



Canadian International
Development Agency

Agence canadienne de
développement international

INTEGRATING INDIGENOUS KNOWLEDGE IN PROJECT PLANNING AND IMPLEMENTATION

This publication was prepared by KIVU Nature Inc. Funding for this publication was provided by the World Bank and The Canadian International Development Agency.

Copyright 2000 by Alan R. Emery

All Rights Reserved

The publication is available from:

The World Bank
1818 H. Street N.W.
Washington D.C., USA.

Or

The Canadian International Development Agency
200 Promenade du Portage
Hull, Quebec, Canada.

Or

KIVU Nature Inc.
47 Okanagan Dr.
Nepean, Ontario,
Canada K2H 7E9

Canadian International Development Agency
200 Promenade du Portage
Gatineau, Quebec
K1A 0G4

Tel: (819) 997-5006

Toll free: 1-800-230-6349

Fax: (819) 953-6088

(For the hearing and speech impaired only (TDD/TTY): (819) 953-5023

Toll free for the hearing and speech impaired only: 1-800-331-5018)

E-mail: info@acdi-cida.gc.ca

Canada 

Integrating Indigenous Knowledge in Project Planning and Implementation

by

Alan R. Emery, Ph.D.

Partnership Publication of the
International Labour Organization
The World Bank
Canadian International Development Agency
KIVU Nature Inc.

GUIDELINES:

Integrating Indigenous Knowledge in Project Planning and Implementation

by Alan R. Emery

A Partnership Publication

The International Labour Organization
The World Bank,
The Canadian International Development Agency, and
KIVU Nature Inc.

February, 2000

CONTENTS

<i>Contents</i>	<i>iii</i>
<i>Goals of the Guidelines</i>	<i>iv</i>
<i>Acknowledgements</i>	<i>v</i>
Preface: The Basis for the Guidelines	1
Introduction: The Need for Guidelines	3
General Guidelines	8
Worksheets for Integrating Traditional Knowledge	32
Traditional Knowledge Case Studies	41
Guidelines for Indigenous Peoples	54
Guidelines for Proponents	81
Guidelines for Government	108
Guidelines for Non-Government Organizations	120
<i>Appendix #1: Global Knowledge Base</i>	<i>136</i>
<i>Appendix #2: Traditional Knowledge Web Sites</i>	<i>139</i>
<i>Appendix #3: Traditional Knowledge Centers</i>	<i>142</i>
<i>Appendix #4: Traditional Knowledge Literature</i>	<i>146</i>
<i>Appendix #5: Traditional Knowledge Newsletters</i>	<i>157</i>

***G*OALS OF THE GUIDELINES**

- 1) **All development initiatives should strive for sustainable projects.**
- 2) **All development projects should strive to benefit all people affected.**
- 3) **All development projects should strive to have the broadest possible knowledge base to achieve the best possible results.**

***B*EST PRACTICE PRINCIPLES**

- 1) **Indigenous communities should be able to provide free and informed prior consent before any development project is initiated.**
- 2) **Indigenous communities should be able to choose their own representatives and not have them assigned.**
- 3) **Indigenous traditional knowledge is best acquired by engaging indigenous holders of the knowledge as active participants in the project, using traditional knowledge as part of the team of experts.**
- 4) **Indigenous peoples participation as bearers of traditional knowledge is best achieved by observing trust, respect, equity, and empowerment as the basic principles of interaction.**
- 5) **Traditional rights to resources, self-governance, and the integrity and autonomy of indigenous peoples' cultural realities should be respected.**

ACKNOWLEDGEMENTS

It is a pleasure to acknowledge the participation of so many people from around the world who participated in the preparation of these *Guidelines*. Literally hundreds of people generously contributed suggestions for improvement to the early drafts. Many of these people were indigenous holders of traditional knowledge, others were representatives of governments, corporations, and non-governmental organizations. Still others were experts on various aspects of related fields of endeavour, and finally many were participants in workshops held specifically to undertake rigorous testing of the principles and recommendations in the *Guidelines*.

The principal supporter of the effort to create these Guidelines through the several drafts has been Peter Croal of the Canadian International Development Agency. Without his enthusiasm and tenacity the progress that we have achieved so far would simply not have been possible. Reiner Woytek of the World Bank has contributed much energy and critical thinking to ensure that the Guidelines have a highly supportive, yet balanced style throughout. Huseyin Polat and Doming Nayahangan of the International Labour Organization have also been two very special supporters of the Guidelines. Their efforts in organizing and managing the Manila workshop, as well as their constant intellectual contributions have greatly added to the effectiveness of these *Guidelines*. I would also like to acknowledge the sensitive contribution of Leslie Patten who assisted in drafting the women's sections of the original Guidelines.

COMMENTS FROM AROUND THE WORLD

“Exceptionally important and needed” (R. Goodland – World Bank, USA)

A much needed document... very well done and very well thought out” (S. King – Shaman Pharmaceuticals, USA)

“Brings out clearly the many aspects of this complex issue.” (M.S. Swaminathan – Swaminathan Research Foundation, India)

“I think it is a superb initiative, long overdue.” (R. McConnell – Natural Resources, Canada)

“This is a wonderful contribution and I am extremely pleased with your efforts.” (D.M. Warren – Indiana State University)

“Heartily congratulated by the focus group ... a document which is needed by many organizations.” (Results of a workshop from Concordia University, Canada)

“...commend your team for taking the initiative to develop it. It is clear that a lot of time and effort has been put forth in preparing it.” (James Ransom, Assembly of First Nations, Canada)

A welcome (and much needed) addition to the development planning/environmental assessment worlds.” (Catherine Hill, FAO)

“A very well researched paper which raises a number of thought-provoking issues of concern to Aboriginal peoples. I especially like the division of the paper into three sections under the headings of Indigenous, Corporate, and Government.” (P. Cuillierier, Indian and Northern Affairs, Canada)

“... impressive set of guidelines. ... an important step in mainstreaming issues related to indigenous communities by, first, promoting recognition of their rights to land and resources, and second, by providing guidance for incorporating their concerns into environmental assessments. We are in agreement with your recommendations...” (M. Concepcion J. Cruz, Global Environmental Facility)

“On the whole...the guideline is intelligent and interesting covering a wide context...” (Z. Tuli, International Labor Organization)

“An important step in the direction of improved cross cultural understanding and how to deal with different perceptions of environmental issues and land use.” (Ellen Woodley, Consultant)

“I certainly find a lot in them to agree with, and plan, if I may, to begin using them immediately in classes I teach on dealing with traditional cultural issues in environmental impact assessment...” (Tom King, Silver Springs, USA)

“I can not begin to express my thanks to you for sending me this prototype in E.A...” (Diane Henry, Stony Point and Kettle Point Negotiating Committee, Canada)

“Thank you! Learning about this work I felt as though I'd been wrenched out of a daily grinder and allowed to breathe some fresh tropical air.” (Nancy Wildgoose, Canada)

“This is a very ambitious and difficult undertaking. The Canadian International Development Agency (CIDA), the Centre for Traditional Knowledge (CTK), the World Council for Indigenous Peoples (WCIP), and Environment Canada should all be commended for even attempting it. The author, Alan R. Emery & Associates, has produced a tidy format that presents the material in an attractive way.” (G. Wagner, Wagner and Associates, Canada)

“It will be a valuable tool for indigenous peoples, governments and private proponents involved in environmental assessment of project proposals.”

(J. Crook Indian and Northern Affairs, Canada)

“At the end of the testing activity, the participating stakeholders including NGOs and other support groups concluded ... that with these Guidelines serving as a framework for dialogue, the Indigenous Peoples, Government, and Business would find it easier to come to terms with one another in relation to the planning and implementation of environmentally sensitive development projects.”

(Workshop conclusions, Manila, Philippines)

PREFACE:

THE BASIS OF THE GUIDELINES

I wrote these *Guidelines* to help draw together the wisdom of different perspectives about the world around us so that development projects have an improved capacity to be carried out to the benefit of all who are affected by them.

The ultimate aim of the *Guidelines* is to help develop a framework within which affected indigenous peoples can expect to receive information that will allow them to choose, on an appropriate collective basis through free and prior informed consent, whether a development project should go ahead. In the event they choose to have it go ahead, that they are offered the opportunity to participate in the planning and implementation of the project, using their traditional knowledge systems to help guide the decisions that will affect their future, and that the use of that knowledge and their participation is handled with respect, trust, equity and empowerment.

Modern advances in fields of high intensity agriculture, mining and oil and gas extraction, increasingly complex technology, planet-wide communication, and the geometric increase in human populations have placed an amazing diversity of cultures and ethnic diversity immediately in touch with each other.

Over the last five hundred years, the global expansion of populations has resulted in the exploration and conquest or colonization of almost the entire planet. Very few places in the world today, are governed by the indigenous peoples who were there since before historical records began.

Thus, for historical reasons, many indigenous peoples, although certainly not all, find themselves in a complex world that is not always able to understand their values, their normal life style, or their way of perceiving the world. In some cases, the transition from traditional indigenous life styles to western styles has been effective and beneficial, but in many, if not most cases, the indigenous peoples have not benefited as fully as they might have.

The knowledge systems of indigenous peoples are quite varied around the world, but there are consistent patterns in the way the knowledge is acquired and in the nature of the content of indigenous knowledge systems. Indigenous knowledge systems are quite different to western, science-based knowledge systems, but have many aspects that complement science. To give but two examples, indigenous knowledge is intensely local in its factual information, whereas science usually must carry out new studies to gain the same information that is already present in indigenous knowledge systems. Science generally has a short-term base of information that it can use, whereas indigenous knowledge can draw on a very long-term information base. Thus, there is a great advantage to using the two knowledge systems together.

The *Guidelines* address the questions and issues that govern how this can be accomplished while respecting the perceived rights of everyone concerned.

In writing these *Guidelines*, I have taken the position that when dealing with human lives and their support systems, it is important to begin with the assumption of individual human rights -- the panoply of collective rights flows properly from this base. I have also taken the position that indigenous peoples should be afforded certain rights that are a result of their long history in the area. Thus, traditional rights to resources including ancestral domains, self-governance, self-determination (or autonomy), cultural integrity, and social justice are fundamental to framing the guidelines. At the same time it is important for every stakeholder to recognize that national laws and policies should be able to accommodate the traditional laws, cultural diversity, and oral traditions. At least at this writing, I know of no country in which this has been completely and successfully implemented.

Increasingly, indigenous communities are being included in the discussion periods that precede the implementation of development projects, but this is a relatively recent trend. The *Guidelines* take the position, and offer advice on how to provide for the indigenous peoples' desire that their collective right to choose whether a development project is implemented should be based on "free and informed prior consent." This is not always a simple task, and advice is offered on how to form or recognize appropriate representation of the indigenous communities, as well as how to know what is credible traditional knowledge and what is not.

The *Guidelines* do not make the assumption that indigenous knowledge or practices are superior to other systems of knowledge or practices. Neither do the *Guidelines* assume that western knowledge or practice is superior to traditional knowledge. Instead, the *Guidelines* recognize that both systems have strengths that can help the other system when they are invited to work together.

Finally, the *Guidelines* provide a way to help strike a rational balance between the protection of the environment, culture, and socioeconomic well-being of the indigenous communities and the changes that necessarily come during the course of project development. The specific advice recognizes that enormous opportunities are potentially available to indigenous communities, but it also recognizes that the risks can be equally great. Historical, and some, although definitely not all, current proponent and government practices have lead to development projects that did not benefit the indigenous communities they affected. In part, the *Guidelines* seek to correct that pattern.

Alan R. Emery, February 2000

INTRODUCTION: THE NEED FOR GUIDELINES

BACKGROUND

Best practice in development calls for projects that benefit to all and result in a sustainable socio-economic and natural environment. There is an increasing appreciation of the advantages of using science and technology together with traditional knowledge to find mutually beneficial results from development projects. These goals can be met within development projects through cooperation and mutual understanding, combined with an understanding of the traditional rights of indigenous peoples.

Indigenous peoples want to have an integral and meaningful role in making decisions about their own future. A growing body of international law, fiscal and policy support in many countries, and an increasing interest in understanding the natural, cultural, and spiritual world of indigenous peoples have highlighted an opportunity. Development projects are beginning to include traditional knowledge in planning and implementation when indigenous peoples are directly or indirectly affected.

Many governments, development agencies, and corporations are interested in the principles that underpin indigenous peoples' traditional knowledge systems. The *Guidelines* capitalize on that informed interest. Many indigenous peoples find themselves in a transitional stage, facing the demands of a changing and demanding world, but still rooted in traditional life styles. This may place them in difficult living conditions. Projects that are planned and implemented using traditional knowledge help reduce the difficulties of this transitional condition for indigenous peoples.

Traditional knowledge is more than a simple compilation of facts drawn from local, and often remote, environments. It is a complex and sophisticated system of knowledge drawing on centuries of wisdom and experience. It also constantly grows and changes with new information. To use this sophistication one must include the indigenous peoples themselves as practitioners.

Traditional knowledge systems of indigenous peoples, while highly variable in their content and style, nonetheless all have a great deal to offer in sustaining life on the planet. Most traditional knowledge systems assume that people are part of the land, not that they own the land, so they consider themselves as true guardians. The wisdom derived from this philosophy can be used to advantage when planning for sustainability.

The *Guidelines* can be used as triggers for actions. The *Guidelines* recommend that all stakeholders include valuable information and accumulated wisdom from people who lived for uncounted generations on the same land. They provide guidance on how to derive mutual benefit to all parties from development projects.

The *Guidelines* do not, and should not, attempt to teach traditional knowledge. In the same way that any other complex and vast body of knowledge, methods, belief systems, and assumptions requires context, language, and skilled interpreters to be used effectively in planning or implementation, so it is with traditional knowledge. Legitimate holders of traditional knowledge range from highly skilled and experienced Elders to hunters and trappers, gatherers of herbs and practitioners of many kinds. Men and women reach equivalent levels of wisdom and understanding in traditional ways. Often, however, there are important gender differences in the knowledge content and in the assumptions for its use.

WORKING TOGETHER

Many advantages derive from the use of scientific approaches to development projects. In fact, the major advances in living standards that depend on technological change have primarily been the result of scientific discoveries in the last few centuries.

It is important to understand that the practice, as opposed to the theory, of both science and of traditional knowledge can be faulty, regardless of the accuracy of the theoretical models in each knowledge system. In addition, the simple transfer of practice from one system to another may not work well without thoughtful adaptation.

In the north, for example, Inuit peoples traditionally abandoned their sleds when they had worn out, allowing the bone, leather, sinew, and wood to decompose and return to the earth. Abandoning a worn out Skidoo does not have the same result. Instead of returning to the earth, the metal, plastic, and gasoline can cause significant damage. To cite but one other example; in some tropical islands, the traditional way to procure salt is to dig a shallow pond and allow the sea water to evaporate, leaving behind the salt. Salt gathered this way in some areas today is polluted with heavy metals, and can cause severe medical problems.

It is equally true that high-tech solutions to perceived problems in traditional societies may not be helpful. In the north, for example, several villages were designed and built on the assumption that the villages had electric power and running water. Now the bathtubs are used outside the house for butchering seals that have been killed for food, leather, and fur. In the south, many communities have a shortage of water. The “obvious” solution of providing water pumps is often fraught with technological and cultural difficulties that make this apparently simple solution a complete waste of money.

These are not guidelines on how to carry out an environmental impact assessment or how to plan a development project. They are guidelines on how to include indigenous peoples and their knowledge in development projects so that mutually beneficial results occur.

The true benefit of these guidelines is to suggest ways in which the two systems can be used together to improve the ultimate results of the projects and to include indigenous peoples in planning and implementing development projects.

ILO CONVENTION 169 CONCERNING INDIGENOUS AND TRIBAL PEOPLES IN INDEPENDENT COUNTRIES

This is perhaps the single most important document to define the rights, recognize the aspirations, and call attention to the many contributions of indigenous peoples. The convention recalls the terms of the United Nations Universal Declaration of Human Rights, The International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, and the many international instruments on the prevention of discrimination. It revises the 1957 Indigenous and Tribal Populations Convention (107).

Several parts of the Convention are directly applicable to the acquisition of indigenous knowledge and the inclusion of indigenous peoples in the development process. This is a significant part of the Convention, placed there because of the historic treatment of many indigenous peoples. In many of the countries where they reside, the dominant culture is there because of conquest or colonization. These provisions are also present in the Convention because of the close relationship of most indigenous peoples to the land. The Convention seeks to give indigenous peoples an equal, but special, place in the nations of the world.

The approaches suggested in the *Guidelines* directly support the underlying principles of ILO 169. The *Guidelines* recommend:

- using the same definition of indigenous
- government action, with the full participation of the indigenous peoples,
 - ⇒ to protect their rights and respect their integrity
 - ⇒ to provide special measures to protect their persons, institutions, property, labour, cultures, and environment
 - ⇒ to recognize and protect their social, cultural, religious and spiritual values
 - ⇒ to make a special effort to consult with the people acknowledging their unique procedures
 - ⇒ to make special provisions so that the indigenous peoples have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions, and spiritual well-being
 - ⇒ to assist them to make their own decisions concerning the land they occupy or otherwise use
 - ⇒ to promote their participation in any formulation, evaluation, or implementation of plans and programs for national or regional development that may affect them directly
 - ⇒ to ensure that whenever they participate in a development project, that they benefit through the improvement of life, work, and levels of health and education
 - ⇒ to ensure that the environment in which they live is protected
 - ⇒ to promote and protect their customs and customary laws
 - ⇒ to ensure that, should it be necessary to safeguard their rights against abuse, they can take legal actions, either individually or through representatives.
- The *Guidelines* further support and work to underscore the specific ILO 169 articles regarding “Land”:
 - ⇒ to respect the special importance for cultures and spiritual values of the peoples concerned of their relationship with lands or territories which they occupy or otherwise use
 - ⇒ to respect the ownership and possession of the land which they traditionally occupy
 - ⇒ to respect the traditional rights to resources in territories where the resources have been used for subsistence and traditional purposes (especially in the case of nomadic peoples who do not occupy the land continuously)
 - ⇒ to respect the rights of the indigenous peoples to participate in the use, management, and conservation of the resources they traditionally use
 - ⇒ to consult with and respect the wishes of indigenous peoples with regard to any damage that might incur from withdrawing mineral or sub-surface resources, before undertaking any actions
 - ⇒ to ensure that wherever possible the benefits from development activities are equitably shared with the indigenous peoples
 - ⇒ to be especially cognizant of the exceptional cases only in which indigenous peoples can be relocated without their freely given permission

- ⇒ to be especially aware that persons not belonging to indigenous peoples not be allowed to take advantage of their customs, or lack of understanding of the laws of the nation to secure ownership, possession or use of the land that traditionally belongs to the indigenous peoples
- to provide guidance to indigenous peoples' capacity building in vocational areas that can help them move back and forth between traditional and western styles of commerce
- and finally to encourage the use of traditional languages in communicating information about development projects.

