

Community Participation in Nutrition Programs for Child Survival and Anemia

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Executive Summary

This review presents a critical analysis of the role of community participation in enhancing the uptake of nutrition interventions for child survival and anemia and whether any such increases in uptake are sustainable and scaleable. One on-going challenge in assessing the role of community participation in health improvements is defining the characteristics of different forms of community participation and their impact on health/nutrition. To address this and to provide a methodological tool for this review, an evaluation framework was developed that incorporates a typology of community participation. This framework was applied to five case-studies of program experience in which community participation was a key element of the program design and/or delivery. From this analysis some general findings emerge.

Firstly the framework allowed for a nuanced analysis that showed the differing nature of community participation achieved within each of the programs, where this fell along the community participation continuum in the framework, and how it related to program outcomes.

In terms of program outcomes, positive impacts were seen on uptake and on various health indicators in all of the programs, but these were achieved in different ways indicating that no single “right” approach to community participation exists. Child Health Days achieved a good community response in two programs and in one was linked with a broader community health and development strategy. This suggests that it may be possible to use community development approaches as a channel for more vertical interventions, although the wider process should not be forgotten. Community health workers or volunteers were involved in all programs, but again in different ways that have implications for sustainability.

All programs were scaled-up to some degree. The more vertical single intervention approach of the NVAP in Nepal was scaled up and expanded to achieve national coverage and deliver a wider range of interventions, and anecdotal evidence suggests that the type of community participation may be evolving from mobilization into something wider. However, firm conclusions cannot be drawn as to whether the different types of community participation lend themselves more or less to scaling-up because of our lack of understanding about the process and hence replicability of different community participation approaches.

Clearer differences were seen in relation to the different types of community participation and sustainability; the greatest potential for sustainability was seen in those programs that tended toward the community development end of the continuum and where health outcomes were part of a broader package, but inevitably change was not instant. The case-studies show that while vertical interventions can produce comparatively rapid results, sustainability still requires

long-term money and support. These are necessary, but each by itself is not sufficient to ensure success; sustainable change is more likely when programs address wider development issues rather than narrow behavior change objectives alone.

To conclude, this review and analysis demonstrate that community participation can enhance the uptake and response to health interventions, their scalability and sustainability, but that the process by which these programs are implemented is crucial. More prospective rigorous evaluations of community participation are still needed that examine the role of process and impact on outcomes.

1. Introduction

1.1 Background and rationale

This review was prepared at the request of A2Z: The USAID Micronutrient and Child Blindness Project. The mandate of the USAID-funded A2Z Project is to implement and strengthen micronutrient programs to improve the nutrition and health of vulnerable populations; provide global technical leadership in micronutrients; and support organizations that work to prevent child blindness. With a focus on the sustainability of programs, A2Z aims to expand coverage of vitamin A, zinc, anemia reduction, and iodine interventions primarily through country and regional programs.

Globally micronutrient deficiencies remain major public health challenges and nutrition interventions to address these are a key part of child survival packages. While the scientific evidence base regarding effective interventions to address micronutrient deficiencies is comprehensive, uncertainty remains as to the most effective means of delivering interventions in ways that can be scaled up and sustained to achieve the child survival Millennium Development Goals. Numerous calls for a focus on enhanced delivery systems exist (Bryce *et al*, 2003), but few reports of success, at least for nutrition-related interventions. Involving communities, either as a complement to the formal delivery system or independently of it, has long been identified as a critical component necessary to achieve effective and sustainable programs for health improvement and to address the social determinants of ill-health (Assai *et al*, 2006).

Following Alma Ata and as part of the primary health care movement much activity in the 1980s used community-based approaches and community/village health worker programs were established in many countries to implement a range of health interventions. Interest waned in the 1990s, but interest in the potential of community-based approaches and particularly in the potential of community health workers (Haines *et al*, 2007) is again renewed. As Hossain *et al* (2004) have pointed out, however, it remains difficult to show a direct link between community development and health outcomes and a challenge remains

in delineating the characteristics of different types of community participation and their impact on health, including the process by which interventions are implemented. This is due in part to on-going challenges of defining and distinguishing the terms participation and empowerment. Thus a rigorous examination of the evidence relating to the role of community participation in enhancing the delivery and uptake of health interventions is needed, particularly in light of recent criticisms of participatory development (Cooke and Kothari, 2001).

1.2 Overview and aims

The purpose of this review is to appraise critically the current literature and illustrative program experience in relation to community-based approaches to implementing nutrition programs, particularly those relevant to child survival and anemia.

The review will address the primary question: *What evidence exists that community participation enhances responses by the general population and/or health care providers to health interventions for child survival packages, and further what evidence shows that this uptake is sustainable?*

Secondary questions addressed are:

- 1) How do we define community participation and what is its relation to community mobilization and empowerment?
- 2) Having created a typology based on these definitions, which of these work best for the uptake of child survival packages and which work best for enhancing the sustainability of child survival packages?
- 3) What is the evidence that these approaches can be scaled up? What is the evidence that these approaches are sustainable?
- 4) Based on these findings, which are the most critical areas requiring further investigation?

1.3 Methodology of the review

The review followed a selective and critical approach. Given the timeframe a full systematic review was impossible and further the nature of the evidence does not lend itself to such an approach. Previous work by the authors was used as the starting point for the review (for example: Rifkin *et al*, 2000; Rifkin, 1996; Rifkin, 1985). This was extended and updated to include:

- Published material since 2000
- Recent reviews on community participation and empowerment in health
- Case-studies of program experiences focusing on nutrition-related programs and interventions relevant to child survival in which women are the main beneficiaries. The case-studies include a range of motivational strategies,

including the AIN-C and similar programs.

Using this evidence, a typology of community participation was developed and factors critical in programs where community participation was the basis for successful health outcomes were identified. These were used to develop a framework to evaluate the process of community participation and its relationship with health outcomes. This was then applied to selected case-studies of actual program experiences to assess the role of community participation on the uptake and sustainability of child survival interventions, with particular emphasis on analyzing the implementation process. Key lessons learned were drawn from these and areas requiring further research identified.

2. Community participation and health

In 1978, member states of the World Health Organization (WHO) voted to adopt the policy of Primary Health Care (PHC). In doing so, they recognized that health improvements were not merely the result of health service delivery and medicines. Reflecting recognition of social determinants of health which included social, economic and political concerns, PHC was based on principles of equity and community participation and supported by recognition of activities for appropriate technology, multi-sectoral collaboration and sustainability (WHO, 1978).

The idea that community lay people had a crucial role to play in health improvements was rather surprising to health professionals. However, this principle was in the PHC policy for several reasons.

- 1) Community resources including money, materials and time can contribute to improved health.
- 2) Peoples' health is not merely an outcome of health services but equally important what people do to and for themselves.
- 3) Health improvements and sustainability of community health programs depend on people defining their needs and taking action to meet these needs (Rifkin, 1990).
- 4) "Social learning" where professionals and community people learn from each other enables both groups to define joint purposes and build partnerships (World Bank, 1996).

In the years following the acceptance of PHC, efforts were made to integrate the principle of community participation into health planning and health care. However, this was not an easy task because there was no agreement on standard definitions of the terms "community" and "participation." "Community" is usually often defined in geographical terms, but this does not always capture the deeper reality around which groups form: identities, ideologies, religions, income, etc. and members do not necessarily want the same thing at the same time (Jewkes and Murcott, 1996). Defining "participation" is equally complicated. As

noted by Oakley (1991), participation can be active or passive; can be contributive, collaborative or transformative. In addition, authors such as Nelson and Wright (1995) directly addressed the question of power in community participation and how participation reflected who had power and for what it was used.

Community participation was traditionally seen by the medical establishment as mobilizing people to adopt an intervention. A typical example is mass immunization day campaigns (Gonzalez, 1965). Such programs, however, proved difficult to sustain because of their high resource demands and the challenges of covering populations in outlying areas. PHC tried to address this by implementing wider interventions that were part of the whole fabric of development. Centrally-driven, stand alone Child Health Days do not reflect principles of PHC that strive to address the wider social and structural determinants of health.

To understand the experiences of integrating community participation into health care programs, Rifkin developed a typology that enabled planners to view how they approached community participation in their own programs (Rifkin, 1985).

1) *The medical approach*. Health is defined as the absence of disease and participation as having people do what the professional advises. This approach may be seen as mobilizing communities.

2) *The health services approach*. Health is defined by the WHO definition as “the physical, mental and social well being of the individual” (WHO, 1946) and participation as a contribution of the community’s time, materials and/or money. This approach might be viewed as collaboration, but with professionals defining what is needed.

3) *The community development approach*. Health is defined as a human condition and participation as the planning and managing of health activities by the community using professionals as resources and facilitators. This approach might be seen as empowerment (defined as creating opportunities for those without power to gain knowledge, skills and confidence to take decisions that affect their own lives) (Rifkin and Pridmore, 2001).

Although these approaches are not mutually exclusive, each is based on a particular health view and community actions lead to different definitions of expected inputs and outcomes.

Reviewing the literature on how community participation has affected health and poverty eradication, Rifkin *et al* (2000) traced the historical development of these different approaches to community participation in health improvements. The review illustrated some critical points in the relationship between better health and community participation.

1) Community participation is best understood as a process that is situation specific. The search for a “gold standard” for replication and evaluation is not realistic or appropriate. Although the biomedical model dominates the health field with the expectation that direct causal relationships can be identified and acted upon, such a paradigm is not valid when examining social processes; as widely recognized in the social sciences, these are complex, context specific, hard to predict and are not equivalent to physiological processes.

2) Case studies suggest that more sustainable improvements are possible when community empowerment through participatory approaches is pursued. However, programs pursuing empowerment face challenges that include the need to address issues of power and control.

3) Case studies reflect developments in a specific situation and therefore are mainly anecdotal. A more extensive investigation published by Taylor-Ide and Taylor (2002) discusses in detail the results of improvements in health and overall development of community participation.

4) Little evidence exists on how interventions can be replicated or on the relationship between community participation and health outcomes. This point was confirmed in a publication by Hossain *et al* (2004). To quote:

“In these years, of research and project implementation, one can observe a myriad of factors that may have played a role in improving health, but the challenge remains to find the definite answers regarding the share between interventions and the process of implementation (influence of community empowerment or development) in improving the health of communities and at what level and scale.”

These conclusions help to define the challenges for assessing the role of community participation on health outcomes in nutrition programs for child survival and anemia.

3. Evaluating community participation in health

PHC assumed that community participation was critical for health improvements. As noted above, however, evidence to link participation and health improvements directly has been scarce. Much evidence indicates that without community participation health and development programs flounder (Pritchett and Woolcock, 2004). The search for the converse has proved illusive. For example, in trying to address the direct impact of participation on health improvements Manandhar and colleagues proved how participation in women’s groups in a controlled study in Nepal improved ante-natal outcomes (Manandhar *et al*, 2004). The tightly controlled epidemiological study illustrated a causal relationship. However, the study and subsequent publications have so far failed to describe how these women’s groups functioned and whether each group had exactly the same intervention. This example shows how difficult it is to identify and describe the process by which communities are involved in health programs.

Others have attempted to develop assessment frameworks using qualitative indicators and/or combining these indicators with quantitative information to examine the participation process in detail. Most recently, the Population Reference Bureau published an issue of their Health Bulletin that proposed a community participation development continuum (Gryboski *et al*, 2006; see Appendix 1). The authors then examined five programs from developing countries and assessed where they fitted in the framework, giving each a score according to the above description. The assessment used both quantitative and qualitative indicators and described each case study in terms of background, participatory approach and outcomes.

Rifkin and others (Bichmann *et al*, 1989; Rifkin *et al*, 1988) have also developed a tool for assessing participation that has been used in both developed and developing countries. This includes a visualisation called a spidergram that links five continua together with narrow participation at one end and broad participation at the other (see Figure 1 below). It was designed to assess changes in five factors (needs assessment, leadership, organization, management, and resource mobilization) by first recording the breadth of participation at the beginning of the program as a baseline (see Figure 2) then at designated times during program development (see Figure 3). This tool can enable planners to see whether participation has changed in any one factor and to discuss why this had happened with programme participants.

