

# **Beyond the Problem-Solving Approach to Sustainable Rural Development**

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# Beyond the Problem-Solving Approach to Sustainable Rural Development

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## Abstract

The tacit mental models of many research and development institutions dedicated to sustainable rural development is that they exist to solve development problems. This has led to a diagnostic and often reactive problem-solving mode of action, and to a culture of trouble-shooting experts who develop solutions. When practiced exclusively, the problem-solving mode is self-limiting because the energy that could create something new is diverted to preventing or containing something undesirable. Negative visions carry a message of powerlessness, and they are short term – once the perceived problem or threat changes, the energy and vision dissipates. Troubleshooting approaches are slow because they ask people to look backwards to yesterday's causes. They generate defensiveness and have a propensity to reinforce hierarchies and the social distance created by power differences. The self-limiting characteristics of the problem-solving mode may be ameliorated by complementing it with positive, vision-oriented approaches. One such approach, called Appreciative Inquiry, evolved in the field of Organizational Development as a response to perceived limitations of participatory action research as an engine of change. The relevance of Appreciative Inquiry to agriculture, natural resource management and rural development is described.

## Introduction

In a 1997 monograph entitled, *Rural Development From Vision to Action*, the World Bank posed the following rhetorical question: "If rural development is so important, why is it not happening?" The Bank posed three answers: poor commitment and capacities of countries, waning international commitment to agriculture and rural development, and poor commitment on the part of the World Bank. In this paper I offer an additional explanation, which may be operating at a deeper level and contributing to the perceptions of World Bank experts. I suggest that the current problem-solving approach of many research-oriented Global Social Change Organisations<sup>2</sup> (GSCO) may be affecting their capacity as change agents. Although such organisations have reconceptualised sustainable development in much broader and more holistic terms, and have made significant progress in evolving towards more participatory and people-centered approaches, a more vision-oriented approach is required to complement the problem-solving focus, as a way of ameliorating its self-limiting aspects.

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<sup>2</sup> Global Social Change Organisations encompass Private Voluntary Organisations, Non-governmental Organisations, Community Development Organisations and International Research and Development Organisations (Cooperrider and Pasmore 1991).

## The Role of Mental Models in Action and Change

In his influential book on the learning as the critical skill for the 21<sup>st</sup> century, Peter Senge (1990) highlighted the critical roles that mental models<sup>3</sup> play in determining what happens in human endeavours. Mental models are the images, assumptions and stories that we carry in our subconscious minds about how the world works. According to Senge, “new insights fail to get put into practice because they conflict with our deeply held internal images of reality, images that limit us to familiar ways of thinking and acting. Our mental models determine not only how we make sense of the world but how we take action.”



Mental models are powerful in affecting what we do because they affect what we see. Different observers of the same event describe it differently because their mental models influence the details that they give importance to. The famous ambiguous picture, “Wife and Mother-in-law”<sup>4</sup>, a ubiquitous workshop tool for introducing the concept of mental models, is either a beautiful young woman or a wrinkled crone, depending on which details capture the viewer’s attention.

Even supposedly objective observers are influenced by mental models. The most famous example of this comes from modern physics. Until Einstein solved the paradox, physicists were unable to explain how the velocity of light could be the same regardless of the state of motion of the observer. Einstein realised that if the velocity of light is really constant for all observers, then the measuring instruments used by observers in different frames of reference must vary. Einstein’s breakthrough (his special theory of relativity) occurred because he was able to set aside the prevailing mental model, which held that the speed of light could not be a constant (Zukav 1979).

Because mental models are usually tacit, existing below the level of awareness, they are often invisible, until we look for them. According to Senge *et al.* (1994), experts are particularly susceptible to difficulties in bringing mental models to the surface where they can be examined and tested. They are prone to believing that their world views are “facts” rather than sets of assumptions. Of all the learning organisation disciplines, working with mental models offers the greatest leverage for change. It is also the most difficult of all the disciplines to master because few of us have learned how to incorporate the skills of inquiry and reflection required to into our everyday behaviour (Senge *et al.* 1994). Fortunately, tools for developing these skills are rapidly being developed (Culbert 1996, Hermann<sup>5</sup> 1996).

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<sup>3</sup> The term, “mental model” was originally coined by Scottish psychologist Kenneth Craik in the 1940s. (Senge, 1990).