PREPARATION OF THE GUIDELINES

The first draft version of the Guidelines was developed for the World Council of Indigenous peoples, and was published in 1997. Since then well over 400 reviewers around the world have seen the Guidelines.

This revision reflects all the comments and suggestions received to date through reviewers, the international workshops convened to examine the *Guidelines* (Christ Church, New Zealand; New Orleans, USA; Montreal, Canada; and Manila, Philippines), and suggestions received through the author's web site (<http://www.kivu.com>).

LESSONS LEARNED

There have been many lessons learned as a result of the reactions to the *Guidelines*, their use as a teaching tool, and from people who have used them in the field. While most of these lessons have been integrated into the text of the *Guidelines*, three lessons cannot easily be defined in *Guideline* form.

Lesson #1:

The first lesson is that no single document can offer solutions to all the issues and problems that attend the integration of traditional knowledge in projects from start to finish. There are simply too many variables: the processes and rules vary from country to country, profound and important cultural differences are too numerous and too region-based to be able to cover them all, and finally each project presents its own unique problems. There cannot be a simple step-by-step process defined that will work in all cases. The *Guidelines* presented here should be considered a template. Users can add to and modify this template to make it more specific to their region or culture.

Lesson #2:

The second important lesson is that a text document such as this one has a broad appeal to people who are easily able to read. Unfortunately it is least well adapted to the very people who most need it. Many indigenous peoples are ill-at-ease with text-based documents or cannot use them at all. Thus, new versions of this document are needed in other media, such as graphic illustrations, videos, or street theatre story-telling

Lesson #3:

There is an almost automatic assumption that the values of indigenous peoples are negotiable because of the overriding importance or benefit of the project to other people. It is important to avoid simplistic equations such as "the desires of a great number of people override the needs of a small number of people." Such simplistic equations are too easily misused. Preserving the autonomy of indigenous local peoples is an important part of responsible development.

KEY PLAYERS

For the purposes of these *Guidelines*, four major parties are directly involved in the process of a development project: government regulatory agencies, proponents of projects (usually, but certainly not always a corporation), indigenous peoples and local communities, and special interest non-governmental organizations (NGOs).

Proponents of projects need to be aware that there can be advantages to using traditional knowledge. They should also be sensitive to the interests, concerns, and rights of indigenous peoples.

Indigenous peoples and local communities need to know what their rights are, and how to negotiate effectively with proponents governments, and NGOs.

NGOs, whether local or distant in origin, support, technical, or advocacy-based, need to take care that their participation is appropriate and approved by the local people.

Governments are called on to recognize, protect, and monitor the rights of both the proponent and the indigenous peoples.

The *Guidelines* suggest a framework within which stakeholders in development projects can ensure appropriate inclusion of indigenous peoples and their traditional knowledge as part of the process.

GENERAL GUIDELINES

SUMMARY OF THE GENERAL GUIDELINES

The general guidelines are arranged so that a proponent, government, or NGO can work through them in planning a development project that will contact indigenous peoples and incorporate their traditional knowledge as part of the project planning, implementation, operation, and evaluation. Think of these as a stages in the development of your own thinking about how to approach the project. Later they can be topics within the project plan to help define actions. Eventually you will have used them to create your own blueprint for all the stages of the project. There are seven basic guidelines that indigenous peoples will expect you to observe:

1. **Locate and identify indigenous peoples in the area of your project**

The first step is to find out if there are any indigenous peoples in the area, and if so who they are.

2. **Respect the traditional rights of indigenous peoples**

If there are indigenous people in the area, they have traditional rights to resources and a right to protect their own knowledge, especially if it is sacred or represents intellectual property.

3. **Plan for sustainability, protect the long-term**

Indigenous people are closely tied to the land. They will want to know that the project will be sustainable over a long term (generations of people) or that there is a plan to know what will happen after the project is finished and its operational life is over.

4. **Understand the nature of indigenous knowledge before attempting to collect or use it**

Indigenous knowledge has many characteristics that may be unfamiliar to non-indigenous people. These characteristics will affect how you acquire and use the knowledge. The simplest and most effective method is to build the indigenous knowledge holders into the project at all stages.

5. **Build on the strengths of indigenous knowledge**

Indigenous knowledge is intensely local and of long duration. It uses indirect indicators to predict events. These are complementary aspects to the strengths of the scientific basis of development projects. The two can work well together if guidelines #4 has been well-understood.

6. **Include indigenous knowledge and peoples from the very beginning**

While a project is still in the thinking stages, it is a wise decision to include the indigenous peoples and their knowledge to assist in determining the feasibility of the project. Bringing the indigenous peoples in after the decision has been made to carry out the project is not respectful of the integrity and autonomy of the indigenous peoples.

7. **Acquire indigenous knowledge on the basis of trust, respect, equity, and empowerment**

Finally, once you have decided to embark on the project, and to include indigenous peoples and their knowledge systems, there is a basic attitude that will be expected of anyone that requests access to the indigenous knowledge. These four aspects; trust, respect, equity, and empowerment, may seem obvious, but holding to them can be challenging because it will bring your own values and views in to question.

GENERAL GUIDELINE #1:

LOCATE AND IDENTIFY INDIGENOUS PEOPLES

INDIGENOUS PEOPLES ARE SELF-DEFINED AND GOVERNED

According to the International Labour Organization, there are about 5,000 different indigenous or tribal peoples living in seventy countries. The total world population is estimated at about 300 million indigenous peoples. All definitions of the concept of “indigenous” regard self-identification as a fundamental criterion for determining the groups to which the term indigenous should be applied. Within the UN family, the International Labour Organization (ILO Convention 169) defines Indigenous and Tribal Peoples as follows:

Tribal people in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations;

People in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.

Use the simple definition: indigenous peoples are self-identifiable as a people, wholly or partially self-governed, and live within a larger nation.

TRADITIONAL LOCAL COMMUNITIES DEFINED

Local communities often have a fund of knowledge and expertise that is extremely valuable in project planning and implementation. Local people have specific interests in the impacts that the project might have on them. Local communities have a sense of self-identity that is an important aspect to be preserved. For these and many other reasons, it is important to ensure that local communities are intimately involved as stakeholders in project development when that project has a direct or indirect effect on them.

DEVISE VARIED SOLUTIONS TO FIT VARIED PEOPLES

A very large group of people (numbering close to 2.5 billion) live in a traditional life style close to the land, in communities that have been in existence for centuries. The degree to which technology has touched and influenced their lives varies immensely from the relatively well-equipped North American and European fishing and farming communities to isolated groups of nomadic wanderers in the farthest reaches of a tropical jungle in New Guinea who are unfamiliar with most modern technology.

Within this very large group of people, there are two important subsets of people who hold the type of traditional knowledge: indigenous people, and traditional local communities.

GENERAL GUIDELINE #2:

RESPECT THE TRADITIONAL RIGHTS OF INDIGENOUS PEOPLES

EXISTING LEGISLATION CAN USUALLY BE USED TO PROTECT INTELLECTUAL PROPERTY RIGHTS

Most traditional knowledge is held in the minds and practices of the people. Neither western nor traditional knowledge holders nor governing authorities consider pure knowledge to be something a person can “own.” It is common property. In most traditional societies, the concept of proprietary information or of selling traditional knowledge is not easily acceptable. Where traditional knowledge has been recorded in some form (book, record, tape, video, etc.), and that recording was done with the agreement of the indigenous peoples, then the recording can be purchased and used directly (respecting the conditions under which the record was created). Sometimes, the intellectual property is physically demonstrable; a written document, a recording of music, a painting or drawing, an electronic record. Statues, paintings, and drawings that embody traditional knowledge are able to be protected through copyright laws. Recordings of traditional songs, stories, and music are also capable of being protected.

Indigenous peoples usually consent to share their wisdom on an individual basis, but not if it is commercialized, distorted, trivialized, or otherwise debased. One innovative project that faces this issue is run by indigenous peoples in India. A network of entrepreneurial developments is based on traditional knowledge in the form of value-added tangible items that can be legally protected through copyright or patent. Information on this project is available in the newsletter “Honey Bee.” This newsletter is available by writing to Prof. Anil K. Gupta, Editor, Honey Bee, Indian Institute of Management, Vastrapur, Ahmedabad, 380 015, India (e-mail honeybee@iimahd.ernet.in).

Some complications

Intellectual property rights attempt to protect the ownership of the intellectual content of the works of an individual or a legal entity. This concept is complicated when traditional knowledge is involved. By its very nature, traditional knowledge is communal, not personal. Legislation concerning intellectual property rights is able to protect traditional knowledge only when it can be identified as belonging to a person or some group of persons who specifically developed the knowledge. Currently special alternative systems (sometimes referred to as *sui generis* systems) are being developed. The best examples of international debates developing *sui generis* approaches are in the implementation of the General Agreement on Tariffs and Trade (GATT) under the auspices of the World Trade Organization; the development and revision of the Food and Agricultural Organization (FAO) Global Plan of Action and International Undertaking on Plant and Genetic Resources; and the continuing evolution and development of the Convention on Biological Diversity through its Conferences of the Parties.

LEGISLATION TO PROTECT TRADITIONAL RIGHTS TO RESOURCES IS RARE, YET THE HUMAN NEED MAY BE GREAT: BE SENSITIVE TO THE RESOURCE NEEDS OF INDIGENOUS PEOPLES

Traditional rights to resources are intended to protect access to food, medicine, travel routes, sacred places and other resources for indigenous peoples who have lived on the land for very long periods of time. Traditional rights to resources are currently largely based on human rights principles, not legislation. In most countries, indigenous peoples do not own land or have the right to use without clear legal title. Very few traditional groups can demonstrate clear legal title.

Defending Traditional Rights to Resources

Even within countries that acknowledge traditional rights to resources, resources often must have been used *continuously*. This can be very difficult to demonstrate in legal terms. In a precedent-setting case in Canada, the British Columbia Supreme Court (the Delgamuukw decision) recently recognized oral traditions, performances, stories, and legends as evidence in court. The case recognized that in the absence of written deeds, indigenous peoples could use their own traditions as a means of demonstrating continuous use. Importantly the court further recognized that continuous physical presence was not the only criterion. Periodic, long standing cycles of visits or the presence of sacred objects or graves also demonstrated traditional rights to use the traditional resources.

In all cases, however, the intention of granting rights to traditional resources, is for traditional uses of the resources. It is not intended to provide a means to undertake large scale commercial ventures.

Protection in the Absence of Local Legislation

There are essentially four processes that can be used to develop legal instruments to protect traditional resource rights:

1. identifying “bundles of rights” expressed in existing moral and ethical principles,
2. recognizing rapidly evolving “soft law” which is currently being influenced by “customary practice” and legally non-binding agreements, declarations, and covenants,
3. harmonizing existing legally binding international agreements signed by nation states, and
4. “equitizing” to provide marginalized indigenous, traditional, and local communities with favourable conditions to influence all levels and aspects of policy planning and implementation.

International Conventions

The most important document to attempt to establish traditional resource rights is the ILO Convention 169 Concerning Indigenous and Tribal People in Independent Countries. This does not have the force of international law, but many countries use it as a guiding principle.

Another important document that recognizes traditional rights to resources is the Convention on Biological Diversity, which was signed by many countries in 1992. Many of the signatory countries have also ratified the convention in their own governments, giving it the force of international law. However, an initial caveat in Article 8 limits the requirement to “as far as possible and appropriate”, and a specific caveat in section (j) empowers the nation in question to apply the right subject to its own internal legislation. So the Convention is only as strong as the national legislation of the country in protecting traditional rights to resources.

Nonetheless, these conventions are important platforms upon which sensitive policies, regulations, and even legislation can be based.

GENERAL GUIDELINE #3:

PLAN FOR SUSTAINABILITY; PROTECT THE LONG-TERM

GOOD GOVERNANCE PROMOTES HEALTHY, PRODUCTIVE CITIZENS

Many indigenous communities are in transition between their traditional and western life-styles. During this transition, living standards may fall far below an acceptable norm for access to basic human necessities. Often poor conditions can be improved by elementary infrastructure support services. For many local and traditional communities, moving away from welfare dependency attitudes, and transforming aid into self-sustaining projects can be difficult.

The rights of indigenous peoples living in resource-rich areas need to be protected by sovereign nations or proponents in planning and implementing development projects. This protection should take the form of well-integrated planning processes that have the ultimate objective of benefits to all, and sustainability of both the project and the community in which it is developed. Best practices are the direct result of proponents who place a high priority on cultural differences and on the close tie to the land that characterizes indigenous peoples. Best practices are the result of knowing how to bridge the differences in the culture and knowledge systems. Indigenous peoples deserve to participate in shaping their own destiny; and respectful proponents and governments ensure that this happens. As an added bonus to these informed practices, traditional knowledge can be an important and helpful source of knowledge in project planning and implementation, adding significantly to the effectiveness and efficiency of the project.

ENCOURAGE THE INCLUSION OF WOMEN

Including traditional knowledge can encourage the inclusion of women by recognizing the value of their knowledge. Women in many traditional communities may not have equality of power in decision-making or as participants in the development of their societies, but they can often influence the decisions in informal ways. Finding culturally sensitive ways to include women can shift their influence from minor or non-existent to an important contribution. By being included, women can play a role in the fundamental decisions about their future, rather than leaving it in the hands of men.

CONSULT LOCAL COMMUNITIES FOR INDIGENOUS KNOWLEDGE ABOUT ENVIRONMENTAL SUSTAINABILITY

Many, although certainly not all traditional communities want to change their traditional life style. Many seem to favour a mixture of traditional and technological life styles, but most traditional cultures espouse a sustainable relationship with nature, and a secure and healthy life. Indigenous peoples are often located in rural environments, including some of the most untouched regions of the world, and may have little experience with technology. Because many of the most vital cultural and spiritual values indigenous peoples hold are rooted in the land, and because many development projects can modify the land, indigenous peoples can be profoundly affected. In some cases, the impacts are very positive, but there is always an immediate need to consider solutions to any potentially negative impacts.

Negative environmental changes can be caused by projects that are beneficial in other ways. Mining and forestry can dramatically alter the landscape and productivity of traditional natural resources. Shifting from traditional agriculture which encourages diversity, to intensive agriculture which sacrifices diversity to productivity, can have a negative impact on indigenous peoples and their lands. Construction of major infrastructure, such as transportation, or increased urbanization can significantly reduce traditional resources. These projects have many beneficial results, but it is important that they consider the potentially harmful impacts, especially on indigenous peoples. When indigenous peoples are involved, negative environmental impacts can be very serious, simply because people living in traditional life styles rely heavily on a healthy environment, an environment that is well-understood within the traditions of the indigenous population. Inclusion of the traditional knowledge highlights environmental understanding.

Best practices in development projects include the creation of a plan for sustainability that lasts long after the end of the project's operational life. Factors should include sustainable cycles for economic, social, cultural, community and individual health.

BE TO SENSITIVE TO LOCAL INDIGENOUS CULTURAL AND SOCIETY

Take the time to understand the cultural etiquette of the community and the potential health risks. This is an important first step in the development of a protocol for the personal interactions that must accompany any project that brings new people to a traditional community.

Traditional knowledge can assist in helping to avoid problems associated with drugs and alcohol that often accompany sudden increases in financial resources. An emphasis on traditional values can help to predict and mitigate the effects of cultures that have different value systems including the treatment of women, conflict resolution style, and acceptable norms of behavior. If people from distant locations are to interact directly with indigenous peoples, health problems can result from importing pathogens to which the indigenous peoples have no natural defences. As people travel more, the problems associated with exotic infectious disease is lessened, but it is still a factor in remote locations. Traditional healing patterns may help, but not be able to cope. However, traditional ways of interacting often minimize the potential for infections.

GENERAL GUIDELINE #4:

UNDERSTAND THE CHARACTERISTICS OF INDIGENOUS KNOWLEDGE BEFORE TRYING TO ACQUIRE IT OR USE

THINK OF TRADITIONAL KNOWLEDGE AS A WAY OF LIFE

Indigenous traditional knowledge is a way of life. Traditional knowledge is a process of acquiring and passing on knowledge and understanding. It contains information collected over time. It is values, stories, language, and social relations. It is experience-based relationship with family, animals, places, spirits, and the land. It is a world view.

Because it is experiential, each group will have a tradition that is, to a greater or lesser extent, different from other groups. While it may be convenient to speak of traditional knowledge, it is important to understand that such knowledge is not a single homogenous body.

The following description is a sensitive attempt by a non-traditional person to capture and give credence to traditional indigenous knowledge:

The indigenous peoples of the world possess an immense knowledge of their environments, based on centuries of living close to nature. Living in and from the richness and variety of complex ecosystems, they have an understanding of the properties of plants and animals, the functioning of ecosystems and the techniques for using and managing them that is particular and often detailed. In rural communities in developing countries, locally occurring species are relied on for many — sometimes all — foods, medicines, fuel, building materials and other products. Equally, people's knowledge and perceptions of the environment, and their relationships with it, are often important elements of cultural identity.

Director General of UNESCO (Mayor, 1994)

By comparison, the next quote is from a group of Canadian indigenous peoples who live and work in the field of applying and explaining indigenous traditional knowledge. The description below distinguishes carefully between traditional knowledge in the broadest sense, and traditional *environmental* knowledge, a narrower body of information and understanding:

Traditional environmental knowledge is a body of knowledge and beliefs transmitted through oral tradition and first-hand observation. It includes a system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use. Ecological aspects are closely tied to social and spiritual aspects of the knowledge system. The quantity and quality of TEK varies among community members, depending on gender, age, social status, intellectual capability, and profession (hunter, spiritual leader, healer, etc.). With its roots firmly in the past, TEK is both cumulative and dynamic, building upon the experience of earlier generations and adapting to the new technological and socio-economic changes of the present.

(Dene Cultural Institute)

Most indigenous people have traditional songs, stories, legends, dreams, methods, and practices as means of transmitting specific elements of traditional knowledge. Sometimes it is preserved in the form of memories, ritual, initiation rites, ceremonies, or dance. Occasionally it is preserved in artefacts handed from father to son, or mother to daughter. In indigenous knowledge systems, there is usually no real separation between secular and sacred knowledge and practice. In virtually all of these systems, knowledge is transmitted directly from individual to individual.

The following characteristics of indigenous traditional knowledge were defined in an international workshop on environmental assessment held in Inuvik, Canada, in November 1995.

What do we mean by traditional knowledge?

It is practical common sense based on teachings and experience passed on from generation to generation.

It is knowing the country; it covers knowledge of the environment (snow, ice, weather, resources), and the relationship between things.

It is holistic — it cannot be compartmentalized and cannot be separated from the people who hold it. It is rooted in the spiritual health, culture, and language of the people. It is a way of life.

Traditional knowledge is an authority system. It sets out the rules governing the use of resources — respect; an obligation to share. It is dynamic, cumulative and stable. It is truth.

Traditional knowledge is a way of life — wisdom is using knowledge in good ways. It is using the heart and the head together. It comes from the spirit in order to survive.