Figure 1: Diagram for assessing community participation in a health programme (Bichmann et al, 1989)

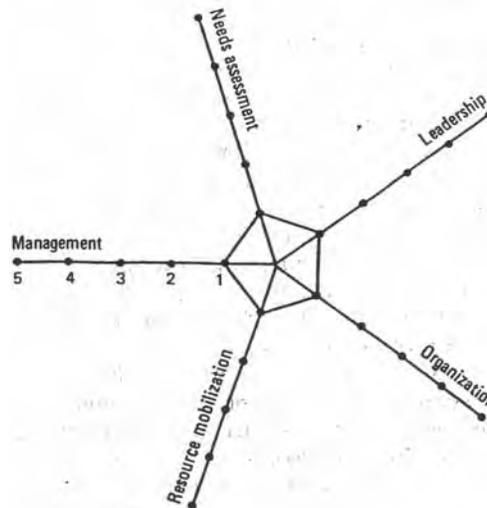


Figure 2: Baseline assessment of community participation in a health programme (Bichmann et al, 1989)

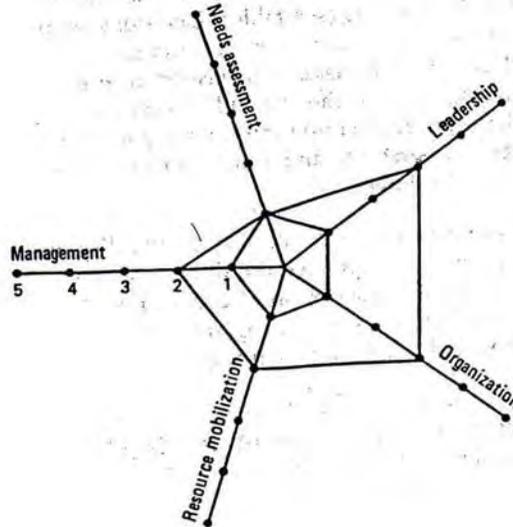
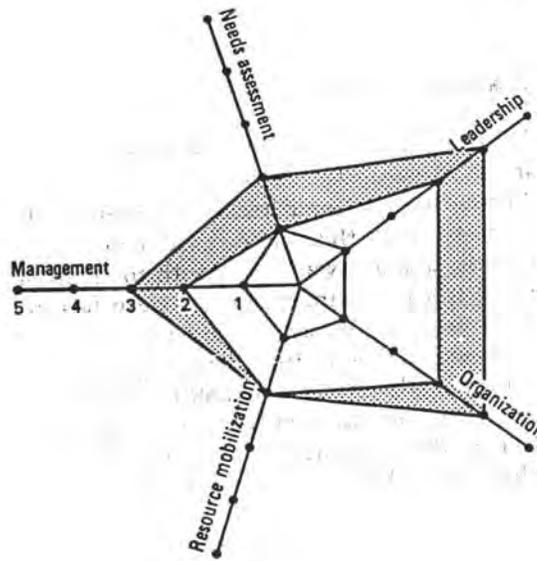


Figure 3: Changes between first and second assessments (Bichmann et al, 1989)



To create a spidergram for a program, a set of questions is developed to assess where the marks should be placed on each of the five continua. The continua are arranged in a spoke-like configuration to show their inter-relationships and the marks display how wide or narrow participation is; it is narrow at mark one and widest at mark five. Figure 1 shows the diagram for assessing participation;

Figure 2 shows how marks can be placed at the baseline for a hypothetical program; and Figure 3 shows the comparison between the baseline and an assessment done at a later time. Two points must be noted: 1) the pentagram at the center of the diagram reminds the assessors all communities have some degree of participation. This means no mark can be at the center of the continuum; 2) changes do not necessarily reflect growing participation; they also can show diminishing participation. The indicators are purely descriptive; they do not tell planners whether participation is good or bad, they only allow the planner to see change and to explore the processes that allow such change to occur.

Building on the spidergram, Laverack (2004) developed a framework for evaluating empowerment. He identified nine domains (participation, leadership, organizational structures, problem assessment, resource mobilization, asking why, links with other people and organizations, the role of the outside agent, and program management). He suggested that collecting information on each of these domains examines and promotes the empowerment process.

These frameworks all attempt to incorporate and understand process and its relationship to health outcomes. Using these experiences, a new framework can be suggested that would combine both the qualitative and quantitative indicators and help identify lessons for nutrition intervention program planners.

4. A framework for evaluating the role of community participation in nutrition programs

A framework is needed that can examine the role and function of community participation. Experience suggests that such a framework should include the following features:

- 1) Qualitative and quantitative indicators.
- 2) A way to assess process – a continuum can assess the program in a dynamic way.
- 3) Ability to assess a specific program, but findings should not imply that one process is replicable across all programs.
- 4) Be robust and flexible, so that new indicators can be added if they are appropriate to reflect the program being assessed, e.g. equity.

A framework that allows this is based on two axes or continua. The first is the continuum of community participation based on Rifkin's typology described earlier with community mobilization at one end of the continuum and community development at the other. The other axis is five factors that recent reviews on community participation in health programs, including maternal and child health, have identified as critical in programs where community participation has been the basis for successful health outcomes (Gryboski *et al*, 2006; Murthy and Klugman 2004; Rifkin, 1990; Rifkin *et al*, 1998, 2000; Wallerstein, 2006; Zackus and Lysack 1998). These factors are:

Leadership – Local leaders serve as role models for other community members. These leaders act out of concern for all community members, not just those with whom they have a special relationship. This ensures that the program is effective and benefits everyone, especially the most in need. If leadership and governance/democracy skills are weak within the community, efforts should be made to strengthen these skills to engender strong, sustainable and open leadership. With regard to external leadership for specific program promotion, leaders must build partnerships with local people, respecting views and contributions, and share responsibility for the new program.

Planning and management – Equitable and sustainable health programs require communities with planning and management skills. This means communities can plan around their needs in a locally appropriate way, which may also foster local program ownership since it stems from local people's ideas and time investments. Strong planning and management skills means that the community will be more likely to adapt the program to changing circumstances, thus maintaining program effectiveness. Activities to promote such skills include active participation in needs assessments and monitoring and evaluation.

Women's involvement – Engaging women in improving community health is an important component of equity in primary health care. Community participation approaches endeavor to empower women with confidence and skills to adopt new and senior roles. This not only promotes equity, but may also benefit child health outcomes as women are more likely to use any improved knowledge or income for their children.

External support for program development – Full community participation in designing a health program is likely to lead to a locally appropriate design that addresses community priorities. This may increase program effectiveness and enhance community ownership of the program, contributing to its sustainability and encouraging local people to invest their resources in it. If communities are taught how to seek and secure resources (including materials, money, and human resources) from within and outside the community, they will gain valuable skills that will enable them to try to sustain the program in the future and be self-reliant. In the context of financial empowerment, the community can negotiate funding for other health and development activities, enabling them to diversify their self-help efforts.

Monitoring and evaluation – Community participation transfers measurement and analytical skills to the community as they learn how to define indicators, and monitor and evaluate in a way that is meaningful to them. The community therefore becomes better able to analyze its actions and their effects and to respond appropriately. This will help maintain program effectiveness and sustainability.

Such a framework reflects the rationale that community participation may help achieve effective and sustainable changes in health and promote equity within the community. A community development approach to participation aims to give a community the skills, experience, and confidence to sustain a program without external support and adapt it to changing circumstances, to diversify their activities to pursue their own development, and to protect the weak among them.

The framework is shown below in Figure 4. The typology of community participation is on the horizontal axis and the five critical factors on the vertical axis. The latter have been operationalized for each cell of the matrix to define, for instance, the various types of leadership as they fall along the continuum of community participation.

Figure 4: Framework for analysing community empowerment in health programmes

Component of Participation	Community Participation Typology		
	<i>Community mobilization</i>	<i>Community collaboration</i>	<i>Community development</i>
<p><i>Leadership</i> <i>Of the community where the intended beneficiaries are living and of the professionals introducing the health interventions</i></p>	<p>Health professionals assume leadership of program – decide and direct program activities. Leadership within the community is not necessarily concerned with widening the decision-making base in the community. The community leadership does not question health professionals or its own role in program implementation.</p>	<p>Decision-making is collaborative between health professionals and community leaders. Local leaders seek ways to present the interests of various groups, particularly the poor.</p>	<p>Program is led by community members selected through a representative process who act in everyone’s interests. They are accountable to the community and responsive to change. If community leadership is weak initially, health professionals train and support members to assume program leadership. Local leadership is a role model and ensures that the interests of various groups are represented in decision-making and /or provides opportunities for different groups to participate in decision-making, especially women and vulnerable groups.</p>
<p><i>Planning and Management</i> <i>How partnerships between professionals and the community are forged</i></p>	<p>Health professionals conduct the needs assessment and decide the program’s focus, goals and activities and provide necessary resources. Program timeframe is at health professional’s discretion. Decisions are not necessarily</p>	<p>Health professionals collaborate with the community. Professionals assess needs by asking local people for information. Health professionals have a predetermined remit, but invite the community to participate</p>	<p>Partnerships between communities and other health care professionals are created or re-negotiated with representatives of the community and are institutionalized. Professionals act as facilitators</p>

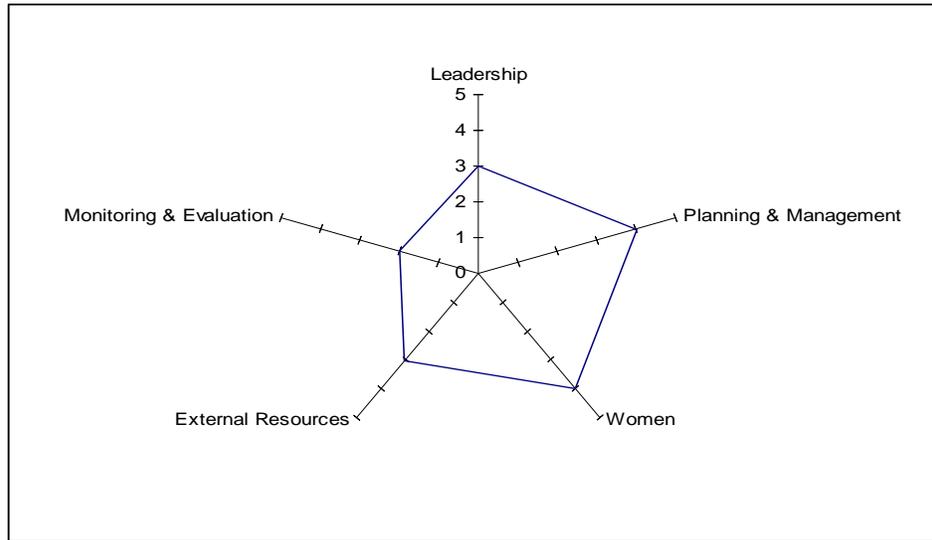
<p><i>Planning and Management (cont'd)</i></p>	<p>transparent and no mechanisms are established to hold health professionals accountable to the community.</p> <p>Health professionals tell the community how they may participate. Minimal transfer of skills: technical training if necessary.</p>	<p>and respond to their priorities within that remit and in ways that are negotiated with and involve community members and existing community organizations. Program goals are negotiated. Processes and decision-making work toward transparency.</p> <p>Program timeframe has some flexibility.</p> <p>Both professionals and community members provide resources. Community members provide materials, money and human resources e.g. volunteers, local NGO participation. Some transfer of skills: capacity-building and training.</p>	<p>to enable the community to plan and manage the program. Community conducts needs assessment, possibly with professional help.</p> <p>Program priorities are defined by community members and advocated by them. Local people's knowledge and understanding of an issue is the starting point for exploring solutions.</p> <p>Programs are integrated into existing organizations. Organizations are supported and members learn any program management and evaluation skills they lack and then assume these tasks.</p> <p>Mechanisms are established for the community to hold health professionals and local program management accountable.</p>
<p><i>Women's involvement</i></p>	<p>Including women is not specifically sought outside of their traditional roles and they are told how to participate. Women's priorities are not investigated nor is their active participation seen as necessary for program success.</p>	<p>Women actively participate in some program aspects and their opinions are elicited. They contribute to the program, particularly when it affects them directly, however they have minor decision-making roles.</p>	<p>Women participate actively at all stages. They hold positions of decision-making and responsibility is a program objective.</p>

<p>External support for program development</p> <p><i>In terms of finance and program design</i></p>	<p>Program is funded from outside the community (Government / large NGO) on a scale and timeframe determined by the funder / health professionals. Health professionals acquire the funding, allocate it, and are responsible for it.</p> <p>Program components are designed by health professionals to address health outcomes they prioritize and in ways they deem appropriate.</p> <p>Health professionals determine how community participates.</p>	<p>Most funding is external to the community. Local people are asked to contribute time, money and materials to the program. Professionals determine resource allocation is although they may consult community members.</p> <p>Program is designed by health professionals in discussions with community representatives. Role of each in the program is negotiated.</p> <p>The participation of women / minority groups is not necessarily incorporated into the design.</p>	<p>Community members decide program priorities and work to find ways to mobilize resources to meet them. This could include approaching external funders. They seek to maintain the program with their own resources, which could include micro-financing and income generating activities.</p> <p>Program is designed by community members to address their priorities. Health professionals provide technical advice on request.</p> <p>Women / minority groups' needs and involvement are integral to the design, which is flexible and incorporates wide community participation.</p>
<p>Monitoring and evaluation</p> <p><i>How intended beneficiaries are involved in these activities</i></p>	<p>Health professionals design M&E collection protocols, choose the outcomes and analyze the data to suit their or their donor's information needs. Approach is mainly one of hypothesis testing and statistical analysis of health-related outcomes.</p> <p>Feedback from the community is not necessarily solicited.</p>	<p>Health professionals design M&E protocols and perform analyses, but community members are involved in data collection.</p> <p>Mixed methods (including qualitative methods) are used to capture wider outcomes and the context. Broad definition of 'success' used.</p> <p>Responses to monitoring</p>	<p>Communities are actively involved in monitoring the program and in deciding how to respond to findings from monitoring data. Participatory M&E is an essential component of overall evaluation which uses both quantitative and qualitative methods.</p> <p>Communities conduct an evaluation which produces</p>

	<p>Health professionals define 'success'. Community members may be involved in data collection using methods prescribed by the professionals. Final evaluation findings are not always shared with communities.</p>	<p>findings are jointly decided. Information needs of health professionals are met and community feedback is both sought and given in an appropriate format.</p>	<p>locally meaningful findings and are involved in any wider dissemination. A variety of locally appropriate data collection methods are used. The community chooses indicators for success. Professionals provide advice and assistance where necessary and as requested by the community. Communities contribute to any wider external evaluation conducted by/for the program funders.</p>
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To apply and visualize this framework, we can return to the spidergram described in section three. An example is shown below in Figure 5.

Figure 5: Spidergram visualization of community participation based on the new framework



As in the original spidergram, each of the five factors is scored and then visualized using the spidergram to show how wide or narrow participation is. As described there, this maps the overall nature and extent of participation at a particular point in time and shows at what point a program is, between community mobilization and community development. It may show that the degree of participation is not equal across these five factors, and, if applied at different time points, can show changes over time. To show how the framework can be implemented, the next section gives examples using case studies in a retrospective analysis.

