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Community Participation: Tools and Examples

by

Dr. Rodney Jackson,
Senior Ecologist, The Mountain Institute, and Director, Snow Leopard Conservancy

Author's address: The Mountain Institute, Main and Dogwood Streets, Franklin, WV 26807; Snow Leopard Conservancy, 236 N. Santa Cruz Ave, Suite 201, Los Gatos, CA 95030, USA.
E-mail: rodjackson@mountain.org

Introduction: In response to dwindling wildlife populations and habitat, governments established national parks and protected areas, often with little input from people living in the immediate area. In some cases communities were relocated, but in most they are left to pursue traditional agricultural and pastoral livelihoods under a new set of rules. Important questions of land tenure remained unresolved, with a "fences and fines" approach to protected area management (Stolton and Dudley 1999).

Despite strict enforcement by the various governmental agencies, habitat and wildlife populations have continued to decline in many areas. There is a growing recognition long-term management of protected areas must hinge upon the cooperation and support of local people, and that it is neither politically feasible nor ethically appropriate to exclude the poor – who have limited access to resources – from parks without providing them with alternative means of support. One approach is the adoption of the ICDP or Integrated Conservation Development Project model, along with a growing body of literature on conflict resolution and co-management of protected areas (Borrini-Feyerabend 1997, 1999). Community-based stewardship could contribute significantly to overall biodiversity conservation, including protection of endangered species such as the snow leopard which may be responsible for significant loss of livestock in some areas (see companion paper titled, "People-wildlife conflicts in the trans-Himalaya").

This paper briefly describes how communities could be better mobilized for environmental stewardship in the transHimalaya, drawing upon The Mountain Institute's conservation project in Tibet as a case study.

Participation in Community-based Conservation: Participation may range from token dialogue and passive input to interactive participation, which ultimately leads to self-mobilization. The most meaningful participation occurs if the driving agency solicits input and participation from all sectors of the local community – men and women, young and old, rich and poor, those with power and those without – enabling them to play an effective role in the design,

execution and monitoring of projects or programs, alongside other stakeholders like the government and NGOs (Table 1). Stakeholders are seen as persons or groups that are generally aware of their interests in the protected area, who possess specific capacities such as skills, knowledge and a comparative advantage for management due to their proximity or resource use mandate, and who are willing to invest time, money and political authority in becoming involved in protected areas management (Borrini Feyerabend 1999).

If appropriately implemented, the participatory approach should ***encourage*** shared decision-making, cooperation, and mutual respect while building confidence and leading to empowerment. The participatory process increases learning and sharing of values and experiences, and thereby promotes greater stakeholder ownership of the particular protected area or proposed set of management and protection actions.

Table 1: Scales of Participation and the Continuum toward Greater Self-reliance (adapted from Worah et al. 1999).

Greatest dependence on external agents

Passive: No feedback (the information shared belongs to the external agent only)
Participate in information giving: People answer the questions posed, but have no opportunity to influence decisions as information is not shared
Consultation: People's views taken into account, but decisions made by external agent who is under no obligation to accept local viewpoints
Participate for incentives: Time-bound, so participation ends when the incentives run out
Functional Participation: form groups to meet pre-determined objectives driven by external stakeholders, usually after the planning phase
Interactive Participation**:** People closely involved in information gathering, planning and decision-making; local perspectives favored, thus giving local stakeholders an incentive in maintaining structures and practices
Self Mobilization: People take the initiative in planning, decision-making and action - Outside agencies provide technical support and play a facilitating or catalytic role, rather than directing the activities

