

# A methodological approach and framework for sustainability assessment in NGO-implemented primary health care programs

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## SUMMARY

An estimated 10.8 million children under 5 continue to die each year in developing countries from causes easily treatable or preventable. Non governmental organizations (NGOs) are frontline implementers of low-cost and effective child health interventions, but their progress toward sustainable child health gains is a challenge to evaluate. This paper presents the Child Survival Sustainability Assessment (CSSA) methodology—a framework and process—to map progress towards sustainable child health from the community level and upward. The CSSA was developed with NGOs through a participatory process of research and dialogue.

Commitment to sustainability requires a systematic and systemic consideration of human, social and organizational processes beyond a purely biomedical perspective. The CSSA is organized around three interrelated dimensions of evaluation: (1) health and health services; (2) capacity and viability of local organizations; (3) capacity of the community in its social ecological context. The CSSA uses a participatory, action-planning process, engaging a 'local system' of stakeholders in the contextual definition of objectives and indicators. Improved conditions measured in the three dimensions correspond to progress toward a sustainable health situation for the population. This framework opens new opportunities for evaluation and research design and places sustainability at the center of primary health care programming. Copyright © 2004 John Wiley & Sons, Ltd.

**KEY WORDS:** sustainability; child health; non-governmental organizations; community health; evaluation; sustainable development

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## INTRODUCTION

An estimated 10.8 million children under 5 years of age die each year in developing countries, most of them from causes that are easily treatable or preventable through effective and low cost child health interventions (Gove, 1997; Ahmad 2000; Black *et al.*, 2003).

Non governmental organizations (NGOs) are a recognized force in addressing the challenge of child mortality, and in providing vital services and interventions at the community level (Winch *et al.*, 2002; Akukwe, 1998). With the rest of the global health community, NGOs have made progress over the past decades in reducing child mortality (Claeson and Waldman, 2000). They also have evolved toward partnership and local capacity building strategies, with both civil society and governmental structures (Akukwe, 1998; Burkhalter and Green, 1998; CSTS, 2000a).

Questions about the impact of NGO-implemented programs have, however, endured in relation to both their scale and sustainability (LeBan *et al.*, 1999). We argued in a companion paper in this issue (Sarriot, 2004) that sustainability and scale are related, in that unsustainable health achievements, on any scale, will fail to have a lasting impact. In response to the increased priority accorded sustainability in child health programs, some insist on the need for programs to demonstrate sustainability, even when they operate within short timeframes and limited funding. Others, however, dismiss sustainability as simply not relevant to project approaches because, 'nothing is sustainable anyway!'

We believe that the recognition of sustainability as a key public health question is already well supported in the literature (Bossert, 1990; Lafond, 1995; Shediak-Rizkallah and Bone, 1998; Claeson and Waldman, 2000), and that both of these extreme views can be avoided with some perspective.

This paper focuses on the assessment of sustainability in NGO primary health care and community-based projects through an evaluation approach, which systematically places health interventions within a sustainability perspective. This methodology—the Child Survival Sustainability Assessment (CSSA)—is derived from a 2-year collaborative research effort between the Child Survival Technical Support Project (CSTS), the Johns Hopkins University and a large number of US-based NGOs that implement child health programs and participated as members of the Child Survival Collaboration and Resources Group (CORE).

## BACKGROUND: OUR UNDERSTANDING OF SUSTAINABILITY IN THE CONTEXT OF NGO PROJECTS

We have proposed (Sarriot, 2004) this definition of sustainability as it relates to NGO child survival projects.

Sustainability in child survival projects is defined as a contribution to the development of conditions enabling individuals, communities, and local organizations to express their potential, improve local functionality, develop mutual relationships of support and accountability, and decrease dependency on insecure resources (financial, human, technical, informational), in order for local stakeholders to negotiate

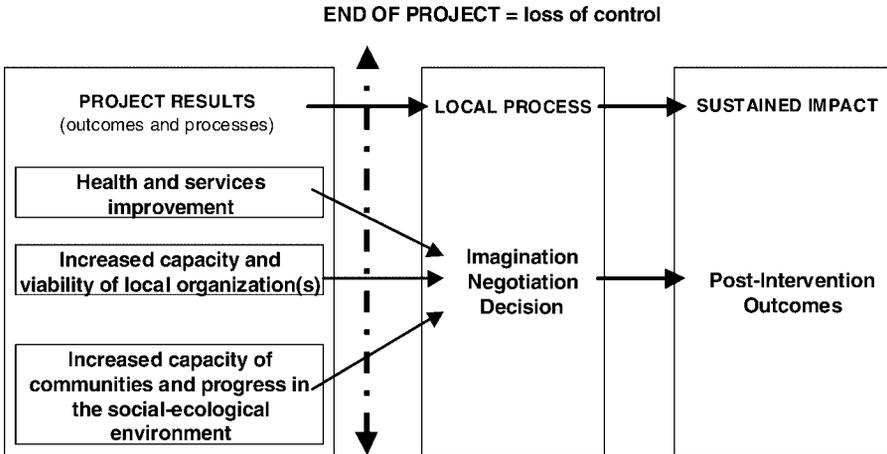


Figure 1. Schematizing project results and actual sustained outcomes

their respective roles in the pursuit of health and development, beyond a project intervention.