<sup>4</sup> *My wife and my mother-in-law* was published in 1915 by the cartoonist W.E. Hill. According to Seckel (1997) Hill almost certainly adapted the figure from an original concept that was popular throughout the world on trading and puzzle cards. An anonymous dated German postcard from 1888 depicts the image in its earliest known form. The figure was later altered and adapted by others, including the psychologists, R. W. Leeper and E. G. Boring who described the figure and made it famous within psychological circles.

<sup>5</sup> Ned Hermann’s work on brain dominance theory is a valuable tool for helping people to realise that there are other equally valid perspectives.

## Mental Models of Sustainable Rural Development

Our prevailing mental model of research and development institutions dedicated to sustainable rural development is that they exist to solve development problems. This has led to a diagnostic and often reactive problem-solving mode of action, and to a culture of trouble-shooting experts who develop solutions (Fig. 1).

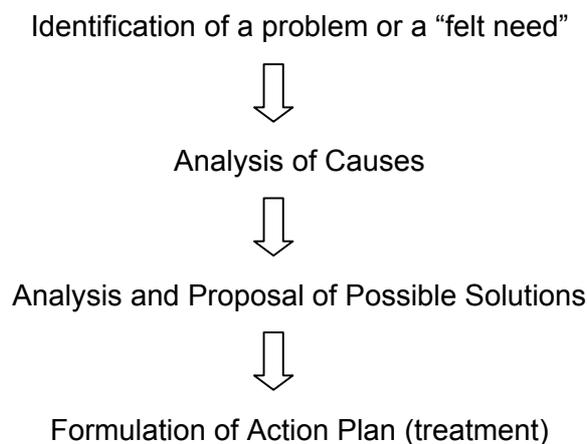
Since the 1980's there has been a shift away from the Transfer-of-Technology or Central Source model (Biggs, 1989; Chambers and Jiggins, 1986) of sustainable rural development towards a more demand-led and people-centered approach. This approach focuses considerable attention on the importance of participation and equity, defines development much more broadly and expands the concept of "expert" knowledge to include local, indigenous and informal knowledge as well as external, formal knowledge.

Sustainable development is now defined as the process of enlarging people's choices and freedoms so that they may lead a long, healthy and secure life, acquire knowledge, and have equal access to the resources needed for a decent standard of living without compromising the prospects of future generations (UNDP 1998).

The key dimensions of development include:

- *Empowerment* - embodied as choices, freedoms, participation in decisions, dignity, respect, cooperation, and the sense of belonging to a wider community.
- *Equity* - seen as equal opportunity in access to natural and social and economic resources.
- *Sustainability* - defined as meeting present needs without compromising those of future generations.
- *Security* - encompassing freedom from violence, discrimination, unemployment and disease.

Figure 1. The Problem-Solving Process in research-oriented Global Social Change Organisations. An underlying assumption about the purpose of research for development organisations is that they exist to solve problems.



This more holistic and ecological view of sustainable rural development is framed as a vision or a dream of to inspire us; nevertheless, the missions of R&D organisations

dedicated to sustainable rural development, and the participatory tools and methods that they use for navigating the development process remain grounded in the problem-solving mindset.

### **The Problem-Solving Framework for Sustainable Rural Development**

Perusal of the literature produced by Global Social Change Organisations involved in research for development supports the view that their work revolves around iterative cycles of diagnosis, priority-setting, action plan development, monitoring and evaluation embedded in a problem-solving framework (see Boxes 1-3).

**Box 1:** An example of the problem-solving orientation prevailing in Global Social Change Organisations from the International Center for Research on Women. From the introduction of: Sanez, N.C., Door de Ubillas, R.M. and I. Salvatierra Guillen. 1998 Increasing Women's Involvement in Community Decision-Making. A means to improve iron status. International Center For Research on Women, Research Report Series No. 1. Washington, DC.

The International Center for Research on Women (ICRW), a non-profit policy research institution that promotes economic and social development with women's full participation. Working with partners in Ethiopia, Kenya, Peru, Tanzania, and Thailand, ICRW undertook a series of studies to explore ways to strengthen women's contributions to reducing iron and vitamin A deficiencies by combining women's productive and reproductive activities. The idea was to tap into women's roles as income-earners and food producers on the one hand, and as food processors and care givers on the other. Community members, particularly women, drew on their knowledge and experiences to develop and implement solutions to micronutrient deficiency problems in their communities.

