1994; Katarbarwa and Mutabazi, 1998; LeBan *et al.*, 1999; Ndure, 1999; Powers, 1995; Robertson, 1994).

Elaborate statistical analysis models have been employed in a few studies to identify programmatic factors of sustainability, such as flexibility in program

implementation vis-à-vis initial design, or negative factors such as monetizing incentives for the work of community health volunteers (Katarbarwa and Mutabazi, 1998; O'Loughlin *et al.*, 1998).

Various authors have attempted to clarify definitions and proposed models for the exploration of sustainability (Bossert, 1990; Olsen, 1998; Bracht, 1999; Shediac-Rizkallah and Bone, 1998; Thompson and Winner, 1999). The first definitions and models of sustainability for health programs—largely based on Bossert's landmark research—focused on institutionalization (ACSI-CCCD, 1990; Bossert, 1990). Subsequent definitions are more relativist, and have become open to a greater variety of mechanisms for maintaining health benefits to a population (Lafond, 1995; Honadle and VanSant, 1985; Glasgow *et al.*, 1999; USAID, 2000). Some of the models, such as those influenced by the health promotion movement (WHO, 1992), emphasize community processes of appropriation as the main drivers of sustainability (Renaud *et al.*, 1997).

These models, however, were not designed as tools for evaluation and management in PHC programs, and have largely remained unused by PHC program implementers (CSTS, 2000b).

SUSTAINABILITY IN CHILD SURVIVAL PROJECTS IMPLEMENTED BY NGOS THROUGH USAID'S CSHGP

Sustainability is of particular importance to the Child Survival projects operated by NGOs under Child Survival and Health Grants Program (CSHGP) of the United States Agency for International Development (USAID) (CSTS, 2000a; CSTS, 2001). Efforts to ensure that effective community-based Primary Health Care (PHC) programs are sustainable and achieve scale have led to increasing emphasis on project sustainability, both in guidelines emanating from donor organizations and collaborating agencies, and in NGO project documents (CSSP, 1992; CSTS, 2001; Burkhalter *et al.*, 1998; CSSP, 1993; USAID, 2001). This increased emphasis has, however, met with uneven results (CSTS, 2000a).

On the one hand, Child Survival projects have evolved considerably over the years. They have moved away from direct implementation alone to include strategic partnerships, capacity building and efforts to enhance the financial sustainability of basic services (CSTS, 2000a). End-of-project (Burkhalter *et al.*, 1998; Powers, 1995) and post-intervention case studies also describe some positive results of NGO projects in terms of sustainability. Notably, Seims (2000) found evidence for various types of sustainable achievements from NGO-operated Child Survival interventions: continuation of project activities as long as 10 years after the end of funding, capacity built in the US NGOs with expansion of activities in new countries, creation and development of local NGOs, institutionalization of lessons within the countries' Ministries of Health (MOH), continued activities of community organizations and volunteer health workers, and even some measure of sustained impact in communities.

On the other hand, a review of CSHGP projects' evaluation reports found that most projects had not satisfactorily addressed the problem of sustainability of health

services and functions by the end of their grant period (CSTS, 2000a), echoing the recurrent concern found in the literature regarding the sustainability of Primary Health Care programs (Bossert, 1990; Lafond, 1995; Olsen, 1998).

Lack of a solid conceptual framework for sustainability has hindered the advancement of a research agenda and made evaluation of sustainability in Child Survival programs considerably more difficult (CSTS, 2000b), despite widespread interest in this issue. Our analysis of the literature and our ongoing dialogue with the NGO community brought to the fore the need to address this conceptual confusion. It appeared necessary to organize the questions about sustainability into a practical framework, with the purpose of informing program management and allowing meaningful comparisons when appropriate.

The aim of this study was to discover and organize the sometimes-implicit models through which NGOs pursue sustainability in Child Survival interventions, and to propose a coherent framework to advance the evaluation of sustainability in their projects. This aim was pursued through broad research questions: What are the organizing concepts and recognized factors of sustainability of Child Survival projects in developing countries in the experience of NGO opinion leaders? Can we find consensus among NGO PHC specialists on matters of opinion about sustainability-related issues, such as relevance, strategies and evaluation parameters? Finally—although these results are not presented in this document—our last question was how do field project managers self-assess their current projects in terms of sustainability?