This definition takes into account a number of important points:

- 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 conditions.
- The loss of control over local processes inherent in project approaches, is illustrated in Figure 1. This means that the immediate determinants of sustainability—based on a local process of negotiation, role definition and action—are outside the full control of any NGO project. But NGOs have an essential responsibility in advancing the key determining conditions of sustainability within the local system.
- This recognition of sustainability as a combination of processes and outcomes to which projects can only contribute. Much like the concept of capacity in the health sector (Lafond *et al.*, 2002), sustainability refers to multiple inter-dependent dimensions, and our evaluation approach needs to acknowledge this.

Measuring a project’s contribution to sustainable health requires an approach to planning and evaluation that can guide programmatic and management decisions. This is the purpose of the Child Survival Sustainability Assessment (CSSA) methodology.

**THE CHILD SURVIVAL SUSTAINABILITY ASSESSMENT (CSSA):  
FRAMEWORK AND METHOD**

The CSSA methodology proposes both a framework to approach systematically the dimensions of evaluation on which progress will be measured, and a process for a participatory sustainability assessment with communities and local partners. The

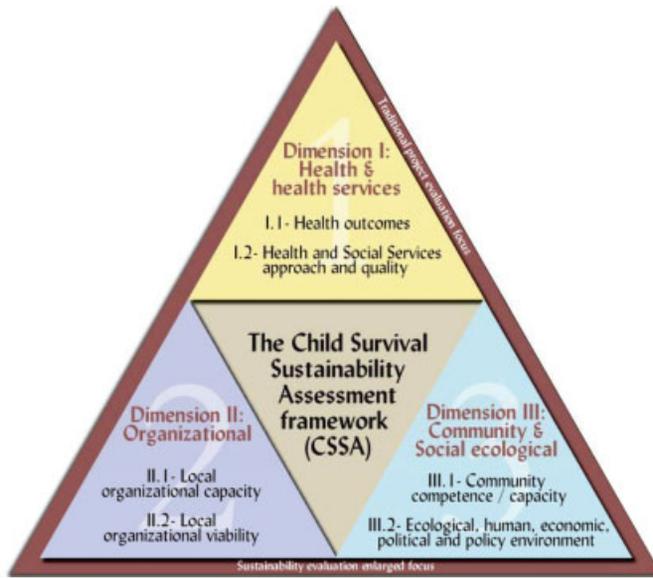


Figure 2. The three dimensions and six components of the Child Survival Sustainability Assessment framework

purpose of the framework is to systematically present, within common dimensions, general objectives (elements) agreed upon by local stakeholders as relevant to their context for sustainable health.

We first present the structure of the CSSA. We then describe an assessment process through which the framework can be used. We will provide examples from the experience of Concern Worldwide Inc. (CWI) in Bangladesh.

### *The CSSA framework*

The framework is presented in Figure 2. It is organized around three dimensions, each broken down into two components, within which a large number of elements can be identified and selected on a case-by-case basis. An illustrative list of these elements is available in a previous publication (Sarriot, 2002b).

1. The first dimension, Health and Health Services, consists of two components including elements reflecting progress in the health situation and the condition of health and social services of the local system:
  - The first component, Health Outcomes, represents the population's health, which is generally addressed through proxy health objectives such as immunization coverage, child growth, healthy household behaviors (exclusive breastfeeding, weaning practices, sleeping under bednets) and/or improved knowledge (e.g. management of the sick child, risk of HIV transmission).
  - The second component, Health and Social Services, consists of elements in the health and social services approach, such as quality, cost, accessibility,

equity, appropriateness and coverage—whether through public or private, community or facility-based service delivery.

This dimension anchors sustainability around the health progress local actors really want to achieve over time. It does not represent only *what* stakeholders want to sustain (health outcomes), but it is also part of the conditions needed for sustainability. As Bossert (1990) has shown, perceived effectiveness has its own positive effect on the sustainability processes. In our research, NGOs were clear that efforts at capacity building are to be judged in parallel with progress achieved in the health of poor communities. Any disconnection between these dimensions (health achievements and capacity developed) would go against the principles of sustainability.