**Box 2:** An example of the problem-solving orientation prevailing in Global Social Change Organisations from Centro Internacional de Agricultura Tropica (CIAT), an international agriculture and natural resource management research center. From the preface of: Fujisaka, S. (Ed). 1999. Systems and Farmer Participatory Research. Developments in Research on Natural Resource Management. CIAT Publication No. 311.

The International Agricultural Research Centers (IARCs) were formed 30 years ago to respond to predictions of global food shortages and regional famine. The Centers conducted research to improve the genetic potential of crops such as rice, wheat and maize. New varieties and crop management practices led to increases in yields and productivity in favorable areas, allowing global food production to stay ahead of population growth.

Researchers found, however that producing more food was not enough. Poverty still persists. The gap between rich and poor is still increasing, especially in the less favorable areas. One fifth of the population in the developing world remains chronically undernourished. Increased pressures on uplands and hillsides are degrading land through soil erosion and nutrient depletion. Tropical deforestation, in which slash-and-burn (S&B) agriculture plays a major role, continues to lead to loss of biodiversity and emissions of carbon into the atmosphere – with the latter contributing to changes in the global climate. Even favourable areas face a new generation of environmental and human health problems from the use of agrochemicals; degraded irrigation systems where maintenance funds are lacking; agrobiodiversity loss accompanying the adoption of modern varieties; and the decline of commodity prices.

The IARCs continue to respond. Today, they are concerned with creating impact in terms of reduced poverty and a more protected environment. Research is under way to address the constraints encountered in previously bypassed areas and to deliver benefits to the rural and urban poor.

**Box 3:** An example of the problem-solving focus prevailing in research-oriented, Global Social Change Organisations from Cornell University's International Institute for Food Agriculture and Development (CIIFAD) From the Introduction to: CIFAAD 1996-97 Annual Report. Cornell International Institute for Food, Agriculture and Development. 172 pp.

On a global scale, it is hard to know how much progress was made toward sustainable agriculture and rural development this past year. Fortunately, in various places where CIIFAD is working with government, university, non-governmental and community partners in Africa, Asia and Latin America, we have seen some promising advances. These countervail the adverse trends that threaten to undermine the environment, world food supply and people's well being in the decades ahead.

CIIFAD's programs continue to be purposefully interdisciplinary because of the complexity and the interaction of biophysical and socioeconomic realities. Our programs are at the same time collaborative because solutions will require a variety of complementary actions, beyond what a university like Cornell can accomplish by itself. We also can learn more and be more effective when working with other institutions.

Even with the complementary efforts of collaborating partners, we know that CIIFAD cannot address all important questions. We have to be selective, choosing to work on topics and in places where we believe the state of the art for sustainable agriculture and rural development can be advanced most substantially. Significant problems will not be quickly resolved. But we see some encouraging movement toward solutions that can improve the livelihoods and security of millions of households around the world. These include enhancing soil fertility, slowing the loss of forests, raising agricultural production, establish processes for conflict resolution, and linking agricultural decision making to better nutritional outcomes.

### **Beyond Problem-Solving**

I hypothesize that sustainable rural development seems elusive because people and organisations are constrained by their *perception* that resources, and hence their capacities, are limited. Other related constraints include the need to have concrete definition of problems (see Box 4), and the reluctance to step into unknown territory (e.g. other disciplines and ways of knowing requisite to a more holistic perspective) Together these constraints act as a damper on human imagination, vision and enterprise. The World Bank's explanation for the poor track record in sustainable rural development is clearly grounded in a negative view of inadequate capacity and commitment. I suggest that this is a consequence of a deeply held mental model that is currently below the level of awareness of the World Bank and of many GSCOs<sup>6</sup>. The mental model says that our world is full of problems and that is the job of the World Bank and GSCOs to help fix them.

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<sup>6</sup> As Senge points out in "The Fifth Discipline," (1990) bringing mental models to the surface requires learning new skills and "soft systems" tools that deal with important non-quantifiable variables.

**Box 4.** Definitions as a barrier to understanding abstract concepts

In *Zen and the Art of Motorcycle Maintenance*, Robert Pirsig tackles the issue of definitions as a barrier to understanding abstract concepts. Pirsig's character, Phaedrus, is a university professor who teaches rhetoric. Phaedrus asks his students to write an essay on "What is quality in thought and statement?" The futility of reaching agreement about a definition of quality quickly becomes apparent. At the same time it becomes clear that absence of a definition is no barrier to working with the concept of quality. Phaedrus' class find that once they put aside expectations of formulating a definition of quality, they easily reach a consensus about how to differentiate good and poor quality writing.