Greatest self-reliance

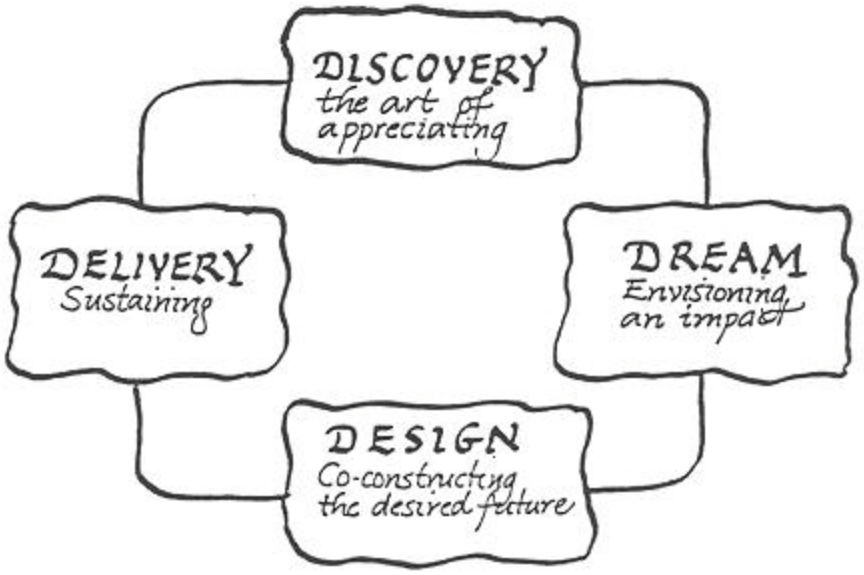
Participatory tools include PRA (Participatory Rural Appraisal), PLA (Participatory Learning and Action), and APPA (Appreciative Participatory Planning and Action), in addition to baseline wildlife inventories by trained personnel. Many of these tools can be understood by literate and illiterate persons, who may then play a leading role in information gathering, evaluation and planning. When carefully applied, these tools help to resolve local people's rights and access to natural resources, to facilitate the incorporation of indigenous knowledge in management planning, and empower local communities to effectively implement and sustain ecologically sound natural resources management regimes.

APPA combines concepts from *Appreciative Inquiry* (used in business leadership training) and *Participatory Learning and Action* (PLA, Pretty et al. 1995), in a collective inquiry and planning process aimed at fostering effective group action. APPA operates on two simple complimentary premises: (1) What you seek is what you will find -- *"if you look for problems, then you will find more problems,"* or conversely, *"if you look for successes, you will find more successes"*; and (2) What you believe is what matters most — *"if you have faith in your vision or ideas for the future,"* and if these are believable, then you'll be able to achieve success without waiting for government or an outside donor to help take you there.

APPA is practiced through a repetitive cycle known as the "Four Ds" (Figure 1).

(1) *Discovering* the community's strengths and valued assets or resources;
(2) *Dreaming*, or envisioning, the short-term (one year) and long-term (five or more years) futures – if adequate and realistic resources were mobilized and the community acted in concert;
(3) *Designing* an action plan for linking community development with stewardship of a species or its habitat, emphasizing what the community already knows and can do on its own without relying substantially on outside financial sources or technical know-how; and
(4) *Delivering* – spurring participants to initiate community-improvement actions *immediately* rather than waiting for some future time or depending on a government subsidy that somehow is always delayed for lack of funding.

Figure 1: The Four D's Iterative Cycle



APPA draws upon the full range of traditional PRA tools (Pretty et al. 1995). It works best when local communities (1) take a leadership role; (2) focus on their opportunities rather than problems (the "a glass half-full rather than half-empty" concept); and (3) build on past community successes rather than highlighting its failures, thus better fostering confidence, self pride and reliance (rather than continued dependency).

The Example of Ngora and Khoryak villages in Tibet: Lessons from these two settlements help illustrate some of the benefits and limitations of a highly participatory engagement process for addressing people-wildlife conflict due to crop and livestock depredation (The Mountain Institute 1997; Jackson, In Press). Ngora and Khoryak are located in the Qomolangma National Nature Preserve (QNNP), which was established in 1989 and encompasses about 35,000 square kilometers centered on Mt. Everest along the China-Nepal border. The park authorities were able to effectively ban hunting, and with the border military presence significantly reduced, wildlife benefited from the immediate protection afforded it. In addition, the park authorities mounted an awareness campaign targeting government officials and the general public alike, and giving the preserve national attention and status.

By 1997 the number of crop damage and livestock depredation complaints from local people had increased significantly, especially from communities located in or adjacent to the core areas that constituted the best wildlife habitat. The two villages of Ngora-Khoryak are situated about 18 km off the main Lhasa-Kathmandu highway at an elevation of 4,350 m. Each consists of 30-35 households with just over 200 people who people cultivate barley and raise herds of yak, cattle-crossbreeds, sheep and goats. In recent years they have sold many goats to Nepal for the Desai holiday.