We judged it necessary to identify an existing conceptual framework as a starting point for our study, even though the purpose of the study itself was to develop a new framework. This is obviously a paradox, but we felt that such a framework would help us ensure that important dimensions of sustainability were addressed in the data collection instruments. At the same time, given the exploratory nature of our study, it was important to formulate our questions as openly as possible within the initial conceptual framework, in order to be receptive to the paradigms and models that the interviews were to elicit, and not to pre-impose our own perspective.

Our initial conceptual framework was based on Shediac-Rizkallah's model (1998), which offered an open conceptual framework adapted to our exploratory study. Her model makes very few assumptions about the expected end-roles of any actors in sustaining health promotion, and she defines three possible positive outcomes through which sustainability can be achieved:

1. The maintenance of health benefits achieved through the continuation of an initial program.
2. The continuation of program activities within a new organizational structure (institutionalization).
3. The maintenance of health promotion through building the capacity of the recipient community.

Three types of factors influence these outcomes: factors in the project design and implementation, in the organizational setting and in the community environment. This model does not force any particular type of interaction between the different factors, just as it leaves open the range of possible final outcomes.

It helped us frame our initial field guide and questionnaires, without imposing an initial bias on what sustainability should mean, or how it is achieved. We wanted to rely on the opinion of program designers and implementers, in order to discover the parameter of a new model, applicable to program work.

METHODOLOGY

The study was designed as a collaboration between CSTS, the Child Survival Collaboration and Resources Group (CORE)—a membership organization of over 30 NGOs working in child health worldwide—and the Johns Hopkins Bloomberg School of Public Health.

Qualitative and quantitative investigation methodologies were combined in order to first explore experiences and positions, and then identify consensual opinions about child health professionals. We conducted a systematic review of the literature, semi-structured interviews with key informants in the NGO community and two questionnaire surveys: one an opinion survey and one a self-assessment of projects.

In the first phase, semi-structured interviews were conducted between October and December 2000, with 21 key informants with years of involvement in primary health care in developing countries, representing 16 NGOs. We purposefully recruited informants considered particularly knowledgeable about NGO practices and their thinking about sustainability. The questions followed a semi-structured guide, starting with the elicitation of positive and negative experiences with program sustainability, followed by probing for more details about the informants' understanding through open-ended questions. A body of textual narrative of over 1000 pages was collected on experiences from our informants. Our approach was inductive rather than deductive: we queried participants about their experiences and what they had learned from them.

We used textual analysis to analyse the interview transcripts with the Atlas/ti analysis software package (Scientific Software Development, 1997). Codes were created and organized into 'families' of codes. Intensive referencing of the text with the codes facilitated the work of data retrieval and analysis.

The open-ended semi-structured interviews were employed to explore informants' conceptions of sustainability, and to build and expand upon our model of sustainability in child survival programs. This is akin in many respects to a Grounded Theory methodological approach (Titscher *et al.*, 2000), where theory is built from ('grounded' in) the narrative and experience of the individuals. The subsequent phase of close-ended surveys served to validate our understanding about the components of sustainability that had been elicited in the initial interviews.

In the second phase, our survey questions explored logical propositions that reflected assumptions and opinions about sustainability. A questionnaire—a 'critical issues' survey—was administered to 50 professionals associated with CORE or the NGO community. It addressed the respondents' opinions about 'critical issues'—paradoxes, problematic or controversial questions, assumptions—relating to sustainability.

A long list of questions and statements was developed based on positions found in the literature and expressed in the interviews. After review by a small group from CSTS and CORE, the list was brought down in size. A questionnaire based on this second list was tested with a small number of public health interns working in NGOs, then revised and further reduced. The final questionnaire included 75 questions.

Purposive sampling was used to obtain the opinions of NGO professionals specialized and dedicated to primary health care and Child Survival within the small and well-connected NGO Child Survival community. Senior officers working from a home office and providing technical assistance to field project managers (commonly referred to as *backstops*) were our main target, but recognizing that the lines between some international office and field NGO staff, consultants, members of USAID and its collaborating agencies are often changing, we used the CORE list-serve to reach a larger body of 'informed practitioners'. We obtained responses from 50 respondents (26 women and 24 men), 38 of whom worked as backstops. Our sample represented 31 different NGOs. The median number of years of professional life in primary health care programs was 12 years, and the median number of years lived in developing countries was 7 years. The critical issues survey tested the level of agreement to simple propositions with a four-point Likert scale format from 'strongly disagree' to 'strongly agree'. Other questions represented 'logical propositions' linking more than one affirmation through a relation of causality or opposition, in order to explore agreement on relationships between concepts. Responses were numerically coded and entered into the SPSS software (SPSS, 1999). Univariate analysis was conducted on overall agreement to the questions.