2. The second, Organizational, dimension of the CSSA consists of the organizational capacity and viability that need to develop at the local level.
  - The first component, Organizational Capacity, represents the capacity that needs to exist in local organizations in order to maintain essential services and activities. Organizational capacity refers to a range of functions that are necessary to the life of an organization, to its administration, and its ability to perform its mission (Lafond *et al.*, 2002).
  - The second component, Organizational Viability, relates not only to financial viability, but also to other essential types of support and relationships—connectedness—which an organization depends on to fulfill its mission. This is not so much self-reliance, an optimistic and ambiguous concept at best, but a rational profile of organizational dependency, or interdependency, in a given institutional environment.

Organizational capacity and viability are two overlapping concepts, though sometimes considered one and the same. We distinguish between them because differences in programmatic efforts will enhance one or the other. For example, significant effort can be invested to improve the capacity of a local NGO to manage itself and perform activities, while actually increasing its dependency on a single international source of funding, thus potentially putting the NGO's viability in question. To increase the viability of the organization, efforts of another kind will be necessary to improve its financial autonomy and integration within a societal network to access knowledge and human resources.

The nature of the organization concerned with this dimension will vary contextually, depending on how the local system has been defined: be they Ministry of Health (MOH) structures at the facility or district levels, local NGOs or Community-Based Organizations (CBOs).

3. The last dimension, Community and Social Ecological Conditions, addresses the conditions in the community and the social ecological system in which the project evolves:
  - Its first component, Community Competence/Capacity, refers to overlapping elements that affect the community, such as cultural acceptance of positive

changes, social cohesion, collective efficacy, etc. All these elements can be looked at under the umbrella concept of community competence (Cottrell, 1983).

- The second component—Ecological, Human, Economic, Political and Policy Environment—includes a number of elements within the environment of the local system: national and regional policies, the economic and political environment, the environmental/ecological conditions and human development situation. These elements are frequently outside of a project's scope of intervention, but represent important transitional stages of development, which NGOs cannot ignore.

These two components are strongly related: Policy and local political climates will strongly influence the ability of the community to express its capacity. And reciprocally more capable and cohesive communities will bear greater influence on larger social, political and environmental progress.

Different attempts have been made to describe and assess community capacity, community competence and related issues. One helpful way to look at this is to consider community capacity as a range of functions of community life (leadership, communication skills, conflict management, sense of community, internal participation), which contribute to the competence of the community (Eng and Parker, 1994; Goodman and Steckler, 1993). Community competence is summarily defined as the ability of the community to collaborate on need and problem identification, to achieve consensus on goals and priorities, and to agree on ways and means to implement the required activities (Cottrell, 1983). A number of community 'capacities' are needed to express this 'competence.' The evolution of cultural norms, the cohesion between local community players and the expression of community capacity through the work of CBOs are going to be important to the future of any development and health effort. Recent efforts have been made in the NGO community to better measure areas of community capacity but these efforts have yet to be widely reported and published.

The community competence/capacity component is essential to NGOs, and central to their experience with sustained health benefits. Additionally, the social ecological component is essential in recognizing the importance of the environment in enabling the maintenance of progress (Stokols, 1996).

The CSSA does not offer directives or ready-made indicators for project sustainability, but it supports the systematic development of a monitoring system we might refer to as a dashboard or scorecard toward sustainable health, tailored to the realities of each situation. Each dashboard will contain general objectives recognized by the local actors. One aim of the assessment process is to identify indicators for all general objectives. This requires iterative steps. Measured progress along the three dimensions describes an increased prospect of durable health gains, while lack of progress in any of the dimensions predicts a decreasing prospect for sustainable health.

### *The CSSA process*

The CSSA relies heavily on the quality of the assessment process. A six-stage participatory process is followed to complete a sustainability assessment. This

process has been used in planning for sustainable development with communities in developing countries (Najam, 2000). The six suggested stages are as follows:

1. Define the system to be assessed, its vision and its goals;
2. Identify the relevant elements/general objectives for the local system;
3. Choose indicators and performance criteria (or indicator status definitions) measuring progress on the determined elements;
4. Measure and map the status on the indicators combining the appropriate evaluation tools;
5. Combine the indicators and build indices as needed; and
6. Review results and propose programmatic intervention (including specific project objectives) or policies.

We will discuss these six stages and illustrate them with practical examples.

