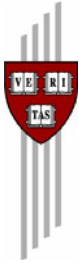


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Characteristics of Leadership and Five Equator Prize 2002 Finalists

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It is available at <http://www.cid.harvard.edu/cidwp/grad/003.htm>. However, as a work in progress, this does not constitute formal publication, and comments are especially welcome and may be directed to Vanessa Timmer via email at vtimmer@interchange.ubc.ca.

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This paper was written as part of the Initiative for Science and Technology for Sustainability (ISTS). The Initiative is an international, open-ended network with the goal of enhancing the contribution of knowledge to environmentally sustainable human development around the world. The Initiative was founded in late 2000 by an independent group of scholars and development practitioners gathered at the Friibergh Workshop on Sustainability Science. Since that time, it has worked to strengthen cooperation between two communities: practitioners involved in promoting human development and environmental conservation, and researchers involved in advancing science and technology relevant to sustainability. Funding for the Initiative has come from the David and Lucile Packard Foundation and the U.S. National Oceanic and Atmospheric Administration's Office of Global Programs, with additional support from numerous governments and institutions around the world. The Initiative's secretariat is based at Harvard's Center for International Development.

The Science, Environment and Development Group at Harvard's Center for International Development collaborates internationally on a variety of research projects and outreach activities that seek to improve society's understanding of interactions between human development and the natural environment, and to harness that understanding in support of a transition towards sustainability. The Group builds bridges between the local, place-based character of many sustainability challenges and the increasingly global context within which solutions to those challenges must be shaped. It is concerned with the role of "partnerships" among governments, civil society, the private sector, and academia in shaping solutions.

Further information on the Initiative and the Science, Environment and Development Group at Harvard's Center for International Development can be found at <http://sustainabilityscience.org/ists> and <http://www.ksg.harvard.edu/sed>, respectively, or by contacting Nancy Dickson at nancy_dickson@harvard.edu.

ABSTRACT

The Equator Initiative was launched as part of the international community's deliberations at the World Summit on Sustainable Development on how to combine poverty reduction and biodiversity conservation. The focus of the Equator Initiative is on local communities in tropical countries that have successfully combined sustainable use of natural resources and community development. The communities that were nominated for the Equator Prize 2002 were part of an international competition that sought to identify effective local partnerships for sustainable development. This paper contributes to the analysis of the 27 finalists of the Equator Prize 2002 and attempts to distill factors of success. The paper proposes that leadership plays an important role in determining effectiveness and outlines five characteristics of effective leadership: leader as innovator, leader as communicator, leader as learner, leader as bridge-builder, and leader as systems thinker. The second part of the paper traces these characteristics through five of the Equator Prize 2002 case studies and concludes with recommendations to the Equator Initiative as to ways to facilitate the development and support of leaders within local partnerships for sustainable development.

Keywords: leadership, innovation, local partnerships, community-based conservation, tropics, environment, development, sustainable development, biodiversity, poverty, United Nations, Equator Initiative

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INTRODUCTION

The United Nations World Summit on Sustainable Development was held in Johannesburg, South Africa in 2002. This gathering of heads of state and thousands of government officials, civil society, private sector and media representatives provided an opportunity to focus on the implementation of sustainable development goals established at the 1992 UN Conference on Environment and Development. The concept of “sustainable development” encompasses the challenge of achieving both social and economic development goals as well as ecological conservation and natural resource management goals. The Equator Initiative was launched within this context of the international community deliberating on how to reconcile social justice and biodiversity goals and how to recognize the valuable role that local communities can play in achieving sustainable development.

The Equator Initiative focuses on local communities in tropical countries along the equatorial belt. Tropical countries have the greatest concentration of biological diversity but are also beset by the disempowerment of local and indigenous communities and by increasing poverty. It is in these countries that the Equator Initiative is searching to identify innovative approaches to achieving the goals of poverty reduction and the sustainable use and conservation of biodiversity at the local level. The Equator Initiative’s flagship activity is the biennial Equator Prize. This awards program is aimed at supporting local examples of sustainable development in action. Out of the 420 nominations submitted for the 2002 inaugural Equator Initiative Prize, 27 finalists were chosen by a Technical Advisory Committee to be evaluated by an eminent international jury for the selection of the 6 award recipients. There are a number of motivations behind the award scheme. The prize honors innovations in local partnerships to combine poverty reduction efforts through sustainable use of natural resources. There is also a social learning goal inherent in identifying these innovations, as they are demonstrations of the possibility of integrating conservation and human development goals even though entirely win-win solutions are rare. As Alvaro Umana, Principal Advisor and Leader of UNDP’s Environmentally Sustainable Development Group, stated:

“Local communities from throughout the tropical developing world are charting a path towards true sustainable development. Their work is proof that biodiversity conservation and poverty reduction are mutually inclusive aims. The Equator Prize is designed in part to focus global attention upon these local success stories.”¹

The Equator Initiative has a goal of creating a “worldwide movement” that would enable the lessons learnt from the Equator Prize recipients to result in increased awareness and improved capability of social systems to be sustainable. Sean Southey, the manager of the Equator Initiative, expressed this goal when he stated that the Equator Initiative wants to “lead the way to a better understanding of how conservation efforts can support wider work to achieve sustainable human development”. This will be accomplished “through dedicated efforts to promote linkages between biodiversity conservation and poverty reduction.”²

LEADERSHIP AND THE EQUATOR INITIATIVE

The overall purpose of this paper is to examine the role of leadership in the effectiveness of local

¹ Quoted in UNDP Newsfront, 13 June 2003, <http://www.undp.org/dpa/frontpagearchive/2003/june/13june03/index.html>.

² *Ibid.*

partnerships for reducing poverty and enhancing biodiversity.³ The paper proposes five characteristics of effective leadership as drawn from the analysis of the Equator Prize 2002 finalists and from academic literature on leadership. These leadership characteristics are explored through the lens of five case studies. The analytical framework that is developed in this paper seeks to contribute to the research and learning component of the Equator Initiative's activities. This activity has "the aim of providing knowledge to support a global movement for poverty reduction and biodiversity conservation."⁴ The focus of the research, analysis and learning is the Equator Prize nominees and winners that provide "a rich source of information that may be used to better understand those factors that influence the organization of successful initiatives at the local level ... [and] the cross-level linkages between local communities and the decision making process."⁵ Other factors under investigation include inquiries into the types of community organizational structures and cross-scale linkages that lead to effectiveness and inquiries evaluating the success of the initiatives based on poverty reduction and biodiversity enhancement outcome indicators. This paper contributes to the examination into the factors that can lead to success by focusing on leadership—one of the criteria used to evaluate the Equator Prize finalists. The criteria outlined that effective community partnerships were "initiatives demonstrating leadership that has inspired action and change consistent with the vision of the Equator Initiative, including policy and / or institutional change and local people's empowerment, especially that of marginalized groups."⁶

The universe of cases here has already been defined as "successful" by virtue of having been selected by the Technical Advisory Committee to be a finalist for the Equator Prize. Out of the 420 nominations for the first Equator Prize, 27 were singled out to be the pool from which the international jury of experts would select 6 winners. The positive a priori judgment of these cases can be seen as problematic for analysis; however, although the sample is deliberately drawn from a collection of strong local partnerships for sustainable development, each of these cases has both strong and weak features and fluctuating life histories that make them relevant to the entire class of local partnerships. It is hoped that this paper will reflect both on the characteristic of leadership within effective performers and also contribute to the understanding of the role of leadership in local partnerships in general.

The twenty-seven 2002 Equator Prize finalists were the case studies examined for this study.⁷ Of the 27 local partnerships, 7 are from Africa; 6 are from Asia and the Pacific; and 14 are from Latin America and the Caribbean. Five cases were selected from these twenty-seven as the role of leadership played a critical role in the success of their initiative. Analysis of these cases revealed the importance of leaders in both their formation and the continued effectiveness of their programs. Leadership is only one of many factors that lead to the effectiveness of these initiatives. This paper seeks to highlight its role as part of the larger research and learning program of the Equator Initiative. The five cases are briefly described below and further explored in the second part of the paper.⁸

³ A companion working paper to this paper is Timmer, V. 2004. "Community-based Conservation and Leadership: Frameworks for Analyzing the Equator Initiative." CID Graduate Student Working Paper No. 2. Cambridge, MA: Science, Environment and Development Group, Center for International Development, Harvard University, <http://www.cid.harvard.edu/cidwp/grad/002.htm>.