It gives credibility to people.

FIND OUT WHO HOLDS TRADITIONAL KNOWLEDGE IN THE COMMUNITY

In traditional communities, all people hold at least some traditional knowledge. Typically the most accomplished practitioners and disseminators of traditional knowledge are the older people in the community. Just being old, however, does not automatically confer a depth or breadth of traditional knowledge. Certain Elders are more proficient and wise than others. In addition, those who are practicing the traditional skills on a day-to-day basis are more likely to be adept in both the ancient and modern skills and knowledge that make up a fully developed traditional knowledge base, than those who are not using the traditional ways on a daily basis. Unlike a formal education system, there are no certificates or degrees by which to judge if an indigenous person has a high degree of skill in traditional ways. Every traditional community, however, is aware of who is best in various areas of traditional knowledge. The best way to find out is to ask a number of people in the community.

For project planning, it is important to recognize that although one person may be the leader for a knowledge area, others also may be highly skilled or even better in certain aspects. For example, the “medicine man” or “shaman” may be the person with the highest status in healing and medical aspects. However, he or she is certainly not the only person who has traditional knowledge about medicine. In fact, others may be more skilled in certain aspects. Often women deal with problems such as wounds and injuries, whereas other healers deal with sicknesses that have less obvious causes.

THE TRADITIONAL KNOWLEDGE OF WOMEN MAY BE DIFFERENT FROM THAT OF MEN

Traditional knowledge held by men is critically important, but is not the only important source of traditional knowledge. Women are often the primary harvesters of medicinal plants, seed stocks, and small game and are thus keepers of the knowledge about significant spheres of biodiversity in their own right, and as such they may be best able to identify environmental indicators of ecological health.

Women share with men the responsibility for stewardship of values in their societies. They feel a keen responsibility to future generations for actions undertaken today, to ensure continuity and wholeness of their lifestyle, their culture, and the natural world in which we all live, for their descendants. Women share in transmitting these values to the next generation.

The hidden economy of women's work is often inextricably bound up with productivity, and needs to be recognized in any development scheme. Current models of economic growth and development focus on notions of commodities produced for profit in the marketplace. These models do not easily recognize the economy of "women's work", which is largely invisible because it is undertaken for subsistence or domestic purposes rather than for profit. Consequently women's work is often not counted or valued. Underestimating the value and productivity of women's can seriously undermine a development project's ability to estimate impact, especially if the project alters the traditions of women's indigenous knowledge and work in the community.

COMPLEMENT YOUR OWN VIEW OF THE WORLD WITH A TRADITIONAL WORLD VIEW

Indigenous peoples' use of the land includes subsistence, the development of culture, and a sense of identity. Changes to the land through development projects have effects that ripple through the entire fabric of their existence. Those who live close to the land can bring direct observation and special understanding of the natural cycles, and of animals and plants. Their traditional knowledge extends back hundreds or even thousand of years, a perspective science and modern technology simply do not have. For all these peoples, cultural roots are solidly planted in traditional knowledge and practice. Traditional knowledge represents a unique opportunity for projects to increase their information base, to improve their effectiveness and efficiency, and to add new world views and perspectives to the many variables that are part of development project planning and implementation.

To take advantage of this potential, special care and methods need to be used if indigenous peoples are to be real partners. Indigenous peoples sometimes do not easily participate in western-style planning processes. They have different ways of making decisions and may not use representatives as spokespersons. Yet they have much to offer, and, of course, much to benefit if they are included in project planning and decision-making. They also have much to lose by being excluded from project planning.

DIFFERENT KNOWLEDGE SYSTEMS CAN WORK TOGETHER EFFECTIVELY

The basis for all major knowledge systems is the same: human observation of natural events. The significant differences arise primarily from the interpretations that people place on the observations. A modern biologist argues that animals and plants should be classified by their genetic and evolutionary relationships. A traditional shaman might observe that an effective classification is based on the societal function of the animal or plant. In science and technology, the data and mechanisms in a working model are always available as a check because they were only recently developed. In traditional models, the data and mechanisms are

often omitted, because the environmental or cultural indicators are so powerful, and were developed over long periods of time.

When combining traditional and other knowledge bases work together to discover where the two knowledge systems complement each other. The combination can be very powerful. For example, when a development project is planned, the time frame for gathering baseline data is at most a few years, and is usually much shorter. Nature has short, medium, and long-term cycles and events. Therefore the baseline study is almost certain to miss at least some of the medium and long-term events and cycles. These can often be dramatically significant to the health of the natural or cultural environment. By contrast traditional knowledge has already recorded and made allowances for these longer-term events and cycles.

One of the most effective ways of preserving traditional knowledge is to embody it in the decisions about projects that affect the communities. In this way, the knowledge and understanding in the indigenous knowledge systems is automatically a part of the process of planning and implementation of the development project. In many projects, the course of the activities and the critical decisions about what happens next is significantly influenced by the information that is collected, how that information is made available to others, how it is interpreted and finally how it is communicated to both the decision-makers and the stakeholders. Most participants will approach this question with an open mind, but there are often great differences in experience and background that can markedly affect the way information is handled.

Recognize that indigenous knowledge is a way of understanding that uses indirect signals from nature or culture to predict future events or impacts.

To acquire a deep understanding of indigenous traditional knowledge and to be able to use it responsibly in estimating impacts on the environment or on the culture of the people, requires a lifetime of immersion. Just as with the development of scientific expertise, which also requires decades of immersion and practical experience to be highly accurate in predictions, a great investment of time is needed.

While it is entirely possible to gather the facts and information contained in the traditions, it is much more difficult to understand the relationships that are contained in the generations of teachings. For this reason, and just like science, it is not difficult to describe traditional knowledge. Traditional knowledge should be collected and used within its own framework. It is not practical to “collect” it and use it in the framework of science.

As with scientific knowledge, traditional knowledge also has its limits. Scientific knowledge recorded in books for instance, often states the limits of confidence or applicability. Traditional knowledge also usually comes with similar constraints, although they are not likely to be stated the same way as in a science text.

It is entirely practical, however, to have the practicing scientist and the practicing holder of traditional knowledge work together. The key to success is respecting each other’s methods and information, while assessing the conclusions in a cooperative fashion.

COMBINE INDIGENOUS AND NON-INDIGENOUS TRADITIONAL KNOWLEDGE

Local non-indigenous communities of long standing also have traditional knowledge of the local conditions, environment and wildlife. This knowledge may be as in-depth as indigenous traditional knowledge in certain areas, and therefore is of great importance to project planners.

Indigenous traditional knowledge and language are parts of the definition of indigenous autonomy. Recognizing the difference between indigenous and non-indigenous knowledge supports and emphasizes the additional value and understanding that can come from combining the two as complementary, rather than

treating them as similar bodies of information. To do so may result in a “power struggle” between the two knowledge bases, eroding the credibility of both. Instead, by joining the advantages of indigenous and non-indigenous approaches, a symbiosis can result, enhancing the depth and breadth of both systems.

GENERAL GUIDELINE #5:

BUILD ON THE STRENGTHS OF TRADITIONAL KNOWLEDGE

REDUCE COSTS BY INCLUDING TRADITIONAL KNOWLEDGE

Characteristically, background research begins with an inventory of the resources and attempts to predict the effects that the project will have on the area. Because the information to be used must be quite detailed, an intensive research program is usually involved. Traditional knowledge of the area can significantly reduce the effort to acquire this knowledge if it is included in the survey. The development of large scale detailed maps, catalogues, and even Geographical Information Systems of traditional information by some indigenous associations will vastly speed the process of transfer of information. Because these are being compiled by indigenous peoples for indigenous peoples, the means used to collect the information will have been done inside their own cultural system.

Co-management agreements where traditional knowledge and technological knowledge are used together can significantly improve the management of resources. There are numerous examples where traditional hunters and fishers knew of spawning grounds or of separate stocks that non-traditional methods had not uncovered. Incorporating this kind of information into project planning at appropriate levels can represent enormous savings.

INCLUDING TRADITIONAL KNOWLEDGE IMPROVES INTERACTION AMONGST PARTICIPANTS

Including traditional knowledge in project planning and implementation can significantly improve the project's public image. Honest inclusion allows comfortable interaction amongst the participants. Complaints about trivializing or thwarting indigenous peoples are avoided. Inclusion of traditional knowledge also generates a wider acceptance of the results of the project.

The amount of information that is contained in the traditions is enormous, having been accumulated over thousands of years, and passed down in oral traditions. Much of the information is already processed, rather than simply being raw data, and so has a high value-added component. It is also highly sophisticated in its understanding of how signals from nature can be used to predict future effects. But perhaps the most interesting and valuable aspect is that traditional knowledge does not segregate secular, metaphysical, and sacred knowledge within its database. Western knowledge systems tend to partition these aspects and consider them separately. Indigenous traditional knowledge considers them as a unified whole.

IMPROVE SUSTAINABILITY BY INCLUDING TRADITIONAL KNOWLEDGE

There are many factors that can affect the success of a project. Long-term cycles can be the critically important factors in determining ultimate effects of introduced stresses and changes. Gradual changes may have an accumulating effect, such as changes in water quality that are not toxic, or "harmful," but that may alter the underlying trace minerals. Indirect effects from these subtle changes might include a loss of herbivorous animals on which the community depends, because of the changed plant community. Apparently minor introduced changes in policy or practices may seem to be beneficial, but have subtle intergenerational

effects. In cumulative effect, these small changes can ultimately be harmful. The people best equipped to discover these subtle potential changes are often the holders of traditional knowledge of the area. When traditional knowledge is used in its original context, and in partnership with other knowledge systems, the combination is often a powerful tool.

LITIGATION CAN BE AVOIDED BY INCLUDING INDIGENOUS PEOPLE AND THEIR KNOWLEDGE FROM THE BEGINNING

In many countries, constitutional, legislative, policy, and practices dictate that indigenous peoples and their knowledge bases must be included in certain kinds of projects. Inclusion of these knowledge systems may be a legal requirement.

Failure to understand and adhere to the local legal systems can create far more problems than it solves. Many large projects have stalled or been abandoned because the local legal systems were side-stepped, forcing local people to resort to legal action. Ensuring appropriate inclusion and participation by indigenous peoples will go a long way to avoiding legal action.

International treaties and conventions such as the Convention on Biological Diversity, the UN Declaration of Human Rights, the International Labour Organization's Draft Convention on the Rights of Indigenous Peoples, all have important principles to offer. International laws, however, almost all defer to national laws, while encouraging broad principles. Bundling international and national laws together is a principle many indigenous peoples and supportive agencies use in determining how to proceed.

GENERAL GUIDELINE #6: INCLUDE TRADITIONAL KNOWLEDGE AND INDIGENOUS PEOPLES FROM THE BEGINNING

DETERMINE FIRST IF ANY INDIGENOUS PEOPLES WILL BE AFFECTED

Traditional knowledge, and the people who can use it effectively, should be included whenever they are directly or indirectly affected by a project. Often indigenous peoples are nearly invisible. Sometimes they are difficult to locate or recognize because they live in remote areas, or because they actively avoid contact with outside intruders. Sometimes they are simply not an influential group in the larger system and so are deemed to be unimportant. It will usually be obvious if indigenous peoples are going to be affected. If it is not clear, however, two aspects need to be investigated.

First, are there indigenous peoples in the area? Clues include authentic hand crafts or art objects that are not obviously a part of the dominant culture. Ethnically different people with a different language within the local community may constitute a traditional population. Sources of information on indigenous people in the area include non-governmental organizations that work with indigenous peoples and church groups.

Secondly, if there are indigenous peoples in the area, are they going to be affected by the project? A simple check list includes the following: 1) Are there going to be environmental changes, even subtle ones? 2) Will there be a shift in the economy? 3) Will there be any cultural or social interaction? 4) Does the project involve communication techniques that could require language translations or that might influence policies on language?

WEAVE INDIGENOUS PEOPLES AND TRADITIONAL KNOWLEDGE INTO THE DESIGN AS PARTNERS, NOT STAKEHOLDERS

If there are any indicators that indigenous peoples may be present, and the answers to any of the questions about the nature of the project is yes, then the project should seriously consider using traditional knowledge. This is best done by weaving indigenous peoples and their traditional knowledge systems in the design as full partners.

Regardless of the practices, it is important to recognize that there will be fundamental differences in the beginning assumptions for each group. Project planners may have already decided the project should move ahead, and are concerned with how that should be done. Whereas, most indigenous communities who are being asked to participate, will be assessing why and if the project should go ahead, not how. This difference means that the project developer will essentially be trying to explain how the project will work.

If this approach is taken, the usual reaction of the local people is indignation that they were not consulted first. A circle of emotional responses then begins in which everyone (proponent and indigenous community alike) ends up feeling hurt and betrayed.

A much better approach is ensure that the local people are invited to participate in the initial decision about whether the project should exist. Given that a positive decision to proceed is reached, then the local indigenous peoples can participate fully in the design of the project.

Project planners may find that a group of indigenous people will decide not to share their traditional knowledge. It is important to try to understand why they are reluctant. Is it because they want to protect proprietary interests; is it a lack of financial support, or is it sacred wisdom or locations, that requires them to withhold the knowledge. If their reluctance stems from fear of divulging sacred knowledge, great care must be taken to avoid causing harm by proceeding simply because they are not participating. Instead it is best to try a different approach and ask them to help solve the issues. In this way, they can use their knowledge without having to divulge it.

GENERAL GUIDELINE #7:

ACQUIRE TRADITIONAL KNOWLEDGE ON THE BASIS OF TRUST, RESPECT, EQUITY, AND EMPOWERMENT

ESTABLISH WIN-WIN DEVELOPMENT GOALS

When acquiring traditional knowledge, use five guiding principles:

1. Operate on the basis of respect, trust, equity, and empowerment of indigenous peoples and of the traditional knowledge system.
2. Cause no harm.
3. Define the roles and responsibilities of participants carefully and in line with culture and knowledge systems.
4. Define the information to be collected; specify what parts of the traditional knowledge will be outside the project limits.
5. Establish the use and ownership of information, how to interpret or communicate it, and how to pay for it, right from the beginning.

IDEAL #1: CAUSE NO HARM

The best design of development projects is when the ideal is to achieve a benefit for everyone; a situation where everyone wins and no one loses. Many people argue that it is impossible to undertake a development project without causing harm to someone. And yet it seems irresponsible to leave even a few people worse off than when the development project began. If your guiding principle is to have everyone benefit, you will have aimed as high as possible, and perhaps the day will come when indeed no harm will be caused.

One of the most difficult aspects of project planning and initiation is when the expectations of the planners are not the same expectations that the local people have. While the proponents may be convinced that their project will benefit many people, the indigenous peoples may see the project as a major problem, with few benefits. It is always best to bring in traditional knowledge before initial decisions have been taken. This will help make early predictions of the impacts. The importance of power sharing can not be overemphasized. However, it does mean that proponents must be prepared to abandon the project or vastly modify it if there is undue risk of harm to local peoples.

Negotiating Mutually Beneficial Results

As in all negotiations aimed at finding mutually beneficial results, there must be flexibility on both sides. Indigenous peoples will need to assess their expectations from the project against the costs that will necessarily be incurred. Proponents will need to understand that human lives and their quality of life are at stake. The proponent may need to be creative in discovering ways to enhance the opportunity for these people to continue to live in the area that is important to them and to continue to develop according to their own decisions.

Proponents should begin projects by acknowledging that local indigenous peoples must be involved from the beginning in ways that ensure their decision-making role. Like anyone else, indigenous peoples are protective of their life values, homes, culture, and food sources. If these are threatened, local people will refuse to cooperate, or become hostile. While this is understandable, there are more effective strategies that indigenous peoples can adopt — they can make use of existing laws, regulations, and policies governing acceptance of the projects, and can make use of public attention through the media. Increasingly, this is what has been happening.

A well-planned project (from the perspective of local indigenous peoples) should begin with a three-party negotiation among the proponent, the local traditional community, and the government over the use of the land. Decisions taken with the inclusion of the people who have lived on the land for centuries is much more likely to reflect their needs.

When indigenous peoples are excluded, years of experience demonstrates that they will be angry and perhaps hostile. The indigenous peoples will feel betrayed by the government, and no matter where they turn the expected support systems will be missing. They will feel they have no means of recourse. Tempers can flare quickly and resentment will certainly become a major impediment to successful relations between the proponent, government bureaucracy, and the local community. Recent experience also shows that excluding indigenous peoples will result in protracted and costly legal and review processes, which in turn will undermine the project's effectiveness, or even its existence.

Scheduling

Develop a time schedule with culture and nature-based indicators of when tasks should be completed, or when certain milestones will be met.

Indigenous peoples who live on the land are tied to the rhythm of the land, its seasons, and the movement of wildlife. For many people, hunt or gathering occurs at a particular time of year, or it does not happen. Failure to meet these cyclic imperatives can be dangerous for indigenous peoples. Plan the schedule for a project with indigenous peoples and their knowledge to develop a flexible schedule based on their seasonal and cultural requirements. This should be worked out in advance with the local people.

All parties can agree that at certain stages a milestone should be met. Problems usually arise when the agreed-on milestone is missed. Project work schedule are defined by time frames, but these are often not effective for indigenous peoples who have their own internal needs and schedules that are not easily adjusted. Instead of time scales, it is sometimes better to use indicators based on their traditions. For example, a task will need to be completed before the first harvest, but after the solstice festival. This also explicitly acknowledges that traditions and necessary community work have been established as part of the project schedule.

Communicating: Language, Perspectives, and Process

Accuracy in language translation is important to ensure the right information and attitudes are transmitted. Poor translations can result in major misunderstandings. One technique that helps is to have translation made from one language to another, then back again to check its accuracy. Unfamiliar terms (names of chemicals, technical terms such as ionising radiation, etc.) may not have an existing word in a local language. An Elder or a group of Elders can be asked to make up a new term and agree on its translation.

People from different cultural backgrounds may have trouble communicating because of different ways of thinking about facts. For example, some indigenous peoples pay strict attention to their Elders and assume they speak the truth. Elders usually speak in the form of metaphors and parables that may have many levels of meaning. The native listener understands this and uses the experience to become wiser through self-

enlightenment. In contrast to this practice, many non-indigenous people have a long-established practice of answering questions directly, and are not accustomed to working their way through parables. They certainly do not automatically assume that an elderly person speaks the truth.

The short-term objectives of a development project (usually measured in years or decades) are very different to the objectives of indigenous leaders who consider the long-term (measured in generations). Yet, for a successful conclusion to the project, both must be satisfied. In the final analysis, differing opinions may need to be resolved. Which knowledge base has more “power?” Which knowledge base will have the deciding vote in a case of a dispute? In best practices, neither knowledge system is deemed to have more influence. If different conclusions are reached, it is a signal that more information is needed, not that one is correct and the other incorrect.