Negative mental models and problem or deficit-based approaches are self-limiting for several reasons (Cooperrider *et al.* 2000):

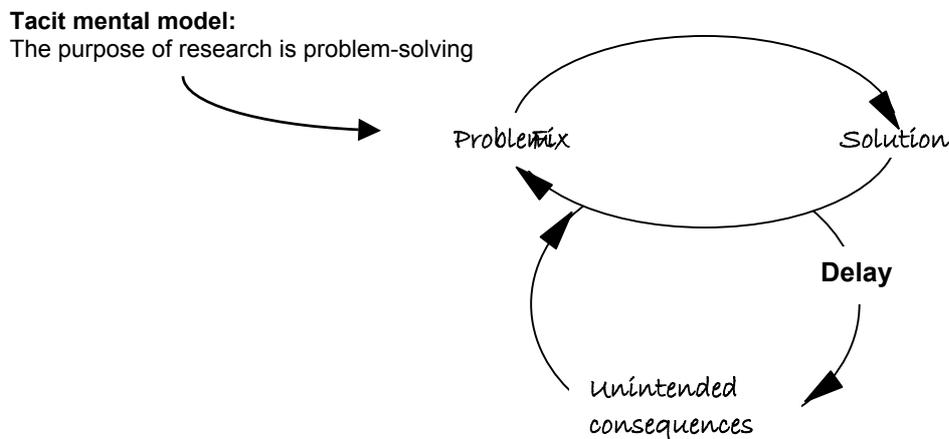
- The energy that could create something new is diverted to preventing or containing something undesirable.
- Negative visions carry a message of powerlessness, and they are short term – once the perceived problem or threat changes, the energy and vision dissipates.
- Troubleshooting approaches are slow because they ask people to look backwards to yesterday's causes.
- They generate defensiveness and have a propensity to reinforce hierarchies and the social distance created by power differences (Hofstede 1980).

A **complementary** approach is to choose to "see" consciously and focus on possibilities, capabilities and assets rather than focusing only on problems, needs and deficits. By focusing on what is *right*, rather than what is wrong, individuals, organisations, communities and even societies can tap the transformative and creative energies of people who believe that we have the collective capacity to create the future we desire. These ideas are not new, but rather, are part of a paradigm shift and a "consilience" of knowledge (Wilson 1998), that is gradually challenging our mechanistic view of the world and moving towards a more holistic ecological view that gives greater eminence to the role of human consciousness in constructing reality (Capra 1979; Devall and Sessions 1985, Gergen, 1982, 1993, Cooperrider and Srivastva 1987).

In the Fifth Discipline, Senge (1990) discusses working with mental models as one of five key disciplines in learning organisations. Another of Senge's key disciplines is systems thinking. Systems, according to Senge (1990), are bound by "invisible fabrics" of interrelated actions that often take long periods to fully play out their effects on each other. Since we ourselves are embedded as actors in the systems, it is difficult to see the whole pattern, so we tend to focus on snapshots of isolated parts. Systems thinking is a conceptual framework, a body of knowledge and tools that has been developed over the past 60 years to make the full patterns clearer and to help us see how to change them effectively.

Systems thinking reveals how the problem-solving orientation leads to the creation of an increasing number of new problems. This is illustrated in a Senge systems diagram (Fig. 2):

Figure 2. Problem-solving as a vicious cycle (adapted from Senge, 1990).



The impact of Western civilisation's romance with the problem-solving approach has been studied in many fields including medicine, psychology and organisational development.

#### Insights from Medicine

Western medicine has finally accepted that the placebo effect illustrates an important therapeutic use of imagery. Doctors recognise that the use of positive images can activate physical changes by awakening the body to its own self-healing powers (Weil 2000). According to O'Regan (cited in Cooperrider, 2000) placebo effects are strongest when belief in the efficacy of the treatment is shared among a group.

Likewise, in during the last decade, investigators have shown the connections between negative imagery, life stress, "learned helplessness," depression, the breakdown of social bonds, the suppression of the immune system and the development of disease. A host of diseases, especially various forms of cancer, are associated with chronic and persistent negative images and associated feelings of helplessness and hopelessness (Ley and Freeman 1984, cited in Cooperrider, 2000).