⁴ See <http://www.undp.org/equatorinitiative>.

⁵ *Ibid.*

⁶ For Equator Initiative 2002 Equator Prize criteria, see http://www.undp.org/equatorinitiative/secondary/select_crit.htm.

⁷ A complete list of the Equator Prize 2002 Finalists can be found at http://www.undp.org/equatorinitiative/secondary/awards_finalists.htm.

⁸ The brief descriptions of the cases were written by Equator Initiative staff for the Equator Prize Jury.

Uma Bawang Resident's Association (UBRA)	Malaysia – This organization represents a small community (about 100 people) that has been successful in establishing and defending customary land rights to prevent logging, especially through an innovative initiative to map and defend in court traditional land boundaries. It is providing leadership for other communities in the Sarawak to do the same. It has helped communities improve income through developing over a dozen different projects, mostly based on farming, which are aimed at providing income from conservation and stemming out-migration.
Programa de Campesino a Campesino (PCaC)	Nicaragua – Nicaragua's PCaC (small farmer to small farmer program) was initiated in the late 1980s by the Union Nacional de Agricultores y Ganaderos (UNAG), the national union of farmers and ranchers, in collaboration with Mexican partners. In 1992, PCaC Siuna began a pilot effort to use legumes grown in association with maize in order to improve production and therefore arrest expansion of the agricultural frontier in the buffer zone of the Bosawas Biosphere Reserve (World Heritage Site). This initial project has evolved into a wide-ranging social transformation with new organizational structures and development of a number of sustainable development initiatives. Campesino to campesino (and community to community) exchange and networking (in which 300 campesino trainers work with 80 communities and more than 3,000 families) has culminated in the idea of a campesino biological corridor through the buffer zone.
FITEMA (Flkambanan'ny Terak'I Manambolo) – Association of Manambolo Natives	Madagascar – A community-based resource management initiative that re-established a traditional indigenous land use system to help preserve the 5,100 ha of mid-altitude forests and 400 ha of swamps in the 7,500 ha Manambolo Valley and provide food security to the local Betsileo ethnic group.
Kerala Kani Samudaya Kshema Trust	India – This initiative is an internationally acclaimed model for equitable benefit sharing between a scientific institution and the Kani semi-nomadic tribal people of the southern Western Ghat forests of Kerala. They imparted their traditional knowledge about the energizing properties of a wild plant to Dr. P. Pushpangadan and with his help, set up a trust for the community to manage the financial benefits of the product he developed.
Honey Care Africa Ltd.	Kenya – Honey Care is a private-sector initiative working together with NGOs, the development sector and grass-root communities in a symbiotic “win-win” partnership that links environmental conservation and poverty reduction through a model of sustainable bee keeping by providing bee hives to rural communities and subsistence-level farms in Kenya and by guaranteeing to buy the honey produced.

Analysis of the cases was based on material prepared by the case study representatives for the Equator Prize nomination process, synthesis documents produced by the Equator Initiative staff, interviews conducted by the International Development Research Centre, academic articles and a selection of additional documents.

DEFINING LEADERSHIP

Leadership within the Equator Prize 2002 finalists takes many forms: some are led by individuals and others are led by leadership teams; some are led by leaders from the local community and others are led by external actors; some are supported and others are marginalized. There is also a dynamic and temporal dimension to leadership. Whereas some cases have maintained the same leader since inception, other cases have changed leaders to adapt to shifting circumstances.

Are there characteristics that emerge as being critical to effective leadership? Drawing on the literature on leadership as well as on the analysis of the Equator Prize case studies, the following five characteristics can be identified.

Leader as Innovator⁹	<ul style="list-style-type: none"> • Embraces uncertainty and takes risks • Creates value through gap-filling, pulling elements and people together in a new way
Leader as Communicator	<ul style="list-style-type: none"> • Expresses a clear and compelling vision centred around common values • Facilitates an open and interactive dialogue amongst stakeholders and harnesses the leadership capacity of stakeholders
Leader as Learner	<ul style="list-style-type: none"> • Adapts to shifting relationships and circumstances • Actively promotes learning as a core value • Establishes mechanisms for monitoring progress and learning structures
Leader as Bridge-Builder¹⁰	<ul style="list-style-type: none"> • Understands and works with diverse stakeholders • Creates networks of stakeholders to together address a challenge across boundaries and scales • Has the ability to manage conflict in a constructive way
Leader as Systems Thinker¹¹	<ul style="list-style-type: none"> • Sees interrelationships and processes and focuses on areas of high leverage • Distinguishes amongst different kinds of complexity • Moves away from blame and avoids symptomatic solutions • Surfaces underlying assumptions and mental models

In the following section of this paper, each of these characteristics of leadership is examined within the context of one of the 2002 Equator Prize finalist case studies. Although the leader or leadership team displays a number of the leadership characteristics outlined above, the cases focus on one of the characteristics in order to examine the role of the leader in the initiative.

LEADER AS INNOVATOR Uma Bawang Resident’s Association – Malaysia¹²

On 22 August 1993, Jok Jau Evong was stopped at the airport by the Malaysian government and was barred from traveling to Peru for a meeting of the International Alliance of Indigenous Tribal Peoples of

⁹ Alvord, S. H., L. D. Brown and C. W. Letts. 2002. “Social Entrepreneurship and Societal Transformation: An Exploratory Study.” Hauser Center Working Paper No. 15, http://www.ksg.harvard.edu/hauser/active_backup/PDF_XLS/workingpaper_15.pdf; Banuri, T. and A. Najam. 2002. *Civic Entrepreneurship: A Civil Society Perspective on Sustainable Development*. Islamabad, Pakistan: Gandhara Academy Press.

¹⁰ Alvord, S. H., L. D. Brown and C. W. Letts. 2002. “Social Entrepreneurship and Societal Transformation: An Exploratory Study.” Hauser Center Working Paper No. 15, http://www.ksg.harvard.edu/hauser/active_backup/PDF_XLS/workingpaper_15.pdf.

¹¹ Senge, P. 1990. “The Leader’s New Work: Building Learning Organizations.” *Sloan Management Review* 32(1).

¹² Case study information drawn from UBRA’s nomination form for the Equator Prize 2002; Equator Initiative. 2002. *Equator Prize 2002 Finalists*, <http://www.undp.org/equatorinitiative>; Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC; *The Story of UBRA and the People of Uma Bawang*, <http://www.earthisland.org/borneo/news/articles/UBRAstory.html>.

the Tropical Forest.¹³ Evong is a threat to the Malaysian government because he is the president of the Uma Bawang Resident's Association (UBRA) and the leader of an indigenous community in the Sarawak rainforest. Since its founding in 1989, UBRA has been continuously innovative in the face of resource destruction and cultural erosion, and persistent in their objective to achieve their own vision of development. The indigenous community of Uma Bawang has been faced with a challenging journey and their story provides insight into the nature of innovative leadership.

The Uma Bawang indigenous people are descended from the Kayan ethnic people who came from West Borneo, settled at a lake by the Kalimantan border, and called the settlement Uma Bawang meaning "Lake House" in Kayan. The migration by some of these settlers into the Baram River Valley required the forced removal of ethnic groups already occupying this area. The violent encounters were finally ended in the 1800s with the rule of the Orang Putih (British) that allowed the Kayan to practice their culture and traditions freely while outlawing headhunting and other violent practices. The customary practices of the Kayan that were maintained were based around longhouses with appointed headman and selected committees that focused on maintaining their community's welfare.