On a number of occasions, proponents and traditional groups have been able to create round-tables of communities and other stakeholders in a spirit of cooperative negotiation. One of the clear lessons from these early round-tables, however, is the need for commitment on both sides to honesty and a willingness to be at least partially flexible to the needs of the other parties. From experience in North America, the round table begins best if the proponent and the indigenous peoples come together by mutual agreement to work out the rules of the round table jointly. When the rules are agreed, government representatives may be invited to join. If government representatives are invited too early, positions polarize quickly and discussion is not balanced.

Reducing Harm Through Compensation

When a community is significantly affected, it may be possible to compensate them for any real or perceived loss of quality of life. In addition, traditional communities may want to be compensated for any traditional knowledge advice and counsel that they provide for the proponent.

In many cases, the simplest way to compensate a community is by payment. Local people can be paid the same way any other consultant is paid – on the basis of the advice or service offered. Participatory action research is a very large effort and involves the entire community in creating a baseline of information for the proponent. This type of effort, when carried out by a science-based firm can be very expensive. There is no reason why a PAR baseline study of similar scope should not also be compensated similarly.

Compensation does not always have to be limited to money. Research results that are returned to the community, policies that are implemented by the community (not by external people), training opportunities, infrastructure development (at their request!), and other opportunities that fit the needs of the community are sometimes more effective than cash. Cash, unfortunately, does not always bring benefits.

Other approaches are sometimes useful. If the proponent allows the traditional community to share in the revenue from the project on a partnership basis, the amount of compensation is negotiated on a quasi-equity share base. In some cases, the project may anticipate royalties from patents on processes or materials that result from traditional knowledge.

The Long-Term

The cost-benefit ratio of the project must consider the long-term economics. For instance, if the project is to clear-cut a forest, what happens to the people who lived in the forest when the project is finished? If the project is to establish a change in policy to develop more agriculture, what will happen to the people who relied on hunting and fishing? If the project was to build a plant, and many local people were used as construction helpers, are there replacement jobs for these people in the factory? What kind of jobs? Are there enough for everyone? What guarantees do they have that the promised jobs will be there when the plant

opens? If the project is a mining project, have they negotiated a payment for the extraction of resources from their land based on gross revenue? What happens as the ore becomes increasingly harder to find and the mine becomes less and less profitable? The revenues to the community will decline with the revenue to the company. Most mining towns last only a few years or decades at most, unless some other industry comes along to replace the mine. What plans have they developed for the community when the mine closes — as it inevitably will do?

Perhaps during the course of the project, the community can develop its own technological capacity or find ways to market the products from its traditional products by taking the opportunity to make contacts outside the community through the proponent's network of associations. The main thing is to think about it and negotiate the best arrangement possible and plan what will be done as the revenue base winds down. This will go a long way towards reducing or eliminating harm.

IDEAL #2: DEFINE THE ROLES AND RESPONSIBILITIES

Proponents, governments, and NGOs all have a responsibility to understand the local customs and etiquette, and train staff who will interact with indigenous peoples before making contact. Traditional customs vary widely from one place to another. Assuming a single approach or process will suffice for all indigenous peoples is a big mistake. For example, haggling over prices in some cultures is expected, whereas in others it is insulting. Looking into another person's eyes during negotiations can be necessary, or may be quite unacceptable. Sitting, kneeling, standing, and squatting all have special meaning in different cultures. Gender equality is accepted in some, not in others.

Decision-making and representation in indigenous communities is usually not similar to methods employed by non-indigenous peoples. Therefore, the methods that must be employed to include indigenous peoples and their traditional knowledge in an effective manner will not be a simple extension of methods used with other non-indigenous peoples. Make the participatory approach fit the cultural sensitivity of the indigenous community. Successful strategies variously include round tables or talking circles (where everyone is able to speak freely), training the trainers (where the local community is invited to become the teachers), co-management (where government authority and responsibility for managing resources is shared with indigenous peoples), and participatory action research (a partnership arrangement in which the indigenous community collects and ensures accuracy and quality of indigenous knowledge while working directly with the development project).

In some, but certainly not all, traditional communities, a strict hierarchy of status is maintained. The elite do not ask for or receive advice from the lower ranks. Women, in some societies, might suffer if they attempted to participate. In these situations, the head man makes all the decisions that would typically be required in a project design. A project might call for round-table discussions including all stakeholders, but to insist on it might place certain people in a position of jeopardy if they were to express an opinion, reduce the credibility of the project, and insult the local culture. In other cases, the exact opposite could be the correct course of action.

A successful strategy to avoid these problems is to empower the local people to train their colleagues in the area of competence relevant to the project. In this model, the project develops a training module to train the trainers. Over time, the infusion of information and the development of trained people allows the project to evolve in tune with the local traditional community. This also tends to have a more lasting impact because the local people will make the project their own.

In other traditional communities, decisions are made only on a consensus basis with all members of the community participating, including women and children. In these communities, there is a strong desire to see

the equivalent participation by the personnel on a project. They want to see and talk to the people from the hands-on worker right up to and including the Chief Executive Officer of the proponent or Minister of a government. In these situations, round table or talking circles can be successfully used independently or in combination with a program of training the trainers. Participation by indigenous peoples as autonomous groups is an essential ingredient to developing both mutual understanding and consensus to set strategic objectives, define a chain of expected results, identify underlying assumptions and risks, and select appropriate performance indicators.

Design the projects so that the local knowledge experts have the role of providing traditional knowledge. Engage people who are respected as holders of traditional knowledge by the community. Traditional knowledge is not something that can be picked up in a short period of time. Furthermore, it is not generally available in written form. Include indigenous peoples in both interpretation of the knowledge and as decision-makers in the project.

Co-Management

When traditional knowledge is used in its original context, and in partnership with science or other western technical approaches, the combination is a powerful tool. Important examples are to be found in resource management, where both science-based managers and traditional hunters, trappers, or fishermen work together giving equal weight to both types of knowledge. It is best when the process of project development and acquisition of traditional knowledge is seen as participation, not consultation. The practice of co-management works better if a hands-off style of governing the actions of on-the-ground members of the co-management team is used. Because the traditional information base is not easily written down, members should be chosen from the non-traditional side who are open-minded about traditional knowledge and process. The intimate relationship and trust amongst team members needs to be maintained to keep the authority and power of co-management. In a few cases, forcing co-management on aboriginal communities caused the loss of valued traditional knowledge without proper compensation for the knowledge. Though sometimes difficult, co-management experience can be extremely positive.

IDEAL # 3: DEFINE THE INFORMATION TO BE COLLECTED

Traditional knowledge that comes to a project is a product both of the people from generations past and of the present-day people who preserve and augment its accuracy. However, it is transmitted to the project only by present-day people, not all of whom have the capacity to transmit the knowledge well. Assess the credibility of sources of traditional knowledge by using the community as a source of credentials.

Participatory Action Research

Create a partnership between traditional knowledge systems and other knowledge systems (such as science-based management) through complementary action plans, participatory action research, joint ventures, capacity-building and maintenance, and co-management techniques.

Traditional knowledge about the environment assumes a responsibility to respect living things and to live in harmony with them. Thus, it is an easy partner for sustainable project planning, and has the advantage of long and intimate experience with the local area. Asking the local people to assist with participatory action research and co-management of the project outputs can enlarge the knowledge base for the entire project, encourage consensus-building, and better manage the impacts from a community base.

If science or technology is important to the project, the best way to integrate traditional knowledge holders is to use what is increasingly termed “participatory action research” or PAR. In PAR, western and traditional knowledge practitioners operate from the very beginning as equal partners. Using science and traditional

knowledge together in co-management or participatory action research can be a powerful tool to improve the effectiveness of projects, but it requires a relationship based on trust and respect for each other's information and for the different methodologies used.

The development of traditional knowledge in the project takes shape as follows:

1. research and later monitoring is carried out by local people in the local language
2. research and monitoring is controlled by the community through a community steering committee
3. the research or monitoring teams and the steering committee evolve the interview protocol and guidelines for the project
4. all information is verified by the steering committee and the interviewees first, then by the Elders or other designated traditional knowledge experts.

Once the community is satisfied that the information has been collected appropriately, is of high quality, and has been checked for accuracy, it is then built into the project alongside the scientific information. The community assumes that equivalent rigour has been applied to the scientific information, thus setting both knowledge systems on an equal footing.

IDEAL #4: ESTABLISH OWNERSHIP OF INFORMATION

Best practices are careful of the rights of indigenous groups. By incorporating these best practices, and by using the traditional knowledge of the people, disputes can be avoided. The mutually agreed protocol or agreements should include clauses to cover land ownership and use, traditional rights to natural resources, repair of environmental damage, impact of socio-economic factors. The agreements should acknowledge significant changes in cultural systems if these are likely to occur as a result of sharing information. Protocols for acquisition of traditional knowledge should be defined by the local community and agreed to by all parties. Protocols can be quite simple but the best are based on two things; the information already available, and the information still to be acquired.

The main points of the protocol define who will be involved, the way in which the participants are to be involved, the type of information to be acquired or (that may not be acquired), the use to which the information may be put, who owns and controls the use of the information, and finally, what financial arrangements are made for acquisition and subsequent use.

Recognize the autonomy of indigenous peoples by respecting their classification of land use, including sacred and traditional uses that may preclude development, and by acknowledging their traditional rights to resources and intellectual property rights.

Because the concept of ownership, as practised in western societies, is not often not a part of the traditions of indigenous peoples, finding ways to respect their sensibilities about the knowledge is important to project success. Indigenous peoples also expect to receive information and benefit back for the effort they put into providing other people with their knowledge. This can be as simple as ensuring that copies of research reports are given to the community, or it can be as dramatic as providing the infrastructure to allow the traditional community to acquire its own GIS hardware and software.

IDEAL #5: WORK WITH RESPECT, TRUST, EQUITY, AND EMPOWERMENT

The power of any knowledge system is rooted in the experience of many people who have found ways to accumulate a body of practices and processes that allow greater insight into the world around us than any one

person can hope to achieve independently. Traditional knowledge uses indirect indicators that over centuries have proven to predict events accurately.

The four elements all work together.

Respect

Respect for traditional knowledge systems means that the traditional techniques used are valid means of gathering and interpreting information about the project variables.

Trust

Trust is an important part of the relationship between people in acquiring and using the knowledge and understanding from traditional knowledge. To work together, both traditional and non-indigenous peoples must be able to trust the logic and work of the other.

Experience with indigenous peoples from around the world demonstrates that successfully incorporating traditional knowledge in project planning and implementation requires a relationship of trust. Trust is developed by discussions with village Elders, speaking about the project in ways that can be understood by community members, working directly with the traditional communities to develop joint plans for impact studies, mixed teams to carry out research, project planning, and other aspects of environmental and cultural decision-making. To be able to use and understand traditional knowledge requires a long-term commitment, respect for traditional culture, and a willingness to spend the time and effort to listen and learn. Most communities are cautious about how it is to be used, fearing that it may be misinterpreted or used to damage the community. Because large projects may require disclosure of most of the information, there may be some reluctance to share the traditional knowledge. When sacred sites are involved, the community may be reluctant to disclose their location. By asking where projects should be located – not what areas should be avoided -- it is possible to prevent project activities from unknowingly blundering into sensitive areas, while allowing the traditional areas to remain undefined. Developing self-sustainability is an integral part of traditional knowledge systems. It is beneficial to include their knowledge systems in both the interpretation of the knowledge and in its implementation by relying on credible traditional knowledge holders.

Equity

Equity assumes that one system is no better or worse than another. Recognize their strengths and weaknesses and work to bring the systems together, meshing the strengths of one with the weaknesses of the other.

Equity can become an issue when two systems of knowledge come to different conclusions. The biggest mistake is to assume that one or other system is more powerful. To claim this about either knowledge system erodes trust and respect, and removes empowerment. To explain by example: Suppose a scientist has studied an area. The data are extensive, measurements have been taken and analysis completed. The scientist concludes that no harm will result from a particular action. In contrast, the local people feel from their background understanding of the local area, that although the effects will be hard to see at first, they will eventually be very harmful.

The worst approach is to call for scientific “proof.” Clearly science will always have the last word if this is the framework for decision-making, and the local people will feel helpless and betrayed.

Instead, the best approach is to examine the differences together and find ways to use both knowledge systems in an integrated way to figure out why there is a difference in findings. The use of the equity principle establishes a trigger for discussion and renewed investigation.

Empowerment

Empowerment ensures that all have the capacity to engage in a meaningful dialogue. It can mean that the project will need to invest some money and time in transferring expertise to the local indigenous peoples. It may mean building the capacity of the proponent staff to understand and be sensitive to traditional ways of thinking. It may be as simple as providing the needed infrastructure so that the local population has a means of participating in the planning and implementation process.

Worksheets

Checklist of Best Practices

INDIGENOUS PEOPLES, PROPONENTS, NGOS, AND GOVERNMENTS

Reminders about Traditional Representation

When you are trying to ensure that the indigenous peoples and their traditional knowledge are included, here are few things to think about:

- ☐ Encourage the local indigenous to community develop a representative group on basis of skills? What about establishing an NGO or indigenous knowledge centre?
- ☐ Consider a liaison to neighbouring communities?
- ☐ Suggest a network of communications and discussions established amongst indigenous communities and proponent. Establish local communities of practice or practitioners (i.e. let the experts talk to each other, the traditional healer with the medical doctor, the herbalist woman with the botanist etc.)
- ☐ Within the joint ventures or participatory research, are team members assigned from the indigenous community?
- ☐ Will time and work be remunerated? How have the local indigenous peoples participated in establishing a fair compensation?
- ☐ Will the indigenous peoples feel they can influence the project so as to set their own priorities with respect to land and resources?
- ☐ Are women and their special skills and knowledge specifically included on the team and in a culture-sensitive manner? If there can be no direct contact between men and women, do you have women ready on your own staff to be the contact people.
- ☐ Provide for participatory impact monitoring and evaluation ensuring that the perspective of traditional knowledge is part of the assessment.
- ☐ Consider formal or informal partnership or joint venture agreements with the indigenous community.
- ☐ Invite the indigenous community to begin joint classification of land use, joint assessments of impacts, joint decision-making.
- ☐ Establish some form of equity share or joint venturing in the project between the traditional community and the project if it is appropriate.

- ❑ Ensure local non-indigenous communities are included in the project planning and implementation, but distinguished from indigenous communities.
- ❑ Are other stakeholders identified and represented as distinct from the indigenous groups?
- ❑ Will the discussions and negotiations use some form of round table, community mentors, or other means? Check in the detailed guidelines for a range of participatory techniques.

Project Design Reminders

- ❑ Are the traditional knowledge holders who will be working with the project credible experts in the opinion of the indigenous community?
- ❑ Have the community and proponent settled on a way to make joint decisions?
- ❑ Does the indigenous group need to establish a legal entity, such as a representative NGO to have the capacity to engage in negotiations?
- ❑ Will the traditional knowledge system become part of the final decision-making? If there is a difference in findings between the traditional methods and the project's determinations, how will these be resolved? Will indigenous knowledge be seen as an equivalent to scientific methods?
- ❑ How will the two knowledge systems be integrated – is the entire system equitable? Are there people available who have the capacity to bridge the cultural and knowledge system differences? If not, how will you build the capacity?
- ❑ Does the project plan to provide the community with a science / management interpreter / advisor, if it wishes to have one?
- ❑ How will the project be described to the community in terms that the indigenous peoples can understand?
- ❑ After the project is operational, how will the project assess if the community fully understood the project and its implications?

Traditional Rights Reminders

- ❑ What processes have you set up to handle intellectual property rights?
- ❑ Have you assessed the impact of traditional rights to resources and how this will affect the project?
- ❑ Have all the land ownership issues been settled?
- ❑ Have you made sure that the traditional people are satisfied that they will suffer no loss of rights without appropriate compensation?
- ❑ Have you arranged structured traditional knowledge access agreements?
- ❑ What mechanisms have you put in place to ensure the community is empowered through meaningful consultations, capacity-building, and capacity-maintenance?

- ❑ What will you do to ensure that community knowledge is treated with equity and respect?

Risk Analysis Reminders

- ❑ What steps have you taken to prevent societal impacts of alcohol, drugs, and diseases?
- ❑ How will you invite community participation in identifying potential risks to the traditional community from direct impacts on the environment?
- ❑ Have you considered a joint cost-benefit analysis, or joint assessments of impact?
- ❑ How will you and the community measure the project's level of sustainability, in the planning stages, and after the project is operational? What mechanisms are present for the local indigenous community to understand the objectives of the other major stakeholders (the investors, planners, managers, other communities) in the long term?

PROPONENTS, NGOs, AND GOVERNMENTS

Preliminary Reminders Before You Start

- ❑ Have you checked for the presence of indigenous peoples?
 - Use the simple definition: indigenous peoples are self-identifiable as a people, wholly or partially self-governed, and live within a larger nation.
- ❑ Have you been sensitive to the nature of indigenous knowledge?
 - Recognize that traditional knowledge is a way of life, an experience-based relationship with family, spirits, animals, plants, and the land, an understanding and wisdom gained through generations of observation and teaching that uses indirect signals from nature or culture to predict future events or impacts.
- ❑ Have you been careful to incorporate indigenous peoples and their traditional knowledge systems as full partners in the design of a project when traditional people are directly or indirectly affected by the project?
- ❑ Do you remember the four guiding principles on acquiring traditional knowledge?
 - Cause no harm.
 - Define the roles and responsibilities of participants carefully and in line with culture and knowledge systems.
 - Define the information to be collected; specify what information is proprietary and not to be shared.
 - Establish the use, ownership of information, and the means to interpret or communicate it at the outset.

- ❑ Do you know the key aspects of a relationship with indigenous peoples?
 - *Respect*
 - *Trust*
 - *Equity*
 - *Empowerment*
- ❑ Have you respected intellectual property rights derived from traditional knowledge?
 - Build in opportunities for indigenous peoples to benefit directly and equitably from commercial products derived from their traditional knowledge.
- ❑ How did you handle proprietary traditional knowledge?
 - Allow indigenous peoples to define which parts of their traditional knowledge are for public consumption and which are private and confidential.
 - Ask where the development would best take place; do not ask where development should not take place.
- ❑ How should you handle access to natural resources for indigenous peoples?
 - Respect and protect traditional rights to natural resources. Ensure that traditional access routes and places for hunting, fishing, and harvesting are undisturbed.
- ❑ Have you taken into account the most common reactions among indigenous peoples to development projects?
 - Recognize that indigenous peoples feel that they belong to the land, so they may not easily accept changing it, or their relationship to it, in any radical way.
 - Engage traditional knowledge systems before initial decisions have been taken to help predict the impacts of a project. Be prepared to abandon the project or vastly modify it if there is a risk of harm to indigenous peoples.
 - You may be interested in how to make the project work, but they are interested in whether the project should even start.
- ❑ Avoid a strategy of including indigenous peoples too late or in a trivial manner; it places both the traditional people and the project at risk.
 - Local indigenous people will want to be sure they have the authority to make halt a project if the potential damage to the community is unacceptable.
- ❑ Developing a positive relationship with indigenous peoples requires sensitivity. Have you thought about how this should be done?
 - Understand the local customs and etiquette and train staff who will interact with indigenous peoples before contact.
- ❑ How have you gone about including local indigenous people and their knowledge in the decision-making process?
 - Make the participatory approach fit the cultural sensitivity of the traditional community.
 - Successful strategies variously include round tables or talking circles, training the trainers, co-management, and participatory action research.