#### Insights from Psychology

A related phenomenon is the Pygmalion effect. In a classic study, teachers were led to hold either a positive or negative image of their students by receiving credible "expert" information that some of their students possessed exceptionally high potential while others did not, while in reality all students in the study were equivalent in potential. As the experiment unfolded, differences quickly emerged with the students labeled as high potential significantly overshadowing the others in actual achievement. This occurred as a result of the manipulated expectations of the teacher. There have been hundreds of empirical studies on the Pygmalion effect, attesting to its theoretical and practical importance (Rosenthal and Rubin 1978, cited in Cooperrider 2000).

Such considerations have led eminent social psychology researcher Kenneth Gergen (1993) to develop a critical view of psychodiagnosis<sup>7</sup> which holds that:

<sup>7</sup> Summarised on the internet at <http://www.swarthmore.edu/SocSci/kgergen1/Psychodiagnostics/>

- Current practices of psychodiagnosis are injurious to persons treated by mental health professionals and to society
- Diagnostic categories have no validity outside the groups already committed to them
- Diagnostic categories function largely as moral judgements reconstructing socially undesirable actions as diseases
- The number of labels for “mental illness” has expanded exponentially during the present century.
- The dissemination of mental illness labels functions to increase the number of patients, hospitalisations and the cost of mental illness in society
- Mental health professionals are predominantly deaf to alternative interpretations of the actions they diagnose, holding the client’s voice in disregard as well as the voices of family members, colleagues and others.
- Mental health professionals and managed care institutions are responsible for these problems.

### Insights from Organisational Development

Experiences in the field of Organisational Development (OD) build on the medical and psychological insights described, and are especially exciting because of the significant methodological overlap between Action Research in OD and what is often termed participatory research (Ashby 1997) by the GSCO community.

The term, *Action Research*, was coined by Kurt Lewin, a German social psychologist. Lewin’s work centered on bridging the gap between science and the realm of practical affairs. Lewin believed that science should be used to inform and educate social practice and subsequent action would in turn inform science (Marrow 1969). Action Research has been applied and developed in many fields including community development, education, business and industry, and in agricultural research (Selener, 1997). It has been influenced by luminaries in education and sociology such as Paulo Friere and Orlando Fals-Borda (Braun and Hocde, 2000).

In 1987 Cooperrider and Srivastva wrote a seminal paper called “Appreciative Inquiry in Organisational Life,” in which they argued that action research has largely failed as an instrument for advancing social knowledge of consequence, and that it has not achieved its potential as a vehicle for human development and social transformation. They introduced a reconfiguration of action research, which they called Appreciative Inquiry, and which is complementary to the conventional problem-solving mode. A short introductory explanation of Appreciative Inquiry is given in Box 5.

Cooperrider and Srivastva (1987, 2000) suggest that action research has fallen short of its potential because it seriously underestimates the power of theory as a means for social reconstruction, and concentrates on action at the expense of theory<sup>8</sup>. This criticism flows from their examination of the philosophies that underpin scientific enterprise, and can be summarised as follows:

- The prevailing “logical empiricist” philosophy<sup>9</sup> holds that the function of science is to allow prediction and control based on understanding of general laws and principles governing phenomena. Logical empiricism grants eminence to the role played by the external world in the generation of human knowledge, and views

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<sup>8</sup> The importance basing methods and tools on theory is also discussed at length in Senge *et al.* (1994).

<sup>9</sup> This model is called the “Cartesian” by some authors, for example Capra (1997).

mind as the mirror of knowledge. It assumes that social phenomena are sufficiently stable and enduring that transhistorical principles can be discerned. It assumes that that objective knowledge, which is independent of the observer and the process of knowing, is possible. The scientist functions as an impartial and detached observer and the chief product of research is the accumulation of objective knowledge through the production of empirically testable hypotheses.

- The philosophy of science underpinning Appreciative Inquiry is based on the social constructivist view (Gergen 1982, 1993, von Glasersfeld 2001). It gives eminence to power of language and discourse in creating our sense of reality<sup>10</sup>. For a short explanation of generative power of language see Box 6.

Social Constructivism argues that the function of science is the creation of concepts or theories that expand flexibility and choice. It gives eminence to the processes of the mind and as the source of human knowledge. It argues that epistemology, the process of questioning or knowing, has to be included explicitly in scientific theories and descriptions. In the words of physicist, Werner Heisenberg. “What we observe is not nature itself, but nature exposed to our method of questioning.”

