

Welcome to the Swamp:

Why Assessing Community Capacity is Fundamental to Ecohealth Work

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INTRODUCTION

Many of us have already discovered that health promotion is largely the process of engaging the capacity of people and communities to address the determinants of health. Certainly one of the large puzzles of health promotion work for professionals is the reality that we, as professionals, do not hold many of the pieces of the puzzle. Those “missing” pieces are hidden within the thinking, choices, patterns of behaviour, and relationships of a wide variety of stakeholders operating at many levels. What often appears to be a relatively obvious, neat and straightforward problem to health and natural resource management professionals proves to be complex, messy and intractable when attempts are made to implement technical “solutions” in real communities of people.

In his classic study of professional practice, Donald Schön talks about what happens to professionals when they cross the bridge from the familiar territory encompassed by their training, competencies and mandates into a universe of messy and uncontrollable variables.

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner must choose. Shall he remain on the high ground where he can solve relatively unimportant problems according to prevailing standards of rigor, or shall he descend to the swamps of important problems and non-rigorous inquiry? (Schön 1987:3)

When our goal becomes the actual improvement of the health and well-being of specific populations, we as professionals cannot deliver that outcome to communities. We can only work together with communities to build that outcome from within. As they say in South Louisiana, “Welcome to the swamp!”

This paper will focus on four themes:

1. why building community capacity is fundamental to ecohealth development work;

2. how community capacity must be strategically linked to the specific cluster of health determinants that are the most pivotal in creating the actual health conditions giving rise to the problems that need to be addressed;
3. how the definition and measurement of community capacity using participatory action research methods directly contribute to the building of sustainable solutions; and
4. how professional capacity sets limits to the successful leverage of community capacity in strategic solution building and how a professional culture of learning and a professional orientation that focuses on building its own capacity serves as a powerful illuminator in finding pathways through the “swamp” of community-based practice.

In discussing these four themes, we will draw on concrete project examples from Kenya, Uganda, and Aboriginal Canada. What these project examples have in common are the following:

1. Challenging and complex health conditions creating unacceptable levels of ill health;
2. Teams of health and development professionals focused on finding sustainable solutions to the tangled web of problems;
3. Extremely messy processes of intervention through which professionals tried to engage communities in solution building; and
4. Common themes and lessons.

PART ONE: THE FUNDAMENTAL ROLE OF CAPACITY BUILDING

The following example from Kenya illustrates the complex nature of many real-world health promotion research and intervention problematics.

Case Example No. 1 – The Mwea Rice Scheme Anti-malaria Program

In the lowland area of central Kenya, at the base of a low mountain range some 90 minutes from Nairobi, lies the district of Mwea, which holds one of the largest flooded rice schemes in East Africa. For six months out of the year, a large portion of the land in this area is under water, which, among other things (due to greatly accelerated anopheles mosquito count), makes it a very high-risk zone for malaria in a country which WHO calls the “epicenter” of cloriquine resistance in Africa.¹

For the past several years a group of Kenyan researchers and Ministry of Health partners have been searching for solutions to what can certainly be considered a malaria epidemic. Worldwide, it is estimated that 300 to 500 million people become sick with malaria each year, and about two million die of the disease. Malaria accounts for some thirty percent of all outpatient visits to health facilities in Kenya. Currently, in Kenya alone, between seventy-five and one hundred children die *each day* from the disease (usually cerebral malaria) and another fourteen thousand require hospitalization.

The Kenyan research team was funded by Canada’s International Development Research Centre (IDRC)² to explore an “Ecosystem Approach to Human Health”. This approach brings together natural resource management, and human systems change in a search for practical interventions that will address both the impacts of a human health problem (in this case malaria) and its root causes. (Forget and Lebel 2002).

As the evaluators of this research program, we were able to dialogue extensively with research team members, their community partners and many other stakeholders. In essence, this is what Dr. Clifford Mutero, the research team leader told us.

¹ “Anopheles” is the variety of mosquito that carries malaria. “Cloriquine” is a drug that was used successfully to prevent and cure malaria for many years. Recently, cloriquine-resistant strains of anopheles mosquitoes have developed, which is causing a rising epidemic of malaria in some parts of the world.

² “Livestock and agro-ecosystem management for community-based integrated malaria control.” (IDRC project No. 100482)

There is no scarcity of knowledge and methods about how to eliminate malaria in many parts of Africa. What stands in the way is poverty and apathy.

On the surface of the malaria problem in Mwea, it would seem that a combination of technical solutions such as insecticide-impregnated bed nets, pyrethrum cattle strips, window screens, biological agents for killing mosquito larvae, community education and making treatment more accessible would solve the problem. And these strategies might work, *if* the community could even begin to approach the level of capacity required to afford and sustain such solutions.

In their mapping of the situation, the research team was able to uncover a very familiar causal web of factors that influence malaria prevalence in Mwea. Following is only one part of the web, gleaned from analysis provided by various community-level players at a stakeholder meeting.