- Participation by indigenous peoples as autonomous groups is an essential ingredient to developing both mutual understanding and consensus to set strategic objectives, define a chain of expected results, identify underlying assumptions and risks, and select appropriate performance indicators.
- ❑ Have you remembered to develop a comprehensive plan for meshing traditional and other methods?
 - Include traditional knowledge early and as a complement to scientific or western approaches.
 - Leave broad margins for error in predictive models, and include the socio-economic costs of the often invisible economy of “women’s work” and the special vulnerability that traditional women face.
 - Include indigenous knowledge systems in both the interpretation of the knowledge and in its implementation in the program design by relying on credible traditional knowledge holders. These people can bring traditional concepts of self-sustainability to the project.
 - Assess the credibility of sources of traditional knowledge by using the community as a source of credentials.
 - Using science and traditional knowledge together in co-management or participatory action research can be a powerful tool to improve the effectiveness of projects, but it requires a relationship based on trust and respect for each other’s information and for the different methodologies used.
 - Protocols for acquisition of traditional knowledge should be defined by the traditional community and agreed to by all parties.
- ❑ Have you scheduled work using traditional methods of time-keeping?
 - Instead of using time scales in project planning, it is sometimes better to use indicators based on the traditions of traditional people such as harvest times, festivals, and hunting or fishing seasons.
- ❑ What about working within another country’s rules and regulations?
 - Understand the host jurisdiction’s laws and regulations regarding indigenous peoples including constitutional rights, relevant legislation, policy statements, and recent practices.
 - ILO 169 recommends that no government incorporate discriminatory practices with regard to indigenous people. Where this has not been done, build the development project program design so that indigenous peoples benefit in an equitable fashion to other stakeholders.
- ❑ What will you do if the traditional people would like to be paid?
 - If they would like money, engage traditional knowledge practitioners the same way you would engage scientists and other professionals.
 - Non-monetary, innovative ways of payment can also include training opportunities, construction of infrastructure such as schools and hospitals, or there may be something that the local community would like that is special for them -- ask and see what they would like.
 - Build in safeguards to protect traditional communities that are extremely vulnerable to unfair exploitation because of lack of experience with, or non-acceptance of, monetary-based systems of resource sharing.

Capacity Building and Capacity Maintenance Reminders

- ❑ Encourage a socio-economic capacity needs-analysis be carried out.
- ❑ Arrange for quality translation.

- ❑ Consider capacity-building workshops or training programs for both indigenous peoples and for project staff.
- ❑ Build in mechanisms for sustaining the skills and knowledge capacity acquired during the project.
- ❑ Ensure financial assistance is provided so that participation will be possible by indigenous peoples.
- ❑ Build in mechanism to evaluate and collect evidence of indigenous peoples' participation. Use this as a means to improve the performance and interaction the next time.

Reminders about What to Do If Problems Occur

It is an ominous sign when trust disappears and confrontation replaces cooperative negotiation. Examine your own performance with the community.

- ❑ Did you unreasonably expect self-financed participation by the community?
- ❑ Did you consistently ignore local practices, such as traditional hunting times or sacred ceremonies, to suit your project schedule?
- ❑ In consultations, did you forget (or neglect) to make sure the community understood the consequences of each decision, and the specific actions that would follow?
- ❑ When confronted with a problem, did corporate managers show contempt for or disregard community opinion?
- ❑ Did your staff treat traditional knowledge as a poor second compared to technological or scientific knowledge?
- ❑ If you answer yes to any of these questions, you need to re-think your strategy. If you are willing to train your staff, then go back to the community and tell them of your findings and that you want to change the way you operate to better suit the community.

INDIGENOUS PEOPLES

Reminders on How to Communicate

- ❑ Has the community named its own spokesperson to media?
- ❑ Does the community have a representative group or team? Have the powers and tasks of the team been decided?
- ❑ What other people can step in if some members of the team must do other things in the community, or get sick, or must travel?

- ❑ How will you be sure everyone in the community knows what is going on? How will you pass your own information to the media and to the proponent?
- ❑ Have you made good arrangements for language translations for your community?

Reminders about Responsibilities

- ❑ What is the schedule, and is it set in a schedule that fits your community's needs for harvests and events?
- ❑ How much time will be available for the community to react to questions?
- ❑ What will you do if the amount of time is too short to gather all the answers?
- ❑ Do you understand what regulations the community and the proponent will get from the government?
- ❑ What regulatory agencies of government will be involved? What have you decided to do to ensure your community and the agency understand each other?
- ❑ To what degree will individuals and the entire community be involved in contractual arrangements?
- ❑ What resources can the regulatory agencies offer to the local community?
- ❑ What resources can the local community offer to the agency to help the process?
- ❑ What techniques could be used to involve the general public, and when could they be used?
- ❑ Most important, what techniques would your community like to see to ensure that your knowledge and expertise is used most effectively in the decision-making part of the project? How many people should represent the community for traditional knowledge and for other aspects like financing and organizing people?

Reminders about Getting a Technical Summary

- ❑ What is this project all about, what is it going to use, why is it here, and not somewhere else?
- ❑ What is the complete schedule of the project, with dates for each major event?
- ❑ What buildings, or other physical facilities will be built? What about sewers, clearing forest areas, digging holes or quarries or trenches?
- ❑ What is the total area of land to be affected directly, and indirectly by construction or other project activities?
- ❑ How much water is to be used and is there any way to recycle all the water?
- ❑ Why was this location chosen, and what other locations were considered?
- ❑ How big is this project, both in its development and construction phases?

- ❑ Once it is completed and operational how many workers will there be?
- ❑ Are workers going to be drawn from the local community or brought in from afar?
- ❑ Of the locals, how many will be in management, how many in low-paying jobs?
- ❑ What obvious changes will the community see and feel?
- ❑ What are the waste materials and how is the waste to be treated?
- ❑ What are the planned transportation routes?
- ❑ What are the current plans for post-project clean-up?
- ❑ What commitments has the project already made to other organizations to take care of these aspects?
- ❑ Can the community take a role in some of the operations instead of hiring outside companies to do it?
- ❑ Is this completely financed? Are there partners? Can the community play an investment role?
- ❑ How long will the project last — both the development and construction phase, and also the operation of the project?
- ❑ Does the proponent plan for a “permanent” home in the community?
- ❑ Just what is the long-term picture from the proponent’s perspective?
- ❑ Do the community and the proponent both feel at ease with local men and women involved in the project?

Reminders about Benefit Sharing

- ❑ Do you understand how the project will make money, and how much it will earn?
 - Check out the profits from similar projects by this proponent.
- ❑ What portion of the profits are likely to stay in the community?
- ❑ Who from the community will be employed and to do what kind of jobs? How long will the project operate? Can the community be a permanent part of the industry?
- ❑ What spin-off or support services can be started up?
- ❑ If the community does become dependent on the industry from the project, what will happen when the project is finished or does not live up to expectations?
- ❑ If fishing, or hunting, or traditional agriculture, will be reduced or destroyed, is the project worth it?

If the community will receive a financial package to offset the loss of other opportunities, is it enough to make up for other changes to your cultural and social traditions?

GOVERNMENT

PROGRAM OF PUBLIC CONSULTATION

- ❑ Is there a political, historical, or social tie between this community and others?
- ❑ What significant changes to the social, cultural, economic, political, or environmental conditions of the community have taken place recently or even not-so-recently?
- ❑ What experience or participation has this community had with development projects or agencies?
- ❑ Has this community ever participated in a consultation? If so, was it successful?
- ❑ Who are the community leaders? Whom do they represent?
- ❑ Has there been a recent change in the community leadership; if so why?
- ❑ Is the community divided in its allegiance to the leaders, i.e. will you be dealing with more than one faction?
- ❑ What are the political systems within the community? How are they allied to external political systems? Does the community in general approve of the project or its ideals and goals?
- ❑ What are the respective roles of Elders, men, women, and youth within the community?
- ❑ Who is most knowledgeable about the community's biophysical, socioeconomic, and spiritual resources?

You will probably be greeted with skepticism, but persistent good behavior will pay off.

***T*RADITIONAL KNOWLEDGE CASE STUDIES**

CASE STUDIES SOURCES

To illustrate some of the concepts of how traditional knowledge can be incorporated into projects and project planning, several case studies are presented below. This is by no means an exhaustive list, but each one illustrates a different aspect of how perspective is gained by including traditional knowledge in the project. These case studies are drawn primarily from examples provided by the International Labour Organization (ILO), The World Bank (WB), Indian and Northern Affairs Canada (INAC), and the United Nations Education, Scientific, and Cultural Organization (UNESCO). Users of the guidelines are encouraged to submit their own examples of case studies to an Indigenous Knowledge Centre (see Appendix 3).

CULTURAL VIABILITY CAN BE SAFEGUARDED THROUGH CONTINUED HABITATION AND USE OF TRADITIONAL LAND (PERU)

The valley of the Mayo River was isolated from the rest of the country until the 1970s, when construction of the Carretera Marginal trunk road gave access. A wave of spontaneous settlers from the highlands and the coast then came into the valley, increasing the population five-fold. Under such a dramatic event, the Aguarunas became a disadvantaged minority in their own traditional territory. Providing legal land titles to the nine Aguaruna communities living in the Alto Mayo basin, adjacent to the settled areas, was a condition of the IFAD project.

The native communities were thus able to obtain communal land titles and rights from the government before the major wave of migrants could reach the region. In this way, the nine communities became owners of 60,000 hectares of land, of which some 17,000 hectares were suitable for intensive agricultural production. Consequently, they could continue their traditional activities in shifting agriculture, growing about 80 species of plants, most important among them, manioc, maize, bananas, and rice. Hunting, fishing, and gathering fruits and nuts from the forest are other activities that significantly enhance their diet.

INDIGENOUS WOMEN HEALERS FORMED GROUPS TO PRACTICE TRADITIONAL MEDICINE IN OAXACA (MEXICO)

After bitter struggles with official associations of physicians, traditional medicine people, mostly women, finally were able to organize joint meetings in which they shared their experiences and set up plans for collaboration. As a direct result, indigenous women benefitted immensely. Their involvement has been a key factor in cataloguing the plants, herbs, and practices, and in promoting the conservation and availability of curative products and practices. With the support of the National Indigenist Institute, UNICEF, and NGOs, an overall health program has been established. Recognized medicine people and healers train interested indigenous villagers as health promoters through courses and workshops, focussing on the recovery of communal knowledge about medicinal plants and traditional healing practices. The status of indigenous women has been enhanced through the creation of a council of traditional medicine where their knowledge is recognized, and through the opening of community clinics. Not only can they make wide use of their traditional knowledge in medicine, but also the exercise of their practice has been greatly improved.

MOSSI FARMERS OF BURKINA FASO REVIVE TERRACING AND WATER HARVESTING PRACTICE

Early this century the Mossi put up lines of stones (bunds) on their cultivated land to build up terraces. Because of political instability this method was later abandoned. After a series of droughts in the 1970s, the bunds were revived. Pits that conserve water were added. They were filled with organic material to increase soil fertility. Other introduced systems were shunned. The stone bunds are built up over the years, reaching about one meter height, terracing the slopes with relatively little labor input during the slack, dry season. The semi-permeable bunds allow for a gradual seeping in of the water and prevent the run-off caused by the scarce but highly intensive rains, reducing the risk of crop failure and soil erosion. In the disastrous drought years of 1983 and 1984, crops grew on land with bunds, while adjoining fields grew nothing. The International Fund for Agricultural Development ([LIAD](#)) assisted Burkina Faso to disseminate the technology throughout the country's densely populated central plateau, where today 150 villages on the plateau now have stone lines. Sorghum yields on the plateau have risen by about 40 percent in fields with bunds.

MAASAI WEATHER FORECASTING IN TANZANIA

Maasai alternate the use of their natural grassland according to seasons. This requires a timing decision on when and where to move next. They predict droughts as well as weather related diseases by watching the movements of celestial bodies in combination with observing the date of emergence of certain plant species (e.g., Ole Kitolya). Such "early warning signals" of an approaching environmental disaster are used to determine any preventive measures, prepare for mitigation and decide on the course of the community in using the natural resources. Similarly, estimates of animal fertility can be drawn from such forecasts with implication on stocking rates and density. This knowledge is little researched so far. Traditional expertise in astronomy and weather forecasting in combination with conventional agricultural meteorology could enhance local forecasts on harvests and food security.

INDIGENOUS POSTPARTUM MATERNAL AND CHILD HEALTH CARE RITES IMPROVES HEALTH OF MOTHER AND CHILD (NIGERIA)

During a four-week period after birth called 'Omugwo' the mother and the child are secluded and relieved from all other chores they are cared for by the grandmother of the new born. The new mother is given a stimulating hot soup made with dried fish meat yams plenty of pepper and a special herbal seasoning called 'udah' which makes the uterus contract and thus helps in expelling of blood clots. The diet helps to restore blood lost during childbirth to restore energy facilitated the healing of wounds and restores normal bodily functions and promotes lactation. For a first time mother the time is utilized to receive parental and house keeping practices from her mother.

The most important lesson learned in this example is that health care programs need to acknowledge the 'Omugwo' rites and integrate them in their assistance strategies.

WASHAMBAA USE BUNDS TO EMULATE PLANT SHELTER AND INCREASE HARVESTS (TANZANIA)

The Washambaa of the Usambara Mountains in Tanzania developed a land use system emulating the climax vegetation of the deciduous natural forest, a multistory system integrating annuals and perennials on the same plot. The principles were transferred to Nyabisindu, Rwanda. Special multipurpose contour bunds with trees shrubs and grasses were added to the system and re-transferred to the Washambaa once dense population and demand for firewood had depleted the soil cover. Emulation of natural vegetation is a valid approach to

soil conservation; transferring and adding elements to address new problems adds value to the original land use system.

VALIDATING TRADITIONAL ARCHITECTURE WITH MODERN TECHNOLOGY IMPROVED AWARENESS AND ACCEPTANCE

Following a re-orientation of national energy policies the Egyptian atomic energy commission started to research energy and material saving construction methods. A regional exchange of experience was arranged with the following observations: Curved roofs have a smaller surface area (and require less building material) for the same volume of indoor space. Computer simulations prove: the net heat gain of a dome can be 20 % less than that of a flat roof; curved roofs allow the warm air to rise leaving cooler air at floor level. Openings at the top can provide “ natural air condition” by very cross-ventilation; skylights on vaults and domes provide 4 to 5 times more light per unit floor area than low windows on vertical walls. Less window area is needed heating and cooling loads are reduced; rooms with curved roofs have a pleasant psychological effect on the occupants: they seem less oppressive than rooms with flat ceilings.

It has become abundantly clear to informed practitioners that including traditional knowledge (whether indigenous or not) is an important and helpful approach to modern project planning and implementation when traditional peoples are directly or indirectly affected.

TRADITIONAL ETHNOVETERINARY MEDICINE AND MODERN MEDICINE WORK AS PARTNERS IN CAMEROON, AFRICA

Modern veterinary sector is plagued by numerous constraints, including the erratic supply and prohibitive expense of veterinary drugs and supplies, poor communication facilities, and a shortage of manpower. The project promoted complementary use of indigenous and conventional veterinary medicine for sustainable livestock production, and the conservation of medicinal plant resources. Through interdisciplinary collaboration with governmental and non-governmental organizations, the project documented the indigenous treatment of various diseases and ailments of livestock. Diseases are now being treated using effective remedies that were used by local communities many years before the arrival of modern drugs. The practice depends above all on indigenous farmers' knowledge. Modern drugs complement indigenous ones and are used for certain diseases if no effective indigenous remedies are available. Farmers are now using more local remedies, which are several times cheaper than modern drugs. Low investment costs and increased livestock productivity improve farmers' monetary profits as well as their nutrition. Because the practice builds on indigenous knowledge and practices, it enjoys a high rate of acceptance. Indigenous knowledge is being preserved in a continuing way. Farmers are empowered and encouraged to participate in development. There is increased awareness of the importance of environmental conservation.

LOCALLY AVAILABLE INDIGENOUS EDIBLE SPECIES OF PLANTS ENHANCE COMMUNITY HEALTH, PROVIDE INCOME, AND CONSERVE BIODIVERSITY IN KENYA

The National Museums of Kenya is compiling a database of indigenous food plants of Kenya, to compile agronomic, nutritional, cultural and market data on priority species; to promote the cultivation, consumption and marketing of these foods through field demonstrations, educational materials and the media. People were despising their traditional foods in favour of exotic foods. This was most common among the younger generation, who took pride in their ‘modern’ patterns of consumption. Poverty, famine, and malnutrition were common in rural areas despite the fact that local foods were readily available. Much local knowledge

regarding the nutritional value and cultivation of local edible plants was being lost. Most people no longer knew, for example, when and where to collect seeds, etc. Having never been written down, the indigenous knowledge of the elderly was slipping away day-by-day. A number of important species, or varieties of species, were on their way to extinction.

Indigenous knowledge was thus the starting point. Specialists in nutrition, ecology, and botany have had to base their research on it because there was simply not enough time, money or human resources to duplicate all of that knowledge. The scientific, economic, and socio-cultural significance of the indigenous knowledge becomes apparent as specialists and practitioners work with it.

The practice is beneficial in several ways. It improves the local communities' living standards and health. It enhances the knowledge which extension workers put to daily use. It generates knowledge that is useful to NGOs seeking ways to alleviate poverty and improve public health. It generates scientific knowledge useful for the preservation of cultural and biological diversity. By raising the status of indigenous knowledge in the eyes of local communities, the practice not only helps to alleviate poverty but also increases people's respect for their own culture.

There are some dangers. Commercial interests could result in a selection of species and varieties, and thus reduce the present diversity. Research exposes local knowledge to piracy.

INTEGRATION OF QIANG ETHNO-BOTANICAL KNOWLEDGE AND PRACTICES INTO A REFORESTATION PROJECT, AND RESTORES A DEGRADED WATERSHED IN CHINA

The Qiang people mainly inhabit the valleys of the Minjiang River (a main branch of the Yangtze) in Sichuan Province. This region is important for its mountain forests, which are a major source of water for the Yangtze. What takes place in these mountain ecosystems has far-reaching effects on the areas downstream. Large-scale deforestation and population growth over the last four decades have resulted in serious degradation in this area. In just four decades, it is estimated that the forests have shrunk from 40 per cent of the land area to 10 per cent. This has caused a loss of biodiversity.