*Stage 1: Define the system to be assessed, its vision and goals.* The first step is to identify the individuals, communities, organizations and institutional stakeholders that can be brought together as an entity with common purpose, a 'local system.' Some projects may have to start small, working to integrate additional authorities and stakeholders into the system as they proceed. Whether all relevant parties—from political authorities to disenfranchised groups—can be represented around the table is an indication of the validity of the sustainability plan that is devised. While some actors need to be on board as activists, others may be required to be enablers, but the likelihood of progress being sustained will be influenced by the amount of dialogue and shared learning that takes place.

NGOs working in child survival already involve a number of stakeholders in their projects. Once local stakeholders are brought together, they will need to define a long-term vision for sustainable health and corresponding goals in the three dimensions of the framework. The steps between the definition of a vision and the articulation of general goals will vary with the approach that is used. Some organizations have a strong tradition of working together to build a vision as the basis for planning, while others may feel the vision can better emerge from establishing and discussing goals for community health, for organizational development and community capacity. Local actors will define goals based on their understanding of their roles; this is another reason for creating a situation of dialogue around goals, roles and strategies for health improvement.

We illustrate this stage with the example of CWI. CWI has intervened in municipal health in Bangladesh since the 1970s. Child mortality levels continue to be alarming in Bangladesh, including in urban areas (Hussain *et al.*, 1999). In 1998 the organization shifted its strategy from direct service delivery for urban slum populations using mobile clinics, to strengthening the municipal health system. CWI recently conducted a mid-term evaluation of this child survival project using the CSSA to assess its progress in developing a sustainable maternal and child health system.

CWI Bangladesh and its partners established goals around the three dimensions as follows: (1) Improve protection of children through immunization and environmental sanitation; improve safe motherhood and newborn care, and; improve

caregiver feeding and care seeking practices for young children; (2) Strengthen technical, managerial and community mobilization skills of Municipal authorities; and (3) Promote community health through Ward Health Committees.

Goals reveal how sustainability thinking is taking place, and what roles are being assigned to different parties. They are open to critical analysis by evaluators familiar with the local context. In this case Ward Health Committees are recognized as central to the community life and the ability of the population to support lasting health progress.

*Stage 2: Identify elements/general objectives for the local system.* The second stage of the assessment is to select or define the general objectives—the elements of the framework—that actors of the local system consider important pieces of the sustainable health puzzle. Specific objectives for the project will emerge later from these general objectives of the local system for sustained health.

A number of iterative steps, involving dialogue between community members, institutional stakeholders and program experts, will need to take place between steps 2 and 3, to identify general objectives with measurable indicators. Because the identification of objectives and indicators are so closely related, we present examples of objectives and indicators selected by CWI in the next section.

*Stage 3: Choose indicators and performance criteria (or indicator status definitions) measuring progress on the determined elements.* NGO projects play a critical role in helping their partners identify and select the elements of the framework and indicators that matter most in their particular context. They will also have to work at identifying elements that can be validly appreciated and measured. Stage 3 looks at the validity of the proposed measures: Do reliable indicators exist for all elements, and can they be measured?

In the first dimension, Health and Health Services, CWI and its partners focused on immunization, vitamin A, safe motherhood and newborn care, improved feeding and care seeking for young children, as well as sanitation. They identified 12 indicators from the standard Knowledge Practice and Coverage survey (CSTS, 2000b) to assess progress on these elements. They identified quality, accessibility and coordination between formal and informal providers as the key elements of the health services approach component. As easily collectable indicators are less readily available for these issues, CWI chose to facilitate a self-assessment of quality, accessibility and coordination for the different providers in each municipality in which it works.

In the second dimension, Organizational Capacity and Viability, identifying general objectives for local capacity requires some discussion and understanding of the roles and responsibilities of institutional actors. Community-based primary health projects rely heavily on official MOH structures, as well as on local NGOs and CBOs. NGOs have increasingly been involved in capacity building of local partners through a large range of activities, and in some cases have limited themselves to this task and left direct implementation in the hands of their local partners (Sarriot, 2002a). A number of tools now exist to assess organizational capacity (Lafond *et al.*, 2002). At the time of its mid-term evaluation CWI had applied a capacity assessment tool twice with its local partners and identified six areas of capacity

or viability relevant to the development of municipalities: monitoring and evaluation, human resources development, leadership, coordination, participation and resource mobilization. For all these areas, CWI's local partners developed 'possibility statements'—representing a high level of demonstrated capacity—and identified indicators of their current capacity level.

Organizational viability—particularly financial viability—remains frequently and unsurprisingly a critical component of NGO sustainability plans. CBOs may develop their own plan for financial sustainability, including a progressive decline in dependence on NGO funding and an evolution toward a balanced amount of funding from governmental subsidies or grants, membership fees and small funding projects. Viability may also depend on non-financial elements. Health districts, for example, may feel dependent on external access to knowledge and expertise, or a functioning and appropriate referral system, to be viable in their role. Whether dealing with financial or non-financial viability, assessment will require substantial contextual appreciation.