The study—designed to be participatory through the involvement of NGO and CORE members in the early stages of its design, identification of informants, review and adaptation of the survey tools—also involved daily participant engagement of the lead investigator in NGO related activities. The work of the investigator with the NGOs included ongoing dialogue and technical assistance, and was quite different from that of a distant analyst, and was akin to that of a participant observer.

RESULTS

Our informants (interviews) and respondents (critical issues survey) combine years of experience in Primary Health Care, reproductive health, safe motherhood, food aid, relief work and development. Most bring a high level of qualification into their work. The most common degree, for both groups, is Masters of Public Health, not infrequently combined with other degrees in health, education, social sciences, or business administration. Most of them work from the USA in a support function to field projects, after having worked and resided themselves in developing countries. Some informants hold academic positions, have worked in technical assistance projects, or worked in donor agencies. Most have had experience in different NGOs before the current one.

The following quote is illustrative of the way these informants entered into the discussion:

'I've worked with a lot of projects over the last 10 years. Some I managed myself, some I backstopped. I don't know if I could bring up particular projects [as example of sustainable programs], but there are some themes that have come out of it, or there are some let's say, characteristics, about the ones that I thought . . . made a difference, and ones I thought were nice but . . . didn't really change the way they do business there for the longer term involvement.'

We present our findings from the informant interviews and the survey on critical issues according to three main directions of analysis with direct relevance to the task of informing evaluation efforts in the future:

- the relevance and importance study participants gave to sustainability in their work;
- the strategies and results of their interventions that they specifically relate to sustainability;
- and finally, the evaluation implications of their understanding of the concept.

From these observations, our discussion will suggest that a clearer concept and definition of sustainability emerges to describe the commonality of experiences and purpose among our study participants.

NGO respondents largely embrace the relevance of sustainability to health programming, but raise questions about the appropriateness of particular interpretations of the concept, or about programmatic expectations set on projects of different nature, in different environments. They provide information about the key strategies and intermediary results on the road to sustainable achievements and, finally, give meaningful insights into how sustainability evaluation should be approached.

The next three quotes offer an introduction to the opinions and results we observed:

'When we think of sustainability in [our NGO], we think more in terms of, especially at the community level, a well-functioning health system We should be able to say, . . . this is a community that understands what the health issues are, for maternal [and] child mortality; understands why moms and kids die and knows what they can do about it. And they understand the value of their community health workers and the training the community health workers have gotten I look on it as a . . . well-functioning social system that almost becomes part of the local culture So for me, that would be the goal of 12 years, to make that cultural change that would leave a well-functioning health system intact, working well; coordinating well into the local health units, . . . local health posts, and just that whole system working My idea would be that the project ends and all those things continue to happen That's much more important than the organizational sustainability or any of the things we often think of.'

'I slightly agree that the emphasis on sustainability can be overdone, such that it stifles maximum creativity. But generally, I mostly agree that it's good to emphasize it.'

'The community, on the other hand, obviously wants what they can get, I mean, if they're in need of health services, they're not in a position to stand back and say, well it's not sustainable so let's not do it.'

Relevance of sustainability

As demonstrated in the quotes above, study participants universally recognized the relevance of sustainability to the Child Survival agenda. Respondents to the critical issues questionnaire almost unanimously agreed with statements making sustainability part of what makes a project 'truly effective'.

While agreeing on the importance of sustainability, some expressed skepticism about our ability to address it programmatically through projects in a meaningful fashion. Forty-three percent (43%) of the critical issues survey respondents think that, 'a project approach to health programs in developing countries is not compatible with high expectations for the demonstration of sustainable results'.