Nature is seen as an interconnected web of relationships, in which the identification of specific patterns as objects depends on the human observer and the process of knowing. Scientific knowledge is seen as a network of concepts and models in which no part is any more fundamental than the others (Capra 1997).

Constructivism holds that social order is fundamentally unstable and that any pattern of social action is open to change. All social action is open to multiple interpretations, none of which is superior in any objective sense. The interpretations favoured in one historical setting (for example: males are more intelligent than females) may be replaced in the next. All observation is filtered through belief systems, which are our personal theories or mental models of the world.

The scientist is viewed as an active agent and participant, and the chief product of research is continued improvement in capacity to generate theories.

### **Theory as an Agent of Change**

The constructivist view holds that theory<sup>11</sup> is a powerful change agent. Theory and practice are not viewed as separate moments but rather as inseparable aspects of a single process. The idea that we first analyse and then decide on change is viewed as inaccurate portrayal of what actually occurs. Even the most innocent question can evoke change – in awareness, dialogue, emotion and belief. One of the most powerful tools available to human change agents is the articulation of questions. Cooperrider and Whitney (2000) say that “Inquiry IS intervention.”

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<sup>10</sup> This is an ancient concept that is central to Buddhist philosophy. The emphasis placed by Buddhist teaching on training the mind to eliminate negative forms of thought derives from the recognition that discursive thought is the foundation of action (Payutto 1993; Ravel and Ricard 1998).

<sup>11</sup> Senge *et al.* (1994) define a theory as a set of propositions about how the world works, which has been subjected to tests and in which we have gained some confidence.

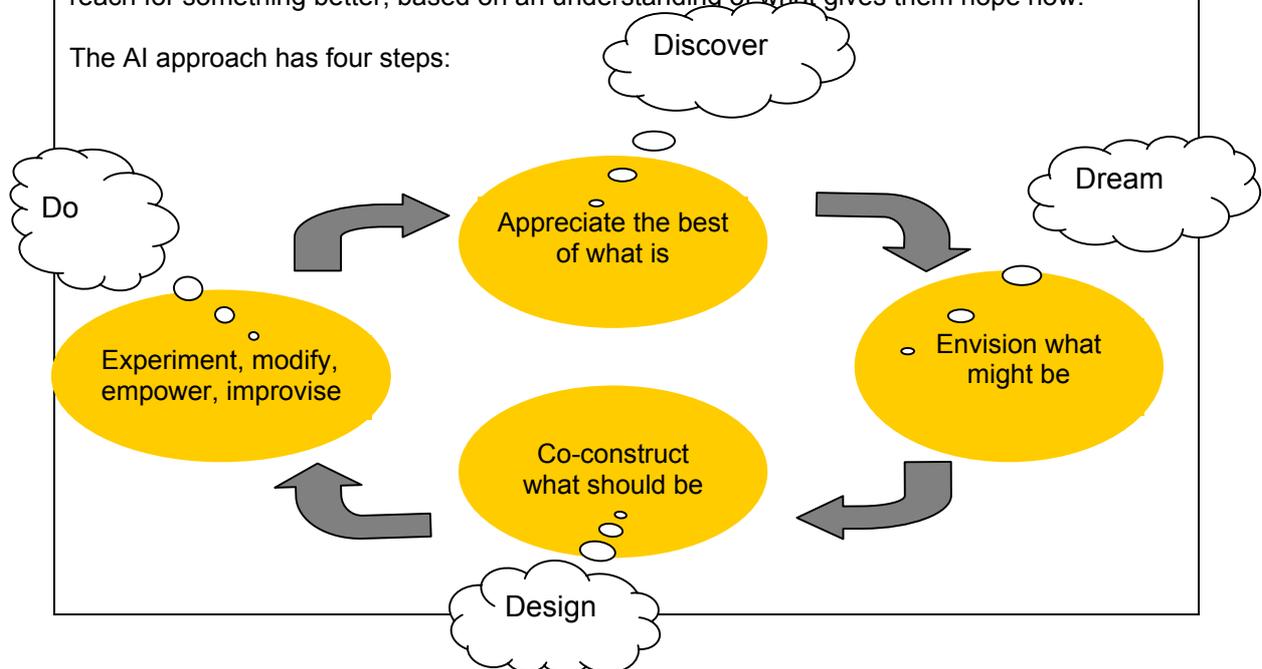
**Box 5.** A short introduction to Appreciative Inquiry (Part 1) adapted from Cooperrider and Whitney (2000) and Elliot (1999).