In terms of the last dimension, Community and Social Ecological Conditions, CWI focused on the community capacity expressed through Ward Health Committees (WHCs). It developed a capacity assessment plan for WHCs including eight capacity areas in relation to established roles and responsibilities: leadership, coordination, participation, planning, resource mobilization, monitoring and evaluation, human resources development and financial management. In defining these areas, CWI strongly considered the interaction between the WHCs and broader civil society.

NGOs have limited influence on the factors of the last component of the framework—the social-ecological measures of progress—although they have an increasing role in framing policy and advocating for social change. Projects may not have the time, resources or expertise to compile data about such elements, and development players interested in governance, civil society and sustainable development may need to be involved as partners and resources.

CWI and its partners did not rely on larger development indicators for this component, but assessed that the environment had remained generally conducive based on the existence of policies favorable to community participation in the WHCs, institutional support for health activities by the municipalities, and the existence of payment exemptions for poor households.

These examples illustrate the inherent difficulty, which we discuss later in this paper, in finding appropriate measures for 'soft issues' such as community capacity, social cohesion, leadership and others.

*Stages 4/5: Measure and map the status on the indicators combining the appropriate evaluation tools./Combine the indicators and build indices as needed.* Measurement of indicators in the different dimensions requires the combination of different tools over time. NGOs have developed some experience at combining different methods of assessment as they initiate child health: from the KPC survey, to facility assessments, organizational capacity assessments, participatory learning and action-derived community diagnostics tools, etc. CWI has combined these different tools into a formative evaluation process labeled 'quadrangulation.'

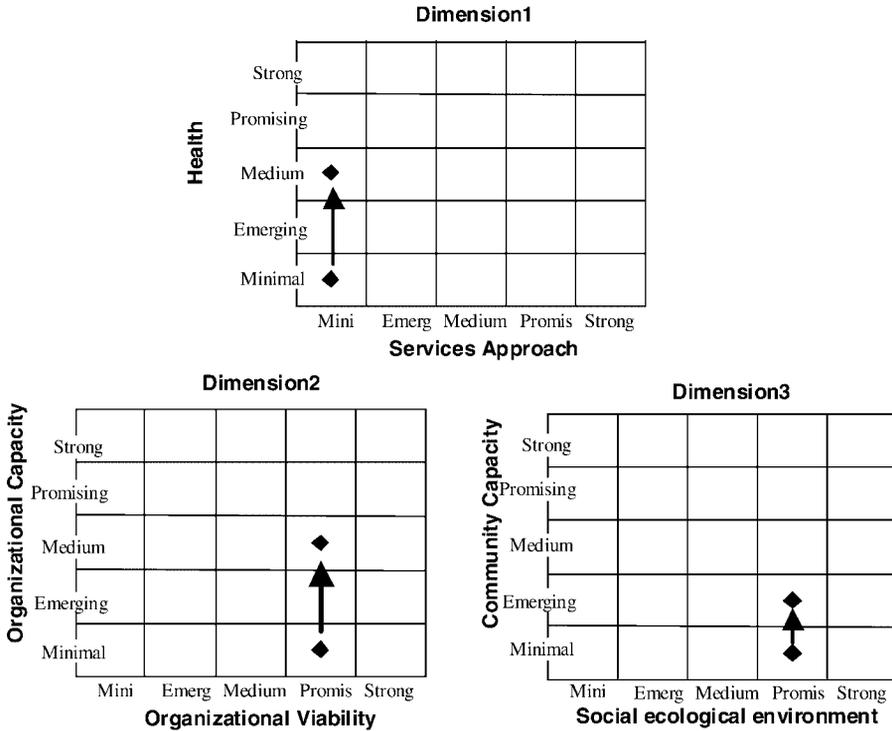


Figure 3. Mapping progress toward sustainable health in Saidpur and Parbatipur, Bangladesh (Concern Worldwide Inc., 2003. Sustainability Review of a Model for Municipal Health in Bangladesh)

Considering the diversity of dimensions, and even elements within a given dimension, it is useful to define status scales for the indicators, thus allowing the development of summary measures—indexes—for each component and dimension (Sarriot, 2002b; Guveya *et al.*, 1999).

CWI's exercise provides an illustration of the type of sustainability mapping these measures will be able to provide. While CWI and its partners could not identify specific verifiable indicators in all the dimensions, they went systematically through the information and measures available in the three dimensions and completed the missing information through a participatory scoring exercise. The resulting picture (Figure 3) demonstrates how progress toward sustainable health can be illustrated by the CSSA framework.