5. Case studies

The case studies were selected from community-based programs that addressed maternal and child health. They were purposively selected to reflect the range of approaches to community participation across the typology (Section 2) and to give a geographical spread.

Each case study was analyzed with reference to the five components of participation using the framework (Figure 3). For each component, the case was given a 'score' ranging from 1 (the case most closely reflected the mobilization form of community participation) to 5 (the case most closely reflected the community development form of community participation).

5.1 AIN-C Program, Honduras

Atención Integral a la Niñez en la Comunidad (Integrated Community Child Health Program)

History and objectives

AIN-C is the national GMP strategy in Honduras and the centerpiece for integrating child health programs. It was conceptualized and developed by the Honduran Ministry of Health (with assistance from BASICS) from AIN, the existing facility-based GMP program. The BASICS evaluation of the successful AIN-C pilot in 1996 led to the program's refinement, strengthening, and rapid expansion in 1997. By 1998 the program covered one third of the population and in 2000 it was adopted as the national child health program.

Through AIN-C the MOH decentralizes health service provision focused on hard-to-reach populations to achieve better efficiency, equity, and participation, and to increase community participation which is a central tenet of AIN-C. The program focuses on services that prevent and treat health problems, and on community management supported by occasional consultations from health center staff.

AIN-C moved GMP from health facilities into the community. The community selects the AIN-C team (volunteers work in groups so responsibility is shared), reviews children's progress and solves detected problems that impede child health. It brings equity by insisting on complete coverage of under twos, and it decentralizes decision-making to the community and household, recognizing that the root of many problems is local. AIN-C tries to give the family the opportunity and confidence to nurture children within its own resource base. In cases where a household cannot, the community is asked to assume some responsibility.

AIN-C is regarded as a model program and has been replicated elsewhere in Central America and in Africa.

Program outline

AIN-C relies primarily on volunteers to proactively engage families and communities to monitor and maintain the adequate growth of children under two years of age. AIN-C also treats and refers sick children under five years to health services.

Health sector nurses train local health center staff in AIN-C. As part of this activity, meetings are held with community leaders (communities are selected by the health sector nurse) to determine their interest in their community having an AIN-C program and whether they will support it. If the community leaders pledge their support, a meeting is held to discuss the program. The community selects

three people to serve as AIN-C volunteers (Monitoras) and the community leaders agree to attend tri-annual community meetings to discuss the program.

Monitoras' teams (frequently women) are trained and supervised by a local nurse auxiliary. The AIN-C structure focuses on monthly GMP sessions held in the community. At each session, monitoras weigh each child under two years of age, assess the child's growth rate relative to expected weight gain, plot the growth curve on the child's card, and provide counseling. The monitoras inquire about the child's health and the caretaker's care and feeding practices, use a diagnostic decision-tree analysis to identify the causes of inadequate weight gain, and give key messages on breastfeeding, child feeding, illness care, and hygiene. Health center personnel are also often available for immunizations, vitamin A and iron supplementation, and family planning. Monitoras make home visits for newborns, children who do not attend sessions, and children with inadequate weight gain or illness.

To support families' efforts to improve care in the home, monitoras hold community meetings three or four times a year to discuss children's growth and to plan collective actions that will create a favorable environment for child growth. These meetings, attended by community leaders, formally recognize and confirm the importance of the monitoras and are important in shaping the community's response to and support of the AIN-C program. They provide a regular public forum for identifying, discussing, and addressing the roots of common community health problems affecting children that are beyond the power or authority of any one family to address (e.g., unclean water supplies).

The program is implemented by NGOs in some areas with weak MOH presence and the MOH leads an AIN-C inter-institutional committee. Implementing NGOs include the Red Cross, CARE, and World Vision. NGOs implementing AIN-C have promoted community-based democratic processes through selecting monitoras, forming community health committees, and strengthening the linkage between the community and local / national institutions. They have also assisted communities to develop adjunct sustainable activities, such as rotating community medicine chest funds, income generation activities, and improvements to water and sanitation.

Outcomes

A mid-term evaluation conducted by BASICS staff compared sixty AIN-C communities with control communities. It used questionnaires and looked at a variety of outcomes around program attendance and child health care practices. Some of the findings included:

- Enrollment of children under two years: 92% AIN-C communities vs. 21% control communities. Enrollment in GMP programs in AIN-C communities before the program started was 30%

- 62% of AIN-C mothers could interpret their child's growth card vs. 31% in controls
- Iron supplement coverage for children over four months: 47% AIN-C children vs. 9% controls
- Vitamin A supplement coverage for children over 6 months: 80% AIN-C children vs. 65% controls
- Vaccinations: 76% of AIN-C children were fully immunized vs. 66% controls
- Oral rehydration therapy use increased from 37% to 57% in AIN-C communities vs. 36% to 42% in control communities
- AIN-C exclusive breastfeeding (EBF) rates increased from 27% to 49% for children under 4 months and from 21% to 39% for children under 6 months of age, while control rates decreased from 20% to 17% for children under 4 months and from 15% to 13% for children under 6 months.
- AIN-C mothers had significantly better knowledge on a range of child feeding practices than counterparts in control communities, including the optimal period of EBF, appropriate age for introducing complementary foods, appropriate consistency of soup, techniques for making thick soup, and ways to stimulate a child's appetite.

The final impact evaluation (conducted in 2002) found that full participation in AIN-C was associated with significantly better weight-for-age and height-for-age.

A report of the experiences of the collaborating NGOs found that they thought AIN-C actively involved communities and families in achieving and maintaining adequate growth in young children and that it had improved access to and use of health services.

Community participation framework

Leadership – 3

- MOH leads the program at the national level.
- At the village level, monitoras lead GMP activities with the support and supervision of local health center staff or NGOs. Monitoras decide how to organize their activities. The community selects the monitoras, but detail is lacking on how this happens.
- The program tries to draw existing leaders into the program and use them to galvanize community action.

Planning and management – 3

- Health professionals instigate the program and define its priorities. MOH staff and monitoras work together: health centre staff supervise monitoras and attend GMP sessions to immunize children, give out supplements, etc. Monitoras plan and manage their activities.

- The needs assessment (in this case the pilot evaluation used as the basis for planning the revitalised AIN-C is considered the needs assessment) was conducted by BASICS. AIN-C in its current form was designed by the MOH with BASICS's technical assistance.
- MOH restricts the program expansion for financial reasons – recommends two communities per health center. Nurses select which villages to offer the program and the community is invited to select monitoras.
- MOH, communities, and NGOs provide money and human resources.
- Monitoras are extensively trained and given new counselling tools to use.
- Communities analyze village-level problems and identify action solutions with the monitoras. (Health center staff attend the first two community meetings.) This local flexibility promotes local ownership of the program.
- Accountability of the MOH or health staff to the community is not mentioned in the documents reviewed.

Women's involvement – 2

- Women are quite heavily involved in the program as the majority of monitoras are women, but they are not specifically targeted for this role. Frequently they have previously served as community volunteers.

External support for programme development – 2

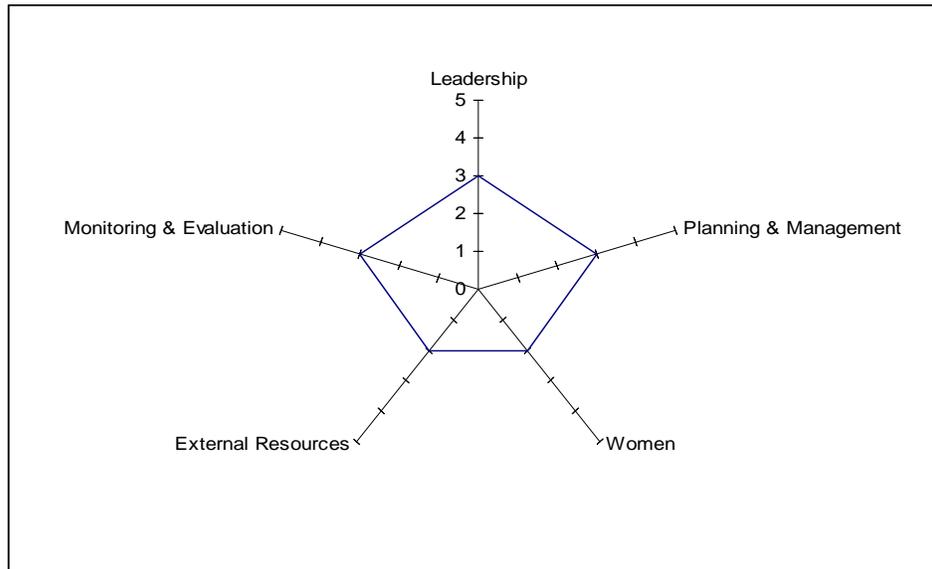
- The program is funded from outside the community, by MOH and in some areas by implementing NGOs. Communities contribute monitoras to the program. (Monitoras receive free state health care.) It is not clear how community activities are funded.
- Some NGOs have established income-generating schemes as an adjunct to the program, but this is not an integral part of the program.
- The basic program structure, including the manner of community participation, was designed by the MOH and it sets the program goals. The community then responds to these as they see fit. Women's participation was not specifically incorporated into the design.
- The program targets all children under two to ensure equity of provision and collaborates with NGOs to cover regions MOH cannot reach.
- At the village level, the program is flexible as monitoras manage their own activities, involve the community as much as they can, and address locally relevant problems.

Monitoring and evaluation – 3

- Health professionals designed the monitoring protocols, but they are implemented and analyzed by monitoras. Monitoras collect data at each session and produce bar charts showing number of children enrolled, attending, with adequate weight gain etc. They use these to monitor

themselves and in their discussions with the community. Communities decide how to respond to the findings.

- BASICS the CORE NGO group have conducted evaluations. BASICS evaluations have been quantitative questionnaire-based designs, analyzed outside the communities. It is not clear whether evaluation findings were fed back to communities.



Further examples

Guatemala: Hurtado, E. and Koniz-Booher, P. Guatemala launches the AIEPI AINM-C strategy to improve child health and nutrition. *SCN News* 2003; **27**: 28-31

Sources of information

Fielder, JL. *A cost analysis of the Honduras community-based integrated child care program*. HNP Discussion Paper. Washington DC: World Bank, 2003
Griffiths, M. and McGuire, JS. A new dimension for health reform – the integrated community child health program in Honduras. In: La Forgia, GM. (Ed.) *Health System Innovations in Central America: Lessons and Impact of New Approaches*. World Bank Working Paper No. 57. Washington, DC: World Bank, 2005

Serpa, M. and Joya de Suarez, MJ. *PVO – NGO experiences with AIN-C in Honduras: Participatory Study*. The CORE Group IMCI and Nutrition Working Groups, 2003

Van Roekel, K., Plowman, B., Griffiths, M., Vivas de Alvarado, V., Matute, J. and Calderón, M. *BASICS II Midterm Evaluation of the AIN Program in Honduras, 2000*. Arlington, Virginia: the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development, 2002

Villalobos, C., McGuire, J. and Rosenmoller, M. *AIN-C Integrated Child Care: Improving Health and Nutrition at Community Level*. IESE and World Bank, 2000

5.2 Basic Development Needs Programme (BDN), Djibouti

History and objectives

BDN was launched by WHO's Eastern Mediterranean Region (EMRO) in 1987; the first field site was Somalia.

BDN is a process that aims to achieve a better quality of life and health for all by building communities' capacity to find local solutions to local problems and create and manage sustainable development activities. BDN strategies facilitate access to social services and appropriate technologies and provide financial credit with the explicit aim of promoting fairer distribution of resources to achieve equity at grass roots.

BDN recognizes the intrinsic link between poverty and health and aims, through community empowerment and leadership, to improve access to basic needs. It is a needs-based, bottom-up strategy that pursues integrated socioeconomic development based on involving all social groups supported by strong, co-ordinated intersectoral collaboration. It fosters community empowerment by promoting self-reliance through self-management and self-financing by the people.

Under BDN, health is a contributor to and a product of development. The program recognizes that it is unrealistic to expect substantial improvements in health without addressing the wider determinants of health and that multisectoral efforts are crucial to achieving this. BDN therefore seeks better health through alleviating poverty, creating awareness, building capacity, enhancing literacy, and providing essential nutrition and health services.

BDN's inherent flexibility and locally sensitive operational mechanisms means it can be adapted to different socio-political contexts. Today twelve EMRO countries implement BDN programs. Djibouti launched its program in four sites in 2001 and extended it to a further four in 2004/5, covering 16,600 people.

Program outline

Each BDN site established a village development committee (VDC). The VDC consisted of a president, vice-president, secretary-general, treasurer, youth representative, women, local association members, public sector employees (e.g. nurse, teacher) and zonal representatives. (A zone is 30 to 50 households and is represented by one man and one woman.) VDC members are local notables, including traditional leaders, and chosen for being actively involved in community development. VDC membership is voluntary.

The BDN co-ordinating team then trained local people, especially VDC members, zonal representatives and district co-ordinators. VDC treasurers and presidents are trained in financial management and methods of recovering loans. Other training is provided according to community-identified needs, e.g. handicrafts, health, fish breeding.

The VDC conducts a needs assessment, prioritizes the identified needs and develops an action plan. With training and support from local public sector departments (e.g. health, agriculture), the group implements and manages its own projects.

The Djiboutian Government trained two community health workers (CHWs) and one midwife for each program village and integrated health education and immunization into the BDN.