Most development projects are designed and delivered using participatory techniques that uncover local problems, resource constraints, deficiencies and unmet needs. Interventions to address these problems are then developed jointly. These approaches encourage participation, emphasise the importance of local knowledge and address real problems, but they may not succeed in launching development processes that continue in the community after the implementing organisation withdraws. The risk associated with such approaches is ironic. -- they may inadvertently lead local people to view their community as place full of problems and needs which require the help of outsiders to overcome. Development workers may be viewed as the agents of change in the community rather than the community members themselves. A decade of work by Case Western University, The Taos Institute, the International Institute of Sustainable Development (IISD), and other organisations has resulted in a approach called Appreciative Inquiry (AI) that addresses this risk of inadvertent disempowerment. AI focuses on a community's achievements and seeks to go beyond participation to foster inspiration at the grass-roots level.

Appreciative Inquiry is an approach for planning and working for change that identifies the best of "what is" as the grounding for pursuing a vision of "what could be." It is a cooperative and participatory search for the strengths and positive forces found within every system. The AI approach involves collaborative inquiry, based on affirmative questioning and theory building, to uncover and accentuate the positive in a community, enhancing cultural identity, spirit and vision. AI is selectively attentive to the best and highest qualities in a system.

Local people can use their understanding of the "best of what is" to construct a vision of what their community might be if they identify their strengths and then improve or intensify them. They achieve this goal by creating a provocative vision for the future that can build on past and current achievements. These visions are realistic dreams that motivate a community to reach for something better, based on an understanding of what gives them hope now.

The AI approach has four steps:



**Box 5.** A short introduction to Appreciative Inquiry (Part 2)

The core task in the **Discovery phase** is to uncover and *appreciate* the peak moments of excellence when people experienced the community in its most alive and effective state. Participants then seek to understand the conditions that made the high points possible, such as leadership, relationships, technologies, values, capacity building or external relationships. They deliberately choose not to analyse deficits, but rather to systematically identify and learn from even the smallest victories. In this phase, people share stories of accomplishments, discuss the positive attributes at the core of their community and identify the aspects of their history that they most value and want to enhance in the future.

In the **Dream phase** people challenge the status quo by constructing practical visions that are grounded in the community's history, but seek to expand the community's potential. Images of the future emerge from the positive examples from the past.

In the **Design phase** participants create a strategy to carry out their provocative visions, incorporating the qualities of community life that they want to protect and the relationships that they want to achieve.

The **Doing phase** involves the construction of the new image of the future. It is a time of continuous learning, experimentation and innovation, adjustment and improvisation in the service of shared ideals.

**Box 6.** The Generative Power of Language. (Adapted from Senge *et al.* 1994).

Werner Heisenberg shocked the world of classical physics in 1927 by claiming that when we measure the world we change it. With his uncertainty principle, Heisenberg gave "hard science" credibility to what eastern religions had taught for centuries and western philosophers had come to understand over the preceding hundred years: that human beings cannot ever know what is "really real." We participate more deeply than we imagine in shaping the world that we perceive.

Philosophers have given the name "naïve realism" to the worldview that takes reality as a given entity outside our perception, and sees language as the tool through which we describe this external reality "out there." But as Heisenberg suggests, we have no actual way of ever knowing what is "out there." Whenever we articulate what we see, our language interacts with our direct experience. The "reality" we bring forth arises from this interaction.

The alternative to "naïve realism" is to acknowledge the generative role of the traditions of observation and meaning shared by a community – and the rich diversity of these traditions. Instead of searching for the "right" interpretation of the "real world, we can acknowledge the multiple interpretations, and seek to learn from those that are the most useful for a particular purpose. Instead of seeing language as describing an independent reality, we can use the power of language to create fresh interpretations of our experience, and to bring forth new realities.

When we forget the generative power of language, we quickly confuse our map with the territory. We develop a level of certainty that robs us of the capacity for wonder, that stifles our ability to see new interpretations and new possibilities for action. Such are the roots of belief systems that become rigid, entrenched and ultimately self-protective. When we forget the contingent nature of our understanding, we confuse who we are with our beliefs and views. This is why we defend against an attack on our beliefs as if it were an attack on ourselves.