Figure 3 shows that—based on the information available at the time of the mid-term assessment—progress may have been made in community health knowledge, practice and coverage, quality of care in health facilities, and access to services by the population. However, the coordination of services between providers still required substantial strengthening to support the sustainability of health gains in the community. On the organizational dimension, there is at least perceived progress in municipality management capacity following the efforts of the project.

The scores on the viability of the Municipal Authorities remained unchanged. The question of the viability of the Municipal Authorities was the subject of some discussion. As an integral part of the local government system, municipalities could be considered intrinsically viable. The financial and human resources necessary to pursue critical activities beyond CWI support remained, however, constrained due to uncertain national policy regarding delineation of responsibilities and resources between the Ministry of Local Government and the Ministry of Health.

Using participatory capacity reviews with the WHCs, improvements could be qualitatively expressed in most of the capacity areas. The environment was generally rated as positive and stable. Local government support for establishment of WHCs, linkage of WHCs to the municipality, broad support for community participation and involvement in planning had been determined as conducive to supporting a sustainable Municipal Health System.

*Stage 6: Review results and propose programmatic intervention (including specific project objectives) or policies.* Following the CSSA process, making programmatic decisions and defining specific objectives for NGO projects can be effectively integrated within a local plan for sustainable health. In the case of CWI, this also involved the decision by partners to develop better indicators of progress on the elements identified within the assessment framework, in addition to specific recommendations for action and for project efforts in the remaining period of the project. Based on the assessment CWI and its partners determined that they needed to broaden civil society participation, expand leadership of WHCs, and strengthen linkages between health providers, municipalities and WHCs through formal Municipal Health Committees.

## DISCUSSION

We have presented a framework (CSSA) for assessing the sustainability of child health programs and illustrated its application to a project in urban Bangladesh. One factor favoring CSSA's acceptability is that it is non-prescriptive about the tools and methods that need to be used in the measurement of the elements in the different dimensions. This allows NGOs to use the tools they are more comfortable with in each dimension of assessment. For example, CWI in Bangladesh built on its Appreciative Inquiry culture to develop its vision for sustainability with its local partners. In recent years NGOs have multiplied the type of assessment tools used in their evaluation plans including: small population health surveys, facility assessments, capacity assessments, and participatory learning and action (PLA) community-based assessments. All these tools can be applied with the CSSA framework.

Proposing a new tool for improving the evaluation of a complex issue such as sustainability in the context of child health forces us to ask a few questions: (1) What improvements are brought by the proposed tool over current practices in sustainability assessment? We will discuss how the CSSA offers an evolution in the evaluation approach of PHC programs, and how it parallels approaches to complexity in sustainable development and other fields. (2) What specific measurement challenges

will we be facing in its implementation and refinement through practice? (3) Finally, where does sustainability fit within the global health agenda, and what new research opportunities will present themselves if different programs and organizations start sharing data based on common evaluation dimensions?

*An evolution of evaluation approach for community-based primary health care programs*

One of the strengths of the CSSA tool—a *system* assessment of progress toward sustainable child health—is also one of its biggest challenges. It requires a shift in approach for traditional primary health care projects, echoing the call for a ‘reorientation of development priorities and approaches’ in order to better address sustainability in development assistance (Russel, 1995).

The traditional project approach could be summarized as a public health problem solving approach: assess the situation, determine objectives for health improvement, rally local constituents behind the activities, and then worry about sustainability at some point in the implementation process. In practice, this often leads to questions about local ‘buy-in’ only as afterthoughts and the recurrent comments by evaluators that sustainability was not thought through from the onset, or that a phase-out plan needs to be developed. Some of the most promising reports about sustainability come when local stakeholders take ‘ownership,’ which means they start envisioning their future without a project and act as such (Taylor-Ide and Taylor 2002). The CSSA proposes to start with this local ownership of the future and integrates a project’s plans within the local system’s long-term plan for sustained health. The stakeholders of this local system will evolve their vision through time. By starting project plans with a local system perspective of sustainability, the CSSA moves beyond the traditional problem-solving approach.