In the 1980s, the Sarawak State Government issued timber licenses that infringed on the traditional lands of the people of Uma Bawang. This led certain families within the village and particularly the "local nobility" of the headmen and his family to develop beneficial relationships with logging companies in order to earn money from the use of the Native Customary Right land. Community leaders abused their power, pretended to speak on behalf of the community and made separate deals with the logging companies that ensured compensation would come to them and not be distributed across the community. The longhouse committees were brought into the inequitable arrangements in order to ensure that the headman would remain in a position of power. Inquiries were silenced and the unity of the longhouse eroded. Uma Bawang remains a heterogeneous and largely hierarchical community that defies the romantic ideal of a homogenous and harmonious unit. In 1987, some people of the Uma Bawang community began to organize to protect the remaining forests in the surrounding ecosystem, and to coordinate resistance against the logging company and for the struggle of the Uma Bawang people.

In 1988, the Uma Bawang Resident's Association had not yet been registered but the concerned members of the community recognized the urgency of the need for action against deforestation. The rate of forest destruction was rapid and the indigenous people launched their first innovation and formed a road blockade to stop the logging trucks. The government forcibly broke the blockade and, a year later, a second blockade resulted in the arrests and incarceration without charge of 42 villagers for 2 weeks. The blockade innovation and the resulting media attention about the incarceration was successful in directing international attention to the logging of the Sarawak. For example, visitors from Berkeley, California were so impressed with the Uma Bawang people and their struggle for control over their lands that they lobbied and succeeded in passing legislation in Berkeley to make the city a sister city to Uma Bawang. The founders of the non-governmental organization The Borneo Project that was established to support the indigenous people of the Sarawak stated that Uma Bawang "was a village with strong leadership, and a vision to develop themselves without participating in destructive logging."¹⁴ Although the innovative leadership had been somewhat effective, the villagers decided that road blockades were not a long-term solution to the problem as the strategy was being undermined by government officials and was keeping villagers from their farms and economic activities. It was decided that the next innovative strategy would focus on establishing legal rights to their land.

In 1989, the Uma Bawang Resident's Association was officially registered and the divisions and conflict in the Uma Bawang village deepened. Members of UBRA made the innovative decision to depart from

¹³ See <http://nativenet.uthscsa.edu/archive/nl/9309/0274.html>.

¹⁴ See The Borneo Project web site at http://www.earthisland.org/borneo/borneo/borneo_sistercity.html.

the control of the pro-logging headman and set up a new longhouse an hour's walk away from Uma Bawang but still in the traditional lands. In March 1989, some of the members of the Uma Bawang community left and the new longhouse community was set up near the Keluan River and was called Uma Bawang Keluan, or just Keluan. UBRA in Keluan was structured to avoid the mistakes of the elitist longhouse of Uma Bawang. The innovative governance model is based on open access to all interested members including women and the marginalized poor. The planning, programs and decisions are made by all members. The Board is re-elected every two years and elder Kayans serve on a disciplinary advisory board that maintains customary law. Jok Jau Evong serves as the chairman and delegates responsibilities for activities to the different members of the community including youth.

In addition to the innovative governance structure, the leaders of UBRA also set goals for developing community projects that benefit the community equitably. The development projects have not been equally successful but the leadership is willing to take risks and learn from their experiments. UBRA has established communal rice farms and a rice bank as a reserve for poor harvesting years, pig free-range rearing, reforestation / agro-forestry projects, fish rearing, teakwood plantations, wet rice agriculture and frog rearing. The reforestation project has been effective and the KTS Timber Company has recently sought permission from the community to log in their traditional areas. UBRA has coordinated the purchase of a communal rice miller and a new longhouse is being constructed in the traditional way. The women in the Keluan community have launched craft cooperative programs and pepper and fruit tree planting. Celebrations are also encouraged and in addition to the Harvest Festival, the 42 people arrested in the 1988 blockade are commemorated with Warrior's Day.

The ability of the UBRA leaders to innovate is apparent in their creative approach to community development projects. When some of the species of fish they had placed in the fishpond ate too much and ate other species in the pond, the community drained the pond and removed the fish. The pond remained dry for two years during a drought and then was used to create a wet rice paddy. Since the ponds were too close to the longhouse, the chickens ate most of the rice and so the community allowed the pond to refill, fixed the drainage pipe that had leaked water in the past, and returned fish species to the pond that could be sold at a good price.

One of the most successful innovations that UBRA has been involved in is the development of village mapping. UBRA's connection to The Borneo Project in Berkeley, California and to the environmental group Sahabat Alam Malaysia (SAM) led to the development of a mapping initiative. In mid-July 1995, mapping experts from The Borneo Project held a village mapping workshop in Uma Bawang Keluan that was jointly hosted by UBRA and SAM. Members of surrounding communities also came to participate in the workshop and to learn and develop basic survey / mapping techniques. By May 1996, UBRA produced a full-scale land map of Keluan project areas, which is being used for resource management, regaining control of reserved areas of communal forest, and resolving land boundary disputes amongst community members. Those trained in mapping techniques at these workshops have used their skills to develop maps such as the ones used in the Rumah Nor court case that set precedents for indigenous land claims. SAM is currently using GIS to place these maps on computer and allow UBRA to use GIS layers in planning their resource management purposes.

In 1998, UBRA was faced with another challenge that triggered innovative leadership within the community. The Sarawak government had given 60-year leases on all of Keluan's land for oil palm plantations. After continuous protest and letter-writing campaigns, UBRA succeeded in having the Ministry of Resource Planning exclude the Keluan land area from development. UBRA's experience in taking risks and finding innovative solutions has been useful in dealing with emerging challenges. The UBRA community is also building alliances with other longhouse communities in order to strengthen their voice against future threats to their land and resources, and to develop innovative programs such as mapping projects.

LEADER AS COMMUNICATOR **Programa Campesino a Campesino (PCaC) – Nicaragua¹⁵**

Communication is critical to the effectiveness of the Programa Campesino a Campesino (small farmer to small farmer program – PCaC) as the program is structured to be an ever-expanding network of local people participating in the program and communicating its central message of sustainable natural resource management to other farmers and communities. The role of communication in PCaC expands beyond the Nicaraguan program to its involvement in networks of similar programs around the world. Through the education and training program, PCaC provides the skills to small farmers and empowers them to become communication leaders on sustainable agricultural practices and technologies and reforestation. These communication leaders are called promoters.

Promoters are first and foremost farmers. Their main place of work is within their own farm. They are also innovators, experimenting and putting into practice solutions to their problems. As promoters they are interested in receiving other farmers so that they can demonstrate and explain their innovations, and in visiting other farmers to tell their story and to motivate. Having previously suffered at the hands of top down extension programmes implemented by technicians who had no appreciation of farmers capacity to contribute to solving the problems, these promoters meet other farmers capacity to contribute to solving the problems, these promoters meet other farmers with another attitude. Mutual respect and common understanding about opportunities and constraints, contribute to an atmosphere where creativity is let loose.¹⁶

UNESCO's World Heritage Committee has listed Nicaragua's Bosawas Biosphere Reserve as a World Heritage Site. The reserve is located in the northeast of Nicaragua and borders with Honduras. Together with its buffer zone, the Bosawas Biosphere Reserve spans 20,000 square kilometers. It forms the "Heart of the Mesoamerican Biocorridor" with three neighboring protected areas of Honduras. The Bosawas Biosphere Reserve is home to 20,000 indigenous peoples from 2 ethnic groups, the Mayangnas and the Miskitus. Since the end of the war in Nicaragua in 1990, *mestizo*, small-scale farmers, have migrated from different parts of the country to the area around the Bosawas Biosphere reserve and converted significant parts of the forest in the reserve's buffer zone into agricultural land threatening local biodiversity and the livelihoods of indigenous peoples. The indigenous and farming communities are part of the municipality of Siuna that has been attempting to gain a level of autonomous self-government from the Nicaraguan government and their authorities in Managua. Historically, local farmers in Siuna and around the Heritage Site were introduced to sustainable agriculture technologies by outside "experts." This expert advice did not always produce desired results and it also contributed to the increased sense of marginalization among the small farmers.