From the beginning, the project to rehabilitate this watershed has incorporated indigenous knowledge of the Qiang people. Their knowledge of medicinal plants has played an important role in the conservation of biodiversity, and Qiang practices of forest management and home-gardening have been integrated into the project. Because the collection and cultivation of plants for herbal medicines were an important source of income for the Qiang people, the cultivation of these plants was integrated into the project to plant trees. This helped to guarantee the participation of local farmers in ecological conservation, which in turn increased the economic return from the reforestation investment.

At present trees are being planted in terraces: i.e. horizontal bands of original vegetation (shrubs and grasses) are alternated with bands that are planted with tree seedlings. Indigenous species are preserved in the bands of original vegetation, which also prevent soil erosion. In the area where the Qiang live, the collection of wild medicinal plants is a traditional source of income. Some of the plants are used locally, but most are sold. Because of this market, Qiang farmers cleared fields for cultivating the plants on a large scale in addition to growing them in their home gardens. This indigenous agroforestry model—meaning that the people know exactly which plants to cultivate and how--was incorporated into the national projects. This not only maintains local traditions of forestry management but also promotes the participation of local people in conservation projects.

The practice provides income for local people and guarantees their participation in the project. This reduces the need for government and development agencies to make large investments. The practice of alternating bands of new trees with bands of original vegetation creates an ideal habitat for medicinal plant cultivation, increases the diversity of species in forest stands, and protects the soil against erosion from water runoff. It is common in China for reforestation projects to ban local people from entering the woodlands. But the Qiang people have a tradition of cultivating medicinal plants in common woodlands and around their homes. If this had not been taken into account, the reforestation project would not have been sustainable. It is sustainable because it not only focused on planting trees; it also opened up the woodlands to local people. They may cultivate medicinal plants under the tree canopy as they have always done. Because these plants need shade, local people have always understood the need to plant trees first. This step in their indigenous practice is now supported by project funds, but they still finance the cultivation of medicinal plants themselves. This cultivation surely increases the diversity of woodlands, and if reforestation projects are managed in this way, local people will surely protect the newly reforested lands. The traditional medicinal knowledge of the Qiang people has acquired higher status as a result of the reforestation project. This helps to ensure that local traditions are passed on to future generations. The cultivation of plants for herbal medicine is very popular in China and not only limited to one ethnic group. But each group has its own species and practices. Planting trees in terraces on slopes is an extension of the indigenous practice of the Qiang people, who planted cash crops in this way, including the *Zanthoxylum*, a kind of pepper which has traditionally provided one of the Qiang's traditional remedies.

THE BAREFOOT COLLEGE - PROMOTING PRODUCTIVE EMPLOYMENT FOR YOUTH IN INDIA

A hundred years ago, when villages in India had no urban-trained professionals with impressive paper qualifications, what did the villagers do? They developed their own knowledge, skills and wisdom to solve their basic problems of drinking water, health, education and employment. The Barefoot College has been reviving and giving more respect and dignity to knowledge, skills and wisdom that have been devalued and discarded by modern-day planners and 'experts'. The idea is to apply traditional, indigenous knowledge and skills to solving these basic problems, and thus to reduce villagers' dependency on the expertise from outside which is so often inappropriate and irrelevant. Villagers are encouraged to depend more on their own common sense, on their indigenous institutions, and on their own practical skills and ability to judge what is possible.

The skills taught at the Barefoot College are aimed at providing the basic services villagers need: safe drinking water, sanitation, education, and health care. The College is a non-formal training institute where young men and women are taught practical skills by village teachers, many of whom have no formal qualifications. Teaching and learning are based on the day-to-day needs of villagers. The approach has given the College a grassroots base, made the training low-cost, and demonstrated the sustainability of community skills that have never been endorsed by any recognized university or college. Up to now the practice of using village knowledge and skills has only been paid lip-service; it has never really enjoyed real confidence or been given a full opportunity.

The College has over 400 staff members working full-time in various activities related to basic services. They have no formal qualifications for the job they are doing. With the help of a cadre of barefoot engineers, doctors, teachers, designers, chemists, accountants and traditional communicators, communities are using expertise they acquired from their ancestors. The concept of communities depending on themselves has revived. Indigenous institutions and decision-making processes have been activated, and villagers have gained

new confidence. They increasingly recognize their own strengths and assign value to their own skills--something that was never felt before.

All changes emerge from a conflict of ideas, approaches and methods. The Barefoot approach has challenged the urban-based, 'paper-qualified' experts in the belief that this totally non-violent conflict will be beneficial to the communities over the long term. Already the benefit has been amply demonstrated.

The use of traditional (indigenous) knowledge, skills and wisdom promotes active community involvement because people depend more on each other. The use of traditional knowledge has an ethical dimension. It encourages transparency and accountability. This is not the case with urban-based skills, which encourage secrecy and dependency, and which offer no guarantee that the service is either competent or reliable. The use of traditional knowledge demystifies the local technologies that will be the basis for sustainable solutions in the future. The more people who understand and try out a technology, the greater the chance of the technology being accepted. Other types of sustainability are achieved by using traditional media, such as puppet and street theatre, to convey messages on social issues (minimum wage, gender equality, etc.).

OVERCOMING LABOUR SHORTAGES THROUGH INDIGENOUS MUTUAL-HELP GROUPS IN THE PHILIPPINES

To improve soil erosion and poor soil fertility, the International Institute of Rural Reconstruction (IIRR) introduced agroforestry measures. But because the measures were labour-intensive, they were being adopted only slowly. After a visit to a similar project, the farmers themselves suggested forming traditional mutual-help groups for the agroforestry work. These groups are called "hunglunan" in Albay province, "alayon" in Cebu, and "tropa" in Cavite. They usually consist of four to six members, but sometimes up to 10 or more members, who help one another with labour-intensive agricultural activities such as land preparation, planting, weeding, and harvesting. Members also help one another for fiestas, weddings and other social events. The local labour groups formed for the project were crucial in implementing the agroforestry measures. The use of local approaches and the fact that the groups were formed by the farmers themselves were important factors. Experience in many development projects has shown that groups introduced by outsiders seldom survive for long.

The sustainability depends very much on the project for which it is used. For example, if people do not find the agroforestry measures useful, they will leave the mutual-help groups. Another factor probably influencing sustainability is whether the groups formed themselves according to their own criteria or whether the groups were imposed by outsiders. Local people initiated the practice and were familiar with it. Local labour-sharing arrangements can be used as an effective tool for making labour-intensive activities more acceptable.

PARTICIPATORY RESEARCH MAPPING (PRM). USING MAPS OF INDIGENOUS LAND-USE PATTERNS TO HELP INDIGENOUS PEOPLES CLAIM LAND RIGHTS IN HONDURAS

The practice helps indigenous hunter-gatherers draw their own maps of the lands and resources required for their subsistence. The aim is to help indigenous people communicate their need for land to government authorities through their spatial knowledge of the landscapes and ecosystems they inhabit. We encourage people to draw progressively more complex maps of the sites and areas used for their subsistence. Projects in Honduras and Paraguay are described in this report.

In Honduras, the project was co-ordinated by MOPAWI, a local NGO, and several indigenous organisations. The project aimed at developing a clearer understanding of indigenous land-use patterns so that an appropriate strategy could be designed to legally reclaim historic land rights. The project was funded by

Cultural Survival. Indian 'surveyors' designed a questionnaire, which they then administered to all villages in the eastern Honduras region (population 40,000). The data was gathered through public meetings, and included oral and graphical descriptions of the sites and areas used by villages for their subsistence. The surveyors gathered the information, and professional researchers used the information to draw up 1:50,000 scale maps of the region. Circles were drawn around the sites identified to show the approximate extent of lands used. Village-level data was grouped into zones, and the resulting map was published at a scale of 1:500,000. The researchers included a vegetation overlay on the map to highlight the relationship between land-use and the landscape's ecology.

In Paraguay, the project focussed on helping Indians draw detailed maps to communicate their indigenous knowledge of land and resource-use. The practical purpose of the research was to shed light on the extent and quality, in ecological terms, of the lands the Indians needed for subsistence. (This is now a major issue in Paraguay, where land is being given to Indians on an externally-determined amount of 100 hectares per family).

The project began from people's own practice of sketching maps on the ground. During daily conversations, these maps were drawn to describe the location of a particular site with reference to roads and man-made features. Indians were encouraged to add more detail to these maps and to try their hand at drawing them on paper. This process took on a life of its own, as the Indians started to produce maps independently.

Maps of Indian land use that do not draw on indigenous knowledge do not incorporate an indigenous perspective on issues such as the ecological structure of the landscape, categories of ecological habitat, ethno-ecological classification, etc.. It enables indigenous people to articulate and communicate spatial data/information. Until now, indigenous people in Western Paraguay have not managed to do this with much success. Such information is crucial in their claims for land rights.

Some of the results are truly remarkable. Among other things, they emphasize the importance of indigenous spatial knowledge. We must access that knowledge if we are going to understand the complex, and often unseen factors that make up the intricate relationship between indigenous peoples and their environment. If required, Indian-made maps could be cross-referenced with aerial photos and satellite images of the area.

The practice works best with people who have an intimate knowledge of their land. It requires a high degree of trust between outside researchers and local people.

PROMOTION OF LOCAL COMMUNITIES' STRATEGIES FOR THE CONSERVATION OF MEDICINAL-PLANT GENETIC RESOURCES IN AFRICA

In Africa more than 80 per cent of the continent's population relies on plant and animal based medicine to meet its health care requirements. For the most part the plants and animals used in traditional medicine are collected from the wild, and in many cases, demand exceeds supply. As Africa's population grows, demand for traditional medicines will increase and pressure on natural resources will become greater than ever. Africa has a history of conserving bio-diversity in medicinal plants for at least two reasons: traditional practices surrounding their use reflect local knowledge and wisdom, and the plants are readily available and relatively cheap—being either easy to gather in the wild, or simple to cultivate. Herbalists have preserved traditional knowledge and practices of herbal medicine, often using it in combination with spiritual powers. Certain families keep their recipes secret. Plants continue to provide most of the rural population of Africa with ingredients for traditional medicines. Throughout the continent for many generations, small plots of land near the homesteads have been used as home gardens. Because these gardens serve a family's own needs, they contain a whole range of plants that provide food and medicine. They are used widely to prevent and treat

common ailments, but their conservation also means that the indigenous knowledge associated with their unique properties and correct application will be preserved.

Through a combination of participatory research and development action involving local communities, project workers first learn about the local communities' own solutions for conserving medicinal plants and for putting them to safe and effective use for traditional health care. Appropriate incentives then provide further encouragement of community efforts to safeguard bio-diversity at the village level. Economic incentives include seed funds, the promotion of income-generating activities, and help with marketing. Social incentives include technical assistance and training, information and consciousness-raising related to conservation, the provision of equipment, and technical and scientific advice and assistance. Institutional incentives include guarantees of full property rights, and the establishment of local committees and associations for purposes of monitoring and planning.

The fact that income can be generated from medicinal plants and traditional medicines helps to sustain the practice of cultivating them. Recognition for the value of traditional medicine and medicinal plants will foster sustainable methods of propagation and cultivation. Traditional knowledge and practices pertaining to medicinal plants will be preserved as herbal medicines are increasingly used to complement other forms of community health care.

ENHANCING PASTORALIST SELF-RELIANCE THROUGH SUSTAINABLE ECONOMIC DEVELOPMENT IN KENYA

An integrated development program for pastoralists in Kenya, bringing together traditional (indigenous) knowledge and modern technical knowledge in training, handbooks for treatment of cattle diseases, also aims at bringing together indigenous knowledge from different ethnic groups, sharing indigenous knowledge and practices, and promoting pastoralism as a valid mode of production and way of life.

This project is based on disseminating indigenous knowledge. In all project activities, the Kenya Economic Pastoralist Development Association (KEPDA) brings together traditional and modern technical knowledge, through publications and networking, to promote understanding and awareness on key issues. Such an approach offers considerable potential for improving dry land productivity in a sustainable manner. In the past, traditional knowledge was considered largely a research topic, and technical knowledge was considered as a replacement for primitive or outdated practices. This project aims to integrate these two information bases.

GENGENLILAS PRESCHOOL: COMMUNITY EFFORT FOR COMMUNITY GAIN IN CANADA

When the Campbell River First Nation on Vancouver Island decided to build a preschool for its community, it had specific needs in mind. It wanted a school that would teach children about the First Nation's culture and that would be free of charge to anyone in the community. Today, that school – the Gengenlilas Preschool – is up and running. The First Nation used resources from its bingo operation and from outside sources to build the school and offer the program free of charge. The school has a play-longhouse, First Nation theme toys and traditional articles such as drums and masks. Elders and other community members help teach the basics of the First Nation's culture, including Campbell River stories, dances, and songs. Previously, Campbell River First Nation parents had to pay to send their children to preschool. Now, parents are able to work while their children are at the school, a situation that is providing a boost to the local economy and to the personal pride of the First Nation's members. The school and its program are a vital element of the community's educational resources. Gengenlilas should continue for generations to come,

helping to teach the First Nation's children about the wealth of their heritage and to prepare them for their future education.

MIAWPUKEK: REACHING SELF-SUFFICIENCY THROUGH ECONOMIC DEVELOPMENT GUIDED BY TRADITIONAL VALUES IN CANADA

The Miawpukek reserve, a community of about 600, is located on the southern coast of Newfoundland. Since receiving recognition as a band under the Indian Act in 1986, the Miawpukek Band has committed itself to becoming economically self sufficient through a number of economic and community development activities that are guided by traditional values. These activities include aquaculture, housing, education, and a job creation program that is funded by social assistance funds. The economic initiatives are carried out in ways that respect the environment and the band's culture. The various initiatives have shown successful results and benefit all community members. For example, one in every three houses in the community has been built in the last six years. Band members are employed in fields such as aquaculture, silviculture, agriculture, tourism, and communications. Ninety percent of community service jobs – administration, health, social, and school – are staffed by band members. The Miawpukek bring a holistic approach to their economic development activities, taking into account the context of community and traditional values.

BUFFALO POINT DEVELOPMENT CORPORATION: DEVELOPING A WORLD-CLASS TOURIST FACILITY IN CANADA

Over the course of two decades, the Buffalo Point First Nation has built a profitable and popular tourist resort on Lake of the Woods in the Canadian Shield near the U.S. border. Operated by the Buffalo Point Development Corporation, the resort welcomes summer and winter tourists from the United States and Canada, and shows that First Nations can play a leading role in Canada's tourism industry. Work began in 1974 with a tourism development plan. Two decades later, the Buffalo Point International Resort features a world class marina with 320 docking slips; an RV campground; luxury rental cabins with jacuzzis and satellite televisions; and trails for hiking, biking, cross country skiing, and snowmobiling. Future plans include an 18 hole golf course, a hotel/casino, and an Aboriginal village theme park. The small size of the Buffalo Point First Nation (less than 80 members in 1995) necessitated development of the resort in stages, with careful planning at every stage. The keys to Buffalo Point's success have been patience, a clear vision and a good development strategy. Using the development plan as a road map, the Buffalo Point First Nation has successfully overcome obstacles in its path to become a seasoned veteran of the tourism industry.

COMMUNITY-BASED RESEARCH & DEVELOPMENT: INTO THE FUTURE WITH GLUNG-US (CANADA)

The T'Sou-ke First Nation of Vancouver Island traditionally caught trapped salmon in reef nets. At the turn of the century, it converted to the fishing methods used by non-traditional fishers. In recent years, the First Nation has not been catching enough fish to meet the needs of its community. In response to this problem, the First Nation decided to resurrect the practice of salmon trapping and put itself at the forefront of development technology. The T'Sou-ke took up the challenge of researching, developing, and testing a trap that would work in their local environment and meet their needs in an environmentally responsible manner. The First Nation conducted historical research and tests, and consulted a diverse group of experts: band elders with experience in salmon trapping; a retired, local fish trapper; a biologist; and cod trappers from Newfoundland. The Glung-us trap, named after the last T'Souke chief to fish with a reef net, yields top quality fish and allows for effective stock assessment and tagging. By bringing back salmon trapping, the T'Sou-ke First Nation is replacing environmentally outdated fishing practices with a part of its heritage that has cultural, environmental, and possible financial benefits for its people.

WALPOLE ISLAND HERITAGE CENTRE: A RESEARCH APPROACH TO SOLVING COMMUNITY ISSUES (CANADA)

The Walpole Island Heritage Centre – the research arm of the Walpole Island First Nation – was officially founded in 1989. But the First Nation undertook research activities as early as 1973.

The Centre has evolved from its early focus on land claims and historical research to its current acclaimed work on sustainable development and the environment. Through the Centre's effective practices, Walpole Island has become one of the first Aboriginal communities in Canada to take a leadership role in this area. In 1995, the Walpole Island First Nation received the "We the Peoples: 50 Communities Award" from the Friends of the United Nations for its exemplary record in environmental research and sustainable development. The Centre uses community-based research and decision-making. This allows the Walpole Island First Nation to sustain its cultural heritage and traditional ecological knowledge and, at the same time, interact effectively with the non-indigenous population. Recent projects include: partnerships with industries in Sarnia and government agencies to improve the quality of the St. Clair River and Lake St. Clair; and a study on the effects of toxic contamination on wildlife with the Great Lakes Institute, the University of Windsor, and the Canadian Wildlife Service.

VUNTUT GWITCHIN PORCUPINE CARIBOU PROTECTION: LOOKING AFTER WHAT'S IMPORTANT (CANADA)

The people of the Vuntut Gwitchin First Nation live primarily in a small community located north of the Arctic Circle in the Yukon Territory. The Vuntut Gwitchin depend heavily on the Porcupine Caribou herd for food and other products, as they have for thousands of years. The Porcupine Caribou's calving grounds are located in Alaska, and until recently, were protected by the Arctic National Wildlife Reserve. In 1985, the U.S. government planned to introduce legislation to open these lands up to oil exploration and development. This would have destroyed the Porcupine Caribou's calving grounds, potentially damaging the herd and affecting the traditional lifestyle of the Vuntut Gwitchin.

In spite of their small population and limited resources, the Vuntut Gwitchin successfully challenged the United States government, and secured continued protection for the calving grounds. They used a combination of methods, incorporating traditional, community-based decision-making processes and modern communication strategies, including lobbying and public education. One of the key components of the Gwitchin strategy was to gain the support of local groups before moving to higher-level organizations and governments. This step-by-step approach solidified grassroots commitment to the cause and helped the Gwitchin develop skills to give them firm footing at the next level.