A longstanding conflict between the farmers union and the managers of the irrigation scheme has led to a withdrawal of services to farmers by the government, which has in turn led to a general deterioration of the entire rice production system, including infrastructure (such as canals and roads, the availability of adequate farming inputs, quality seeds, fertilizers, etc.), all of which has in turn led to a very major reduction in rice production and therefore in farmer income. This, in turn, has led to a significant increase in household poverty, which has impacted food security and accessibility to health inputs such as malaria medicine and bed nets. The lack of clean drinking water (which is endemic to the area) combined with poor nutrition and the inaccessibility of health services all contribute to a general susceptibility of most residents to disease (including malaria), which in turn leads to a generally weakened capacity for agricultural production, thus creating a self-perpetuating downward cycle. Dysfunctional social behaviour (due mostly to increased social-economic stress) such as addictions and domestic violence leads to an even greater increase in the vulnerability of households (and especially children) to the impacts of malnutrition and ill health. All of this makes Mwea residents, and especially the poorest, increasingly vulnerable to malaria and its impacts.

It is in this (partially described) context that technical solutions to the problem of malaria (such as bed nets and medical intervention) will have to be implemented, and it is precisely because the real world of Mwea rice farmers and their families is complex, multi-faceted, and not easily changed that the research team needed to carefully map the situation before attempting to test technical solutions.

So, in essence, researchers found that despite the fact that a battery of technical solutions were known (even by community people) for how to reduce malaria and its impact, those solutions a) are not implementable within the general population because of their cost relative to worsening levels of poverty; and b) are in any case not enough to really solve the problem of malaria in Mwea, because malaria strikes people the hardest who have compromised immune systems and generally weakened conditions that come about from such factors as inadequate nutrition (i.e. hunger), and persistent chronic sickness (due mainly, in Mwea, to bad water). These factors are further compounded by a weakened capacity for hard work (because of chronic sickness) that then leads to poor agricultural productivity, which in turn leads to even greater poverty, and downward the cycle goes. As it turns out, the research shows that it was not those who live closest to mosquito breeding areas (i.e. water) where anopheles mosquito population is the highest who have the most malaria. In fact, those groups have the least malaria in the district. Those with the most malaria and the worst impact from malaria are the poorest – and they happen to be the people who live on the margins of the rice scheme (furthest away from mosquito breeding sites) who are earning the lowest levels of income from the scheme.

Let's take a few steps back and consider this problem from the standpoint of health professionals.

1. The battery of technical solutions generally known to reduce both the incidence and impact of malaria will not work in Mwea unless a complex web of other factors is also addressed.
2. Epidemiologists, malariologists, and other health experts working on the problem would have never known that their pat technical solutions could not work in Mwea, (given the current realities) unless they engaged the community in a process of participatory analysis.

3. They eventually did so, and they then learned that the problem of malaria is imbedded in a web of interrelated causal factors. So, this research team stumbled on a fact of life in health-related community intervention; namely, that single-issue health campaigns are often unsuccessful because they try to abstract a problem from its context by dealing only with “the problem”, while ignoring other factors that are co-related through common dynamics within the socio-ecological system that generated and sustains the problem.

How did the Mwea research team discover what was really happening? First, they had to construct a “map” of the agro-ecosystem dynamics (related to the malaria virus, disease vector, host behaviour, etc.) and as well related to the dynamics of the relevant human systems (farming systems, family systems, community systems, wealth distribution, etc.).

This map-making was only possible when community members became real partners in the research process. It is community members who have the inside knowledge of the actual agro-ecosystem dynamics such as which stresses farmers face, who gets malaria most often and most severely, household caloric intakes at different seasons of the year, or factors that are impacting farm productivity and income (such as rising costs of inputs such as fertilizer, or lack of access to high quality rice seed stock due to the failure of government controllers of the rice scheme to manage or distribute seed stock effectively, or rising frustrations and militancy of farmers as rice rots in the fields for lack of transportation to market, due to government tactics to force farmers to accept lower prices).

In fact, most of this sort of knowledge was contained within the community system, but it was not known systematically. It was held in bits and pieces, (like an unsolved jigsaw puzzle) by many different actors (or groups of actors) within the community system. Community members tended to view most of this multitude of seemingly disconnected factors as being beyond their control; simply part of the world “as it is” and until a thorough participatory analysis was undertaken, researchers too were not able to see the connections between these sorts of social and economic factors and the problem of malaria.

What will it take to solve the problem of malaria?

As we contemplate moving toward solution building, it is critical to ask the question “who needs to do what?” in order to begin to transform the web of conditions now producing high levels of chronic malaria in Mwea. Through the process of participating as co-researchers, community capacity to read the text of their own lives and context was significantly increased in Mwea (i.e. consciousness-raising and analysis). Eventually, a very enthusiastic group of community stakeholders emerged which was subsequently able to produce an analysis of key determinants of well-being that will have to be transformed to really impact malaria in Mwea. These factors are the following.

1. Make clean water accessible to every household.
2. Improve household income and nutritional intake.
3. Address critical social problems such as alcoholism and violence against women and children which are increasing household vulnerability to disease.
4. Improve agricultural productivity and profitability, which will require resolving the ongoing dispute with the farmers union.
5. Implement a community-driven anti-malarial campaign linked to a revolving fund to cover input costs. (Adapted from Mutero et a., 2002)

Basically, there is very little for professional providers to “provide” in this plan, in terms of delivering actual solutions to the community. However, technical support will certainly be needed related to every one of those strategies. What is most fundamental about this set of solutions is that they all depend on the community’s capacity to actually implement them. If the community does not spearhead and sustain each of these, nothing will really change. What is absolutely certain is that no outside benefactor is going to come and deliver these solutions to the community, least of all the cash-strapped Kenyan government.