In 1996 the villagers claimed that approximately 40% of their barley crop was damaged by kiang (*Equus kiang*) and blue sheep (*Pseudois nayaur*). All households were affected and the county administration had to provide an annual food subsidy to the two communities. The economic value of lost barley was said to average $150 per household in Khoryak and $220 per household in Ngora. Almost 70% of their goat and sheep flock died as a result of severe winter snowfall the same year. During each barley-growing season, all households had to post guards each night, a practice requiring some 26 or more persons per settlement in order to adequately cover their widely scattered fields from wildlife damage. Additional traditional guarding measures included the use of fire and smoke, stone scarecrows, rope fencing, noise-makers and prayer flags. During the period of greatest damage, no persons were allowed a blanket in the hope that they would stay awake throughout the hours of darkness! Villagers also complained of lost opportunities. For example, more land was available for barley cultivation to offset any food deficit, but they were not willing to invest more time and labor given the high risk of crop damage.

With the collaboration of QNNP's Management Bureau, The Mountain Institute (TMI) held a workshop in the summer of 1996 with the following objectives: (1) Increase crop production by reducing crop damage due to kiang and blue sheep; (2) Promote environmentally responsible & socially acceptable income generation opportunities; (3) Protect wildlife in accordance with QNNP's laws and regulations; (4) Train QNNP managers and villagers in participatory resource assessment, planning and management; and (5) Prepare a funding proposal to implement, monitor and evaluate recommendations made by the workshop participants.

Facilitators trained QNNP Management Bureau staff, county and village leaders in APPA, which was being pioneered by TMI as a community-action and learning tool. The team then visited the two settlements and working with the local people, identified and characterized crop damage patterns, including seasonal damage pattern, wildlife behavior and movement corridors, guarding practices, and barley field size and location. Other participatory exercises provided useful information on the village's natural resources, past successful community initiatives, sources of household income, and relationships between the various village and governmental institutions. During the dreaming phase, villagers envisaged how they would like their settlement to appear in 1-5 and 10 year's time. Participants highlighted the need for securely protected croplands, a school and income-generation opportunities associated with trekking tourism.

During the design phase, villagers evaluated the different field protection methods and concluded that the optimal solution lay in fencing all barley fields. However, a rapid economic assessment indicated this would not be possible with the available resources, and that the fields could only be partially fenced. In its role as external donor and facilitator, TMI presented five conditions for funding the project, along with guidelines or "Best Practices" in developing the preferred solution. The conditions governing project funding and support, and later applied to community engagement in other TMI community-based wildlife conservation initiatives were:

1) Conservation – Biodiversity conservation is the primary motivation behind external investment, and therefore all project activities should be implicitly linked with clearly defined conservation objectives.

2) Participation – Commitment to active and equitable stakeholder participation at all stages of the project that should benefit all households affected by crop or livestock damage.

3) Reciprocity – All stakeholders (NGO, government, villagers) should make a reciprocal contribution within their means (e.g., cash, materials, labor, or in-kind service).

4) Responsibility – The beneficiary community should assume full responsibility for meeting specified conservation conditions and maintaining any infrastructural development. There should be clear penalties for infringement by any of the parties to the agreement.

5) Monitoring - Stakeholders should be willing to employ simple but realistic indicators for monitoring project impact and performance that are described in the Action Plan prepared during the workshop.

The suggested design and operational criteria require that all actions be (1) *Environmentally (ecologically) responsible* (i.e., compatible with habitat, species, and ecosystem requirements, along with protected area regulations); (2) *Economically sustainable* (cost-effective programs containing cost-sharing mechanisms and sustained with reasonable outside cash infusions, but self-sustaining in the long-run); (3) *Socially responsible* (e.g. measures that build upon proven traditions and cultural values which protect nature); and (4) *Implemented* with clear responsibility and a transparent budget (under a mutually agreed-to work-plan that sets forth the responsibilities, contributions and obligations of each partner).

Using this basic process and working closely with the villagers, TMI and QNNP's managers developed a plan of action for reducing crop damage, increasing income and protecting wildlife. Participants concluded that the best solution would be to fence their fields off with a 7-strand barbed-wire fence. The available budget allowed for a 8 km 7-strand fence, about half of the perimeter needed to enclose all existing field areas. Ngora-Khoryak agreed to provide all labor and assume responsibility for fence maintenance. Nyalam County and the local township (Yarleb Shang) agreed to transport materials from Lhasa to the site, a distance of some 700 km, and to provide skilled supervisory staff to oversee the construction. The QNNP Management Bureau offered overall project supervision and provided some co-financing for the fencing materials, while TMI facilitated project funding through its own resources and a grant from the Canada Fund. TMI also agreed to provide technical support and assist QNNP in project monitoring, reporting and financial accounting. Finally, they secured funding to train a member from each household in weaving and handicrafts production. Over the long-term, TMI committed to assisting the villagers and the government to develop trekking tourism in the area under the Qomolangma Conservation Project.