Across BDN villages, local projects included:

- Promoting use of health services by CHWs and midwives
- Creating MOH trained community health volunteers who conduct health promotion: school health, immunization, nutrition, environmental health, malaria and HIV
- Screening women for anemia
- Conducting malaria control programs
- Collecting refuse, building wells, water tanks and latrines, planting agricultural plots and trees
- Providing interest free loans for income generation activities. The poorest community members submitted loan applications to the VDC who select some to submit to national BDN administrators at the MOH and WHO.
- Holding literacy classes. VDCs supplied materials and covered salary costs. Health promotion messages have been reinforced in classes.
- Constructing health centers with MOH support and constructing/renovating primary schools.

Outcomes

Baseline data collection in BDN villages was poor. In comparison to national averages, however, several health indicators are positive, despite the fact that only 14 of 34 social projects were directed towards health:

- Infant mortality / 1000 live births ranged between 14 and 65 in program sites vs. national average of 103;
- Under 5 mortality / 1000 live births ranged between 12 and 25 in program sites vs. national average of 124;
- Vaccine coverage at < 1 year and women vaccinated against tetanus ranged between 96 and 99 percent in program sites vs. national average of 64 percent;
- Growth monitoring in under fives ranged between 91 and 98 percent coverage in program sites vs. national average of 23 percent.

Program managers see BDN as a good entry point for future health interventions.

Note: BDN programs in other EMRO countries (e.g. Afghanistan and Pakistan) have reported substantial improvements in vaccination coverage. In Somalia BDN initiatives survived civil strife as community ownership was strong.

Community participation framework

Leadership – 4

- The program is locally led by community members who act in the community's interests and represent a range of groups in the community. Women have a role in program leadership, though it is not clear how VDC members and zonal representatives are selected / elected.
- Traditional community leaders are active leaders within the program.
- The MOH leads the program at the central level with technical support from WHO.

Planning and management – 4

- The VDC manages the program locally and members are trained for their roles. The VDC seeks partnerships with potential funding bodies.
- The VDC identifies community needs, creates an action plan and manages projects at the local level. Decision-making is local and transparent. VDC treasurers administer loans in their village, but MOH/WHO makes final decisions on recipients.
- The MOH will institutionalize BDN by integrating it into national health and development policy.

Women's involvement – 5

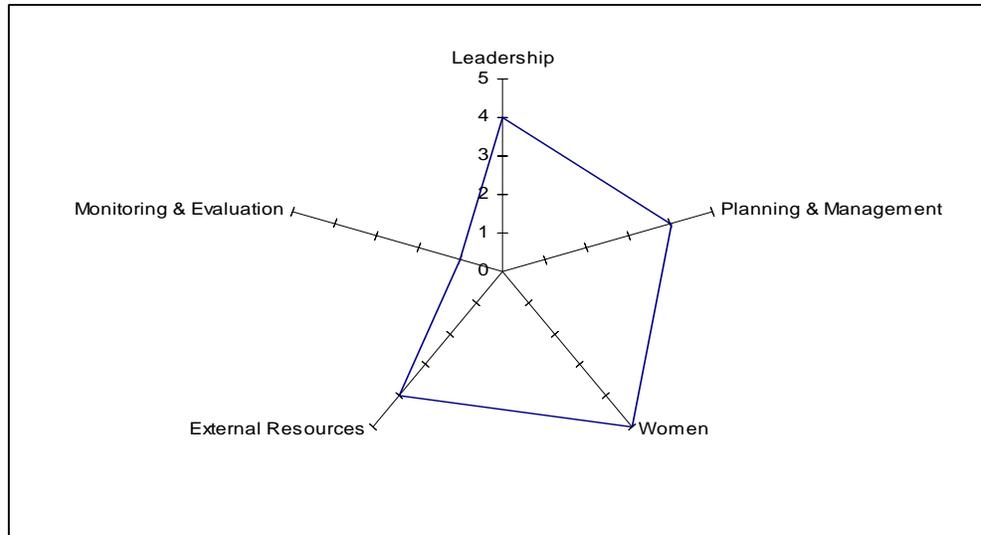
- BDN focuses on women in health and development and sees their involvement as essential. Most projects are directed toward the socioeconomic and health situation of women and include vocational centers, literacy training, computer training, and income generation.
- Women are actively involved in the program and serve on all VDCs; one is headed by a woman. In one village a woman heads the hygiene and environmental health activities.

External support for programme development – 4

- The BDN approach asserts that the community should contribute 30 percent of funds invested, with the remainder coming from Government and other agencies. So far in Djibouti, communities have contributed 5 to 21 percent according their tenure with the program.
- Communities are taught skills to mobilize resources available to them. One VDC created its own fund for those in need through community donations, while others mobilized aid from Government ministries, NGOs, UN agencies, and bilaterals. One VDC sought funding from an Islamic organization in London to build a primary school.
- Loan repayments carry an additional 10 percent levy, which is used by the VDC to finance social projects. Communities also provide human resources and local materials.
- Centrally, BDN has mobilized several partners to participate: USAID, WFP, AFD, UNICEF, UNDP, CIDA, the US Embassy, and the National Union of Djiboutian Women. Government ministries include Health, Agriculture, and Women, Family and Social Affairs.
- The program's overall structure was designed by WHO but local features are designed by the community responding to their priorities. Wide community participation is encouraged as is the participation of women.

Monitoring and evaluation – 1

- The Djiboutian Government requested a program evaluation that was conducted by WHO and MOH staff, and district co-ordinators.
- Overall, data collection and recording and reporting systems are weak and monitoring needs to be improved.
- Supervision and monitoring is carried out by WHO and MOH technical officers. Monitoring has focused on income generation projects.
- Baseline surveys conducted in new villages are being analyzed by the MOH.



Other BDN examples:

Iran: Asadi-Lari, M. *et al.* Applying a basic development needs approach for sustainable development in less-developed areas: report of ongoing Iranian experience. *Public Health* 2005; **119**:474-82

Pakistan: Sustainable Resource Foundation (SuRF). *Evaluation of Basic Development Needs (BDN) Programme, Pakistan*. Islamabad: SuRF, 2003

Jordan: Alwan, A., Afzal, M. and Sheikh, M. (Eds) *Appraisal Of Basic Development Needs Initiatives In Jordan: A Report On The Evaluation Of The Quality Of Life And Healthy Villages Programmes*. WHO Jordan, 2003

Yemen: WHO Regional Office for the Eastern Mediterranean. *Evaluation of the Basic Development Needs Programme in the Republic of Yemen*. WHO, 2005

Further examples of community development for health / with health outcomes:

Bangladesh – Chakaria Community Health Project (ICDDR,B) Chakaria Community Health Project: Community Mobilization Toward Self-help for Health *Glimpse* 2001; **23(3)**

Bangladesh – BRAC Bhuiya, A. and Chowdhury, M. Beneficial effects of a woman-focused development programme on child survival: evidence from rural Bangladesh. *Social Science and Medicine* 2002; **55**:1553-60
 Chowdhury, AMR. and Bhuiya, A. The wider impacts of BRAC poverty alleviation programme in Bangladesh. *Journal of International Development* 2004; **16**:369-86

Sources

Abdullatif, AA. Basic development needs approach in the Eastern Mediterranean Region. *Eastern Mediterranean Health Journal* 1999; **5**: 168-76

Assai, M., Siddiqi, S. and Watts, S. Tackling social determinants of health through community based initiatives. *British Medical Journal* 2006; **333**:854-6
Sheikh, MR. Basic development needs approach in the Eastern Mediterranean Region: from theory to practice. *Eastern Mediterranean Health Journal* 2000; **6**:766-74

WHO Regional Office for the Eastern Mediterranean. *Community-based initiatives: success stories from the Eastern Mediterranean Region*. WHO, 2006
WHO Regional Office for the Eastern Mediterranean. *Evaluation of the Basic Development Needs Programme in Djibouti*. Cairo: WHO, 2006
www.emro.who.int/cbi/bdn.htm

5.3 Essential Nutrition Actions Program (ENA), Nigeria

History and objectives

ENA is a BASICS II initiative that builds on a country's existing nutrition work by using delivery channels within and outside the formal health structure to link nutrition with health services and community-based organizations to attain high coverage.

ENA focuses on six technical interventions:

- Adequate intake of iodine by all members of the household;
- Exclusive breastfeeding (EBF) for six months;
- Adequate complementary feeding (CF) from about 6–24 months with continued BF for at least two years;
- Appropriate nutritional care of sick and severely malnourished children;
- Adequate intake of vitamin A for women and children; and
- Adequate intake of iron for women and children.

The ENA approach explicitly emphasizes universal and frequent contact with every mother and child to improve growth and nutritional status. ENA interventions concentrate on prevention and emphasize community-level actions with strong links to the health system. The ENA approach does not assume that inadequate nutrition is due only to lack of knowledge in families, but recognizes that household food insecurity, inadequate societal support for women, poor access to health care, and unhealthy environments cause or exacerbate nutritional problems. The ENA approach encourages ongoing advocacy on these issues while implementing near-term solutions.

ENA has evolved into a comprehensive program implementation strategy suitable for resource-poor settings. ENA has three main strategies to improve child health:

- 1) *Integrating the six nutrition interventions into existing maternal and child health services and systems strengthening.* This includes assuring the availability and use of supplies such as micronutrient supplements and vaccines, improving health provider performance, and building an enabling policy environment.
- 2) *Capacity building and mobilization in communities* by, for example, strengthening women's groups; recruiting and supporting volunteers to promote increased participation in health services and practice of desired behaviors; increasing participation of marginalized groups; and engaging community leaders.
- 3) *Multi-channel, ongoing communications* to inform, sensitize, and motivate key groups with information about priority behaviours and services.

ENA has been implemented in four African countries and India. It was launched in Nigeria in 1999 and operates at the national, state, local government area (LGA) and at the community level. The program operates in three states: Abia, Kano, and Lagos.

Program outline

In addition to the community, ENA involves primary health center and LGA health staff who manage community-based activities, state government nutrition officers, international agencies (UNICEF and USAID) and the national planning office's food and nutrition task force, which has been at the forefront of advocacy efforts.

The program operates through a three-pronged approach:

- At the federal level it sensitizes policy makers on ENA and advocates for including it into the national policy to provide an enabling environment for implementing ENA interventions.
- It trains health workers on ENA to integrate priority nutrition actions into existing maternal and child health services, and provides counselling materials to encourage health staff to incorporate key ENA messages and services at each maternal and child health care contact.
- It promotes enhanced infant feeding practices at community and household levels through (a) building capacity among community residents (community leaders, volunteer Community Health Promoters (CHPs), and TBAs); and (b) mass media communications through multiple channels.

At the federal level, the program spearheaded integrating vitamin A into National Immunization Days (NIDs). As NIDs was phasing out, the program piloted a Child

Health Week in Lagos state as a possible transition strategy for vitamin A supplementation. Child Health Weeks were subsequently held in all three states. Continuous communication and advocacy at the federal level has made ENA recognized as an appropriate and effective approach for improving child nutrition that is now part of the National Plan of Action for Food and Nutrition.

The program instituted a strategy called **Catchment Area Planning and Action (CAPA)**, a community-based approach to strengthen partnerships, planning and action with all child health stakeholders participating, including health providers at state and LGA levels, NGOs, and community members. Community participation, at the core of the CAPA process, was realized through two groups: a CAPA Committee (CAPA-C) and the CHPs.

To encourage state ownership the program secured the states' approval from the outset by seeking their input on designing and implementing ENA in the local context. State MOHs reviewed ENA materials to make them more culturally sensitive.

In the CAPA process, LGAs guarantee support, including supplies, infrastructure, and human resources, to ensure primary health centers provide quality care and supervise and manage the CAPA process through a CAPA Coordinating Committee (CCC). The CCC has two representatives of each CAPA-C and the LGA CAPA focal person. CCC members select their own executive leaders. The CCC brings together the CAPA-Cs to share ideas and liaise with the LGA as one body. (Use of CCCs is not uniform across all areas.)

The CAPA goal is to create community understanding and ownership of child health issues leading to local decision-making and cooperation. It seeks to empower all partners and is designed to achieve sustainable change through community-level action. The CAPA process focuses on improving the utilization of health services. In the program the "community" comprises three components:

- Community structures/organizations (e.g. existing leaders, community-based organizations, associations, etc.);
- Private sector health providers (e.g. traditional birth attendants, traditional healers, private clinic staff, etc.);
- Public health service providers.

The program trained state and LGA CAPA facilitators. The latter conducted advocacy with indigenous community leaders (chiefs, ward heads) to explain the CAPA process. The team encouraged these leaders to identify and send approximately 30 community group representatives to a 3-day CAPA workshop. Typically community representatives came from markets; community-based organizations; religious, school, and trade groups; and neighbourhood associations. (Indigenous leaders did not participate in the workshop, as they are impartial patrons of community development efforts.)

Through participatory learning, attendees at CAPA workshops received technical training on nutrition, immunization and malaria, training on community education and mobilization processes and CAPA Committee duties.

Each group developed a simple workplan on how to sensitize and mobilize community members to improve child nutrition. They were equipped with materials such as infant feeding posters and home health booklets to assist in community mobilization. Attendees and primary health care staff became the CAPA committee (CAPA-C) and selected an executive committee.

CAPA-Cs work to improve health facilities – both the physical plant and the staff's relationships with the community. They undertake community development activities, sometimes linking up with other local CBOs and associations, and advocate to the LGA although advocacy efforts have varied. They recruit and supervise CHPs. CAPA-Cs hold monthly meetings to discuss their activities with the primary health center and to hear back from CHPs.