Which Capacities?

We now come to the nub of the implementation challenge. In this case, a team of professional researchers and health providers have worked with a fairly broad range of stakeholders in Mwea³ and have identified a six-pronged strategy for reducing both the incidence and the impact of malaria. For each of these six strategic lines of action, community members will probably require

- a) education and training;
- b) technical support;
- c) encouragement;
- d) monitoring for effectiveness; and
- e) assistance to support the costs of interventions.

Nevertheless, the metaphor of coaches and a team describes the true nature of this problem. It is the team that must play the game. The coaches can cajole, educate, challenge, encourage and support. They can prepare the team for the big game, but ultimately, the game will be won or lost on the performance (i.e. knowledge, skills, perseverance, etc.) of the players themselves, both as individuals and as a coherent team. Good teams usually have good coaches, and their contribution can make an enormous difference to athletic success. But what makes a good coach? Certainly a big part of good coaching is knowing which capacities the players will need in order to be effective, and also knowing how to develop those capacities in their players and teams.

What is “community” in community health development?

The term “community” comes from two root words: common and unity. To be “in community” is to share a common oneness with other people. The focus of that common oneness can be all inclusive (addressing all parts of life) or very specific. Hancock, Labonte and Edwards (1999) refer to “spatial” and “non-spatial” communities to refer to communities with geographic boundaries versus communities of affinity.

What is important, in this context of work aimed at transforming the web of relationships and conditions that give rise to any particular health problematic, is that there are some parts of the work that individuals must do (such as learning and adapting new health behaviours), but there is also collective work to do that lies beyond the capacity and influence of individuals.

The social-cultural world within which a person lives (like a fish lives within water) can have a tremendous influence on attitudes, behaviour and ultimately on health outcomes. Some communities create opportunities for their members that greatly enhance personal levels of well-being such as access to goods and services, recreation, education, arts and cultural experiences, high levels of trust and mutual aid, economic opportunities, etc. Other communities provide a hostile environment in which individuals are left to fend for themselves and to fight over scarce resources and are discouraged from cooperation and mutual aid by a climate of dependency-thinking, suspicion, mistrust and an absence of nurturing and supportive social networks.

For our strategic purposes, “a community” can be defined as any sizeable grouping of human beings “who enter into a sustained relationship with each other for the purpose of improving themselves and the world within which they live” (Bopp and Bopp 2001:13). While this is certainly not an adequate sociological definition, it does recognize that communities are not homogenous, and that within any particular aggregate of people (geographic or relational), interveners are most likely to be working with a (somewhat) representative sub-group. Who exactly is and is not “represented” by community working-groups must be made an explicit part of any comprehensive problem statement. Nevertheless, the messy strategic reality is that outside helpers trying to assist communities to transform health conditions from within find themselves working with some kind of more or less representative group who are acting on behalf of “the community”.

Community Capacity?

³ Community members aggregated by place of residence, gender and wealth levels, community leaders, various community helpers/providers and representatives of the National Irrigation Board staff stationed at

When we speak about “community capacity” we are referring to the problem, what do community insiders need to have, to know, to do, and to be, in order to effectively influence the primary determinants of health that are affecting them. As in the Mwea case, much of the work to be done in achieving health for all cannot be done by professionals and “handed over” like a package of pills. Improvements in many of the fundamental determinants of health require that people learn and change – and that is something that happens from within.

Following are examples of some of the most fundamental capacity requirements we have encountered in helping communities.

1. The capacity to facilitate effective people’s **participation** – i.e. the community’s capacity to engage its own diverse membership in constructive processes of consultation, collective analysis and decision making.
2. The capacity to systematically develop, articulate and adapt a **vision** of sustainable health, well-being and prosperity toward which the community can work.
3. **Community cohesion**, which is the capacity to work together, to develop common aims, purposes and methods, to manage and transcend conflicts and differences, and to incorporate diversity and complexity into evolving community systems.
4. **Resilience** which is the capacity to absorb shocks while maintaining function (Gunderson and Holling, 2002; Berkes et al., 2002). The opposite of resilience is vulnerability. In a world where the pace of change has increased exponentially, change, and even surprise, are inevitable. The adaptive capacity to absorb shock and surprise, and to respond with creativity, novelty and innovation is critical in complex socio-ecological systems (i.e. systems in which people and nature are interdependent). Resilience moves beyond trying to control systems assumed to be stable to managing the capacity of human beings in relationship with natural systems to “cope, adapt and shape change” Folke et al, (2002:4).
5. **Ongoing learning** is the capacity to learn from development processes while they are underway, and while participating in them (see Schön, D. 1983 and Bopp et al. 2000).

Mwea.

Previously developed vision, principles and goals hold within them the accumulated knowledge and wisdom of past experience about how to proceed. Ongoing learning calls participants to account through an action-reflection dynamic in which actions may be corrected, or (on the other hand) vision, principles and goals may be refined. The capacity to reflect on what worked, what didn't and what is now needed is fundamental to a culture of learning within development processes. For such a culture, "mutual support, commitment to learning, and appreciation of a diversity of action are the prevailing norms" (Universal House of Justice, 2002).