Study participants had reservations about what the focus of a project should be in different situations. The sense of the community's needs comes unsurprisingly as a foundational value of our participants, even for some of those endorsing sustainability as a *sine qua non* of project funding. A small majority of respondents think that NGOs should not work in situations where sustainability is 'clearly an unreachable goal'. A larger majority considers that 'direct implementation of interventions by NGOs is necessary when all other stakeholders are either unable or unwilling to serve the needs of a specific disfavored population' (Table 1).

Additional concerns were expressed through the interviews about the risk of a disconnection between what sustainability should mean for communities and how it can be translated in bureaucratic requirements.

'[If] it's just to salute the objectives and the requirements of data reporting, I think it's meaningless, . . . It doesn't empower the people. I mean those are the things that have to change, and I'm becoming more aware of that . . . I'm finished with writing picture perfect reports.'

This thinking is expressed in particular on the topic of 'capacity building', which is presented as one of the key strategies to achieve sustainable health.

Strategies and results

Working through partnerships and building capacity were viewed as central strategies to achieve sustainable health results. Three primary types of partners are identified: Ministry of Health (MoH) structures, local non-governmental organizations and communities (including community-based organizations or CBOs).

Partnership with MoH structures such as health districts emerges both from the necessity to overcome the risk of gridlock in project implementation and the opportunity it creates for sustained results.

A majority of respondents (78%) also recognize the need to coordinate interventions to national policies and priorities. For most this does not translate, however,

Table 1. Agreement to the 'critical issues' statements (50 respondents from 31 NGOs)

Survey statements	Agreement (%)	<i>n</i>
Direct implementation of interventions by NGOs is necessary when all other stakeholders are either unable or unwilling to serve the needs of a specific disfavored population	82	50
Direct implementation of child survival interventions by NGOs remains necessary when innovative approaches need to be developed, before their effectiveness can be demonstrated to other partners and stakeholders	58	50
The benefit to children and mothers in the community is what ultimately matters. Capacity building at any level should be judged according to its ultimate contribution to this final benefit	68	50
Equity is not disconnected from sustainability; in a general sense, <i>true</i> sustainability requires a reduction in disparities	83	48
Measures of sustainability should ultimately be validated by measures of improvement in human and social development.	90	48
Interventions not supported by governmental structures are not sustainable and should not be funded	27	49
It is the duty of NGOs to work and plan for sustainability independently of government structures, when these structures do not demonstrate interest for the long-term needs of the communities	65	49
If we are really concerned about sustainability, improving the relationship between communities and health care providers justifies a specific allocation of resources, even if, for example, a training plan for the health district staff would have to be implemented more slowly because of the diversion of resources	92	49
Health programs operating with a sustainable development approach should, at a minimum, demonstrate that their strategies do not increase the dependency of their local partners on a single and insecure source of funding	84	49
When local NGOs are built too quickly through a project, they can become dependent organizations and very unlikely to carry on their own vision in the future	88	50
Developing the technical skills and management know-how of a local NGO partner is an immediate need for Child Survival projects, but—in terms of prospects for sustainability—building vision and commitment is an equally important or even a more crucial issue	90	49
Increasing the demand for quality health services will not in itself improve the sustainability of health interventions, without developing the accountability of the health systems at the same time	96	50
Interventions relying on community participation (for example to mobilize human resources such as volunteers, promoters, club leaders, etc.), can be just as unsustainable as any other, if they are only driven by the desire to gather support for their activities, but are not grounded in a community development approach	86	49
Efforts to build the organizational management and communication capacity of community-based organizations (CBOs) will have important results for the sustainability of child health gains, because of the huge role they play in strengthening communication, support, and cohesiveness within the community of intervention	94	47

into an unconditional demand for an alignment of NGO interventions behind government structures, particularly when the commitment of the latter is questionable (Table 1).

Study participants generally recognize partnering and developing the capacity of local NGOs as a key strategy for sustaining child health. Building capacity goes far beyond transferring basic technical skills for the delivery of services, but relates to a bigger perspective of the mission of local organizations, and their social function. As a strategy, NGO capacity building is seen to fit within the larger development of civil society and democracy (Table 1). The NGO understanding of capacity building is also translated into how it needs to be evaluated, and this is presented later in this paper.

What emerges clearly in terms of strategies is that capacity building for partner organizations in and of itself does not summarize sustainability.