The bulk of CAPA activity financing comes from personal member donations. When funds are not available, some CAPA-Cs requested funding from the LGA. Some community projects are co-sponsored with other CBOs, such as school improvements in collaboration with the PTA. A few have contacted local philanthropists and some have established small scale businesses, e.g. palm oil, and used the profits in the community.

CAPA-C members networked through their leadership and organizational networks to find suitable volunteers to be CHPs (between ten and 40 were trained in each area). Often CAPA-C members themselves volunteered to be CHPs, and later some CHPs joined the CAPA-C. CAPA-C members were mandated to supervise CHP activities.

While the CAPA-C leads the CAPA process, the CHP role is primarily to implement essential interventions. The CAPA-C undertakes planning, fundraising, general public awareness, and advocacy, while the CHPs conduct health education and referral, primarily at the household level but also within clinics under health staff supervision, e.g. ORT demonstrations. Enhancing clinic utilization is central to CHP activity.

CHPs were oriented on ENA messages and how to use materials such as counselling cards, home health booklets, and infant feeding plan posters. They often organized community outreach, provided house-to-house education, conducted community campaigns, mobilized the community before Child Health Weeks, and spoke at community gatherings. They identified women needing antenatal care, children requiring immunization, and sick people needing treatment, all of whom were referred to the primary health center. CHPs have

initiated other community health issues in addition to those on which they were trained, e.g. HIV/AIDS and environmental sanitation exercises.

Outcomes

Several child feeding practices and caregivers' knowledge on these topics improved. The percentage of mothers reporting exclusive breastfeeding increased in all three states between 2000 and 2003:

	2000	2002	2003
Lagos	12%	39%	36%
Kano	3%	20%	34%
Abia	11%	15%	29%

In 2003, following federal legislation in 1990 that banned non-iodized salt and made iodization of salt produced in Nigeria mandatory, salt iodization rates at the retail and household level had reached 98 percent nationally.

The overwhelming consensus among management staff, officers-in-charge, and CAPA-C members was that CAPA activities were reaching increased numbers of caregivers and increasing utilization of services at health centers.

CAPA-Cs, however, have varied in effectiveness. While some were strong and well run, making major clinic improvements and undertaking community development projects with significant financial inputs from members and community, others had problems doing more than raising awareness/education because of member attrition, funding shortages, and bad local infrastructure.

In Kano State, the CAPA process was expanded to cover all 44 LGAs under the name of PLACO – participatory learning and action for community ownership.

When ENA interventions were assessed in 1999, no identified national nutrition policy or strategy existed and leadership on nutrition issues was weak. The program's technical leadership led to ENA recognition at the national level: vitamin A supplementation was integrated into national immunization days and the program helped develop and incorporate ENA into the National Plan of Action for Food and Nutrition.

The program also successfully launched Child Health Weeks in the three states. These were well attended and deemed a success by program partners.

Community participation framework

Leadership – 3

- Health professionals provided leadership at state and LGA level. At each a 'focal person' was appointed. At the LGA level this was usually (but not always) a person from the primary health care department. At state level the person was in the MOH.
- Existing leadership within the communities sanctions the program in the village, but does not play an active role beyond that.
- CAPA-Cs did not have a formal electoral process. The program assumed that democracy was 'on the ground' in Nigeria and CAPA-C members chose their leadership. The formality of this process varied; although no guidelines existed, members were encouraged to think carefully about leadership criteria and the positions their CAPA-C needed.
- Several CAPA-Cs had members who were also local political leaders, e.g. elected LGA counsellors
- The accountability of CAPA-C members to their communities is not clear since their selection process was informal.
- CAPA-C activities were led by its members. They were not given leadership or governance training. Women were CAPA-C members and sometimes leaders, but this was not a program objective.

Planning and management – 3

- Health professionals decided the program's focus and goals and the framework under which community participation would operate, but CAPA-Cs and CHPs decided and managed local needs and activities. CAPA-C members drew up work plans at the training workshop with LGA and PHC staff facilitation.
- The program created CAPA-Cs and gave them technical and mobilization training, but no training on management, administration, and leadership.
- CAPA-C's and their PHC (and other CBOs) created partnerships.
- Communities and LGAs provided resources (human and financial), although what was supplied by the latter was highly variable. The program provided training and new counselling materials.
- Staff at state and LGA levels were designated as ENA 'focal persons' to help institutionalize the program. Advocacy at the federal level also institutionalized the program by incorporating it into national policy.

Women's involvement – 4

- Women are the program's target beneficiaries and are involved through CAPA membership or volunteering to be CHPs. Women leaders exist, but are not an objective of the program.

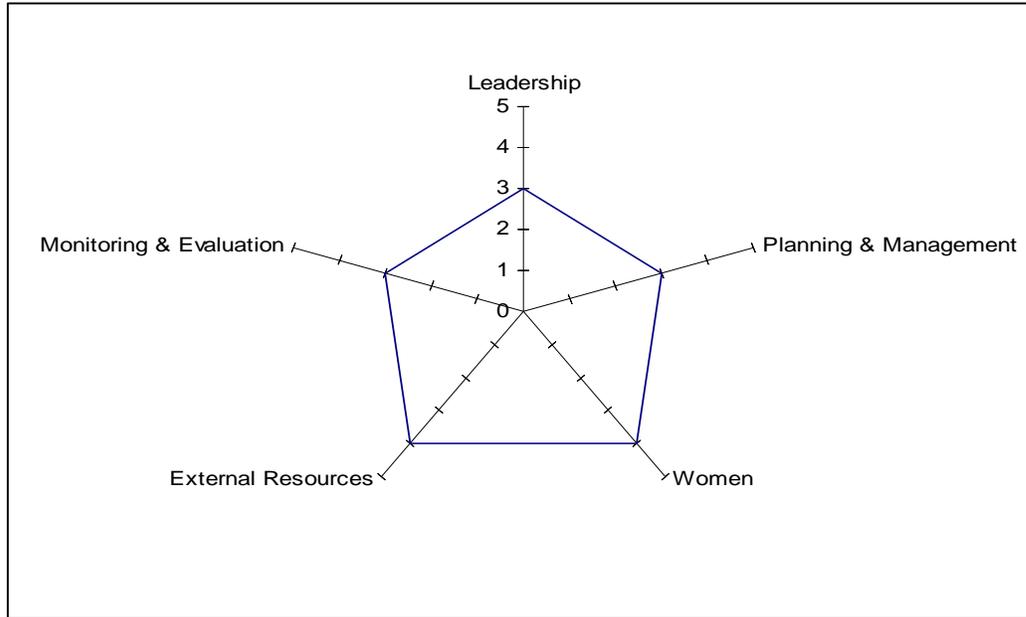
- Kano state has parallel male and female leaders with separate women's meetings. Female CHPs do house-to-house education and mobilization while male CHPs meet other males at public functions, in the market, at ceremonies, and at the mosque.
- In one Kano state CAPA-C, the women's group started a business to fund their work.

External support for program development – 4

- CAPA-Cs found the means to finance their activities. The bulk of financing came from personal donations of members. When funds were not available, some CAPA-Cs wrote to the LGA. LGAs responses varied and some requests were met with funding or actions. Some community projects were co-sponsored with other CBOs, such as school improvement in collaboration with the PTA. A few CAPA-Cs contacted local philanthropists and some started income-generation activities. In some CAPA-Cs, a few key individuals bore most of the project expenses.
- Members' personal funds could not always meet CAPA-C aspirations, and many poor communities had no alternatives.
- Training activities at the state level were heavily reliant on donors.
- Community participation was framed by health professionals who saw the CAPA model as a way to increase immunization coverage and other health indicators.
- Health professionals designed the overall program structure and determined the six technical interventions and program goals.
- CAPA-Cs determined their own activities at the local level, but addressed the priority areas the health professionals had chosen.

Monitoring and evaluation – 3

- CAPA-C monthly meetings are a forum for monitoring activities, but it is unclear whether formal records are kept. No monitoring protocols were provided.
- Monitoring at the state level is weak.
- A qualitative evaluation was conducted by US and Nigerian academics. They interviewed people from all program levels, and health focus group discussions with caregivers to assess their knowledge of care practices. The evaluation findings were fed back to the national and state levels including state MOH, LGAs, primary health centers, and communities.
- Quantitative evaluation data came from BASIC's Integrated Child Health Cluster Surveys.
- The program did not build the capacity of partners to monitor and evaluate ENA activities.



Further examples

Benin, India, Madagascar and Senegal. Acharya, K. *et al.* Using 'Essential Nutrition Actions (ENA)' to Accelerate Coverage with Nutrition Interventions in High Mortality Settings. Arlington, VA: BASICS II for USAID, 2004

Sources of information

Acharya, K. *et al.* Using 'Essential Nutrition Actions (ENA)' to Accelerate Coverage with Nutrition Interventions in High Mortality Settings. Arlington, VA: BASICS II for USAID, 2004

BASICS II. *Essential Nutrition Actions in Nigeria: the BASICS II Experience.* Arlington, VA: BASICS II for USAID, 2004

Brieger, WR., Salami, KK. and Ogunlade, BP. *Catchment Area Planning and Action: Documentation of the Community-based Approach in Nigeria.* Arlington, VA: BASICS II for USAID, 2004

5.4 Hôpital Albert Schweitzer (HAS), Haiti

History and objectives

HAS was founded by an American couple and opened in 1956 in Deschapelles in the rural Artibonite River valley. Initially only a hospital, HAS began community health activities in the 1960s with a tetanus immunization campaign for women. In the 1980s HAS recruited, trained, and supervised medical auxiliaries who manned six outlying dispensaries so that primary health care services would be geographically closer to the communities served. (Rural Haitian mothers do not

carry their babies on their backs or in a sling, so services must be within an hour's walk of their homes for them to come regularly for surveillance or immunization services.) A more comprehensive approach grew from this and HAS gradually introduced a community health program with paid community health workers assisted by community volunteers who offered preventive services at village assembly posts.

HAS has become an integrated rural health system providing medical care and community health and development programs for 285,000 impoverished people in its service areas. Approximately one-third of this population live in isolated mountain villages. Medical professionals from abroad work with a permanent Haitian staff of almost 900. HAS's annual operating budget is US\$4.9 million and financial support comes from partner organizations and private individuals around the world.

Program outline

The HAS community-based primary health care program consists of:

- 1500 volunteer community health workers (animatrices; mostly women), one for every 15 households, who provide peer-to-peer health education, conduct 'Hearth' sessions for malnourished children, assist with mobile clinics and rally posts, assist with referral to higher levels of care, and promote community involvement in planning, implementing and evaluating services;
- 80 paid Health Agents (mostly men), one for approximately every 400–500 households, who make regular home visits and direct monthly rally posts for immunizations, vitamin A distribution, growth monitoring for under 5s, nutritional counselling and referral;
- 8 monitrices (monitors) who liaise with and train lay midwives and animatrices and supervise the community-based nutritional rehabilitation program (Ti foyer/Hearth);
- 7 tuberculosis accompagnateurs and nine tuberculosis agents who follow up on tuberculosis contacts and provide directly observed therapy for tuberculosis patients in the home;
- Mobile Clinics where an auxiliary nurse visits isolated communities every 1–2 months to provide basic curative and family planning services and to refer patients when indicated; and,
- 7 dispensaries/health centers, where curative care, immunizations, and family planning services are provided.

HAS's programs are designed to promote equity by ensuring that those most in need have ready access to essential services and by ensuring that health services reach every home. Many services are provided free of charge, including immunizations. Mobile clinics are held in the most isolated areas and almost all primary health care services are accessible within a 1–2 hour walk.

HAS has strengthened the role of lay midwives and traditional healers by providing training and involving them as integral members of the health system.

In addition to its community health program, HAS has a Division of Community Development. This operates programs for improving water and sanitation, promoting vegetable gardens and reforestation (by selling seeds and providing technical assistance), providing opportunities for micro-credit for women by establishing savings and loan groups, providing literacy training and primary education support, promoting animal husbandry (including the training and support of veterinary technicians) and improving agricultural production (including soil conservation).

Outcomes

In 2000 the coverage of key child survival services was greater in the HAS service area than in Haiti as a whole:

- The percentage of children receiving vitamin A during the previous six months was 2.8 times greater in the HAS service area.
- The percentage of children who received the total recommended series of immunizations was 2.4 times greater.
- The prevalence of exclusive breastfeeding was 2.3 times greater.
- The contraceptive prevalence rate was 1.8 times greater.
- The percentage of most recent births attended by a trained health care provider was 1.5 times greater.
- The percentage of children with symptoms of serious acute respiratory infection who obtained medical treatment was 2.6 times greater.
- The percentage of children with diarrhea receiving oral rehydration therapy was 1.5 times greater.

In 2000, the percentage of children aged 6 to 59 months receiving at least one dose of vitamin A during the previous six months was 90.9 percent in the HAS service area; 32.5 percent in rural Haiti; and 31.6 percent in all Haiti. The prevalence of exclusive breast feeding at 0 to 5 months of age was 53 percent in the HAS service area and 24 percent in all Haiti.

Between 1995 and 1999, the risk of death before age five among live-born children was 58 percent less in the HAS service area compared with rural Haiti. The infant mortality rate was 48 percent less and the 1 to 4 year old mortality rate was 76 percent less. The neonatal mortality rate was 28 percent less (not statistically significant) and the post-neonatal mortality rate was 62 percent less. Over this period the mortality rate before age 5 was 62.3 / 1,000 live births in HAS and 149.4 / 1,000 live births in rural Haiti.

Levels of childhood malnutrition in the HAS service area, however, are essentially the same as those in rural Haiti and in Haiti nationwide. Levels of low

height-for-age in 6 to 59 month olds, for example, are about 22.6 percent in the HAS service area and across Haiti.