The research on which the CSSA was built has taught us that many of the sustainability models available in the literature were of limited applicability to child survival interventions (Sarriot, 2002a). For example, supply-and-demand models are very helpful in looking at the sustainability of service delivery organizations, but do not capture all the processes that may be relevant to the development of a sustainable health intervention, particularly at the community level. Models based on financial self-reliance certainly have a value at the organizational level, but may be out of touch with the global context in which programs operate. It is, for example, somewhat idealistic or ideological to think that health promotion services should be fully financially self-supporting in a country that remains largely dependent on foreign aid at the national level. Other models are looking at institutionalization of programs developed by aid agencies within national structures. Practitioners of community-based primary health care also face institutionalization questions, but generally on a much smaller scale than national policy changes. Finally, sustainability plans are meaningless out of context. The CSSA integrates health, services outcomes, capacity building and social change with larger social ecological conditions. Its rationale—local system thinking, a broad and long term view of capacity building, and a proclivity toward integration—is congruent with the call of authors who see too many programs as damaging to local health care services (Unger *et al.*,

2003), and with current thinking about what creates opportunities for sustainable development (Sen, 1999; Rihani, 2002). The focus on different components of evaluation including the environment in which local systems exist also forces us to look at the issue of complexity and non-linear interactions.

### *Complexity and non-linearity*

Sustainability of health projects cannot be considered within a purely biomedical perspective, but demands a broader consideration of human, social and organizational processes. It is a development process and as such fits a non-linear pattern (Rihani, 2002). Most planning models are linear, in the traditional input-process-output-outcome format. While this is a useful way to break down operational plans, it does not translate the non-linear reality of how sustainability 'happens' in primary health care. Increased capacity can lead to increased performance, but it is also true that pushing performance can work wonders in building capacity. Behavior change is a key strategy to improving health outcomes, but achieved or perceived health progress also influences the adoption of new behaviors. Additionally, non-linearity also affects cause and effect in relationships: social capital, trust and the willingness to collaborate at the community or inter-organizational levels do not necessarily accrue linearly under increasing intervention inputs.

These factors (complexity, non-linearity, and unpredictability) have been recognized through many efforts to use non-linear and multidimensional frameworks for planning and evaluation.

Our own interest in a 'dashboard' or 'scorecard' was inspired by assessment tools developed in sustainable development (IUCN, 1997) and in other fields. In business management, for example, some argue that complexity theory seems to doom most long-range planning efforts (Ditlea, 1997). Management leaders have discovered that the long-term health of their organizations (which parallels our concern for sustainability) cannot be ensured by strictly monitoring their business 'bottom line' (for us the effectiveness of our activities). The balanced scorecard (Olve *et al.*, 1999) offers a non-linear, multidimensional model of information, as a management tool for long-term organizational stability and growth. The suggested response to complexity and to the limitation it places on long-term plans is to develop 'attractors' or conditions around which 'complex patterns can organize themselves' (Ditlea, 1997).

This corresponds to our analysis of conditions improved by projects (in health outcomes, organizational development and social ecological systems) to allow local negotiations—the organization of complex local patterns—which will lead to sustained health impact. The CSSA, as much of the field/discipline of social science, tries to provide a framework to better understand a 'messy,' complex and unpredictable world. Experience in assessing and sustaining capacity development for health outcomes is still limited. This tool provides one way to help categorize information into broad dimensions and components in order to help practitioners better understand the variables and determinants that will influence the sustainability of their actions.

One of the lingering questions is about the value of such a planning and evaluation model in predicting success in the long term. Sustainable development authors

offer that sustainability planning might be more about recognizing subjective priorities and developing tools to inform learning and decision processes than about predicting outcomes (Meppem and Gill, 1998; Rotmans *et al.*, 1994). Similarly, the CSSA tool is not a linear construct that guarantees predictability, but rather helps us better understand conditions and linkages between six important components that influence the overall success of our actions. The tool suggests that we need to be aware of these components, and to invest resources (time, effort, finances) in multiple ways to make a positive and lasting difference. The model accepts the overlaps and interdependence between its different elements, but it recognizes that lasting health gains can not take place without some balanced progress in the three dimensions.

It may be that our model has more to offer in informing a local adaptive process, than in predicting outcomes. In other words, the reality of how sustainability 'happens' is going to remain 'complex and messy', but a proper use of the tool will orient projects toward achieving more favorable conditions for sustainability. This will happen through more informed and adaptive negotiations between local stakeholders, as we enable organizations and communities to select and test appropriate indicators that mirror their reality and vision. In a similar approach, Taylor-Ide and Taylor (2002) suggest self-evaluation for effective decision-making (SEED) in order to achieve a lasting and positive change at the community level. The monitoring of selected capacity building indicators should also help organizations be mutually accountable to each other and to a variety of internal and external stakeholders in a learning process that can help guide better investments in the future.

Improving local planning and evaluation processes would be progress enough. We agree with the following statement by Meppem and Gill (1998): 'Flexible institutional arrangements and management strategies that promote continual adaptability and learning are identified as traits with the greatest potential to guide systems towards intertemporally sustainable outcomes.' This also agrees with Rihani (2002), who sees local adaptive systems as central to long term development. There may not be a tool to predict successful local adaptations, but a process can be designed that favors them through a contextually relevant assessment.