‘Capacity building and sustainability, in my mind, are very different in that sustainability—if true benefits or some other important achievement are, in fact, being sustained—[is] inherently good. Whereas capacity is not inherently good, it has to be used effectively to contribute to a higher order result . . .’

Improving the viability of local organizations is another important element influencing long-term work. This relates to financial viability, but also to organizational linkages and relationships for support, advocacy, access to information and technical assistance, etc.

‘And in terms of sustainability, I’d want to look at how does the local Ministry of Health staff relate to those community institutions. Is there a strong link in terms of their working together? Are the community institutions supporting, say, the mobile clinics that the Ministry of Health workers have? Do the Ministry of Health workers depend and work together with these community institutions when they have to do Public Health education campaigns?’

There was frequent acknowledgement that, as desirable as it may be, even strong capacity building relations between international and local NGOs can also increase the dependency of the latter on the former. This told us that capacity and viability are not equivalent concepts.

Participants displayed agreement about four main ideas regarding the role of the community in sustainability:

1. ‘Buy-in’ and ownership by the community is critical to sustaining efforts in Child Survival interventions.
2. The development of community capacity, through community organizing and development, is essential.
3. Communities are more likely to support health intervention strategies that are linked to their perceived development or health-related needs.
4. Activities in sectors beyond health create conditions that are favorable and essential to sustainable health. Literacy, agricultural and food diversification, water and sanitation programs were cited as examples of such activities.

There was also a consensus that using community participation to gather support for project activities without true community development approaches can be just as unsustainable as any other approach (Table 1).

Participants stated that the potential of communities can be enhanced, and can sustain the health benefits at the community level. The following statement from one of our informants would be widely supported by others:

‘With a little guidance, [if] you give people the opportunity, they’ll come up with plans better for them and their communities than we could come up with.’

Respondents were asked to state which of two different strategic approaches was most likely to improve the sustainability of a health intervention at the community level. Overall, 84% of our respondents supported community organizing as an approach more important (58%) or as important (26%) to sustainability than information education and communication efforts to promote the adoption of appropriate health behaviors. This strong consensus behind the value of general community development to support long term health progress is reflected in the following quote:

‘If . . . our intervention has aimed at strengthening the way the community’s addressing that problem, then we’re going to be sustainable If we are trying to change behaviors, in four years, we’re not going to be able to do that’

Some questions related specifically to work with Community Health Workers (CHWs), who are frequently volunteers or semi-volunteers from the community. Sixty percent (60%) of our respondents consider that ‘[building] long term community support and incentives need more [programmatic] efforts [to maintain the performance of CHWs over time] since technical supervision and training are insufficient.’ In other words, community development work to establish community ownership, accountability, and incentives, is for many participants equally or more important than technical training to sustain the work of the CHWs.

On the evaluation of sustainability

A set of questions to and comments from our informants specifically addressed the evaluation of sustainability. Measurement was viewed as problematic because of the intangibility of sustainability, and because of the multiple dimensions and pieces that play a role in making health achievements durable. One difficulty in measuring sustainability is identified by the delay needed to observe certain results. Eighty percent (80%) of our respondents agree that long-term health results due to more functional local systems and improved ‘personal and organizational relationships’, ‘may only become obvious long after end-of-project evaluation has taken place’.

Not only did participants view sustainability as difficult to measure, but also unpredictable. This, in turn, is related to external factors, outside of project control such as economic downturn, epidemiological catastrophes (e.g. HIV), political shifts, natural disasters, human factors, organizational problems (staff turnover) and reversals in national health policies (a change in direction or pace in health care reform and decentralization), all of which can undermine years of work toward a sustainable impact.

‘... Six years ago, they [local NGO partner] were financially better off than they are now. And that’s not because they’re worse at spending money or because they have squandered it in any way. It’s simply because the money from the government has dried up, there’s been droughts. And so then the people are poorer and then there’s been a tremendous amount of deaths because of HIV/AIDS.’

An important point in these narratives is that a single factor such as a change in MoH leadership or policy, and not just a conjunction of problems, can undermine on its own an entire strategy and years of good work.

The combined weight of these external factors can appear to doom the relevance of any project sustainability plan, as suggested by the following quote:

‘We never even got to the point there where sustainability was an issue. I mean, [the country] is not sustainable!’