That inquiry is intervention is also recognised in a research method, called organic inquiry, which has developed as part of the ecofeminist movement. Organic inquiry is a qualitative methodology that acknowledges inherently expanding nature of every research study (Clements *et al.* 2000). Rather than aiming at generalized and replicable results, organic inquiry seeks to present data and analysis in such a way that individuals who interact with them may be personally transformed. Where most research insists that the researcher identify and bracket her or his assumptions and presuppositions to achieve a state that is free of personal bias, organic inquiry depends on the researcher's ability to hold her or his personal experience, both of the topic and of the research process, in the foreground, as the data are gathered and analysed, and to consciously use it as a vehicle for analysis. Feeling, intuitive, creative and thinking modes are all essential tools in evaluation of the data as well as in expressing the results. These four styles of investigation, each a valued aspect of organic inquiry, honor not only linear and rational approaches, but also holistic and subjective ones.

An example of the rapid impact that theory may have on practice is given in Box 7.

**Box 7.** Theory as an agent of change in a sustainable rural development project.

This example is drawn from the Forages and Livestock Systems Project (FLSP). project initiated in Laos in 2000 by the government extension service and international research organisation and an external donor.

The FLSP is a follow-up to an earlier project focused on the participatory development of agricultural technologies for upland areas. The FLSP works in mountainous regions of Laos inhabited by ethnic minorities including the Hmong. Government development plans call for an end to the shifting slash-and-burn agriculture traditionally practiced in the highlands, in favour of permanent settlements and stable agricultural practices. However, population increase combined with the establishment of permanent village settlements has led to a progressive decline in the quality of soil and forest resources. The work of the FLSP involves the scaling-up of successful forage and livestock technologies already identified through collaborative technology development efforts of farmers and researchers.

The project is working in Hmong villages, where complex livelihood strategies include large animal husbandry by men and the raising of small livestock, such as pigs and chickens, by women. The project is staffed by members of the government extension service (DAFO) supported by expatriate agricultural experts and consultants.

The donor expressed a strong conviction that sensitivity to gender and equity issues in participating villages were important to meeting the objectives of the project. The donor stipulated the development of a gender and development strategy by the project team. Initial feedback about this by DAFO staff indicated some resistance, as shown by the following statements:

- All the project villages are poor.
- Well-being level is a household characteristic, so it makes little sense to conceive of men and women in the same family as having different wealth or well-being levels

These and other issues were discussed in workshop, which involved the presentation of, gender and equity concepts and combined with village visits to explore these. This was followed by a series of skills development workshops interspersed with fieldwork.

As part of preparation for a short workshop on gender and development, the participants were asked which skills they wished to focus on. Their responses included the following:

**Box 7.** Theory as an agent of change in a sustainable rural development project. (continued).

- Skills for working with men & women, different ethnic groups, different wealth groups
- Techniques for working with women
- Experiences to build our confidence for working with farmers

Appreciative Inquiry techniques were incorporated in the design of the workshop. At the beginning of the workshop, DAFO staff were asked to think of ways that gender and development issues affected livestock systems and the extension approach of the FLSP. They decided to focus on gender, ethnicity and wealth differences. Based on their analysis, the participants developed a set of concrete strategies for addressing gender, ethnicity and equity differences, envisioning these as tools and assets to help the project in its daily work. These strategies will be reviewed and updated periodically as the FLSP project unfolds. The AI orientation is paving the way for DAFO staff and project resource persons to test their own theories about gender and equity concepts and their usefulness.

### **Appreciative Inquiry in a Participatory Agricultural Extension Project**

The founders of Appreciative Inquiry view collective imagination and discourse about the future as an infinite human resource for generating constructive change. In the context of an agricultural extension project involving several GSCOs and a donor agency, this unfolds organically as people project a “horizon of expectation” that brings the future into the present as a mobilising agent (Box 7). This is where the importance of a *positive* orientation in inquiry comes into play.

A positive orientation in inquiry can be powerfully combined with whole-brain approaches (eg. Hermann 1996) that draw upon the creative power of heterogeneous groups with a spectrum of thinking preferences and capacities<sup>12</sup>. Such groups can synthesise a rich collective picture of what should and can be from many individual views of the world, and the energy that derives from positive intangibles like hope, excitement, creativity, humour, inspiration, caring and camaraderie.

### **Literature Cited**

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<sup>12</sup> including interpersonal, emotional, spiritual, practical, organisational, administrative, logical, analytical, technical, holistic, imaginative, conceptual and integrative.

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