In the late 1980s, Nicaragua's national union of farmers and ranchers (Union Nacional de Agricultores y Ganaderos (UNAG)) launched the Programa Campesino a Campesino. This initiative is part of a global movement to recognize the value of traditional knowledge of and experience with the land and to enlist the participation of local people in determining natural resource management plans for their regions. The program focused on formalizing and legitimizing the small farmer's traditional process of learning from experience and of exchanging and communicating these experiences with other farmers and communities.

¹⁵ Case study information drawn from PCaC's nomination form for the Equator Prize 2002; Equator Initiative. 2002. *Equator Prize 2002 Finalists*, <http://www.undp.org/equatorinitiative>; Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC.

¹⁶ Espinoza, Abelardo Rivas and Eduardo Zamora Gonzalez. 1998. "The Spirit of Innovation – A Key to the Future: Experience of the Campesino to Campesino Program (PCaC) in the buffer zone of the Bosawas Reserve." *Forests, Trees and People Newsletter*. No. 35 (March), <http://www-trees.slu.se/news/35/35abelar.htm>.

Out of the 140 communities in the Siuna municipality, PCaC's small farmer to small farmer exchanges involve a network of more than 3,000 families in 80 communities.

The communication and exchange program has evolved in an organic fashion that has enabled the spread of information about both sustainable agricultural practices and PCaC's organizational approach. The network expands as campesino trainers train other small farmers who, in turn, become trainers and build the network of communities through their training activities. Organized field days facilitate communication exchanges between small farmers about innovations and successful experiments that have resulted in concrete solutions to farming challenges. The enthusiasm of the small farmers is due to the simplicity of many of the solutions and the ease with which the farmers can apply the solutions in their farms.

The campesino promoter takes advantage of this opportunity [at the field day] to respond to the questions of the participants, explaining the process involved, its advantages and disadvantages. The promoter makes comparisons with the past and the present, facilitates questions and answers and finally invites the participants to take part in the "training" courses, in which they make a commitment to multiply their experiences.¹⁷

The promoter communicates a vision and also encourages the active participation of interested farmers. Follow-up visits in the communities play an important role of solidifying communication and exchange of knowledge as well as building social bonds with the farmers. The effectiveness of the communication within PCaC is due to clear vision and objectives, the personal nature of the communication, the engagement of recipients, and the use of various different communication tools to engage the farmers.

Promotion also includes the promoters speaking personally with friends, communicating their experiences during the exchange visits and discussing points of view, thus creating conditions for joint efforts and knowledge in the task of finding solutions to problems together. Campesino to Campesino has a great number of farmers' original songs and poems, and also theater groups that help animate and spread experiences. Embedded as it is in their culture, the programme fulfils and is strengthened by the spiritual as well as the material.¹⁸

In total, PCaC currently has a network of 300 campesino trainers. PCaC is also being promoted by a local church through its communication channels. The church awarded an environmental conservation and community development prize to PCaC in 2001. PCaC has formed partnerships with the administration of the Bosawas Biosphere Reserve, and the local and national government. It has also collaborated with a local women's organization.

The communication program focuses on topics that are of central interest to the farmers and on communication approaches that encourage participation and empowerment rather than passive acceptance of information. Education courses cover diverse topics including land use management, forest regeneration and crop diversification techniques. Although the initiative began as a network of men, currently there are 90 women amongst the 300 trainers. The community empowerment focus of the PCaC training has enabled a traditionally marginalized population to take control of managing their natural resources. The organic organizational structure also instills confidence and encourages creativity by supporting farmers to take leadership roles and to communicate the ideas to their community. The education and training courses are structured in a way that allows two-way communication and encourages farmers to shift their thinking towards sustainability. The farmers have evolved the program from a focus on experimenting with agricultural techniques to include programs for developing biological

¹⁷ *Ibid.*

¹⁸ *Ibid.*

corridors on their collective lands. This has shifted the focus from solely protecting the biodiversity of the Bosawas reserve and buffer zone to regenerating the conservation areas. The exchanges between small farmers has increased awareness of the economic, ecological and medicinal value of the forests which has encouraged forest regeneration, natural resource management and biodiversity protection. Decades of marginalization and war had led the communities of the Siuna region into focusing on short-term survival. Their engagement in PCaC through education and training programs has led these farmers to shift their perspective and plan and implement projects that ensure food security, health and conservation over the long-term. Local cooperatives have been developed and strong community-led organizations have been established. As the projects are implemented, the farmers learn and communicate their experiences, which build their capacity to undertake further projects.

An effective communication strategy is one that engages the participants.

In this continuous process of communication and interchange, small farmers have begun to value their own knowledge by putting into practice techniques learned from other campesinos. They have become aware of their own development. “Training” activities become opportunities for learning as campesinos share experiences and information instead of sitting in a classrooms being lectured to.¹⁹

The Programa Campesino a Campesino communicated with other programs across national borders from its inception. The South-South networking began with the collaboration between UNAG and a Mexican NGO Servico de Desarrollo y Paz. The Mexican NGO had already developed a program for small farmers in the 1970s and the collaboration enabled small farmers in both Nicaragua and Mexico to communicate with and learn from each other. Since this initial collaboration, PCaC has actively collaborated with small farmers from countries throughout the region including Guatemala, Honduras, El Salvador, Costa Rica, Panama, Belize, the Dominican Republic, Cuba and Haiti. Representatives from similar initiatives from around the world have recently begun to visit the small farmer initiatives and participate in regular meetings in these countries. From 1997 to 2002, Siuna has received visits from seventy campesino leaders and sent twenty campesino trainers to other parts of the world to communicate their experience. The Nicaraguan government has been impressed by PCaC’s ability to improve economic conditions and protect the environment in the Bosawas Reserve area and the Minister of the Environment has officially recognized PCaC for its work. The success of this initiative has served as an inspiration to other communities in the Bosawas World Heritage Site and in the Mesoamerican Corridor. The PCaC approach has already been replicated in Nicaragua and in communities in other parts of the region and around the world.

There are limitations to PCaC and its ability to communicate. The different communities that PCaC encounters require different communication strategies in order to engage small farmers in the program. The PCaC has been criticized for being removed from the realities of the wider political arena. “The Programme’s attempt to encompass producers regardless of religion, political affiliation or farm size is in many ways commendable, and is part of a wider attempt amongst NGOs to foster reconciliation amongst a population still divided by conflicts of the 1980s. However, it seems inevitable that class relations within the peasantry, and between peasants and large land owners will have an effect upon the development and outcomes of the Programme.”²⁰ These differences need to be embraced by the training programs in order for the communication to be effective.

¹⁹ *Ibid.*

²⁰ Hawkesworth, Simon. 1998. “Farmers, Environment and Rural Development in Nicaragua: The Case of *Programa Campesino a Campesino*: Some Initial Findings from the Field.” Paper presented at the 1998 PILAS Conference, University of Newcastle, UK, 5-6 December 1998, <http://www.warwick.ac.uk/society/PILAS/1998/Hawkes.PDF>.

The Campesino to Campesino program has evolved from its initial focus on improving agricultural productivity and conserving the buffer zone forests to a broader agenda focusing on a variety of sustainable development initiatives. The trainer network and cross-border community to community exchanges enable the organizational approach, empowerment message and sustainability practices to continue to be spread to other farmers in the Siuna municipality and in other countries. The farmers are motivated to experiment on their own farms and successful experiments are shared with other farmers. The sense of support and solidarity has resulted in farmers being attracted to the program to learn from the experiences.

The organizational infrastructure and communication and technical skills that PCaC has fostered continue to benefit the communities as they set sustainable development goals beyond the initial goals of PCaC. Initially, PCaC encouraged experimentation and learning exchanges about agricultural productivity. Currently, the communities in the Siuna municipality are also engaged in developing a series of local, farmer-driven biological corridors. This evolution demonstrates how empowerment of local communities through organizational and governmental support can lead to creativity in finding solutions to both food security and conservation. The learning exchanges and communication within PCaC remain open and flexible to these kinds of emergent ideas and encourage leadership towards the goals of sustainability.