An agreement was signed by each household, local government officials and the QNNP Management Bureau in which the conservation-development objectives of the program were specified, and arrangements made for financing fence maintenance over the long-term.

Results to Date: A fence was erected the following spring to form a barrier across the general pathway used by kiang to enter the barley fields. By using the Khoryak stream as a natural obstacle, villagers were able to effectively protect three sides of their fields from wildlife intrusion. As time and labor permit, they will slowly construct a stone wall along the unfenced sections. In all, they established a 8 km fence that enclosed about 94% of fields (150 mu or 10 hectares), including 50 mu of new barley cropland and some 1,000 mu of irrigated pasture (15 mu equals one hectare).

With the fence in place, the need for guarding fields declined significantly, and now required only four persons nightly to patrol the unprotected sections and to mend any breakage in the fence caused by kiang or livestock. Crop production improved dramatically in both villages, as show in Table 2. Villagers placed more land under barley cultivation, and with livestock excluded were able to harvest more forage from the naturally irrigated wetland for use during the critical winter period.

Besides the dramatic increase in cultivated cropland and harvested barley, several unanticipated outputs resulted. For example, the villagers used the time saved from guarding their fields to make bricks and construct a school in Ngora, for which the government agreed to provide a teacher. There was no longer any need to watch and prevent livestock from entering fields, but this may turn out to be a mixed blessing if depredation losses increase due to more lax guarding practices. The local people also improve the rough track leading from the main highway as the first step toward attracting tourists. Women were able to more time for spinning and weaving, which resulted in greater supplementary income than projected because the government agreed to purchase all yak-wool blankets the villagers produced. As a result of these and perhaps other

undocumented factors, the attitudes toward the park and the importance of wildlife protection improved considerably.

Table 2: Crop and pasture production before and after fencing

Village / Crop	**1996 (before)**	**1997 (after)**	**Percent Change**
***Khoryak*:**			
Total barley (gyama) harvested	76,075	122,500	+61.0
Mu under barley production	161	201	+24.8
Winter fodder (gyama) harvested	19,400	26,474	+36.5
***Ngora*:**			
Total barley (gyama) harvested	119,171	149,170	+25.2
Mu under barley production	250	270	+8.0
Winter fodder (gyama) harvested	36,750	53,870	+46.6

one gyama = 0.5 kg; 15 mu = one hectare

Conclusions: The strongly participatory processes imbedded in APPA promotes both individual and community participation. It also encourages commitment and contributions (co-financing) toward a set of common goals and objectives, as articulated by the consensus-driven Action Plan. Firmly-grounded community engagement fosters self-reliance and helps to decentralize planning, thus reducing the long-term dependency of rural communities on the government. It is a truly bottom-up approach to facilitating integrated conservation development projects, both large and small.

APPA's proven effectiveness is due in large part to its emphasis on each village's existing assets and positive attributes, rather than focussing upon its problems and negative side. It has been successfully applied to alleviating livstock depredation in Hemis National Park (see Paper no 1, this workshop proceedings). Many of the exercises used to develop that action plan can be understood and carried out in the snow leopard's range. The full set of traditional PRA tools form a vital part of APPA's overall "tool-kit" (The Mountain Institute, 2000), so that this approach basically builds upon skills and techniques already in place.

Evidence to date from Tibet, Sikkim and Ladakh suggest that the APPA-based engagement process will lead to better designed projects because of required engagement conditions and design criteria that ensure better appreciation of the linkage between the conservation and development objectives. Community-based participation conservation also allows for open and transparent reporting, good record-keeping and on-going monitoring and evaluation or M&E.

On the down side is the relatively high costs of training staff and village leaders in the methodology, and in providing ongoing technical assistance to ensure the process moves

forward. Although conservation-development activities result from the workshop, applying the 4-"Ds" of APPA should be an iterative process. Project sponsors and stakeholders need to periodically revisit "the dream," and to monitor and evaluate project activities and outputs through a regular "sharing of experiences." NGOs appear to be the most obvious vehicle for promoting this community-based approach to integrating conservation and development, but the sponsoring agency must be willing to make a long-term commitment to their rural stakeholders (Sanjayan et al. 1997).

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