6. **Leadership** may be defined as the capacity to engage the diversity of sectors and levels within community life in processes of learning and action for health. Communities have both formal (i.e. people in recognized positions of authority) and informal (those without formal authority whose voice is highly regarded) leaders (Bopp et al., 2000:36). Most community development processes require leadership which is able to engage the attention of community members, create a "holding environment" within which people feel enabled to explore issues and develop responses, and which honours the reality that technical solutions (i.e. off the shelf, pre-developed answers) usually will not work because of the nature of complex real-world health dilemmas, which typically require that solutions be adapted and developed from within the system that needs them (Heifetz, 1997).
7. **Partnership building** refers to the capacity to create and maintain strategic alliances with relevant individuals, organizations and departments of government that can in some way support and enhance the ongoing development work at the community level. Sometimes partners are local or regional, such as an NGO or a government departmental service group. However, national and even international agencies can also bring valuable "capital" to the circle, including funding, technical assistance, and legitimization of community issues and efforts. The ability to build effective alliances and working relationships with appropriate partners is a basic need of most community-based processes.
8. **Accessing and managing resources** - Management is the capacity to organize people and resources so that their full potential is effectively utilized. The ability to identify

and access resources that already exist within the community (knowledge, skills, human energy, natural capital, social capital, money, etc.) is critical and often overlooked (Kretzmann and McKnight, 1994). It is also important to learn to utilize existing resources in novel and creative ways in response to surprising and shifting circumstances. Sometimes however, it is critical to be able to locate, access and wisely manage resources (money, technical assistance, allies, etc.) that originate outside the community.

Indeed all living things draw on energy sources outside themselves in order to flourish. A tree requires water, soil, nutrients and sunlight, but it needs these things on its own terms. Too rich a diet of nutrients will sicken the tree. Too much water will drown it. The tree must live within its own biological parameters, but it must also depend on the ecosystem within which it lives. Communities too, live within both natural and social ecosystems within which community development must occur (regional and national governments, global economic conditions, etc.). Managing the relationships between community development processes and the nested hierarchies (or, as Ken Wilber puts it, the holarchies [Wilber, 1996]) within which communities actually exist is a critical capacity for health development.

These eight generic capacities that we have listed are by no means a complete list of capacities required by communities in transformation. Lists such as these are merely indicative of what to look for in specific community contexts. Our experience in applying a capacity lens to community development processes is that there is most often a cluster of specific capacities and health determinants that converge to define every specific problematic. Various examples of generic capacity domains we have encountered such as Goodman et al. 1991; Labonte and Laverack 2001a; Labonte and Laverack, 2001b, as well as our own previous work with the David Thompson Health Region's Research and Evaluation unit (Bopp, et al., 2000) all reflect very similar domains of capacity. It is now clear to us, however, that measuring these or any other community capacities will not advance the process of health development unless and until several other important steps are taken.

PART TWO: LINKING COMMUNITY CAPACITY TO SPECIFIC HEALTH DETERMINANTS

Case Example No. 2 – The Tororo Sleeping Sickness Epidemic

In another IDRC ecohealth project working in South East Uganda (near Tororo)⁴ researchers are trying to head off an impending epidemic of (trypanosomosis-induced) sleeping sickness. In the past several decades, well over a million people and untold numbers of cattle⁵ have died. The last epidemic ended in 1993, and now the disease is making an unsurprising comeback as government tsetse control⁶ and disease prevention programs have crumbled under the weight of disintegrating public sector services across Uganda.

Recognizing that government is no longer able to carry the burden of anti-“tryps” programs, international NGOs and research groups are now rushing to work with communities to develop community-based responses. Across the study area, six villages were selected for pilot work, based on a range of disease-vector-related ecosystem features (i.e. tsetse fly breeding and habitat conditions) as well as related to each area’s history of past sleeping sickness epidemics.

In an evaluation we conducted for IDRC (Bopp, 2002,) the following issues came to light.

1. Researchers and health providers working on the project began with a fairly well established (generic) knowledge base about what works and what doesn’t in reducing the incidence and impact of trypanosomosis. What they didn’t know was how to implement control and prevention measures *through* community systems. While they were also very unclear about the specific ecosystem linkages between health, poverty and natural resource management in the study area, the most critical challenge was that they had no idea how to move past current social patterns of dependency,

⁴ “Links Between Sleeping Sickness and Natural Resource Endowments and Use: What Communities Can Do” Principle Researcher: Dr. John McDermott; International Sponsor: International Livestock Institute, Nairobi (ILRI); Funder: IDRC Ecohealth, Project No. 100106.

⁵ Trypanosomosis causes sleeping sickness in humans and nagana in cattle.

⁶ The carriers of trypanosomosis to both humans and cattle are tsetse flies.

disintegrated social capital and grinding poverty to develop community-led solutions that will be sustainable and effective in the study area.