LEADER AS LEARNER Association of Manambolo Natives (FITEMA) – Madagascar²¹

In 1998, the Manambolo Initiative was founded when the natives of the Manambolo Valley in Madagascar took leadership and requested the assistance of the World Wide Fund for Nature (WWF) in reversing the destructive natural resources exploitation and social deterioration in the Valley. The resulting partnership between WWF and the local residents led to the creation of a local NGO, FITEMA (Flkambanan'ny Terak'I Manambolo – Association of Manambolo Natives). The Manambolo Initiative was established with the goals of preserving the Manambolo Valley and providing food security for the local residents. In creating FITEMA and managing the Manambolo Initiative, the local people and WWF staff had to engage in a process of active learning about how to work effectively towards these goals.

The Manambolo Valley on the island of Madagascar bridges the Andringitra National Park to the south and the Ranomafana National Park to the north. Together, these protected areas and the Manambolo Valley corridor form the largest unbroken chain (168 km) of relatively intact rainforest and contain the highest level of biodiversity in Madagascar. The Betsileo ethnic group was the first resident population of the Manambolo Valley in the early 1700s. The community elders governed the natural resources of the Valley through the traditional management system of the *Dina*, orally transmitted from generation to generation. The *Dina* covered rules and regulations, social relations, conflict resolution, land management, resource use, and harvesting of diverse local forest and aquatic resources such as honey, eels and crayfish. The elders were assisted in governance by benevolent guardians who were stationed at the periphery of the valley to provide security and to monitor activity in the area. In 1895, the French colonized Madagascar and instituted a new system of laws governing community life and natural resource management that deemed the *Dina* to be invalid and illegal. Elders lost their authority to the Department of Water and Forests who exploited the valley and allowed outsiders to degrade the Valley's resources for profit and gain. Without authority or control, Manambolo local residents of the thirteen villages felt pressure to deforest and to exploit their own forest resources with little consideration for future consequences and a system of "anarchic exploitation" resulted that rapidly degraded the Manambolo

²¹ Case study information drawn from FITEMA's nomination form for the Equator Prize 2002; Equator Initiative. 2002. *Equator Prize 2002 Finalists*, <http://www.undp.org/equatorinitiative>; Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC.

Valley. Social conflict increased as communications fell apart within villages and between villagers and government officials.

In 1998, a number of local residents of the Manambolo Valley took a leadership position and galvanized to halt the social deterioration and ecological degradation of their Valley and to find ways to relieve the vulnerability of the subsistence farming communities to natural disasters. In the adjoining Andringitra National Park, the World Wide Fund for Nature (WWF) had launched an Integrated Conservation and Development Project (ICDP) in 1993. The Manambolo Valley residents approached the project personnel to ask for assistance with regaining control of their natural resources and with re-establishing positive social relations. Although the WWF staff could not address these challenges as part of their work in the Andringitra National Park, the WWF personnel formed a close partnership with the elders and a number of the residents to discuss the problems in the Manambolo Valley. The goal of the partnership was to preserve 5,100 ha of mid-altitude forest and 400 ha of swamps in the 7,500 ha Manambolo Valley.

WWF recommended that the residents create a formal association to address the cultural and resource management challenges. The village elders formed FITEMA (Flkambanan'ny Terak'I Manambolo – Association of Natives of Manambolo). WWF played a central role in facilitating the administration, communication and transportation that were central to the process of developing the conservation plan. FITEMA members aimed to open the communication channels with villagers and with government representatives from the Department of Water and Forests and to reverse the rapid deforestation and exploitation of the natural resources of the Valley. In order to address these challenges, the village elders would need to regain the authority over community behavior and resource use that they had had under the traditional system of *Dina*.

In order to develop a cultural and natural resource management plan for the future, FITEMA and WWF looked one hundred and fifty years into the past. In Malagasy culture, ancestors are venerated and the *Dina* was recognized as an effective governance instrument. This acknowledgement of the *Dina*'s effectiveness in the past in guiding community behavior and natural resource use assisted FITEMA and WWF as they began working with local communities and the government to re-establish and legalize the traditional management methods of the *Dina*. The re-establishment of the *Dina* to resolve conflicts and to create a resource management system was a common goal of the residents.

The leadership used the resurrection of the *Dina* as an opportunity to learn how to adapt it to the current conditions. By adopting traditional resource management techniques that are culturally adapted and accepted by the local residents, the Manambolo initiative could build on this strength to add new elements such as the food security programs. The *Dina* has been adapted and the distribution of tasks has become more democratic through its involvement of all residents in making decisions regarding resource use. The women formed an association called EVA that ensures their joint collective voice is heard and integrated in the decision-making process. The process of re-establishing the *Dina* and creating the forest management plan enabled the local residents to develop a strong common vision of resource management for the Manambolo Valley. The ecological awareness of the WWF personnel working with the FITEMA has increased the general awareness of the local residents to ecological issues. The re-establishment of the *Dina* has resulted in a shift in local perspectives of the forest. WWF assisted local residents in the process of re-establishing and formalizing the community cultural and natural resource management system of the *Dina* and developing the forest management plan. After five years of collaboration amongst the WWF, FITEMA and the Department of Water and Forests, the local community of the Manambolo Valley met the requirements set forth by law (No. 96-025 and décret No. 2000-027) to enable the transfer of all renewable natural resources to their management and control. Technical capacity building was also provided by the Department to enable sustainable forest management. FITEMA and the members of the Manambolo community were open to learning new skills and combining their knowledge with the expertise of the governmental representatives and the representatives of WWF.

In addition to the natural resource problems, the Manambolo Valley natives were beset by extreme poverty. FITEMA recognized that it needed to address both natural resource issues and these food security challenges. The subsistence agricultural practices of the local villagers were also vulnerable to natural disasters, such as cyclones, and frequently included a “period of hunger.” WWF proposed a number of solutions to these problems that were implemented jointly with FITEMA including plantations, epiculture, off-season crops and improved agricultural techniques. The community constructed “appropriate technology” dams of hardened clay for irrigation and increased agricultural output by enlarging the agricultural surface area of the rice paddy fields. The process of constructing these dams led to an increase in social cooperation and cohesion amongst local residents in the Valley and in the ability of the community to discuss water distribution rights. These alternative livelihood and resource management schemes have led to reports of success extending to neighboring communities. Two other communities have asked for assistance in establishing similar cultural and natural resource management plans in their regions.

Learning to manage the natural resources and community development projects has led FITEMA and WWF to establish systems of monitoring. Every Valley resident has become involved in monitoring the effectiveness of the community-based management system. The monitoring program was established in a democratic manner and this has enabled the identification and early resolution of conflicts. The monitoring indicators were jointly developed by FITEMA, WWF and government personnel. They measure biodiversity health, access to the forest, fluctuations of natural resource quantities and qualities over periods of time, the financial management and administrative functioning of FITEMA, and the evolution of the resource management program. The *Dina* tradition of benevolent guardians was re-established to protect the Valley and its periphery and this has led to a virtual elimination of intrusion and exploitation by external visitors. The “anarchic exploitation” of the forests and natural resources has been reversed and there has been an increase in positive relations with government officials and social cohesion within the villages. Local residents and members of FITEMA were empowered to take leadership positions in the sustainable use of their resources and in community life.

The partnership between WWF and FITEMA initially aimed to establish a natural resource management plan and open communication amongst villagers and with the government. As the leaders of the Manambolo Initiative have learned to address these issues, they have found that the program has evolved to become a sustainability program that has been able to achieve a range of ecological, economic, and social objectives of the Manambolo Valley native communities. The success of the food security programs encouraged FITEMA and the community to take the lessons learned from this initiative, and to look for alternative income generation opportunities and for possibilities to improve the social and economic condition of the valley residents. The program’s success has led to an enthusiasm amongst the local villagers and WWF agents to continue to learn from the program and to develop it in a sustainable manner and evolve it in response to emerging challenges. The monitoring processes and *Dina* system of governance provide avenues for learning as the initiative develops. FITEMA will need to address the issue of legal rights to forest utilization through tracing the lineage of villagers and monitoring the distribution of benefits. Discussions about equitable sharing of resources and use of the resources will require the lines of communication to remain open and will require a widespread, continuous willingness to learn amongst villagers and between villagers and government representatives. The application of the *Dina* by village elders will also need to be monitored to ensure equity amongst village communities.