ROCKY BAY FISHERIES UNIT: FISH FOR THE FUTURE (CANADA)

Through the generations, Rocky Bay First Nation's subsistence and commercial fishers have learned the subtleties of Lake Nipigon and her surrounding waters. In the last decade, the First Nation has become concerned about the deteriorating health of the fish, and decided to learn more about the fish population first hand. The Rocky Bay Fisheries Unit was created in 1993 to study the effects of fluctuating water levels in Lake Nipigon, the result of Ontario Hydro's fall-to-spring drawdown regime. The fisheries unit's work has expanded since 1993 to include tagging programs that study fish movement, and further studies on specific fish species and locations. Ultimately, this will help the unit manage the fish resources of Lake Nipigon and surrounding inland waters. Further plans include building a fish hatchery and developing a fish farm and fish processing plant. The objective of the Rocky Bay Fisheries Unit is to help First Nations people increase their understanding and control of and authority and responsibility for the waters which in turn will give them an economic basis for development and self sufficiency. Thanks to survey work done by the unit, the Ministry of

Natural Resources took steps recommended by the unit to help fish stocks recover. As well, volunteer workers get free training in fishery technician skills. An important factor in the fisheries unit's success has been its ability to take traditional knowledge, passed on through the generations by elders, and "marry" it to current technological practices and skills to gain a richer understanding of the waters so important to Rocky Bay. The joining of these two streams of knowledge has the respect and support of the Rocky Bay community members, fishers (subsistence and commercial), non-Aboriginal commercial fishers, the Lake Nipigon Advisory Board, Ontario Hydro, and the Ministry of Natural Resources. As a result, the fisheries unit has forged strong working relationships with each of these groups.

WIKWEMIKONG COMMUNITY FORESTRY MANAGEMENT: W.I.K.Y. – WOODLANDS IN KEEPING FOR OUR YOUTH (CANADA)

Wikwemikong Unceded Indian Reserve is an Aboriginal community on Manitoulin Island, Ontario, that has suffered from the deterioration of its forests. The community has also experienced scarcity of food supplies and plant and animal products, which it uses to produce crafts. These scarcities have been attributed to decades of uncontrolled cutting and to excessive hunting. As a result, the Wikwemikong Band was forced to manage its forest lands so that short- and long-term commercial and community needs could be met. In response to this, a 20-year forestry management plan was developed and approved. The plan encourages long-term production of timber products, silviculture practices, and suitable policies and regulations to control timber harvesting. With these key elements, Wikwemikong is now positioned to support a sustainable forestry program while providing long-term employment for its band members. Wikwemikong's approach to forestry management is effective because it combines technical and scientific long-range planning and short-term benefits, with concepts of sustainable development. Furthermore, strong community commitment, a well-suited organizational structure, and innovative and entrepreneurial marketing savvy have all played a role in the success of this forestry management plan. The Wikwemikong Band has planted 500 000 trees in less than four years, trained 35 silviculture workers, managed a wood supply that supports a forest products company which in turn provides year-round and seasonal jobs, and created a forest fire fighting service that employs 130 workers on a seasonal basis.

LITTLE RED RIVER CREE NATION – TALLCREE FIRST NATION CO-MANAGEMENT AGREEMENT: WORKING TOWARDS SELF-SUFFICIENCY (CANADA)

Little Red River Cree Nation (LRRCN) and Tallcree First Nations are working to regain control over their traditional lands in northern Alberta. They are doing this through a Cooperative Management Agreement (CMA). Signed in 1995, this \$5 million agreement is between the First Nations, the provincial and federal governments, and High Level Forest Products, a private company in the area. The CMA calls for developing and implementing an ecosystem-based resource management strategy for sustainable development for a 30,000 square kilometre area of northern Alberta. It allows the two First Nations to protect the environment, preserve important cultural sites, create long-term employment and ultimately become economically self-sufficient by developing a forest economy. Forest resources in the area will be managed according to the principles of sustainable development and traditional land use practices, following guidelines laid out in the area's Forest Management Plan. Representatives from LRRCN and Tallcree comprise a majority on the Forest Management Planning Board. The CMA combines several unique initiatives which reflect community traditions but also integrate the realities of the market economy. Traditional knowledge is combined with scientific research to provide a holistic perspective on the area's development. Ongoing training activities are helping First Nations prepare for future development activities, and partnerships are being forged between

First Nations and a variety of public and private sector groups. A high degree of participation by LRRCN and Tallcree community members is encouraged in all activities.

MUSKEG LAKE URBAN RESERVE NEGOTIATIONS: A PRECEDENT FOR FIRST NATIONS / MUNICIPAL RELATIONS (CANADA)

The Muskeg Lake Cree Nation and the City of Saskatoon forged through uncharted territory when they negotiated the details for creating an urban reserve. While Muskeg Lake is not the first urban reserve, reserves such as Musqueam in Vancouver and St. Mary's in Fredericton-Nashwaaksis became urban reserves only after cities expanded around them. The establishment of a new reserve on land previously under municipal jurisdiction is precedent-setting. It was in the best interests of both the First Nation and the city to forge a good working relationship with one another, knowing that the manner in which they negotiated would be critical to the success of the endeavour. For their part, Muskeg Lake Cree Nation developed an effective negotiating approach, characterized by clear, well-defined goals, flexibility, and a determination to conduct the negotiations patiently and from a "business" point of view. Furthermore, the First Nation also developed and employed the expertise required to manage the negotiations itself and reach agreements that would ensure the realization of its goals for economic development and self-government. As a result of effective negotiations, the urban reserve has become a reality. The McKnight Commercial Centre, the main structure on the reserve, houses a wide range of tenants, such as First Nations organizations, financial institutions, and commercial establishments, all of which provide rent and employment. As well, when the Muskeg Lake First Nation returns to the negotiating table to pursue new ventures, they will be met as respected partners in development.

INDIAN CRAFTSMEN AND ARTISTS OF QUEBEC: CUSTOMER SERVICE IS THE KEY TO SUCCESS (CANADA)

Indian Craftsmen and Artists of Quebec (ICAQC) is a corporation that was established more than 20 years ago to meet the needs of Aboriginal arts and crafts producers. Located on the Hurons Wendat reserve, approximately eight kilometres outside of Quebec City, the corporation has remained successful in challenging economic times by expanding its customer base and by marketing the finished products of Aboriginal crafts producers. However, the secret to making these strategies work has been excellent customer service. ICAQC's customer-service practices include calling customers on the same day to confirm orders and shipments, and training employees in French and English so that they can serve customers anywhere in Canada. As a result, ICAQC has become one of Canada's largest suppliers and distributors of basic handicraft materials for Aboriginal communities across the country, and an important marketer of Aboriginal arts and crafts. ICAQC helps Aboriginal crafts producers and artists continue to produce arts and crafts and profit from their talents. Through this support, ICAQC plays an important role in maintaining and promoting Aboriginal culture.

KIVALLIQ PARTNERS IN DEVELOPMENT: BETTER SERVICES THROUGH PARTNERSHIP (CANADA)

The Kivalliq Inuit Association and the Government of the Northwest Territories have developed a new way of doing business in the Kivalliq region. Three separate agencies – Sakku Investments (the development corporation owned by the Kivalliq Inuit Association), the Department of Economic Development and Tourism, and Keewatin Community Futures – joined forces in 1995 to offer one-stop cost-effective business assistance to Inuit individuals and businesses. The initiative, known as Kivalliq Partners in Development, offers a more holistic and comprehensive approach to economic development in the region. Prior to the formation of Partners, entrepreneurs and businesses faced an up-hill battle to secure funding and business

advice. Each of the three agencies was located in a different area of the Kivalliq region and administered its own programs and funding in its own way. Service, from the clients' point of view, was typically fragmented and complex. Today, Kivalliq Partners gives clients advice on starting up a business, loans, and information on grant options, equity investment and networking contacts – all from one office in Rankin Inlet. Kivalliq Partners in Development is an excellent example of how Inuit organizations are working toward economic self-sufficiency through creative partnerships and effective strategic planning.

EVERGREEN FORESTRY MANAGEMENT LTD.: EMPLOYEE ASSISTANCE PROGRAM (CANADA)

Evergreen Forestry Management Ltd. (EFML) is a joint enterprise of the Hay River Dene Band and the Fort Providence Dene band in the Northwest Territories. In 1990, Evergreen Forestry Management Ltd. won a five-year contract from the Government of the Northwest Territories (GNWT) to manage fire suppression in the area around the communities of Hay River and Fort Providence. The company recognized early on that alcoholism among employees threatened EFML's success. Absenteeism and low productivity were chronic problems. These issues were critical, as the company's contract with the GNWT stipulated that the absence of one crew member could result in the dismissal of an entire team. The company developed an employee assistance program to address alcoholism among its employees. The program's approach is based on an organized system of education and intervention, which incorporates "constructive confrontation." The program involves family and other community members in providing support to the employee. Key factors which have lead to the program's success include organizational and community support, an objective style of management, clear roles and procedures, and an effective use of community resources. Since the program's start in 1992, EFML has seen an improvement in worker health, better relations between management and employees, and a renewal of the company's contract to fight fires.

GUIDELINES FOR INDIGENOUS PEOPLES

SUMMARY OF THE GUIDELINES FOR INDIGENOUS PEOPLES

This set of guidelines will assist you to understand how to participate successfully and to everyone's benefit in development projects. They are organized in roughly the order you will need to use them when you become involved in a development project.

1) Form a representative group

To interact successfully in a development project, someone or some group will need to represent your collective interests. These can be informal or formal, but it is best if they have some legal standing, such as a community corporation or a non-governmental organization. The members should be chosen on the basis of skills required, not just community status.

2) Be prepared: gather information now

Don't wait for a development project to come along. Start organizing your own information now. It is a beneficial activity in any case, and can be used to trigger the kinds of development projects you want to have happen, including projects that you can carry out yourself.

3) Get involved

Once a development project comes along, it can provide enormous benefit to the community if managed well. But to make the best of the project, it is important to be a part of it at all the stages. If the project is potentially threatening to your livelihood or well-being, do not avoid it, get even more involved.

4) Be assertive. Don't be aggressive, don't be passive

Experience with many proponents and indigenous groups has shown that the best way to interact is to be positive, forthright, and patient. Waiting and reacting in a passive manner is the least effective. Aggressiveness often makes the situation worse.

5) Estimate impacts carefully

Work with the project planners to estimate what the effects and impacts will be from the activities and physical changes that will be made. Estimating carefully what these effects will be is the best way to understand how the development project can be of benefit or can create damage.

6) Communicate and network

Expand your capacity by staying in touch with your community members, your neighboring communities, outside experts, NGO support groups, and especially the proponent and government regulatory or enforcement agencies.

7) Know the rules

Development projects follow government rules or rules that are internal to the organization carrying out the project. Be sure you know what these are, and how they work. Many of these rules will create a framework for your community to ensure the project gives the community the most benefit. Unless you know about these, it is hard to take full advantage of the opportunity.

8) Use and keep your traditional knowledge

Much traditional knowledge information can be shared, some cannot. All of it, however, can be used by traditional knowledge practitioners. This is the best way to share the knowledge: use it in the project to help find solutions to problems and to estimate impacts. Expect to be compensated for the effort, just as if you were a staff member or contractor.

9) Insist on your rights, know your bottom-line

Most development projects are exciting and of great benefit to the community and to individuals. Occasionally something goes wrong. If your traditional or other rights have been disregarded, you must know what they are, and how to ensure you can retain those rights.

INDIGENOUS GUIDELINE #1: FORM A REPRESENTATIVE GROUP

CHOOSE TEAM MEMBERS ACCORDING TO SKILLS, BUT RESPECT INDIGENOUS SOCIO-POLITICAL STRUCTURES

Before you do anything else, create a group to speak on behalf of your community.

Having a small group represent you may not be familiar, but it can be important and can be done in ways that add to the richness of your traditions. The people chosen will become a team with each member having different responsibilities and tasks. Members should be chosen on the basis of the skills they can bring to the project.

The representative group should have their mandate and authority clearly defined. Perhaps it is only the authority to bring information or recommendations back to the community. One person could be named as the leader or spokesperson of the group. Make sure everyone in the group understands the limits to his or her decision-making authority (if any) without coming back to the community as a whole. Having a representative group of indigenous peoples empowered by the entire community to represent it, can make negotiations smoother.

Proponent representatives are usually delegated the authority to make decisions only on the basis of policies or strategies agreed to by the proponent. It is normal business practice for only a few people to be involved in the actual decision, so they will be at ease with the representative group taking recommendations back to the entire community for decisions. Inform the proponent right from the first about how your community normally conducts discussions. Try to keep the decision-making process as fast as possible, but be sure to leave enough time to think and consult with your own community.

Consider having all parts of the community represented: Elders, men and women, and young people. The leader or spokesperson should be someone the entire community respects. Other representatives might include those who have special knowledge of the area where the project is to take place.

If culturally appropriate, women should be included. Women's knowledge and advice works best if it is used directly with the rest of indigenous knowledge. If it is not culturally appropriate to have women participate directly, then consider another strategy such as a special interest group working in parallel and reporting back to the main group. Try to develop ways of consulting them informally on issues where their knowledge is normally used in everyday life. Easily forgotten details can sometimes make the difference between a good project and a great one.

BECOME LEGALLY RECOGNIZED

Contracts are a means of defining what everyone wants and agrees to. Being able to agree to a contract is not confrontational, it clarifies the agreement so that everyone knows what to expect.

Your community, or some group such as a specially formed representative NGO, may need to have legal status. It is normal for projects to be handled through contractual arrangements. Deciding whether this is

necessary is primarily a decision the community must reach in discussion. Factors to think about are whether the project will produce revenue, if there are issues of ownership of the end results (e.g. physical structures or patentable materials), if there is some significant change to the landscape that might cause environmental damage that would impair your community.

If the community agrees that there is some reason to consider having legal status, think about using an existing incorporated town or village. If there is no legal entity, consider creating one that includes the whole community. Alternatively consider creating a legal body just for this project (if it is big enough). In India, for example, a practice of establishing non-governmental organizations to represent groups, especially communities, has demonstrated that the idea works well (see Honey Bee – e-mail honeybee@iimahd.ernet.in or on the Internet <http://csf.colorado.edu/srsiti>).

Choose whatever method best suits your situation to take part in legal negotiations over traditional intellectual and cultural property rights, and traditional resource rights. A legal organization will also give you the opportunity to become partners in the project.

In creating a legal entity, there is no reason to change the way your community normally makes decisions or is currently organized. The reason for establishing a legal presence is to ensure that the community has maximum protection and authority in negotiations.

CHOOSE YOUR OWN REPRESENTATIVES

Be sure that the group or people who will be representing the community actually have the community's agreement to represent them. Several different forms of representation are not appropriate:

1. Try to avoid having a government appoint your representative.
2. Do not agree to a government staff member being your representative just because he or she is indigenous. Give the community an opportunity to assess the qualifications of the person who could represent the community.
3. Be careful that the community has a chance to distinguish between tribal leaders who will represent them and tribal leaders who are only interested in brokering a deal.
4. Watch out for tribal “dealers.” Sometimes the proponent or government will offer to provide basic services to the community through a dealer, in return for agreement to proceed with the development project.

HELP THE PROPONENT TO COMMUNICATE WITH YOUR COMMUNITY

Your local community can help proponents by offering to teach the managers of the project the ways of indigenous peoples. In Kenya, Africa, for example, the Friends of the National Museum of Kenya, offers courses to diplomats and business people on proper etiquette for interacting with the many indigenous and ethnic groups in the region. This enhances the experience of business and indigenous peoples working together, and brings modest income to the museum and to the involved communities.

INDIGENOUS GUIDELINE #2: BE PREPARED: GATHER INFORMATION NOW

THE IMPORTANCE OF BEING PREPARED

Development projects can be an enormous benefit to your community. That benefit is made easier to realize if the information that is likely to be required is organized and understood well in advance of the project being initiated. Similarly any potential problems can more easily be solved if the correct information is already known.

The following suggestions are based on the kinds of information that indigenous communities have already found to be helpful in development projects. In many cases, the assembly of this information makes possible the initiation of development projects on your own, and without the necessary intervention of aid agencies of corporations. It also provides evidence to the community, especially the younger members of the community, of the value of traditional knowledge in a modern setting.

CLASSIFY LAND USE FROM YOUR PERSPECTIVE

Experience has shown that early identification of “valued ecosystem components” is a critically important early step in the process. Valued ecosystem components are areas of land or species that the indigenous peoples must have to preserve their way of life. Valued ecosystem components also include the relationships between the environment and living things to the indigenous people a social cultural or even economic attributes that are most important to the community's survival. Perhaps it is a special area of land that is used for multi-layered agriculture, or perhaps it is a traditional part of a stream that supports an important source of food, or perhaps it is an area that is traditionally used for certain ceremonies because of a set of features the land possesses. These areas and the animal or plants that are of critical importance in them are termed “valued ecosystem components.” By classifying them and by defining them carefully (it is best to do so in advance) it is much easier to describe them and protect them from potential harm during the planning and implementation of a development project. If these are not defined early enough, decisions may be taken that would make safeguarding these areas very difficult or impossible.

(See the following interesting web site. ([http:// www.unimas.my/fit/roger/EJISDC/vol1/vol1.html](http://www.unimas.my/fit/roger/EJISDC/vol1/vol1.html)))

The proponent will have made an assessment of how the land is to be used. Find out how they classified sites (mining, forestry, tourism etc.). Make sure you already have your own classifications for the same piece of land. You want your own classifications complete before you even hear what the proponent has in mind, so you are not biased by the proponent's classification. Compare them. Are there incompatible uses, such as digging up an area for a foundation that is right over a sacred burial ground, or placing a road where a migration route would be blocked? Once problems are known, they can become points for later discussions.

COMPARE SCIENTIFIC FINDINGS TO YOUR TRADITIONAL FINDINGS

In project development and environmental impact assessment, no one has all the answers. Use local authorities to check the accuracy of information used by the proponent to predict effects. Compare your conclusions to theirs. Are they the same or different (work with the end results, not the process of how you arrived at the end results). Science is built on the premise that current knowledge is only a working hypothesis

that needs to be tested and refined. The very rigour of science makes it a slave to accuracy. All data must be explained by the model. Do you know something that is not explained by the proponent's model? Usually small differences in data points make small differences in the model, but if even one data point is a long way outside the model, the model will need to change radically to include the new information. This could be an important discovery.

REPORT CARD ON THE PROPONENT'S PAST

Most organizations have a package of information including a mission statement, statement of values, environmental policy statements, annual reports, and technical reports similar to what will be prepared in your case. By requesting this information, you can get a quick look at the proponent. Try to find information on the track record of the proponent. In North America, the Better Business Bureau, or similar organizations in other countries, will have records of complaints. A list of all law suits can be obtained in most countries through legal libraries, on-line annual reports, securities commission findings and other sources. A history of law suits can be very informative, and be used to develop the strategy that will work best in negotiations with the proponent.

If you do not have a way to find out about the proponent directly, ask other communities that have had experience working with the proponent — how did it work out? If you can get on the Internet, use it to find out about the proponent. Send messages to other traditional knowledge organizations (see the appendices for traditional knowledge centres, web sites, and literature). Check out newspaper articles from the business section and also from the news sections. If anything makes you suspicious, follow it up with a call to your local media.

In many countries, this may not be easy, but direct contact with any proponent is possible. Some large mining companies will take representatives of the community to visit projects completed with other traditional groups. This is an excellent way to see what they have done and to talk directly with people who have already been through the process.