2. The program proceeded with the assumption that engaging community representatives in an analysis of disease, natural resources management patterns, and social and economic issues related to poverty would eventually lead to the formation of community action plans that would systematically address trypanosomosis.
3. What actually happened was that the participatory action research approach did in fact lead to considerable community learning, and even mobilization for health action, but very little of that action focused on sleeping sickness, because other issues loomed a great deal larger on the community's own horizon (such as clean water and income generation).

The project is in the first of three phases, and a great deal of work remains, but from this initial set of observations, several conclusions can already be drawn.

1. When communities are encouraged and assisted to analyze the socio-ecological dynamics of particular health problems, they are most likely to see a complex web of interdependent and mutually reinforcing factors that touch many aspects of life. As in the Mwea malaria project, Ugandan communities see their general susceptibility to disease, and their vulnerability to its impact, to be directly related to poverty. Their conclusion is that unless poverty is addressed, along with other important health and social issues, the community's capacity to carry a specifically targeted sleeping sickness control and prevention program would be almost nil.
2. It is also clear that in the six study villages (as in many rural communities in Africa) a small number of people are providing leadership for community-driven development and program efforts. In a focus group session with community leaders in Bugwera village, Uganda, six community capacities were discussed as being critical to carry off long-term community driven initiatives: (i) appropriate learning and knowledge development; (ii) social capital development (defined as the strength of networks of cooperation, trust and common purpose; (iii) people's participation and empowerment; (iv) accessing and managing resources; (v) leadership and

organizational capacity; and (vi) appropriate stakeholder engagement (particularly stakeholders such as government policy makers beyond the community level).⁷

It would certainly be possible to develop a capacity-building program for community action core groups that addressed these six domains of capacity (and in fact we recommended that the Uganda team do exactly that). However, unless community capacity is actually invested (i.e. applied) to the specific cluster of determinants that are the most likely to influence the health outcome the community and its partners wishes to address (in this case sleeping sickness prevention), the building of capacity will most probably not lead to changes in health outcomes.

The chart below (developed as an example of a monitoring tool) graphically illustrates the strategic convergence of specific determinants of health with specific community capacities. Please note that the health determinants shown here are those considered by researchers and the community to be most likely to influence outcomes related to trypanosomiasis.

Learning and Knowledge Development						
Social Capital Development						
Participation and Empowerment						
Accessing and Managing Resources						
Leadership and Organizational Capacity						
Appropriate Stakeholder Engagement						
Community Capacity Development						
Key Determinants of Health						
	Natural Resource Management					
	Disease Vector Control					
	Health Measures Implementation					
	Poverty Alleviation					
	Community Capacity Investment					
	Appropriate Public Policy					

Figure 1:
Linking Community Capacity Development with Key Determinants of Health Related to Sleeping Sickness

⁷ The language we use to talk about these capacities was, of course not the language the community used itself, and it will be important in capacity building efforts to incorporate the community’s own language and analytical framework.

There are of course many possible ways to actually measure both community capacity and progress in key health determinants, but the most effective of these approaches are, in and of themselves, net contributors to the building of sustainable solutions to community health challenges. In other words, the process of taking the measure should contribute significantly to the community's development.

PART THREE: DEFINING AND MEASURING COMMUNITY CAPACITY

One of the most powerful exercises we have ever seen for empowering community transformation process is called the Community Story Framework (see Bopp and Bopp 2000). Essentially the Community Story Framework is a process of community enquiry guided by a framework of questions organized around the medicine wheel, which is an Indigenous people's noetic integrator that depicts nested hierarchies of inter-related levels, systems and capacities.⁸ Within this process, circles of community people (often aggregated by such groupings as extended families, gender, age, and divergent interests in community development such as youth, culture, economics, politics, healing and spirituality), are asked to consider various domains of well-being from three perspectives: **the past** – (What was it like in the past and what can we learn from the way things were done?); **the present** – (What is it like now? What are the issues and challenges? What needs to be learned? Healed? Changed? Further developed?); and **the future** – (What would it be like if it was good? What is the ideal future we want to build?)

This analytical lens is focused on such themes as children, youth, women, men, families, politics, economics, environment, social life, education, spirituality, religion and culture, etc. What emerges is:

1. an analysis that is collectively agreed upon about what is really happening (in many categories of life) – in other words, an honest look in the mirror;
2. an understanding of the presence of the past in everyday life; i.e. of how historical processes and past experiences have shaped the way things are now;
3. an understanding that change is not only possible but inevitable, and that the way things are now is not the way they need to stay;
4. an articulation of a possible and desirable future that the community wants to build for itself, which takes into account specific indicators of progress and well-being in critical sectors of life (such as children, families, politics, economics, etc.);

⁸ For an in-depth discussion of the medicine wheel and its use as an analytical tool in human and community development, see Bopp and Bopp, 2000, pp 21-37.

5. an analysis of what needs to be learned, healed, changed and developed to get to the future the community wants for itself – in other words, a learning and development agenda, from which specific plans of action are immediately created.