Community participation framework

Leadership – 2

- HAS is led by health professionals, Haitian and those from overseas.
- Community leadership is not discussed in the documents.
- The role of women and vulnerable groups in program leadership is not clear.
- Animatrices are not elected by their community, but selected by the local health agent who selects women s/he believes will be capable, motivated and have leadership skills.
- The HAS Youth program develops leadership in young people.

Planning and management – 2

- Health professionals decided the program's focus and activities and provide resources.
- HAS accountability to the community is not clear.
- Communities provide resources in the form of volunteers; financial resources come from outside the community.
- Extensive transfer of skills occurs, both through community volunteer training and community development programs that transfer literacy, business and technical skills.
- Local community development committees are formed and trained, but no information is available on how these committees operate.

Women's involvement – 3

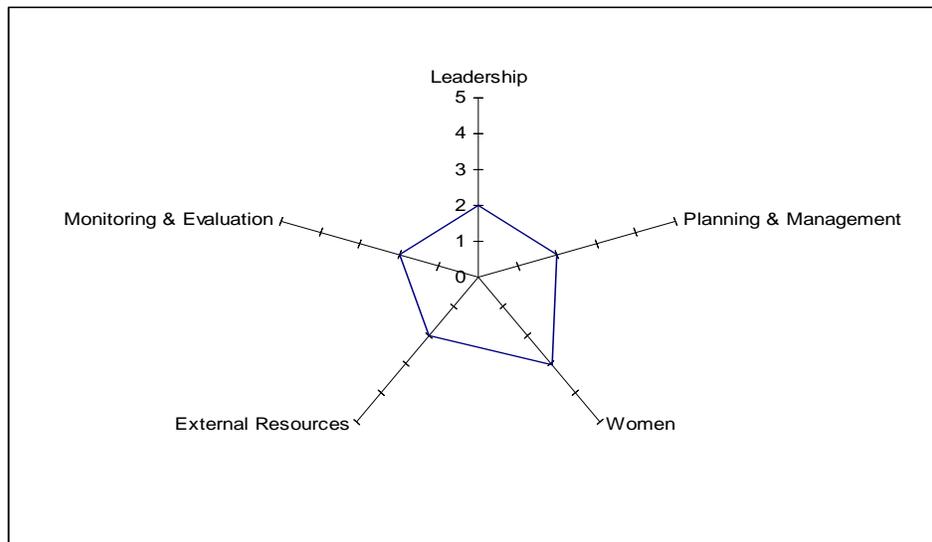
- Women participate in the program as beneficiaries and volunteers.
- Loans and income generation program focus on women.
- Women are not propelled to positions of responsibility and decision-making as a program objective.

External support for program development – 2

- The program is funded from outside the community, including the Haitian government, NGOs such as Caritas, and individual donations.
- Health professionals acquire the funding and allocate it.
- Some micro-financing projects exist to help individuals.
- The programs are designed by health and community development professionals who frame how communities participate. Women and marginalized group participation is considered and efforts are made to make all programs equitable and available to all.

Monitoring and evaluation – 2

- Health professionals and international academics have evaluated HAS.
- Professional staff at HAS keep records and conduct health surveillance. Volunteers report events such as births to health staff.
- It is unclear what feedback is given to communities.



Further examples

Bolivia: Perry, HB., Shanklin, DS. and Schroeder, DG. Impact of a community-based comprehensive primary healthcare programme on infant and child mortality in Bolivia. *Journal of Health, Population and Nutrition* 2003; **21**:383-95

India: Arole, M. A comprehensive approach to community welfare: growth monitoring and the role of women in Jamkhed. *Indian Journal of Pediatrics* 1988; **55**:S100-5

South Asia: Moazzem Hossain, SM., Bhuiya, A., Rahman Khan, A. and Uhaa I. Community development and its impact on health: South Asian experience. *British Medical Journal* 2004; **328**:830-3

Sources of information

Berggren, GG. People, processes, and technology: lessons from Haiti and Vietnam. In: Rohde, J. and Wyon, J. (eds) *Community-Based Health Care: Lessons from Bangladesh to Boston*. Boston, MA: Management Sciences for Health, 2002

Berggren, G., Menager, H., Genece, E. and Clerisme, C. A prospective study of community health and nutrition in rural Haiti from 1968 to 1993. In: Scrimshaw, NS. (ed) *Community-based Longitudinal Nutrition and Health Studies: Classical Examples from Guatemala, Haiti and Mexico*. Boston, MA: International Foundation for Developing Countries, 1995

Burkhalter, BR. and Northrup, RS. Hearth Program at the Hôpital Albert Schweitzer in Haiti. In: Wollinka, O., Keeley, E., Burkhalter, BR. and Bashir, N. (Eds) *Hearth Nutrition Model: Applications in Haiti, Vietnam, and Bangladesh*. BASICS, 1997

Hôpital Albert Schweitzer. *Prevention is Power*. Deschapelles, Haiti, 2004
Hôpital Albert Schweitzer. *Saving Lives, Changing Lives. Annual Report 2003*. Deschapelles, Haiti

Perry, H. *et al.* Reducing under-five mortality through Hôpital Albert Schweitzer's integrated system in Haiti. *Health Policy and Planning* 2006; **21**:217-30

Perry, H. *et al.* Long-term reductions in mortality among children under age 5 in rural Haiti: effects of a comprehensive health system in an impoverished setting. *American Journal of Public Health* 2007; **97**:240-6
www.hashaiti.org

5.5 National Vitamin A Program (NVAP), Nepal

History and objectives

In January 1992, the Nepali Government's Ten-Year National Program of Action detailed the target for achieving virtual elimination of vitamin A deficiency and its consequences by 2001. In February major research findings on periodic dosing of young children with high-dose vitamin A were discussed at a National Vitamin A Workshop in Kathmandu. This advocacy meeting, called by the Ministry of Health, drew senior representatives from the Ministries of Agriculture, Education and Local Development, the National Planning Commission, the Nepal Research Council, UNICEF, USAID, WHO, and a number of national and international NGOs. The workshop recommended that Nepal develop a national, multi-sectoral vitamin A program in 32 priority districts, to be phased-in over a 4-year period. Vitamin A supplementation was a strategy recommended that was translated into a "Guideline for Implementation" and adopted in November 1992. The Guidelines specified that the control of vitamin A deficiency be achieved through a multi-sectoral approach that would mobilize different ministries of the government and various NGOs, INGOs, and donor agencies.

Implementation began in 1993 with eight districts, expanding in phases thereafter. In 1997 policy makers expanded NVAP to all 75 districts of Nepal.

The objectives of NVAP were:

- 1) To reduce child mortality and prevent xerophthalmia through supplementing children aged 6 – 59 months with high-dose vitamin A capsules and to reduce vitamin A deficiency to a level that no longer constitutes a public health problem.
- 2) To change behavior to increase dietary vitamin A intake of the target group through nutrition education, increased home production, consumption and preservation of vitamin A-rich foods, proper breastfeeding and child feeding practices, and increased maternal literacy.

Community participation was seen to underpin NVAP as it would engender ownership at the grassroots by centering on mobilizing district and village officials and the existing network of unpaid Female Community Health Volunteers (FCHVs). FCHVs were seen as a bridge between the health services and the community, capable of mobilizing community members and sustaining the momentum of community participation.

The original objectives of the FCHV program (created in 1988) were to:

- Empower local women with basic knowledge of primary health care, especially related to the health of mothers and children;
- Enhance community self-help in primary health care through increased knowledge and mobilization of local women and other resources;
- Promote community participation by creating awareness of available health and family planning services to reduce infant, child and maternal mortality and the fertility rate;
- Create community awareness of public health issues.

Over 40,000 FCHVs were supervised by local health facility staff, usually the village health worker of the Village Development Committee. The FCHV program was moribund by the early '90s and FCHVs were underutilized and unmotivated.

Program outline

The NVAP distributes vitamin A capsules through FCHVs and supports them by organizing and conducting multi-sectoral training on vitamin A and implementing a well planned and highly structured program that delivers on its promises.

Extensive advocacy at the national level – building alliances with other government departments and organizations –helped legitimize intensive mobilization at the district and village level to reach beneficiaries. Partnership building was actively promoted at every level, with support filtering out from the first tier to the second, e.g. from the District Education Office to schools, principals, teachers, and students.

NVAP training brought together important members of the community to meet with the FCHV, to recognize her role and to support her – both in the logistics of the distribution campaign day requirements and more generally in educating the public about vitamin A. This recognition and the act of working together empowered and motivated the FCHV. The training philosophy maintains that the training process, rather than the curriculum, is the most critical aspect of the training. The multi-sectoral approach to training, including training local politicians and the FCHVs' immediate superiors within the MOH, contributed to the high visibility of the program.

When the program is introduced in a new district, it provides extensive training to MOH primary health care personnel at the district, health post, and community levels. The district health officer also invites district representatives of line ministries and influential NGOs to join a three-day training course. Trainees include representatives of the Ministries of Agriculture, Education, and Culture and Local Development, local politicians, and NGOs such as the Red Cross, CARE, and the Save the Children.

The Nepali Technical Assistance Group (NTAG), an NGO established to help the MOH expand NVAP conducted the training. The hands-on, participatory training has three goals: (1) to educate participants about vitamin A, (2) to train them in the logistics of the vitamin A campaign distribution days, and (3) to empower FCHVs.

NTAG conducted initial and refresher training in each district before handing over on-going training to the District Health Office. NTAG remained available to help if problems arose and also conducted national-level vitamin A promotional activities and monitoring surveys.

FCHVs have three roles: to create and maintain a registry of all children under 6 years of age in her village, to promote and run bi-annual vitamin A days where young children are supplemented, and to provide on-going nutrition and health education to mothers.

Developing the registry requires that the FCHV visit every household in her community. This gives her the opportunity to promote vitamin A to mothers and she becomes known as the person in charge of the vitamin A capsule distribution day and a source of information on vitamin A. The register also enables FCHVs to trace and follow up families who did not attend.

The biannual distribution rounds are campaigns. Intensive promotion of the 'event' takes place immediately prior to each round, along with logistical management by the District Health Office to ensure that each FCHV has adequate supplies available. NTAG launches a nationwide promotional campaign including radio and television broadcasts and pamphlet distribution. Locally, FCHVs work with village health workers and others to promote the day, e.g.

organizing rallies, using town criers and giving talks in schools. On the day mothers bring their children for supplementation to the arranged location, e.g. a school, they receive information on vitamin A. Village health workers and communities participate on supplementation day by assisting the FCHV complete her register and helping to organize activities.

In between supplementation days, FCHVs motivate and educate mothers and community members on vitamin A, mother and child health, family planning and community health. With health personnel support, the FCHVs promote health services such as immunization and family planning and distribute pills, condoms, first aid, and oral rehydration salts. The FCHV role is expanding to include treatment of ARI, pneumonia, intestinal worms, and post partum vitamin A supplementation of mothers.

Outcomes

In 1998 the National Micronutrient Status Survey reported that 87 percent of children living in districts with the NVAP (42 of 75 at that time) had received a vitamin A capsule in the previous round. Furthermore, coverage was significantly higher in rural than in urban areas (89% vs. 67%) and children with lower nutritional status were significantly more likely to have received capsules than children with better nutritional status.

NTAG mini-surveys, conducted after each round, consistently show coverage of over 90 percent since 1993, reaching 98 percent of targeted children by 2002. Coverage in conflict areas is also high (>95%) and the addition of deworming treatments to vitamin A supplementation activities has either not affected or increased coverage.

NTAG mini-surveys have also found that maternal knowledge of vitamin A food sources has increased, e.g. knowledge that dark green leafy vegetables are a good source increased from 38 percent of mothers in 1996 to 91 percent in 2002, and that pumpkin is a good source from 10 percent in 1996 to 35 percent in 2002.

NVAP has also affected the FCHVs and their relationship with their communities. Trust has developed between the FCHV and the community who view the FCHVs as credible sources of health information, and FCHVs report being utilized more frequently for minor injuries and ailments. The success of NVAP has brought national attention and recognition to the critical role played by FCHVs and the program has reinvigorated the FCHV network and transformed it into an important vehicle for improving the public health care system.

FCHVs report feeling more confident and able to offer other health services and interact with people from outside their community. Some FCHVs have pushed for

initiatives such as savings groups, local women's development groups, literacy classes, and election to political office.

Community participation framework

Leadership – 2

- Health professionals in NTAG and donor agencies lead the program at the national level and decide what activities the FCHVs will undertake, e.g. expanding their duties to include ARI.
- NVAP has not been institutionalized within the MOH, in part because the program has been donor-driven and organized and administered independently of the MOH (by NTAG). While NVAP was being organized, the MOH was undergoing major institutional changes, and did not provide the necessary cadre of program coordinators, who constitute more than half of NTAG's personnel and are the primary interface with the FCHVs. Hence, the MOH Central Office has not been involved in the NVAP, and has not made a commitment to it.
- At the community level, FCHVs are supposed to be selected by mothers' groups. Many wards, however, do not have a mothers' group so the FCHV is often designated by the ward chief, village health worker, or the health post in-charge.
- FCHVs have reported feeling accountable to their communities as demand for vitamin A supplements from the community grows. FCHVs lead the promotional activities that precede supplementation days and are supported by other community leaders and members.