Looking to the future, FITEMA seeks to learn about domestic cultivation, and to continue to increase food security through improved farming methods and alternative crops. They have established goals of tropical forest restoration and the identification of honey export markets. FITEMA aims to improve the ability of the local community to be able to monitor its natural resources in order to gather critical information for learning and adaptive management. The Manambolo Valley initiative and the leadership

provided by FITEMA and WWF have effectively woven together the past management system of the Manambolo natives with WWF's expert knowledge of conservation practices and stakeholder processes. This initiative has a commitment to learn and continues to draw on the past to develop a conservation and poverty reduction plan for the present and the future.

LEADER AS BRIDGE-BUILDER **Kerala Kani Samudaya Kshema Trust – India²²**

On an expedition to document tribal medicinal plants in December 1987, Dr. Pushpangadan and his team of scientists were being guided by members of the Kani Tribe through the hilly terrain of the Western Ghat region of India. The scientists were surprised that the Kani people were not as fatigued as they were during the journey. The Kani guides gave the scientists some of the black fruit of a plant that they had been chewing during the journey and the scientists felt invigorated and full of energy. After much persuasion, three of the Kani tribe members revealed the plant that was the source of the fruit, *arogyapaacha*. This “discovery” by the scientists led to a seven-year research program and the distillation of an herbal extract with anti-fatigue properties, a patent application on the extract, and the product “Jeevani” that was licensed to the Arya Vaidya Pharmacy (AYP).

Mallan Kani, Kuthy Mathan Kani and Eachen Kani were the three informants that revealed the *arogyapaacha* plant and were key catalysts in the initiative surrounding the development of the anti-fatigue drug; however, the central leader and catalyst in this initiative is Dr. Pushpangadan. Having obtained the information from the Kani Tribe, Dr. Pushpangadan made a unique choice in deciding that neither he nor his senior colleague, Dr. Rajasekharan, would receive any of the benefits from licensing fees. He received criticism for this choice. “If [Dr. Pushpangadan] had done what all the ethnobotanist have been doing all these years, that is record and publish the local knowledge with or without value addition or patent and enjoy the benefits oneself, perhaps he would not have had to face any criticism.”²³

When Dr. Pushpangadan had moved to work at the Tropical Botanic Garden and Research Institute (TBGRI), he became interested in value addition and shared benefits for knowledge. In his leadership within this initiative, his ability to build bridges across diverse constituencies was central to achieving success in accomplishing his goal of benefit sharing and also key to understanding the barriers he faced. As defined above, bridge-building is the ability of a leader to understand and effectively work with diverse stakeholders. The bridge that Dr. Pushpangadan built between TBGRI and the Kani Tribe was the motivating relationship for the initiative. The three informants were taken on as part-time consultants to TBGRI to assist in the collection of the plant for study. When Dr. Pushpangadan departed after almost a decade from TBGRI for financial reasons, the informants were removed from consultancy status. In this case, Dr. Pushpangadan had not put into place an effective succession of leadership at TBGRI that would continue the consultancy relationship.

Dr. Pushpangadan's primary objective was to establish a benefit-sharing scheme with the Kani people to respect their indigenous knowledge contribution. Through conversations with Anil Gupta at the non-governmental organization, Shrishti, Dr. Pushpangadan was convinced to move away from placing licensing fee payments and royalties in a state government body and to establish a trust fund that would directly benefit the community. In a community meeting with 40 members of the Kani tribe, the Kerala

²² Case study information drawn from Kerala Kani Trust's nomination form for the Equator Prize 2002; Equator Initiative. 2002. *Equator Prize 2002 Finalists*, <http://www.undp.org/equatorinitiative>; Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC.

²³ Gupta, Anil. 2002. *Value addition to local Kani tribal knowledge: patenting, licensing and benefit-sharing*. IIMA Working Paper 2002-08-02. Indian Institute of Management Ahmedabad, Research and Publications Department, <http://ideas.repec.org/s/iim/iimawp.html>, p. 19.

Kani Samudaya Kshema Trust was established with the intention of channeling capital resources raised from the use of the anti-fatigue herbal product back into the community. The trust includes representatives of 30 Kani settlements and the interest accrued from the trust's capital is intended to be for community empowerment, institution building and development projects. Current projects include support programs for poor members of the community, insurance for pregnant women and for accidental death, and the possible obtainment of a telephone for the area. The trust has not been without its problems. With the first infusion of money from the AYP, a payment of 50,000 rupees was split amongst the three original informants. "Actually they should have been paid from the resources that scientists and research institution (in this case, TBGRI) received. By not doing so, an avoidable impression was created among the Kani tribes that the trust was supposed to benefit only a few community members."²⁴ Awareness about the trust fund is still low and amongst the Kani members that are aware of the trust, the perception remains that it will be ineffective and inequitably distributed.

TBGRI filed a process patent application in 1996; however, the research lab did not have the capability to fully analyze all of the components isolated from *arogyapaacha*. Dr. Pushpangadan contacted the Medical Chemistry department at the Royal Danish School of Pharmacy, in Copenhagen, Denmark to form a partnership to analyze the plant. The Danish partner would be able to co-author on scientific papers produced as a result of the investigation but would not share the patent for the plant. Together, TBGRI and the Danish Medical Chemistry lab successfully analyzed the components and secured funding from the Danish International Development Agency (DANIDA) in support of this project and to establish a full-fledged ethnopharmacology laboratory at TBGRI. By building this bridge and not seeking sole recognition for the work, Dr. Pushpangadan produced benefits for TGBRI and ultimately for the Kani people by producing extraordinary results through the international collaboration for commercial use of the plant.

The critical role that bridge-building plays in determining the effectiveness of Dr. Pushpangadan's leadership can also be determined by the cases wherein bridges were not built and failure to build the bridge caused barriers in achieving the benefit-sharing objective. Although the initiative had success in influencing government policy and the *Biodiversity Bill of India*, Dr. Pushpangadan did not initially involve the Forestry Department in determining the benefit-sharing scheme. "The officials of the Forest Department supported in principle the idea of benefit-sharing, but they had less appreciation for their limited role in design and implementation of benefit-sharing arrangement."²⁵ It can be assumed that global media attention and recognition of the significance of the Jeevani drug product in the international scientific and medical community would lead to an increased ability of Dr. Pushpangadan to bridge between different stakeholders; however, he attributed the indifferent attitude of the Forestry Department to the increase in attention on him and his senior colleague. The attention was a barrier to his ability to bridge because it highlighted the lack of involvement of the Forestry Department in the initial design of the benefit-sharing process.

Bridge-building requires leaders to recognize differences of perception. There are distinct differences between the perspectives of Dr. Pushpangadan and the scientific community and the Kani people in natural resource management. The Forestry Department was concerned about the sustainable extraction of the *arogyapaacha* plant and encouraged Dr. Pushpangadan and the TBGRI to assist the Kani peoples in cultivating the plant rather than extracting the plant from the wild. This led to a training program for the Kani people in cultivation, management and pre-processing of medicinal plants for drug development developed by Dr. Pushpangadan and his team. The cultivation project is providing Kani families with a source of additional and stable income. The involvement in the benefit-sharing process has also led to self-empowerment as Kani Tribe members successfully protested and reversed the Forestry Department's

²⁴ *Ibid.*, p. 26.