The “Community Story” is fundamentally a particular type of participatory action research process. It is specifically tailored and redesigned each time it is used to fit local realities and needs, and it is guided and facilitated by a local community research team (which is supported by outside technical helpers). What results is a rich base-line description (some would use the term “map”) of the socio-ecological system, within which people are living, and from which is being generated the entire range of health and development challenges they face. We regard this process of helping the community to tell its own development story to be *the principal baseline task* that needs to be done in community development research. In some form, the first-level challenge for any community research team is always to describe the context (i.e. the environment and its dynamics) within which the problem or set of issues to be addressed is situated. The “Community Story” process provides a framework through which a community can be assisted to systematically carry out such an analysis from the inside-out, while drawing on a way of knowing and a discourse style (i.e. story) that is inherent to living communities.

What has all of this to do with measuring community capacity? The problem with most attempts to measure the conditions and processes that comprise a living community, especially when undertaken by outside professionals (and who else has a strong need to measure?), is that the meaning of any one measure or group of measures can only really be understood in relationship to the context from which it is derived. A community is a relational universe, nested within even larger influencing systems. In our experience, health and development professionals who do not have a fairly rich and deep understanding of the community “story” are usually unable to understand what the measurements they take actually mean, particularly related to the central problem of all professional development intervention – i.e. how do we help the community to transform its conditions and processes so that sustainable prosperity and well-being is the outcome?

Domains of community capacity such as we have listed above (namely participation, vision, community cohesion, resilience, ongoing learning, leadership, partnership building, and accessing and managing resources) are reified theoretical constructs with no more than a vague academic relevance to any *particular* community and its health challenges *until* the community itself is engaged in a refining, adapting, changing and adding process to generate its own capacity domains, rooted in its own analysis (which may indeed be supplemented by the knowledge and experience of outside helpers), all of which derives its meaning from the living web of relationships, stories, processes, conditions and needs that are mapped out when the community tells its own story. Up till then (in most communities) what is known about present community realities, past circumstances that shaped them, and future hopes and possibilities is known in scattered bits and pieces by many different individuals and groups. The process of developing a collective “story” is really like fitting the pieces of a complex jigsaw puzzle together, and seeing the whole picture it makes for the first time. If we return to the metaphor of a map, fitting the pieces of the map together makes it possible to begin a journey. We can then ask “which capacities are needed by this community to take this journey?”

In our experience, when community capacity assessment is situated within a process of ongoing community transformation it becomes a dynamic *curricular* component of ongoing learning (i.e. the process of learning your way toward your goals), and then it can be a very powerful tool for both community insiders and the professionals who are working to support them. However, unless such “capacities” as participation, vision, and leadership are properly contextualized within an inside-out analysis of community realities and dynamics, their measurement will (rightly) be seen as an academic diversion from “the real work” in the eyes of community people struggling to make a difference in their own lives. We have found that this initial “map making” (using some form of the “community story” or some other self-reflective participatory action research process) through which the community is able to “see” the interconnected dynamics that are generating “the world” as it is now, as well as the nature of the journey required to build “the world we want”, to be an essential first step. Without it, defining, measuring and building community capacity does not make coherent sense to insiders,

and often does not result in a significant increase in the community's ability to address the determinants of health.

So Why Measure Capacity?

Essentially, when we talk about measuring community capacity, it is connected to the problem of enabling community insiders (individuals and groups) to undertake and sustain effective work that leads to changes in the status of health determinants. It's only when those same community insiders begin to understand the linkages between their own capacities (or the lack thereof) and their ability to foster the changes they want in terms of development outcomes, that introducing community capacity assessment (linked seamlessly to capacity building) is likely to be strategically effective as an approach to enhancing community development processes. From our perspective, even though assessing community capacity may have some (limited) utility for professional agencies, the cost (in community time and energy) to do it properly cannot be justified unless community capacity will be directly enhanced in and through the process of measuring it.

Assessment Methodology

The conventional wisdom on how to measure community progress (whether related to health determinants or community capacity), is to define categories and develop indicators the status of which can then be assessed through observation and the collection of various types of data. This type of approach can be quite elaborate, technical, professionally driven and time consuming (see Bopp et al., 2000 and Conner et al., 2002 for example). However, there are other ways people "know" things.

For example, in 1999/2000 we were involved in assisting a Canadian Aboriginal reserve community of about 1000 people to make a comprehensive "Community Healing and Development Plan". The process involved a "community story" assessment and a series of planning retreats and community consultations that took almost a year to complete.

Why a year? We have worked in over a hundred Canadian Indigenous communities. Problems are fairly similar. Shouldn't it be possible to develop a plan in less than six workshops and a year of work? And of course the answer is yes. In fact, we could have predicted many of the general issues and goals that emerged from that process without ever once visiting the community. And we could have produced a plan. But whose plan would it be? The community would never carry out a plan that we made for them. Fundamentally, the assessment and plan-making process was a framework within which knowledge building, capacity development, healing, situation assessment, vision making, and planning occurred. The important product of this process was not a document, although a very interesting document was produced.⁹ It was, rather, the consolidation of a core group of some 200 community people who had built a consensus on what needs to be done in order to bring greater levels of health to the community and who are now committed to working together to bring these changes about. Much of this entire process was based on the community's knowledge and assessment of itself, and not on "scientific" evidence.

At one point in a similar process in another community (which asked to remain anonymous) a discussion arose as to how much problematic alcohol consumption was occurring.

What do you mean, how much?, one health committee member asked. *We don't need to count. We know.*

How do you know?, we asked.