On the other hand, unintended local processes can dramatically and positively affect long-term prospects. Participants refer back to project evaluation documents about such unplanned successes. Some references are made to community groups taking over project goals and activities (for example through coalitions and associations) and admitting that a project proposal ‘contained little direction for how sustainability was to be achieved’, or referring to the maintenance of some activities as a ‘surprising program result’. Projects are at times able to stimulate a local process—particularly at the community level—without being able to predict or control it:

‘And it actually turned—it was completely unintentional in terms of where we would go next with it... It wasn’t exactly a mistake, but it wasn’t necessarily an intended strategy. So that was kind of an example for me about—it became sustainable without meaning to be.’

A finding of importance is that sustainability is viewed as inseparable from progress toward high level health and development goals.

‘... When you go into a community they’re not just concerned about health; they’re concerned about other things. So if you can help them address various issues I think that’s more sustainable.’

In addition, participants stated that any model of sustainability ‘has to work’ for the local stakeholders. The best mechanisms for maintaining activities have no value unless they are meaningful in the context of the local stakeholders.

‘The solution... is one that the community says ‘Yes, this is a solution—this is a problem we’ve identified; this is the solution we want.’ We shouldn’t use our standards for success so much. The model has to work.’

A series of nine questions in the critical issues survey asked which elements should be taken into consideration to declare a health intervention ‘sustainable’. The elements that received the highest level of recognition represent general conditions improved by the project, as opposed to specific achievements usually associated

Table 2. Scope of capacity building through sustainability-committed interventions ($n = 50$ respondents from 31 NGOs)

Propositions	
‘In a project partnering with a district health system in malaria control and management, a genuine commitment to sustainability means that—at the end of the project—the district system will be left with a greater capacity . . .’	
‘. . . to conduct malaria control and management activities effectively, regardless of the result for other areas of intervention of the health system’	
- versus -	
‘. . . to define its priorities and to perform more effectively in the wide range of areas of its mandate for service to the population’	
Responses	
—The project should affect more the larger organizational capacity than the activity-specific capacity	60%
—The project should affect equally activity-specific capacity and wider-organizational capacity	21%
—The capacity built should be activity-specific to a greater extent (Includes: Capacity built should be totally activity-specific)	19% (2%)

with the idea of sustainability, such as improving the self-reliance of a local partner. By ‘improving the functionality of local systems’, ‘creating opportunities’, ‘fostering interdependency and relations in local systems’, projects can make the environment more enabling. And this change in general conditions has higher recognition for leading to long-term health impact, than elements more traditionally considered relevant for projects.

An illustration of the importance of enabling conditions is that a majority of respondents support that sustainability means leaving behind a more functional (local) organization, with a greater ability to conduct its overall mission, and not just maintain the performance directly linked to the initial project activities (Table 2). This has implications for our understanding of capacity, and for the previously referred to risk of creating dependencies.

This is also in line with recent calls for respecting and supporting health systems during the implementation of disease control programs (Unger *et al.*, 2003).

Overall, the interview and survey data revealed converging perspectives of practitioners’ understanding on the pertinent parameters of sustainability evaluation in child health interventions.

DISCUSSION

We will first discuss the strengths and limitations of our method of investigation, then the lessons we can draw from our findings, leading then into a discussion of what the data suggest in terms of a meaningful and shared definition of sustainability for NGO primary health interventions. Finally, we will conclude with a call to refocus the question of sustainability as a central and practical public health question for all the stakeholders of primary health care.

Contribution of our method to the development of a valid analytical model

This article does not present the framework that was developed out of this study. This is covered in the next article in this two-part series. A main strength of our research approach is that it allowed us to build this model from the experience of practitioners.

Models are essential ways of depicting complex realities and schematizing the interactions between identifiable parts of a complex whole (Singer, 1961). They are of great importance to the development of meaningful research questions, or the definition of indicators of complex processes (IISD, 1997; Najam, 2000).

Building theory and models from the practical perspective of field professionals is one of the functions of qualitative research (Titscher *et al.*, 2000) and also a recently called for application of anthropological approaches for 'understanding sustainability' (McCabe, 2003). Working with experienced NGO practitioners was critical to developing a model 'providing a common currency of language and enabling decision-makers to be aware of the choices available' (Cole *et al.*, 1998), a need stressed by authors focusing on methodological questions (Singer, 1961), as well as programmatic questions in health and sustainable development (Bossel, 1999; Winch *et al.*, 2002).