²⁵ *Ibid.*, p. 19.

ban on extracting the *arogyapaacha* plant. However, there are still incomplete elements to the true empowerment of the Kani people in this initiative. The local Kani people do not have the capability to produce value-added products nor to create a research laboratory that can benefit from tribal knowledge. In an interview with a representative of the Kani Tribe, the representative suggested that “young Kani boys who are now getting educated can be gradually involved and at a later stage, they could assume the leadership [of such a research lab].”²⁶

Dr. Pushpangadan has been a leader in experimenting with benefit-sharing mechanisms with the Kani people. There are challenges ahead. The term “Jeevani” in the U.S. has been trademarked by NutriScience Innovations, LLC, USA and has not resulted in an agreement for royalties to return to the Kani people or to fund future research. There is still a possibility of establishing a bridge and agreement with this new stakeholder constituency. The Kani people themselves will be faced with challenges as the Kani Trust structure continues to develop. Those members of the community that are opposed to the trust are concerned about the equitable sharing of the funds obtained. There are also challenges in ensuring that the *arogyapaacha* plant is not subject to unsustainable harvesting. There was danger of overexploitation and illegal selling of the plant early in the initiative; however, with continued awareness-raising among the Kani people, supportive institutions, and property rights legitimized by policy and national legal instruments, this can be avoided. Dr. Pushpangadan has provided leadership in the establishment of this initiative and building bridges across constituencies. The long-term effectiveness of the initiative depends on the leadership within the Kani people and those involved in the research and commercial use of the *arogyapaacha* plant.

LEADER AS SYSTEM THINKER Honey Care Africa Ltd. – Kenya²⁷

When Farouk Jiwa returned to Kenya from obtaining an undergraduate degree in environmental biology from Queen’s University, Kinston, Ontario, Canada, he wanted to contribute to his country by finding a niche in the agricultural sector and the environmental market. He recognized the enterprise of bee-keeping as having the potential to reduce poverty and enable environmental conservation, if the correct market linkages and support structures were put into place. Farouk and two other founders invested US \$150,000 apiece to launch the sustainable bee-keeping initiative. The purpose of the initiative would be to empower the rural farmers and local communities in Kenya, supply them with training opportunities and ecological awareness, and provide them with new opportunities to harness the natural resources for their livelihood. The kind of bee-keeping Honey Care Africa Ltd. would encourage would be sustainable, and economically viable. The name, Honey Care Africa Ltd., was selected to reflect the important components of this initiative. This organization would be a private sector organization that enabled the production and purchased quality honey from Kenyans with principled goals of poverty reduction, empowerment, social cohesion and ecological conservation. Their motto was “Honey from Africa: Honey for the World.”

Honey Care Africa Ltd.’s successes have been due the effectiveness of Jiwa’s leadership and particularly the systemic approach he takes to creating the organizational structure and selecting technologies and

²⁶ Quoted in Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC.

²⁷ Case study information drawn from Honey Care Africa Ltd. nomination form for the Equator Prize 2002; <http://www.honeycareafrika.com>; Jiwa, Farouk. 2002. *Honey Care Africa’s Tripartite Model: A New Approach to Solve an Old Problem*; Television Trust for the Environment. 2002. *Bee Fair – Kenya*, <http://www.tve.org/ho/doc.cfm?aid=889>; Equator Initiative. 2002. *Equator Prize 2002 Finalists*, <http://www.undp.org/equatorinitiative>; Nagahuedi Mbongu S. Jonas. 2002. Interviews with Equator Prize 2002 representatives for an analysis of the 27 Finalists. Canada: IDRC.

strategies. By thinking systemically, Jiwa purposefully sought to avoid repeating mistakes of initiatives that solve one problem at a time. The systems approach integrates across social, ecological and economic systems to find solutions that understand and work with the trade-offs amongst the systems and that catalyze benefits across the different systems. In deciding what type of enterprise to embark upon, Jiwa considered social, economic and ecological factors. Bee-keeping can be part of the solution to rural poverty in Kenya because it is an enterprise that can complement subsistence farming with relatively low inputs of land, labor and knowledge for starting and for maintenance. Subsistence farmers can be directly assisted with bee-keeping enterprises. In addition to the economic benefits of reducing poverty, honey harvesting is one of the few environmentally benign enterprises and, in fact, is beneficial to the local environment through the pollinating activity of the bees. Socially, honey harvesting is accepted amongst Kenyan communities as bee-keeping is a traditional activity throughout Africa and honey is an important resource both as a food source and a cultural artifact.

In addition, Jiwa and his partners approached technology in a systemic way. The Kenya Top Bar Hive (KTBH) was introduced by the Kenyan government in the 1960s as an alternative to the environmentally damaging log hives traditionally used by communities. Although the KTBH was the best technology at the time of introduction, there are more appropriate technologies currently available that include movable sections, waterproofing and other amenities. The central problem with the KTBH is that the honey produced is of poor quality and not marketable. The recent arrival of export honeys in Kenyan food stores from USA, Australia, Mexico and elsewhere shifted the demand away from the lower quality local honeys produced in KTBH and log hives. Jiwa recognized the need to improve the reputation of local honey production and ensure a consistent quality of honey. Honey Care was the first to introduce Langstroth hives to Africa to replace the KTBH and log hives. Jiwa and his colleagues applied systems thinking to the adaptation of this technology and took ecological considerations into account. The Langstroth Hive was adapted by Honey Care to the needs of the subspecies of local, endemic bee found in Kenya. This allows the hives to be colonized naturally as opposed to the common method around the world of introducing high-producing non-endemic bees to colonize the hive. The presence of endemic bees and their pollinating activity is beneficial to the surrounding environment as they pollinate a wide range of native trees, shrubs and grasses. The benign methods of removing honey from the Langstroth Hive enable the colony to be preserved and this means that the hive can have a strong resident population throughout the year that produces maximum honey production. The ecological areas that have the highest potential for successful sustainable bee-keeping, because of their regular rainfall, temperature and fertile soils, are the same areas where there is also greater biodiversity that is worthy of protection. The non-invasive and non-destructive nature of bee-keeping enables honey harvesting to take place in parks, nature reserves, buffer zones and forest areas.

Honey Care takes social considerations into account. The supplementary income from bee-keeping has raised the income of many of the subsistence farmers over the poverty line. In 2002, Honey Care had over 10,000 functioning hives in 2,000 rural households with a potential to add US \$600,000 per year to participating beekeepers. Honey Care connects communities to the market and the relatively small size of the product enables this agricultural commodity to be distributed and profitably sold at a good price far from the point of production. Other aspects of Honey Care are deliberately local. With the inclusion of some imported equipment, the hives can be made within the community by local carpenters. The bee-keeping has involved a greater proportion of women who are normally marginalized from economic activity. This gender shift has happened because the adapted hives are located closer to the ground than the traditional log hives and can be located near homes. Honey Care also provides bonuses to women to encourage them to get involved in bee-keeping. There has been increased social cohesion amongst community members engaged in honey harvesting due to their common involvement in bee-keeping and also frequently due to the sharing of bee-keeping equipment. In some communities, the beekeepers have even formed bee-keeping groups and associations. Through the educational system and Kenyan Boy Scouts and Girl Scouts, there has been success in encouraging rural youth and recent school-leavers to

become involved in honey harvesting as well and this has played a part in stemming the rural to urban migration of young people in Kenya. In partnership with the Ministry of Agriculture and Rural Development, Honey Care is creating a national bee-keeping curriculum. 15 District Bee Keeping Officers and various other Government staff have already been trained using this curriculum.

As Jiwa and his colleagues embarked upon their initiative, the founders of Honey Care Africa Ltd. were concerned that they would repeat mistakes of other development initiatives. After much consideration about the causes of past failures, they developed a conceptual model of the synergistic partnership they deemed necessary for success. This model emphasizes the need for projects to be more economically viable, market-sensitive, and realistic than past projects have been. The tripartite model integrates social, institutional, financial and ecological elements and includes the private sector organization, development sector organization and the rural community/farmers engaged in a win-win relationship. Each of the three actors plays specific roles that complement the other two. Together, they form a supportive system that facilitates effective development of the bee-keeping project.

Historically, in past development work, the private sector in Kenya has not played an active role in encouraging development. The tripartite partnership model outlines a proactive role for the private sector to bring its for-profit skills and experience into the development project and to ensure that the project is economically realistic and responds to market conditions. The private sector organization conducts research on the market, develops a strategic business plan, and brings market sensitivity to the partnership. This contrasts with development projects in which the development organizations produce an artificial market for products. In contrast to the inconsistent purchasing by traditional buyers of Kenyan honey, Honey Care guarantees to purchase at the farm gate all honey produced in the hives at a fixed and market sensitive price. The consistent purchasing of honey and direct payments in cash (“money for honey”) has encouraged beekeepers to continue harvesting honey and other rural farmers to join the initiative. While the rural farmers focus on collecting the honey, Honey Care staff collects, extracts, processes and packages, markets and distributes the honey.