How do you know it's raining?, she said. *We know 'cause we're in it. We see it and live it everyday.*

OK, we said. *How much problem drinking is there? If you don't know how much there is now, compared to how much there was last year, how can you tell whether or not your alcohol program is working?*

She thought for a moment. 65% of households, 80% or more of youth under 25. That's about what it is," committee members said after they discussed this in their local language. *Maybe older youth is closer to 90%.*

(from the author's field notes)

⁹ See "The Nuxalk Nation Community Healing and Wellness Development Plan" (2000). Prepared by Michael Bopp and Phil Lane Jr. of Four Worlds International in consultation with the Nuxalk Chief and Council and community. Available from Bill Talio, Wellness Coordinator Nuxalk Nation, Bella Coola, B.C.

We subsequently conducted an anonymous survey in the community school (co-designed, by the health committee) which (among other things) asked some 200 students ages 12 – 18: a) whether there was ongoing drinking that caused harm happening in their homes, or in the homes of relatives; and b) whether they or their friends used alcohol or drugs regularly, and whether that use brought harm. The tabulated results were almost identical to the “estimates” made by health committee members.

We take several lessons from this example.

1. While it is always valuable to triangulate data, the cost of doing so (in time, money and technical know-how) must be weighed against what level of validity criteria is required for what purposes. Institutions usually require scientific research criteria, but for community members, it is often sufficient to estimate based on experience.
2. In assessing community capacity levels, it is primarily the community itself that needs to know both which capacities are needed, and which capacities are now extant in community practice. However, outside helpers also need to know, particularly if they are to contribute to capacity building. So what is needed is a common set of definitions, and a common language to talk together about them.

In Bopp et al. (2000) we describe a fairly elaborate process for conducting a formal community capacity assessment. While we still believe that a formalized process can be very valuable, we now feel that (as explained above) such processes need to be situated within a larger process of development learning and action in order to be effective.

Nevertheless, as practitioners working on the ground with community processes in many countries, we are constantly reading community capacity as a prominent theme, and assessing who needs to learn what in order to advance the process. In its simplest form, community capacity assessment is no more than that.

PART FOUR: PROFESSIONAL CAPACITY AS A KEY COMPONENT OF COMMUNITY CAPACITY

The standpoint from which this paper is written is that of development practitioners who work fairly continuously with community transformation processes and with professionals who are trying to stimulate and support such processes. Our discussion up to this point has been largely directed outside of ourselves. It has spoken to the models, tools and techniques we use as professionals (sometimes in partnership with communities) in order to achieve our ends. However, in the words of the late Dr. Daniel Jordan¹⁰ “the teacher is the primary curriculum.” In other words the techniques, models and theories we bring to the field are not nearly as powerful an influence on what happens as a result of our being there as we are, ourselves. Who we are, how we carry ourselves, the attitudes and values we project and the way we treat people comprise a powerful “curriculum” for community capacity building in the form of role-modeling effective community practice. To us, the primary reason for assessing community capacity is to gain insights and direction for building it. When capacity assessment is embedded within ongoing community learning and action processes, the following features are almost always present relative to the role of professionals.

1. Outside helpers have managed to win the trust and respect of community partners, usually because they have extended trust and respect to the community.
2. The relationship between such professionals and their community partners constitutes one type of “safe place”, or holding environment within which learning experimentation and the gradual development of capacity occurs.¹¹

So the actual capacity-development process can be understood in terms of three dimensions: **content** (i.e. what needs to be learned); **context** (i.e. the situation and the relationships within which the capacity will be tested and developed); and **process** (i.e. the methods used to promote the learning). Capacity assessment can provide all three of

¹⁰ Dan Jordan was the founder of the ANISA model of education, originating out of MIT in the 1970’s. See for example Jordan and Shepard (1972).

¹¹ Another such safe place within community development processes are core groups – i.e. regular working groups that consciously strive to generate an atmosphere of safety and mutual support. For a discussion on the role and function of core groups see Bopp and Bopp (2001).

these components. It can teach what needs to be learned. It can provide a formal structure within which certain types of learning occur, and it thereby contributes to the process of learning. However, adults who are learning new ways of thinking and interacting often feel themselves to be on shifting ground. Within this very sensitive and vulnerable context, the role that professional helpers play can greatly enhance and or seriously undermine both the process of learning and its application to the goals of development.

To return to the metaphor of a coach and a team, a good coach needs at least four characteristics:

1. technical competency – she should know the game so well that she can anticipate the knowledge, skills and attitudes her players need in order to succeed under any given set of circumstances;
2. intimate knowledge of each player’s current capacity and the capacity of the team as a unit;
3. the ability to promote continuous and sometimes rapid learning and capacity development; and
4. the ability to inspire and motivate the players and the team to peak performance.

In our experience, this metaphor transfers well to the role of professionals in community development processes. In both the Kenyan and Ugandan examples described earlier, health professionals placed very high performance expectations on communities, believing (with blind faith, it seems to us) that struggling rural African communities with low levels of literacy would somehow absorb technical “solutions” into the pattern of everyday life because it was reasonable (from the point of view of professionals) to do so. This assumption, though common enough in development research, misses several very large steps related to testing interventions within the real world they are meant to benefit, and related to building the capacity of communities to adapt and sustain new patterns, given the tremendous burden of complex factors they are already coping with.