Planning and management – 2

- NTAG decided the program's focus, goals, and activities and provides resources (training and manpower). International NGOs provide funding and capsules. The program's timeframe, including when supplementation days are held and when the program is rolled out, is at the discretion of health professionals. No mechanism to hold NTAG accountable to communities is apparent.
- The program is highly structured and local leaders and FCHVs get a set agenda on how to conduct the supplementation campaign and day. NTAG's reliability in consistently delivering the supplements on time is believed to have engendered the FCHVs' trust of the health system, and inspires communities to trust the programme.
- Community contributions were invited by NTAG and directed by them initially. As a district gains experience, however, NTAG reduces its role and the District Health Office does more and the program becomes institutionalized at the district level.

- Skills transfer occurs as FCHVs and health staff are trained on vitamin A and logistics. Literacy training, however, seems to be absent and the FCHV illiteracy seems to be worked around rather than addressed.
- FCHVs presumably manage their own activities in between supplementation days under health staff supervision.

Women's involvement – 3

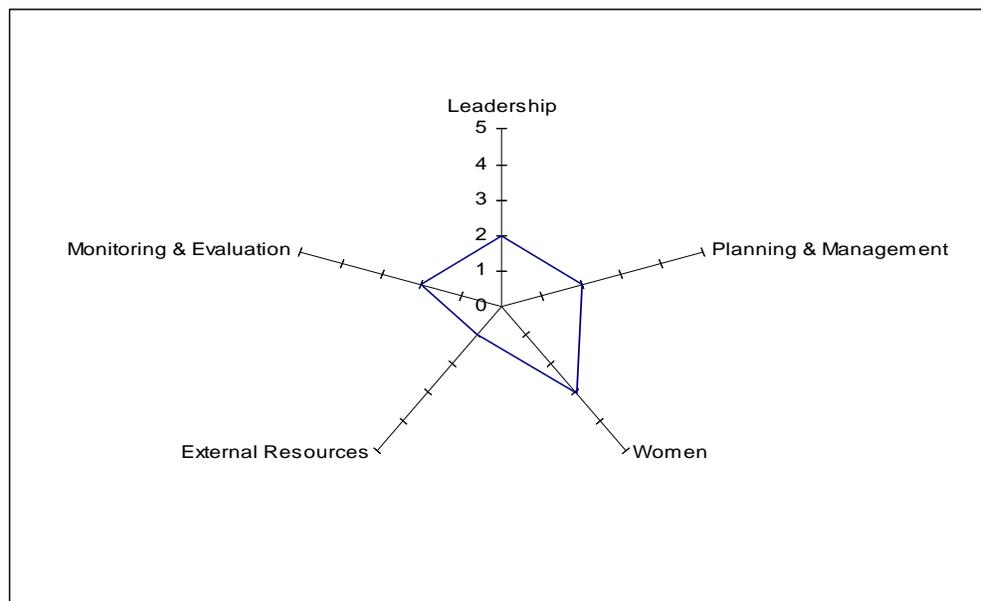
- The program specifically used women as their community agents and through this role FCHVs gained respect and recognition. It is not clear, however, whether the selection of women for the CHV role would have been a program objective if the FCHV network did not already exist.
- The NTAG training aimed to empower the FCHVs through psychosocial competence building, focusing on self-awareness and critical thinking skills to cultivate a strong sense of self-worth and self-efficacy. Greater self-confidence enabled them to lobby for more support from various sectors, build alliances with other grassroots workers and communicate with families.

External support for program development – 1

- The program depends on international assistance for 70 percent of its total operating costs. UNICEF, USAID, and Helen Keller International have been major contributors throughout, the first providing the capsules. NTAG's training success and high participation rates are attributable to relatively high training allowances and per diems paid to trainees.
- NTAG, created specifically for NVAP, was originally funded entirely by USAID. Though not yet independently sustainable, NTAG is now working independently from USAID in several related fields, and by diversifying its activity portfolio and funding sources is ensuring its ability to survive over the longer term.
- The Nepal Micronutrient Status Survey was sponsored by UNICEF and the Micronutrient Initiative.
- Communities do not contribute to the program or decide how funding will be allocated. Communities are not seeking ways to make the program locally financially sustainable, but Village Development Committees contribute money to a FCHV endowment fund that is managed by FCHVs. The fund motivates the FCHVs by recognizing their welfare needs and generates a financial incentive for them.
- NVAP was designed by health professionals to address vitamin A deficiency and framed the way in which the community and district officials participate.
- Women's participation was incorporated into the program design.

Monitoring and evaluation – 2

- FCHV registers are used as a monitoring tool for FCHVs and VHWs.
- Beyond this, NTAG and health professionals conduct all monitoring and evaluation to suit their needs.
- NTAG conducts mini-surveys after each round of capsule distribution to monitor coverage.
- Quantitative evaluations have been conducted using DHS data, the Nepal Micronutrient Status Survey and others. It is unclear whether these evaluation findings have been fed back to communities.
- NTAG and JSI conducted a qualitative evaluation to understand the process of empowerment.



Sources

Coates, J. *Empowered Women Save Children's Lives: a Report from Nepal's National Vitamin A Program*. Nepali Technical Assistance Group and John Snow Inc, 1999

Fiedler, JL. The Nepal National Vitamin A Program: prototype to emulate or donor enclave? *Health Policy and Planning* 2000; **15**:145-56

Gorstein, J., Shrestha, RK., Pandey, S., Adhikari, RK. and Pradhan, A. Current status of vitamin A deficiency and the National Vitamin A Control Program in Nepal: results of the 1998 National Micronutrient Status Survey. *Asia Pacific Journal of Clinical Nutrition* 2003; **12**:96-103

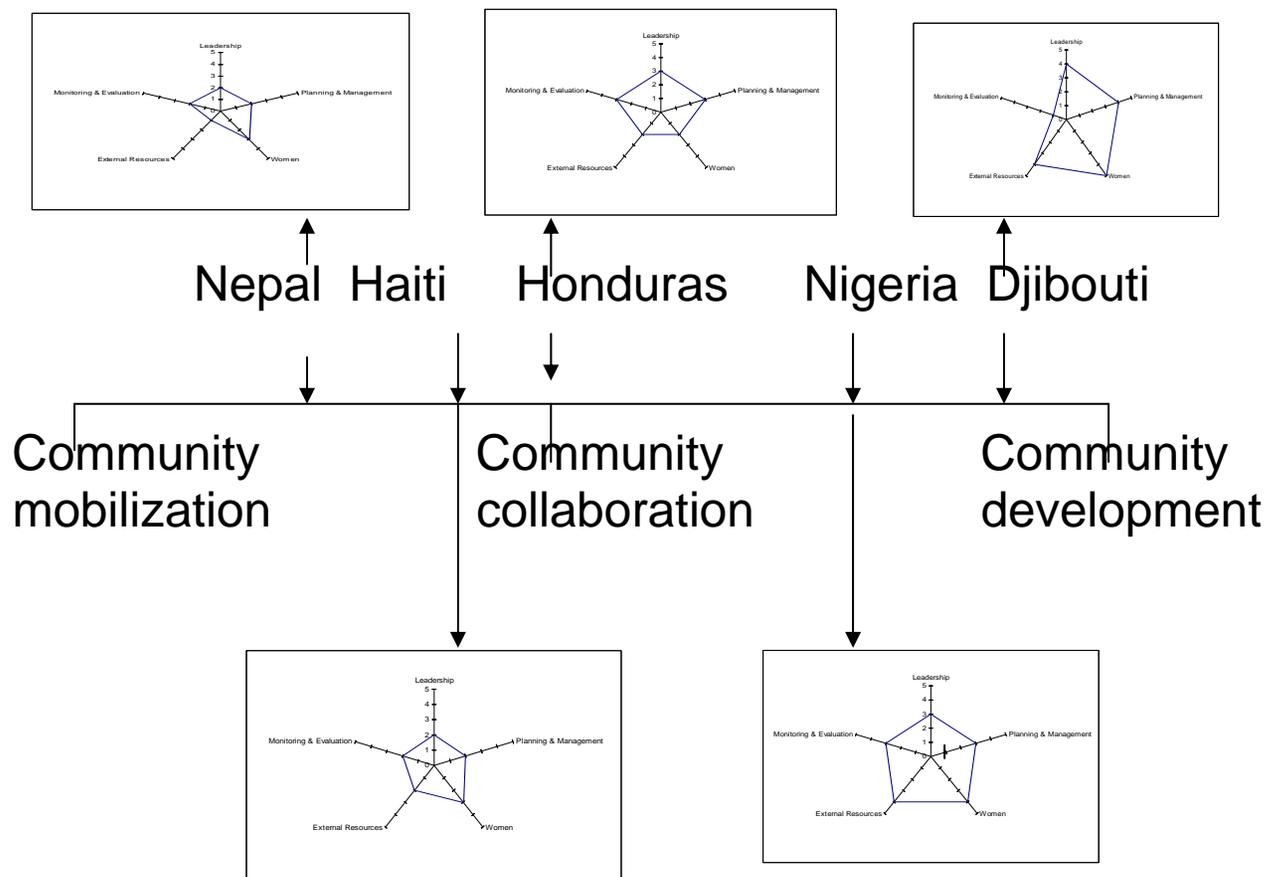
Thapa, S., Choe, MK. and Retherford, RD. Effects of vitamin A supplementation on child mortality: evidence from Nepal's 2001 Demographic and Health Survey. *Tropical Medicine and International Health* 2005; **10**:782-9

UNICEF Regional Office for South Asia. *Getting to the Roots: mobilizing community volunteers to combat Vitamin A deficiency disorders in Nepal*. UNICEF, 2003

6. Lessons learned

This review has collated and analyzed evidence on the relationship between community participation and the uptake, scalability, and sustainability of health interventions for child survival. As part of this, an evaluation framework was developed based on a typology of community participation and key factors that were previously identified as keys to success. This framework was then applied to a series of case studies chosen to illustrate the ways in which communities can mobilize around health issues to develop stronger links with primary health care services. The approach to, and extent of, community participation in the case studies varies along the continuum from mobilization to community development as shown in the figure below.

Figure 6: Visualizations of the five case-studies mapped onto the community participation continuum



The spidergrams illustrate the nature and process of community participation achieved. This analysis was retrospective and only shows one point in time, but to explore their full potential they should be used over at least two time points. This could be either be retrospective or prospective, for instance at baseline and at a later stage to capture changes over time and examine how participation may expand or diminish. The reasons for these changes can be identified leading to program re-adjustment.

While the evidence from these case studies alone cannot identify general principles, two points emerge regarding the framework's utility. First, a more in-depth and nuanced analysis of the relationship of community participation to program objectives and outcomes is possible. Second, those who do the analysis understand the process of participation better and develop their capacity to understand better the dynamics of community involvement in their programs.

Using the framework to analyze the case studies allows some general comments on community participation in nutrition programs relating to uptake, scalability, and sustainability.

Delivery and uptake of health interventions

Broadly, all the case studies show a positive outcome in relation to various health indicators, such as vaccination coverage, growth monitoring, and supplementation coverage.

Two case studies (Nepal and Nigeria) included Child Health Day (CHD) type interventions. Both programs achieved a good response to the CHDs by using community participation, but their strategies were quite different. Essentially, both used a mobilized cadre within the community to promote the CHD, but in Nigeria the activity was nested within a much broader community health and development strategy.

This raises questions about how a CHD combines with a community development approach to improving health. Nepal was a more 'vertical' intervention determined by health professionals with FHCVs delivering intervention(s), while Nigeria is 'horizontal' and facilitates active participation and a strengthened primary health care system. Can a CHD be integrated into a community development approach that does not hurt local primary health care system and strengthens or enhances community development (Oliveira-Cruz *et al*, 2003)?

Programs such as ENA (Nigeria) and BDN (Djibouti) present a channel through which a CHD can be delivered, as was seen in Nigeria. A mobilized community can promote and help deliver the CHD while working on their own health and development activities throughout the year. This approach may be more

sustainable in the long term than NVAP (Nepal) where CHDs themselves and, particularly, the reliable supply of supplements, strongly influenced the FCHVs credibility with the community. FCHVs status, therefore, seems vulnerable to logistical problems beyond their control. With a community development approach, however, community empowerment is more broadly rooted and may withstand problems with a CHD as the Day is only one part of their function. This approach to enhancing the response to CHDs may be slower to establish, but ultimately more sustainable.

A second issue the case studies raise is appropriateness of CHDs. In Honduras 92 percent of children in the AIN-C project areas were enrolled by monitoras and the program strengthened the link between the community and the primary health center. If a community-based program such as AIN-C has the capacity and resources to reach and include all local children and is well integrated with the primary health care system, then a resource intensive CHD seems questionable, unless that delivery style is suited to the local culture and context. Care is needed, however, not to reinvent the community health worker “wheel” of the 1980s and issues such as community health worker burden, primary health care capacity, and monitoring of coverage, need to be considered.

Scalability

Financial resources and political will are prerequisites for expanding health programs, but does a program’s position on the participation continuum influence its potential to be expanded? Examples of program expansion within countries (Honduras, Nigeria) and between countries (ENA, BDN) are among the case studies, but examples of community development programs becoming fully mainstreamed into countries’ healthcare programs are rare (Gillespie, 2003). NVAP in Nepal has ‘gone to scale’ and covers the whole country, but it also illustrates the relationship between scalability and sustainability: resources can be used to expand a program, but they can also make the program vulnerable. NVAP also illustrates some potential tensions within single vertical intervention benefits versus more horizontal interventions aimed at wider health improvements. These echo earlier debates of comprehensive versus selective primary health care (Rifkin and Walt, 1986). While the FCHV role in delivering a wider range of interventions in Nepal has expanded (e.g. de-worming and pneumonia management), no evidence exists to show that the expansion has led to sustained uptake.