Finally, the timeframes for evaluation of sustainability strategies are unfortunately probably not in line with the needs of decision-makers (Langer *et al.*, 2002). But if timeframe of evaluation efforts were far reaching enough, we should expect that local systems achieving substantial and balanced progress in all dimensions of the CSSA will actually observe long-term positive outcomes more frequently. These outcomes may still occur in ways that are unpredictable from a distance.

### *Remaining measurement challenges*

If the CSSA helps planners and evaluators think systematically through the determinants of sustainable health at the local level, it does not solve all the measurement challenges that remain.

There is now a large experience within and outside the NGO community in the measurement of health outcomes or their proxies. Other components of the

framework pose greater measurement challenges. One of the challenges is the difficulty in assessing complex processes such as leadership, community participation, capacity or social cohesion. Recent work offers promising directions for measuring organizational and community capacity, or larger social and environmental indicators, but we are really just starting to develop measurement tools (processes) for these issues, which require a large amount of qualitative appreciation (Lafond *et al.*, 2002; Figueroa *et al.*, 2002).

The other comes from the difference between what Lafond and Brown (2002) call assessment tools, on one end, and tools for monitoring and evaluation, on the other. Assessment tools are often very descriptive, providing a comprehensive picture of many areas of capacity (at the organizational or community level), and are helpful in guiding decisions. But they are much more limited in providing a limited set of informative and verifiable indicators for the outsiders. The transformation of qualitative information into reliable and valid indicators will require clarifying processes of data collection and analysis. This is illustrated by recent work on the measurement of social change (Figueroa *et al.*, 2002).

A framework can organize tools and measures, and it can help structure data from different sources to map a general picture of progress toward what each of the dimensions supports: progress toward sustainable health. The measurement challenges themselves remain, and field experience will be needed to make progress. What a coherent model can offer is a commonality of language to increase learning through the collective process.

First experiences with the tool have shown that community members (e.g. leaders of development associations) strongly and intuitively comprehend the basic rationale of the framework. NGOs can play their part as development professionals in providing technical monitoring and evaluation knowledge, while respecting a process placing ownership of the information with communities and local stakeholders.

### *Sustainability and the global health agenda*

As recent publications explain, progressing toward the Millennium Development Goals (MDGs) (The General Assembly, 2000) will require a better understanding of the determinants of child mortality, from the household level to larger socioeconomic factors (Black *et al.*, 2003; Winch *et al.*, 2002). A workable model for sustainability assessment in health should interest implementers, donor agencies and policy makers, who may find new opportunities for learning through evaluation and research, in order to design better programs and policies.

One of the larger policy questions about sustaining primary health care and child survival is whether we are working with unrealistic expectations within non-validated guidelines. The Macroeconomics and Health Report makes a point of the insufficient resources going to health care in low-income countries, particularly for the poor (Sachs, 2001). In this case, it may be important to learn to measure and be accountable for relative progress toward sustainable health, and to develop a better understanding of what is reasonable to expect from projects at different scales. If projects systematically measure progress toward sustainable health on a dashboard (and not only immediate results), it becomes possible to build the body

of knowledge that is still lacking at this point. Evaluation and research efforts could provide better information about timelines, change thresholds, types of capacities developed and their relationship to performance, and effective phase-out strategies, for sustainable child health gains.

## CONCLUSION

The past decades have seen noticeable progress on child health conditions in the developing world, but the task of achieving lasting and equitable health for the children of the world is far from completed. The international health community has demonstrated the ability to be effective against the major threats to child health, but sustainability remains a pebble in the shoe of both governmental and non-governmental health programs. National leaders are often quicker than foreign agencies to point out the limitations of child health programs that do not deliberately plan for sustainability.

Part of the challenge has been a conceptual lack of clarity and methodological challenges with the evaluation of sustainability. The learning that has taken place since the initial work of Bossert (1990) and others in the past decade has helped to clarify some of the conceptual confusion, allowing us to propose practical steps to address methodological problems. Measurement challenges should not dissuade us from pursuing our efforts. 'Systems of performance management and progress assessment are important to effective management of human activity, but just because good measures of a given issues are not available, it does not necessarily follow that the issue should be ignored' (IISD, 1997). We need to place sustainability evaluation at the center of child health programs, not because of fads or an inclination for development buzzwords, but simply because we measure what we value and often value what we measure. If we are serious about child survival and—ultimately—child health and wellness as suggested by Foster (CSTS, 2000c), we need to value, measure and improve how we deal with sustainability through our health programs. The CSSA can be a step in this direction.

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