Our research approach was strengthened by what we referred to as participant engagement with our study group of NGO professionals. The methodological approach, tools development and then preliminary analyses were frequently discussed with study participants during the course of other ongoing business, as during CORE and CSTS meetings spread throughout the year. This not only ensured trust between researcher and participants, but also continuously enriched the analysis and provided regular 'reality checks' to the investigator. In addition, if elicited narratives from the interviews provided reactive data (generated by an interaction with the researcher), reference to project documents provided a source of non-reactive data, which enriched and helped verify our analyses (Malterud, 2001).

A certain number of methodological weaknesses can be identified in our approach. First, we remained limited to the perspective of NGO professionals as our 'experts'. Although we tried to get closer to the field through the project sustainability self-assessment, we have remained a few steps removed from other essential stakeholders such as local institutional partners and communities. In a sense our study participants served as 'proxy informants', for these communities but we must remain aware of the information that we did not uncover through this approach. We bear this in mind as we conduct follow-up on this work in the field, with local partners and community members.

The second weakness is intrinsic to the aim and design of this study: our findings and analyses did not examine the weight of particular factors in specific set of circumstances faced by projects. We explored commonalities, patterns and shared meaning; this obviously tends to erase organizational or contextual specificities. This only emphasizes that our qualitative exploratory study was essentially a first step, on which further studies looking for differences, specificities, based on the common language that is emerging, can be developed.

Applicable lessons of the study for an approach to sustainability evaluation

Our findings provide us with some directions for improving sustainability evaluation in projects addressing the challenge of child mortality. The tool that emerged from our work—the Child Survival Sustainability Assessment (CSSA)—is presented elsewhere (Sarriot, 2002). We summarize some of the important lessons drawn from our study findings for its development.

First we discovered shared values and common elements of definition from the experience of NGO practitioners. Diversity, limited predictability and multidimensionality characterize the range of their experiences with sustainability.

The multi-dimensionality of sustainability, the multiple stakeholders involved in planning for sustainable health, the importance of external factors over which projects have limited control, and the critical importance of capacity building also appeared clearly from the project sustainability self-assessment. This component of the research revealed the breadth of NGO efforts to mobilize partners and energize local resources at many levels, and suggest that accountability for sustainable health gain can be partly shared with a number of partners and stakeholders.

More detailed lessons can also be derived:

Ensuring that the health of children, particularly children living in poverty, actually improves should be a cornerstone of any health intervention claiming to be sustainable. This may sound like a tautology, but many services can be made more time-enduring and self-sufficient by 'selecting' a more accessible or better-off target population. Such a selection, however, may defeat our goal of reaching those in greatest need, 'the poorest of the poor'. As far as NGOs are concerned, a meaningful approach to sustainability should also be an equitable one, because their focus is on the beneficiaries and not on the programs. This needs to be translated in our evaluation models.

We also learned that our assessment model should focus on many processes beyond the basic health outcomes targeted by projects: the approach (coverage, quality, equity, cost, appropriateness) through which services—including promotional services—are provided is extremely important to sustain health gains. Building capacity in local partners is also essential; however, sustainability depends on many other factors. Increasing the viability of local organizations is important, whether it relates to financial viability, or the development of organizational linkages and support relationships, advocacy coalitions, access to information and technical assistance. Additionally, we learned that capacity building and organizational viability are programmatically distinct. Improvements in social cohesion (e.g. accountability) or community capacity are also cornerstones of sustainability, and need to feature clearly in our evaluation framework.

One key lesson is that sustainable results can often not be reliably predicted. They seem to be due to successful local processes of negotiation, mobilization and imagination, supported by enabling conditions, which a project can advance, but not necessarily control. Some of these conditions (e.g. global, national) are out of the control of most projects, but should be taken into account in our evaluation model to make project expectations and objectives more realistic.

In other words, our evaluation model should make child health programmers accountable for improving key processes, although final lasting outcomes will not be entirely predictable in any single project, regardless of achievements. All things being equal, projects achieving results and improving key processes will stand a greater chance of seeing lasting impact in the future. Long term outcomes will remain, however, somewhat unpredictable at the individual project level.