As we understand this sort of problem there is a critical role for a “coach”, i.e. a development facilitator that works behind a community “team”, which is in turn working to address fundamental determinants of well-being within their socio-ecological system.

If developing communities already knew what to do in order to solve critical problems such as poor water supply, malaria, or chronic poverty, they would have long ago done so. Therefore, the important question for us as professionals is, what sort of help can we provide that will truly assist communities to develop and strategically apply community capacity in order to bring about the health and development outcomes they want? If measuring community capacity can help to answer that question, then it is important to measure.

Professional Barriers to Effective Participatory Development

In this final section we want to focus on us, i.e. on the characteristics professionals need in order to make an effective contribution to community capacity development. In an earlier work (Bopp and Bopp 2001) we published three scales for measuring barriers to effective participatory development. One of the categories of barriers focused on professional attitudes and behaviour. When the scales are applied in the field, professionals are invited to rank themselves and to be ranked by those they are attempting to serve on a scale of 1 – 10. The questions illustrate the sorts of professional characteristics we have found to be important in participatory development work (see Table 1 – Professional Characteristics for Participatory Development).

These characteristics are generic, and like all such lists, their effective application in any particular context depends a great deal on the willingness of the professional to learn. Indeed, in our experience, the most powerful overarching strategy that professionals can use to build capacity when working with communities is to adopt an attitude of learning. When we enter someone else's world, we are in fact ignorant of many things. For example, scientists and health providers in Kenya entered the world of Mwea rice growers assuming they already knew most of what they needed to know about the social, economic and agro-ecological conditions the people live within (like a fish lives within the water). What they discovered was that they knew very little, and also that until they learned a great deal more, the technical solutions they brought could not be made to take root in the Mwea context.

Only when they consciously shifted their stance as a team to that of learners (co-learners really, because they needed community insiders to be learning with them) were they able to even begin to understand how to help the community to build its own capacity to address the key determinants of health related to malaria.

When professionals humble themselves and ask community people for help, it is not merely a “strategy” to win their confidence. It is an honest representation of how helpless we are as professionals to accomplish our goals (such as bringing health to the community) without their knowledge and assistance. Community people of course know that professionals can bring knowledge and resources the community may need, and so a natural reciprocity of mutual aid and collaboration is born. When we are open and honest with our community counterparts, we will be clear about the boundaries and limitations of what we can and cannot do for them. In other words, it is important for professionals to negotiate what their role will be and what the role of the community will be in building solutions to the problems that are mutually being worked on. Once these boundaries are clarified, the focus naturally turns to community capacity, and most often, communities are very eager to learn whatever they need to learn that will enable them to do their part.

FINAL REMARKS

There is a Dakota teaching story we call “the Creator’s gift,” in which the Creator of all good things calls a meeting of all the animal people. Deer, elk, salmon, eagle, bear, mouse, raccoon, mole – they all came. But the human people are not invited. The Creator tells the people at the meeting that He has a gift he wants to give to the human people – a very powerful gift. “It is the gift of creation itself; the ability to make things whole that are broken, and to make things new when new is needed.” But, “There is a problem,” he tells them. “This is a gift that requires the human people to use their head and their heart together. They’re always going off in one direction or the other, but rarely combining the two. Both the powers of the intellect and of the heart will be needed for the human people to be able to use my gift safely and wisely. Otherwise they will make things and do things that will hurt everyone. The Creator went on to ask the people at the meeting where He could hide the gift until the human people were ready to find it.

Many of the animals had great ideas. Eagle offered to take it to the moon, salmon to the bottom of the sea, buffalo to the heart of the empty prairies, and bear, deep within the roots of the great mountains.

When grandmother mole, the oldest and wisest of them all, whispered her idea in the Creator’s ear he only smiled, but his smile was like the warmth of a beautiful sunrise. Everyone became very quiet.

Grandmother mole has given a wonderful idea of where to hide my gift. We’ll put it inside of their hearts. They almost never look there. So, that is what they did.¹²

It is not only the capacities of the intellect but also of the heart that need to be applied to the solving of critical human problems. Indeed, a common theme in shamanistic stories is exemplified in one part of the Navaho creation story. Monsters stalk the land. They are devouring the people. Brave warriors try to kill them with a newly acquired weapon (bow and arrow) but no matter how often they are struck, the monsters never die. Then a magic woman whispers a secret. The monsters have no hearts. They have hidden their hearts beneath a nearby bush. To kill them, it is necessary to

¹² Shared with permission from Phil Lane Jr.

pretend you will attack them directly, but at the last minute, you must attack the hidden heart.

The monsters of poverty and disease that stalk the earth today are also difficult to kill. The old stories contain powerful transformational keys, however. Not only must we be technically competent (by applying the right theory, model, principle or tool) but we must also be spiritually competent, reaching out from our hearts with love and courage to the hearts of the communities we seek to uplift. We need to be able to inspire hope, and to foster forgiveness and unity. Such “software” qualities are at least as essential to success in community transformational work as are capacities such as effective leadership and sound management. Whatever other capacities that communities may need, they also need to stay connected to their own spiritual foundations, and if we want to be of any real help, we as professionals need to stay connected as well.

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