The development sector organization / non-governmental organization (NGO) / community-based organization serves as the intermediary between the private sector and the grassroots community and farmers. The experience working with rural communities that the development sector organization brings to the partnership is crucial for its success. This organization provides the outreach that enables communication between the private sector organization and the grassroots community. Financing of the initiative can also be provided by the development sector organization. For example, the development sector organization can provide funding for bee hives, equipment, and training via loans that are recoverable from the farmer in installments as money is received for harvested honey. These recovered funds can then be re-allocated to a new aspect of the project or an entirely new initiative. The development sector organization serves as the primary arbitrator and mediator for the tripartite partnership system to assist in working through conflicts and to ensure that the relationship between the other two parties is mutually beneficial rather than exploitative.

The rural community is both the beneficiary of the program and an active participant in the partnership. In the case of Honey Care’s bee-keeping initiative, the rural communities include predominately small-scale subsistence farmers. The tripartite structure and model for partnership ensures that the farmers receive adequate training and support, financial loans and repayment schemes and cash payments for honey at a fixed and mutually acceptable price. The model empowers the rural communities in a way that is unusual in current agricultural partnerships where often the subsistence farmers are subject to an exploitative relationship.

Honey Care also applies systems thinking in its design of education and outreach programs to these rural farmers. Rather than focusing simply on the techniques of bee-keeping, Jiwa and his team of trainers

provide workshops on a range of topics and seek to raise awareness about sustainability. Education and outreach have become a central part of Honey Care's work and promotion of the hives takes place at demonstrations, field days and *barazas* (open-air community meeting). Thinking about the social system within which they operate, Jiwa and his colleagues have designed the Honey Care offices to be welcoming to the subsistence farmers rather than intimidating. Practical, hands-on bee-keeping training is provided by Honey Care and is focused on experiential learning. In order to reduce the travel time and cost for beekeepers, Honey Care has established three joint training facilities across Kenya. Honey Care provides training material, teaching equipment and experienced training instructors. The training provides Honey Care with the opportunity to weave leadership skills, team building, community participation, management skills, farm economics, and awareness about ecological systems, gender relations, and sustainable development into the training curriculum. These skills have been transferred to other areas of the individual's and community life. Individuals and rural communities are provided with the opportunity to learn about how to create a community association, organize and manage their bee-keeping business, and keep records. The training extends beyond the initial session to include extension and technical advisory services by Honey Care wherever possible. In areas where it is not possible to provide this service, Honey Care assists the community in establishing its own system of technical assistance.

During the bee-keeping training for subsistence farmers, Honey Care places the bee within the context of the broader system within which it lives. The trainers emphasize that bees depend on a healthy ecosystem and natural Kenyan flora to continue producing honey in the long-term. The use of harmful chemicals such as pesticides and fertilizers directly harms the bee colonies and their ability to produce honey. The staff elaborates on the interconnections between bee-keeping, soil conservation, biodiversity preservation and the protection of surrounding watersheds. The bees are described as being bio-indicators for ecosystem health. In certain community projects, Honey Care is working with the local communities to establish tree nurseries and tree planting projects at the community level in addition to the bee-keeping enterprise. It is this holistic and systemic approach to bee-keeping that Honey Care believes will enable the initiative to be sustainable in the long-term. Sustainable bee-keeping satisfies both poverty reduction goals through providing cash income to the poorest populations in Kenya and biodiversity conservation goals through the pollinating activity of the bees, the ecosystem approach, and tree planting initiatives.

RECOMMENDATIONS FOR THE EQUATOR INITIATIVE AND CONCLUSIONS

This paper has focused on the role of leadership as a factor in the effectiveness of local partnership for sustainable development. Drawing on the literature on leadership and community development and on an analysis of the Equator Prize 2002 finalist case studies, this paper outlines five characteristics of effective leadership: innovation, communication, learning, bridge-building, and systems thinking. Each of these characteristics has been further explored through the lens of one of the finalist case studies. In light of the objective that the Equator Initiative has outlined of triggering a worldwide movement to impact policy at the local, national and global levels and to create an enabling environment for the implementation of sustainable development, this paper concludes with recommendations on how the Equator Initiative can nurture leadership as one way of facilitating the creation of local, effective, community-based conservation projects.

In an analysis conducted by the International Development Research Centre on the 2002 Equator Prize finalists, the leadership capacity-building needs were similarly highlighted:

The needs expressed by the 27 finalists are focused in the area of capacity-building, including in ... education and training leaders and community members in effective project management.²⁸

The Equator Initiative can provide leaders of local community-based conservation initiatives with support akin to the support that entrepreneurs in the business world receive from incubators.²⁹ “Incubators provide services such as office space, coaching, seed funding, information technology, public relations, recruiting, legal advice, accounting services, pooled buying programs, and organized networking to budding entrepreneurs.”³⁰ Taking the stance of an incubator, the Equator Initiative can also encourage entrepreneurs and leaders and target funding in a way similar to the way that venture capitalists encourage entrepreneurs by investing in people, ideas, innovation, experimentation and change despite the risk. The Equator Initiative’s current programs on eco-entrepreneur mentoring and learning exchanges indicate that it is already playing a role in serving “as networks of support and encouragement for tomorrow’s generation of civic entrepreneurs” and leaders.³¹ The learning exchange grants provide the finalists of the Equator Prize the opportunity to share lessons learnt and best practices with other communities in the tropics. The eco-entrepreneur mentoring program aims at providing small sustainable business startups with business and financial advice.³² Part of nurturing effective local partnerships for sustainable development is encouraging a new generation of leaders amongst the youth in the tropics. The Equator Initiative is beginning a youth exchange program and this is a critical part of being an incubator for leadership that can be expanded to reach a larger audience of young people.

Leaders in local partnerships can only be effective within an enabling policy environment that facilitates their actions. The Equator Initiative is contributing to nurturing leaders by connecting community interests to policies and enabling local community initiative representatives to have a voice in policy-making and decisions within national governance institutions and in the donor community. In providing resources and learning exchange opportunities, the Equator Initiative has to maintain a clear understanding of the stages and phases of local initiatives in order to identify where a particular innovation is within its evolution in order to provide timely assistance. Recognizing the dynamic nature of local initiatives is critical to providing support for leaders and the initiative as a whole. The leaders of local partnerships can also provide the Equator Initiative with clear focal points for public awareness campaigns and broad educational campaigns to promote sustainable community practices.

The Equator Initiative is a manifestation of society’s aim to learn how to simultaneously address human development needs and preserve Earth’s life support systems. It is contributing to this learning process by identifying local innovations that have successfully combined conservation and poverty reduction goals. In addition to raising the profile of these innovations, it is actively engaging in learning from their successes, facilitating exchanges amongst the practitioners, and disseminating the story of their innovation to other communities and policy-makers. This analytical framework presents the notion of “leadership” as being central to understanding the success of the innovations nominated for the Equator Prize. The Equator Initiative has a role to play in encouraging the emergence and nurturing of leaders.

²⁸ Nagahuedi Mbongu S. Jonas. 2002. *An Equator Initiative Working Paper – Key Factors Leading to Successful Sustainable Community Livelihoods: Lessons Learned and Research Options based on a Desk Analysis of Winning Equator Prize 2002 Projects*. Canada: IDRC, <http://www.undp.org/equatorinitiative/secondary/knowledge/IRDC.htm>.

²⁹ Banuri, T. and A. Najam. 2002. *Civic Entrepreneurship: A Civil Society Perspective on Sustainable Development*. Islamabad, Pakistan: Gandhara Academy Press.

³⁰ *Ibid.*

³¹ *Ibid.*

³² See <http://www.undp.org/equatorinitiative>.