Considering that many agents and stakeholders are ultimately responsible for the maintenance of health outcomes, assessing and defining sustainability in Child Survival projects requires a consideration of all these actors. This means having a systemic—as in a ‘local system’—approach to sustainability assessment. Helping a local system progress to the next transitional stage toward sustainable health becomes the pertinent role for projects, and this needs to translate into not only the model, but also the evaluation process itself. As we compiled these lessons and continued our analyses, we started to articulate a definition of sustainability that would underlie our assessment methodology.

For Child Survival projects, progress toward sustainability is defined as a contribution to the advancement of specific conditions. These conditions enable actors of a local system to negotiate roles and responsibilities in order to achieve lasting health gains. The individuals, communities and local organizations constitute a local system with their environment, and it is ultimately their coordinated social interactions and efforts, based on the understanding of their own health and development, which will lead to lasting health impact.

The role of a useful evaluation model will be to describe these conditions, which can be briefly summarized as progress on health status and in health services approach; progress in the capacity and viability of local organizations; and progress in the capacity of the community in its social ecological context (Sarriot, 2002).

Framing sustainability as a central public health issue

What is at stake behind our interest in sustainability, in terms of maternal and child health? There has been noticeable progress on global indicators of child health over the course of the past 35 years. But with this progress new causes of child mortality emerge with increasing relative importance, along with a host of threats and challenges to the progress already made (Claeson *et al.*, 2000; Black *et al.*, 2003; Segall, 2003). Consequently, sustainability remains an unavoidable priority because what progress has been achieved must be sustained, while we address the new threats. The alternative is an unending battle against new illnesses, with very limited overall health gains, even regular declines, as priorities shift and levels of foreign assistance funding oscillates.

Interventions that are only immediately effective but not based on durable models will not likely achieve lasting impact. Similarly, if community-based programs are intrinsically unsustainable, we will never get to the stage of effectively scaling up the benefits. At this stage of the health transition in developing countries (Claeson *et al.*, 2000), improving sustainability may be the critical determinant in achieving true impact. A recent paper from a series of publications on child survival makes the case that ‘selection of effective interventions to be implemented at the level of

community and health facilities should be based on the local epidemiological profile and other locally defined key criteria, including the feasibility of achieving high, sustained and equitable coverage' (Bryce *et al.*, 2003). This obviously calls for making progress in our evaluation approaches. This progress is required to avoid designing programs influenced more by political ideologies than by evidence and which can have 'an adverse impact on sustainable health systems' (Segall, 2003).

The lessons provided by our NGO participants suggest that evaluation of sustainability need to and can be approached systematically, focusing on both outcomes and processes (the progress made in enabling conditions for long-term child health gain). Contributing step by step to a balanced progress on these issues is the programmatic imperative of sustainability in primary health care.

ACKNOWLEDGEMENTS

The Child Survival Technical Support Project (www.childsurvival.com) is funded by the Bureau for Global Health's Office of Health, Infectious Disease and Nutrition (GH/HIDN) of the United States Agency for International Development (USAID), under contract number FAO-C-00-98-00079-00, and is managed by ORC Macro. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

Child Survival Collaborations and Resources Group (CORE): The CORE Group, a membership association of U.S. NGOs, strengthens local capacity on a global scale to measurably improve the health and well-being of children and women in developing countries through collaborative NGO action and learning (www.coregroup.org).

Many thanks are due to all the study participants in the field and in the US conducting the real work of health in development in their respective organizations: Adventist Development and Relief Agency (ADRA), AFRICARE, Inc., Catholic Relief Services (CRS), Christian Children Fund, Inc. (CCF), Concern Worldwide Inc. (CWI), Esperança Inc., Food for the Hungry International, Foundation for Compassionate American Samaritans (FOCAS), Freedom from Hunger, Health Alliance International (HAI), Helen Keller International (HKI), International Eye Foundation (IEF), International Rescue Committee (IRC), MAP International, Medical Care Development International (MCDI), Mercy Corps (MC), Minnesota International Health Volunteers (MIHV), Pearl S. Buck Foundation (PSBI), Plan International, Project Hope, Salvation Army World Service Office (SAWSO), Save the Children USA (SC), World Relief Corporation (WRC), World Vision USA (WV). Thanks also to the many colleagues who provided assistance with the development of tools and the review of countless drafts of this paper.

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