A program’s scalability is also related to replicability. But replicating community development program is not just transferring specific interventions to a new location; rather it requires transferring particular principles and approaches that underpin community participation and empowerment (Gillespie, 2003). It is essential to recognize that participation and empowerment are not technical interventions, rather they are processes that require skilled facilitation and are governed by the social, political, economic, and gender context. The

manifestations of a community development approach and the speed at which it unfolds are variable and do not look the same when applied across a range of contexts. Expansion plans therefore must allow for local flexibility, include varying degrees of external facilitation, and encourage local diversity, while monitoring how well the principles of community participation are implemented.

For large agencies with single intervention programs scaleability is not merely one of coverage, but also of sustainability. It can be argued that sustainability is probably better ensured where communities have some control and ownership of these programs, i.e., as in a community development approach, rather than effecting community mobilization around a single intervention to improve health.

Sustainability

Does community participation lead to more sustainable health outcomes? Programs on the community development end of the continuum suggest sustainable outcomes are possible; BDN has operated since the late 1980s and has survived turbulent political periods in some countries. Nepal has been sustainable to date, but relies on substantial external financial support. Many community health worker programs that emerged after Alma Ata, however, have faltered or failed. Despite a theoretical commitment to community development, in practice professional groups asserted their influence on primary health care and so many programs were situated closer to the community mobilization end of the continuum (Stekelenberg *et al*, 2003) and may have contributed to poor sustainability (Walt, 1988).

Support is also relevant to achieving and sustaining health outcomes because an enabling policy environment may help to institutionalize community participation and strengthen sustainability. Both participation and its products, such as Village Health Committees, should be embedded into a country's political and institutional fabric (Gillespie, 2003), through national policy or district health plans or university health curricula (Gonzales *et al*, 1998). The support too must be sustainable.

Support for community development

The issue of strong, early, and on-going support for community participation, both within all levels of the health system and across sectors is an issue that emerged from the case studies. For example, the ENA program worked simultaneously at central, state, and local levels from the outset and the BDN program engaged several ministries to support efforts to tackle the social determinants of health. Community participation does not mean the community does everything. Creating and maintaining committed support is vital and refers to written policy and to attitudes and financial resources (Tontisirin and Gillespie, 1999; Gillespie, 2003; Ismail *et al*, 2003). The decline of nutrition programs in Tanzania illustrates the need for continued support: shifts in donor priorities and the decline of two

bodies that had advocated for nutrition at the central level (the Planning Commission and the Tanzania Food and Nutrition Centre) saw nutrition slip from the country's policy agenda (Dolan and Levinson, 2000). Likewise, in Pakistan, the Family Health project faltered because not enough was done initially to communicate the project's overarching concept to key government stakeholders. Consequently the provincial Finance Department failed to invest in Village Health Committees as they were not convinced of their value and the MOH gave only lukewarm support to District Health Management Teams that had been formed with wide community participation (Israr and Islam, 2006).

Effective multi-sectoral support needs government and collaborating NGOs to have clearly defined roles and responsibilities (Gonzales *et al*, 1998; Gillespie, 2003). ENA's strategy on this was to have a designated 'focal person' at state and LGA levels who did not have to come from the Health Department. Community development support also requires relevant bodies to have the capacity to respond to communities' growing demands. Community self-reliance does not necessarily mean self-sufficiency and increased local capacity to make demands (Gillespie, 2003). In Nigeria, for example, some CAPA-C requests to the LGAs were not acted on.

7. Conclusions

Overall, these case studies demonstrate that community participation can enhance the uptake and response to the scalability and sustainability of health interventions, but how these programs are implemented is crucial. Communities are heterogeneous and complex and community participation needs to be viewed as a process. That said, the evidence presented here and elsewhere suggests that where participation tips to the community development end of the continuum, sustainability is greatest, but change is not instantaneous. Although the technical interventions can produce comparatively rapid results, their sustainability takes time and money. Both are necessary, but each by itself is not sufficient to ensure success; sustainable change is more likely when programs address wider development issues rather than specific behaviour change objectives alone.

Process evaluations of community-based programs are needed to understand more fully why particular programs lead to specific outcomes and to understand the processes of community participation and empowerment within programs and as they expand into new environments. Process evaluation can elucidate key contextual influences and program components that lead to a program's outcome. This information can then be used to assess whether a program's principles and basic framework can be replicated to other areas and can inform understanding of successful (or unsuccessful) program roll out. Some guides to, and lessons from, taking nutrition projects to scale exist (Contreras *et al*, 2004; Gonzales *et al*, 1998; Gillespie, 2003), but this issue requires further research.

Gaps remain in our understanding:

- As noted above, more understanding is needed about the process of particular programs and the impact of particular contexts on the process of participation. Few studies in the health field have examined this, although work in other fields such as development studies does exist. The framework used here could be a useful tool.
- Empowerment remains a rather nebulous concept despite attempts to define it. And perhaps the work of social psychologists linking the domain of the individual with that of the wider social group could be relevant here.
- Processes of behavioral change are still poorly understood as are factors other than information provision that shift patterns of behavior.
- Reasons for declining community health worker programs in the 1990s are not apparent. Given the current resurgence of interest, it would be relevant to examine why they declined and identify any reasons for their failure.

References

Assai, M., Siddiqi, S. and Watts, S. Tackling social determinants of health through community based initiatives. *British Medical Journal* 2006; **333**:854-6

Bichmann, W., Rifkin, S.B. and Shrestha, M. Towards measurement of community participation. *World Health Forum* 1989; **10**: 467-472.

Bryce, J., el Arifeen, S. and Pariyo, G. Reducing child mortality: can public health deliver? *The Lancet* 2003; **362**:159-64

Contreras, A., Drabo, Y., Shimp, L., de Quinteros, P., Linares, MA., Mbaye, M., Touré, S. and Alvarado, V. *Operationalizing Key Family Practices for Child Health and Nutrition at Scale: The Role of Behavior Change*. Arlington, VA: BASICS II for USAID, 2004

Cooke, B. and Kothari, U. (Eds) *The Tyranny of Participation*. London: Zed Books, 2001

Dolan, C. and Levinson, FJ. *Will We Ever Get Back? The Derailing of Tanzanian Nutrition in the 1990s*. Discussion Paper No.17. Food Policy and Applied Nutrition Program, Tufts Nutrition, 2000

Gillespie, S. *Scaling Up Community Driven Development: A Synthesis of Experience*. Washington, DC: IFPRI, 2003

Gonzales, F., Arteaga, E. and Howard-Grabman, L. *Scaling Up the Warmi Project: Lessons Learned*. Save the Children Federation Bolivia Field Office, 1998

- Gonzalez, CL. *Mass campaigns and general health services*. Public Health Papers No. 29. Geneva: World Health Organization, 1965
- Gryboski, K., Yinger, NV., Dios, RH., Worley, H. and Fikree, FF. *Working with the Community for Improved Health*. (Health Bulletin 3) Washington, DC: Population Reference Bureau, 2006
- Haines, A., Sanders, D., Lehmann., U. *et al*. Achieving child survival goals: potential contribution of community health workers. *The Lancet* 2007; DOI: 10.1016/S0140-6736(07)60325-0
- Hossain, SM., Bhuiya, A., Khan, AR. and Uhaa, I. Community development and its impact on health: South Asian experience. *British Medical Journal* 2004; **328**:830-3
- Ismail, S., Immink, M., Mazar, I. and Nantel, G. *Community-based food and nutrition programmes: what makes them successful. A review and analysis of experience*. Rome: FAO, 2003
- Israr, SM. and Islam, A. Good governance and sustainability: a case study from Pakistan. *International Journal of Health Planning and Management* 2006; **21**:313-25
- Jewkes, R. and Murcott, A. Meanings of community. *Social Science and Medicine* 1996; **43**: 555-63
- Laverack, G. *Health Promotion Practice: Power and Empowerment*. London: Sage Publications, 2004
- Manandhar, DS., Osrin, D., Prasad Shrestha, B. *et al*. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. *Lancet* 2004; **364**:970-9
- Murthy, RK. and Klugman, B. Service accountability and community participation in the context of health sector reforms in Asia: implications for sexual and reproductive health services. *Health Policy and Planning* 2004; **19**:i78-i86
- Nelson, N. and Wright, S. (Eds.) *Power and Participatory Development: Theory and Practice*. London: Intermediate Technology Publications, 1995
- Oakley, P. *Projects with people : the practice of participation in rural development*. Geneva: International Labour Office, 1991
- Oliveira-Cruz, O., Kurowski, C. and Mills, A. Delivery of priority health services: searching for synergies within the vertical versus horizontal debate. *Journal of International Development* 2003; **15**:76-86

Pritchett, L. and Woolcock, M. Solutions when *the* solution is the problem: Arraying the disarray in development. *World Development* 2004; **32**:191-212

Rifkin, SB. *Health Planning and Community Participation: Case Studies in South-East Asia*. Dover, NH: Croom Helm, 1985

Rifkin, S.B. and Walt, G. Why health improves: defining the issues concerning “comprehensive primary health care” and “selective primary care”. *Social Science and Medicine* 1986; **23**: 559-566.

Rifkin, SB. *Community participation in maternal and child health/family planning programmes*. Geneva: WHO, 1990

Rifkin, SB. Paradigms lost: toward a new understanding of community participation in health programmes. *Acta Tropica* 1996; **61**:79-92

Rifkin, SB., Lewando-Hundt, G. and Draper, AK. *Participatory Approaches in Health Promotion and Health Planning: a Literature Review*. London: Health Development Agency, 2000

Rifkin, SB., Muller, F. and Bichmann, W. Primary health care: on measuring participation. *Social Science and Medicine* 1988; **26**:931-40

Rifkin, SB. and Pridmore, P. *Partners in Planning. Information, Participation and Empowerment*. London: Macmillan Education Ltd, 2001.

Stekelenburg, J., Kyanamina, SS. and Wolffers, I. Poor performance of community health workers in Kalabo District, Zambia. *Health Policy* 2003; **65**:109-18

Taylor-Ide, D. and Taylor, C. *Just and lasting change: when communities own their future*. Maryland: John Hopkins University Press, 2002

Tontisirin, K. and Gillespie, S. Linking community-based programs and service delivery for improving maternal and child nutrition. *Asian Development Review* 1999; **17**:33-65

Wallerstein, N. *What is the evidence on effectiveness of empowerment to improve health?* Copenhagen: WHO Regional Office for Europe, 2006

Walt, G. *Community Health Workers: Policy and Practice in National Health Programmes*. Evaluation and Planning Centre for Health Care, London School of Hygiene and Tropical Medicine, 1988

World Bank. *The World Bank Participation Sourcebook*. Washington, DC: World Bank, 1996

World Health Organization. *Preamble to the constitution of the World Health Organization as adopted by the International Health Conference*. New York, 19-22 June. Official records of the World Health Organization no.2:100, 1946

World Health Organization. Declaration of Alma-Ata, International Conference on Primary Health Care. Alma-Ata, USSR, 1978.

Zakus, JD. and Lysack, CL. Revisiting community participation. *Health Policy and Planning* 1998; **13**:1-12

Appendix 1: Community Participation Program Development Continuum

From: Gryboski, K., Yinger, NV., Dios, RH., Worley, H. and Fikree, FF. *Working with the Community for Improved Health*. (Health Bulletin 3) Washington, DC: Population Reference Bureau, 2006

	1 (low)	2 (moderate)	3 (high)	4 (highest)
Equity/ Inclusiveness	Health professionals assume leadership for program activities. Community leaders are primarily or exclusively men who represent traditional power structures.	Community leaders involved in program activities rely heavily on direction from health professionals and rarely have input in program decisions. Community leaders are aware of interests of various community groups.	Community leaders and representatives work in partnership with health professionals to participate in decisions. Community leaders regularly confer with representatives of all community groups (ethnic, women, poor) to include their perspectives in decision-making.	Communities create a representative process for community leadership positions. Women and other vulnerable groups play a strong role in health program initiatives.
Management	Health professionals	Community members have	Community members have	Community members are

	<p>identify needs, and develop and manage health services. Communities depend primarily on resources provided by the health system to carry out activities. Health professionals generally direct community contributions and input.</p>	<p>basic needs-assessment, planning, and/or implementation skills. Decisions are largely made by health professionals who provide guidance and make primary decisions about program activities and resource use.</p>	<p>strong needs-assessment, planning, management, and resource mobilization skills. Communities may be able to advocate for their needs, mobilize and access human and other resources from institutions outside the community. Communities make decisions in partnership with health professionals through ongoing mechanisms. Health professionals provide ongoing support and guidance to strengthen community capacity and preventive health knowledge.</p>	<p>highly skilled in all phases of community health needs assessment, planning, and management. Communities effectively mobilize and access resources, advocate for their needs, and create partnerships to collaborate within and outside the community. Community members have strong knowledge of preventive health practices. Community members play a lead role in identifying program priorities.</p>
<p>Process and Outcome Evaluation</p>	<p>Communities have no opportunity to give feedback about the program and</p>	<p>Evaluators and health professionals make decisions about evaluation design and</p>	<p>Communities are active in deciding what to evaluate, and/or in gathering and interpreting</p>	<p>Communities are active in evaluating effectiveness of programs and deciding how to make</p>

	<p>are not aware of program evaluation design or results.</p>	<p>interpretation of results. Evaluators may explain the process to community members whose perspectives regarding evaluation design may be included. Results may be presented to the community.</p>	<p>information to evaluate program effectiveness. Mechanisms are developed to facilitate community collaboration with health professionals and evaluators to improve activities. Communities receive technical advice and ongoing support for evaluation.</p>	<p>improvements. Communities seek advice on their own initiative from health professionals and access evaluation expertise as needed.</p>
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