GET A TECHNICAL SUMMARY

Developers always make advance plans on paper before they take any major initial steps. Therefore, it will be possible for them to provide the official group with technical documentation. Full technical documents are quite large and often quite complicated. If this is the case, ask for an accurate summary in easy-to-understand language. While you can welcome offered promotional materials, you really do need to get a technical summary.

You should have a lot of information about the project:

1. What is this project all about?
2. Why this location and what other locations were considered?
3. How big is this project, both in its development and construction phases?
4. Once it is completed and operational how many workers will there be?
5. Are they going to be drawn from the local community or brought in from afar?
6. Of the locals, how many will be in management, how many in low-paying jobs?
7. What obvious changes will the community see and feel?
8. How is the waste to be treated?

9. What are the planned transportation routes?
10. What are the current plans for post-project clean-up?
11. What commitments has the project already made to other organizations to take care of these aspects?
12. Can the community take a role in some of the operations instead of hiring outside companies to do it?
13. Is this completely financed? Are there partners? Can the community play an investment role?
14. How long will the project last — both the development and construction phase, and also the operation of the project?
15. Does the proponent plan for a “permanent” home in the community?
16. Just what is the long-term picture from the proponent’s perspective?

PREPARE A COMMUNITY LIST OF QUESTIONS

Prepare a list of needs from the community’s perspective. With this list in mind (but not presented formally) discuss informally at least the following items:

1. When will the proponent be able to tell the community their estimate of the long-term implications for the community?
2. What is the official project timeline? How does this fit in with your community needs for harvest, festivals, etc.?
3. Does the proponent feel at ease with both local men and women involved in the project?
4. Perhaps your community would like to involve young people so they can see how to become leaders. Is this a problem for the proponent, or would it see this as a good thing?

Get the proponent to give you a complete step-by-step definition of how it intends to complete the project.

Offer advice to the proponent on how they can better fit in with the needs of the community.

ENGAGE SOMEONE YOU TRUST TO INTERPRET SCIENCE-BASED KNOWLEDGE

If your community does not have a person trained in the sciences, consider asking someone you trust to transform the technical jargon into plain language. To do this well, the person you engage should have a basic understanding of ecology and theories of socio-economic development. Make sure this person can communicate well in your language. He or she can help to determine what other information will be needed using both traditional and non-traditional knowledge bases to come up with reasonable predictions of impacts.

UNDERSTAND THE EXPECTATIONS OF THE PROPONENT

The proponent will expect the community to provide a continually updated list of contacts and resource people. The proponent may want to understand the social and economic makeup of the community. It will use this information in its predictions of social, cultural, and economic impact. Discuss carefully how this is to be done, and who will be doing it. The proponent will expect the community to define what it wants from the project. This is not a small task to define. Resist the temptation to limit your expectations to money; there are often far more important cultural and social issues and safeguards to be negotiated.

To facilitate a mutual understanding of these and other expectations the proponent may have, invite the proponent to discuss all aspects of the proposed project with the community. Begin by determining what background information will be readily available. Set agendas together. Provide an explanation of the organizational structure of the community and who its leaders are. Ask the proponent to supply an organization chart with the local representatives identified on the chart. This will be important when it comes to making decisions and passing information to the correct people. You should find out if there are possibilities for joint ventures with the proponent.

INDIGENOUS GUIDELINE #3: GET INVOLVED

BE ALERT FOR NEW PROJECTS

Be alert so that if a project is going to be proposed for your area, you know about it and can become involved. There are many ways to do this. Perhaps the most effective is to develop a network of information among your own community members and among communities in the general region. One sign to look for is visits by people who are looking at the resources, discussing policies, or asking about the need to improve the local situation (even if the visit is not official). Another sign is an unexpected visit by a local politician, surveyor, the media, or others who are not the usual visitors.

TO BE EFFECTIVE, PARTICIPATE FULLY

You can only be part of the process by participating in it. Standing on the sidelines and complaining will not have any significant influence on the outcome, and may simply entrench the proponent's view that the community is not being cooperative. When this happens, everyone loses. You may be completely ignored and have no ability to influence the outcome of an assessment or any chance to participate in planning the development project, unless you are part of the process.

PRE-EMPTED DECISIONS? — KEEP TRYING!

In the best situations, any decision about whether to proceed with a project or not, will have been taken with the indigenous community. If this is not the case, and if a decision has been taken without your involvement, then it is important for your community to stay involved. Try to become involved in an official capacity. The most common problem is that the decision to proceed with the project has been taken without prior consultation.

In that case, move very quickly to insert your community into the process, if possible. Your instinct may be to refuse to talk to the offending people. While this may be a completely understandable reaction, it is not an effective strategy in this situation. Try to be cooperative, but at the same time, try to preserve your ability to make decisions about your own future.

The normal reaction from proponents when a community decides not to cooperate, is to go ahead anyway. That is why it is a good idea to stay involved, and not a good idea to refuse to be a part of the discussions. The community risks losing everything you might have bargained for. Be sure to participate, even if some decisions have already been lost. If the project is clearly going to be detrimental, legal action or media and public pressure may reverse or modify decisions. If so, this gives you the chance to influence at least some of the decisions. Find out what legal action you can take, just in case working cooperatively does not have the desired effect. While legal actions may be unpleasant, cooperation may still be possible after a legal issue is settled.

Moral persuasion with both the public and government agencies can be brought to bear through the media. Be careful, however, not all governments accept criticism well. If your community must accept an unfavourable project, stay in the assessment or development process. Do not give up. Even minor decisions about the project can sometimes make a real difference.

ESTABLISH FINANCING FOR YOUR PARTICIPATION

Many traditional communities do not have financial resources to plan or to participate. Some governing states require that proponents pay for others to participate in planning and environmental assessments. Ask for financial assistance. This gives your local community a better status in the negotiation. It is not enough for the local community to depend on local volunteers to help with the many tasks involved in an environmental assessment or planning a development project.

As soon as the proponent understands it will be expected to pay for the work of local people, it will want to ensure that its funds are well invested. Be prepared to explain what your people will be doing and what benefits the proponent will receive for its money. The benefits will be the basis on which the proponent will pay. Setting rates and fees is an important part of the negotiations. Try to find other examples, or consult the regulatory agency for benchmark rates of pay or fees for service for other experts such as scientists or technical experts.

Are there other forms of compensation that would be of more interest to the community? What about establishing a school, or a hospital, or scholarship program for the young people to go to university or community college in a distant location? Perhaps the proponent has a need to set up a communications system in the project. Can this be extended to include your community in the system and get access to the Internet? Can the proponent offer training in Internet activities and even help set up a web page for the community?

TRAIN TO BE INVOLVED

The people who are most directly involved will have to learn quickly. Training and capacity building are important. Try to find national, regional, or even local organizations that can provide courses in subjects related to the project. If none is available, try to involve local traditional entrepreneurs in acting as informal mentors, coaches, or teachers. Above all, get as prepared as you can to participate in a process that may not be all that familiar.

PARTICIPATION BY WOMEN

Since women can put different items on the agenda for discussion and review than men, make sure that they are considered in the training. Women, as well as men, will benefit from the training. Training women in your culture may need to be done by women. Encourage the proponent or government to include women as trainers. Once a few women of the community have been trained, they can act as trainers for others in the community. In this way, the investment on the part of the proponent or government need not be large.

ENHANCE YOUR BASE OF INFLUENCE: INCLUDE OTHERS

If possible, involve the entire community. In most projects there are other people or organizations who will directly benefit from or be directly hurt by the project. Still others will be interested in the outcome whenever a project has an impact on the environment.

International, national, and regional special-interest nature or environmental clubs and non-governmental advocacy organizations can be invited to become a part of your advocacy group. National or regional groups of indigenous peoples will be concerned about the potential impact on all aspects of the health of the community. Join forces with these other groups in some manner — whatever is your way. If possible, cement the relationship in documentation; this will inform the proponent and the regulatory agency of your representation. When the time comes to negotiate, your base of influence will be larger than if your community tries to do it alone.

INDIGENOUS GUIDELINE #4: BE ASSERTIVE, DON'T BE AGGRESSIVE, DON'T BE PASSIVE

ESTABLISH OPEN DOOR NEGOTIATIONS

The best practice is for proponents to include indigenous peoples and their communities in the key decisions right from the beginning. Encourage proponents to maintain open-door policies so that the community can participate in the pre-planning as well as later stages of the project. To maintain this open door, the community should also be prepared to invite the proponent to discussions as well. This does not mean that either the community or the proponent will invite the other to all meetings. It only means that the basic decisions should be discussed openly between the parties.

Occasionally, however, proponents may carry out closed door, or private negotiations in key areas while excluding community representatives. This often happens during government-to-proponent negotiations in which permits, regulations, or licenses are set out.

Such decisions are disrespectful of the community, but may be common practice. If possible, try to establish contact with the proponent before the key decisions are taken. Ask the communities to consider what information the representative group should have to negotiate properly. If the project is already moving ahead, ask to be included in the negotiations for granting permits. There may be standard processes for intervention at this stage. If so, consider using them. This does not have to be confrontational. It can at least begin as an information-sharing process.

Beware of the strategy to establish financial benefits for a few key decision-makers in the community so they can be manipulated to make inappropriate decisions at the expense of the community and for the benefit of the proponent. The community will need to be very firm with these situations. Often traditional knowledge can be used to great benefit in developing the cultural backdrop against which tourist development projects can be created. In Belize, the areas near great ruins such as Lamanai and Altun Ha have been developed with a sense of conservation of the culture of the ancient and modern local peoples.

DEAL FIRMLY WITH THE UNREASONABLE

Most people are quite reasonable. However, proponents sometimes make unreasonable demands because they do not understand indigenous peoples and the way they carry out their daily lives. Common practice may allow business to take advantage of a situation for their benefit at your expense. Business may have trouble understanding that their way is not necessarily the best way.

The best way to deal with both of these sources of unreasonable demands is to assert what is reasonable. It is useful to know if you are dealing with a misguided honest person, or a deliberately dishonest person, but in the end, only insistence on what is correct will be beneficial. Be prepared to go through legal channels to establish and to insist on what is reasonable, especially if you are facing a dishonest proponent.

TOO LITTLE TIME CAN LEAD TO POOR DECISIONS

Having sufficient time for the local community to come to appropriate decisions is an important part of maintaining a sustainable project. Proponents may be in a hurry. Time costs money. Be wary if the project seems to demand too many meetings in too short a time frame. Discuss the schedule and suggest a time frame that is more effective for your local needs for harvest, hunting, festivals, etc. People will be unable to digest important information if they are concerned about possible loss of livelihood resources.

Requests for cooperative research efforts should be welcomed with a proposal of how the community and the proponent can work together using traditional knowledge alongside scientific methods. However, it is wise to be careful of requests for research in which the proponent wants everything done in an unreasonably short time. Suggest Participatory Action Research as an alternative way to increase effectiveness and efficiency by including traditional knowledge.

WORK FOR “MEANINGFUL” CONSULTATION

Be very careful that “consultation” with the community is not really just a process of “informing” the community. Being informed is important, of course. But being involved and consulted for decisions is much more important. A simple request to meet the representative’s supervisor can start the process that will get you to the decision-maker. If this does not work, you will have to resort to finding out who the decision-makers are, and calling them directly, or if possible, visiting them by appointment. Set up one or more of many mechanisms to involve the local community in the process.

If this fails, the situation is likely to be a difficult negotiation. This may force you to fall back on legal approaches or using the media to gather public attention and force a high-level negotiation.

PROMOTE THE CREDIBILITY OF TRADITIONAL KNOWLEDGE

Increasingly, environmental assessments require that traditional knowledge be included in the assessment or impact statements. Development project planning is also beginning to be interested in alternative knowledge bases. This is a wonderful development from the perspective of indigenous peoples. Often, however, neither proponents and regulatory bodies may know how to deal with the alternative knowledge base. Indigenous communities can assist in proponents and governments by guiding them in the best practices of how to share the traditional knowledge and integrate it into the various stages of the projects.

Many best practices are described throughout this series of *Guidelines*. Sometimes it is helpful to understand what constitutes poor practices. Here are some examples of relatively common poor practices:

1. attempts to undermine the credibility of traditional knowledge so that the weight given to the findings by indigenous peoples is less than that derived from science
2. requests for overly simplified traditional knowledge to conform to business standards
3. requiring “proof” that traditional knowledge is useful
4. or that its only criteria for inclusion will be that it augments science to save time and money.

Defending the validity of traditional knowledge can be done through practice when people respect each other.

When respect and trust are lacking, it may require a legal challenge. In many countries, only time and persistence will make a difference. Any one project may only gain a little bit of progress, but in time, the sum of all the little steps toward a greater mutual understanding of the traditional knowledge systems will be significant.

PROTECT COMMUNITY STANDARDS

Most proponents will try to be careful of community standards. In fact, there are examples of companies spending years in advance of a development project to prepare for the interaction with the community (such as the diamond mining company Diavik), or offering to take representatives from the potential development community to other locations where the same company has completed projects (Placer Dome - a gold mining company). However, if a proponent does not respect community standards, it does not foster healthy long-term relationships. The most common ways in which this disregard is encountered include:

1. a proponent consistently setting aside local practices, such as traditional hunting times or sacred ceremonies to suit its project schedule,
2. actions departing significantly from community expectations and agreed plans or decisions,
3. discrepancies or misrepresentations that are dismissed as of trivial importance, and
4. proponent employees who routinely show disrespect for women, children, Elders, and the cultural mores of the community.

You will need to clearly identify and prohibit these unacceptable behavior patterns.

INDIGENOUS GUIDELINE #5: ESTIMATE IMPACTS CAREFULLY

CAREFUL ESTIMATES OF IMPACTS MEAN GOOD DECISIONS

The most critically important task, but also the most complicated task, is to estimate as accurately as possible what all the different effects will be on the community from the project: beneficial, damaging, and uncertain. Once these effects or impacts are defined to the best of your ability and the ability of the project, you can make decisions and plan what to do. If fishing will be reduced or destroyed, is the project worth it? If the community will receive a financial package to offset the loss of other opportunities, is it enough to make up for other changes to your cultural and social traditions?

Ask the women to predict the long-term effects the project will have specifically on *their* lives and well being. The invisible economy of "women's work" is usually not factored into the financial picture, but for the health of your community, it can be a major factor. Try to find ways to include that factor in the community's predictions.

BE SKEPTICAL OF PREDICTIONS OF GREAT WEALTH

Careful analysis of benefits to the community are an important factor in making decisions. While huge benefits are sometimes possible, the number of times that occurs is quite small. Therefore, predictions of great wealth resulting from the project should be viewed with a healthy skepticism. Get comparative views of the profit from similar projects. Where does the profit go? What portion of it will stay in the community? Who from the community will be employed and to do what kind of jobs? What spin-off or support services can be started up? How long will the operational aspect of the project go on? Is the project going to last a long time, or will be gone after a short period? Will the community be a permanent part of the industry? If the community does become dependent on the industry from the project, what will happen when the project is finished or does not live up to expectations?

Experience in traditional communities has shown that sometimes great wealth does happen. With good planning, this can benefit the entire community. Without planning, the new wealth can be lost, or end up in the hands of just a very few people.

ASSUME PREDICTIONS ARE NOT VERY ACCURATE

Because neither science nor traditional knowledge has particularly accurate means of predicting long-term effects, it is important to make the estimates of the impacts of a project with broad margins of error.

Traditional knowledge of the local areas almost always is more informed than distant science. Sometimes this results in under-utilization of resources. In one example in the far north, a whitefish harvest was slowly rising. Managers of the harvest used a scientific basis for estimating the maximum limits. Traditional fishers argued that the harvest could be much larger. The basis for the scientific quota limits rested partly on the understanding that there was one brood stock, and that stock was measurably lower than could support the current harvest levels. To settle the dispute, traditional fishers requested, and received, permission to take scientists to a whitefish spawning grounds that only they knew about; knowledge derived from centuries of watching the whitefish.

In other cases, it results in an over-utilization of resources. In another example, traditional Inuit hunters of beluga whales in the far north were careful to kill only certain individuals from herds. Scientists decided to sample the herds, and against the advice of the traditional hunters killed a very large individual the local people knew as Lok, named for its strange voice. The following year, the large herd that Lok had lead never formed, and the hunt declined rapidly. The hunt remained low for many years. According to Inuit hunters, Lok had not yet trained a successor, and until a new Lok appears, the beluga will not recover their numbers.

Always consider the cautious position, but ensure that the position is based on the best possible sources of knowledge. In any cases that source is the indigenous knowledge of the area. By combining scientific and local understanding the best possible estimates of impact usually result.

Elders are careful to remind the young that they must not forget that important knowledge can be derived by living on the land, and watching it react to natural forces over long periods of time.

The most common scientific weakness in making estimates of impact is a lack of long-term information. Most projects predict impacts on the basis of a short-term look at specific species. These models can often account for a very large percentage of the impacts, but not all. For example, models of population levels of specific animals or plants over a three year period are not good enough. Gradual changes in natural patterns established for centuries change over much longer periods. Of course, it is important to know if the food or clothing sources will be harmed immediately — these will be the first predictions made — but subtle, long-term effects can be even more important. Very slow changes in the economy or environment over years can result in social and cultural erosion, resulting in devastation that only becomes apparent years later.

Take time to understand all the long-term effects that might happen from the project. Development is all about change. According to many people in the development field, it is not possible for development to take place without change. Take time to be certain that the nature of the changes that may or will take place are acceptable. It is highly unlikely that development will take place in or near your community without change.

Be skeptical of claims that the community will remain the same during and after the project. Changes, even changes that are expected, tend to create conflict within the community. It may well be that the community is anxious to change the status quo. If so, this makes change easier to accept. If the community is not anxious for change, the transition period may be difficult. Be prepared for healing to take time.

PROTECT YOUR COMMUNITY FROM SOCIETAL IMPACTS OF ALCOHOL, DRUGS, AND DISEASES

If your community is not accustomed to interacting with western value systems, it will be very important to protect your community from potential intrusion onto your cultural values. Development projects originating and staffed by western personnel sometimes inadvertently introduce indigenous communities to unfamiliar ways.

Traditional communities sometimes suffer greatly from alcohol and drugs brought inadvertently into the community. Young and old alike can fall victim to overuse of these substances. Health problems arise from the invasion of germs from people from distant areas. Research has demonstrated that there is a gender difference in the impact of increased wealth in indigenous communities. Young men are disproportionately drawn away from the local community to seek work in towns or cities. This may leave the women and children behind without the necessary infra-structure and support systems. Under these conditions, disease and malnutrition are common results.

Try setting up a series of self-help groups within the community to make your people aware of the risks and how to avoid unwanted interactions. Establish rules or guidelines of etiquette with the proponent and their

staff before the interaction begins. It is much easier to allow greater freedom than to attempt to impose restrictions later.

DEFINE DIRECT EFFECTS

There are legal and moral obligations for a development project that has an impact on the environment beyond the area directly controlled by the project. For example, communities that live on a river downstream from the project have rights (called riparian rights). These rights should be preserved. Altering a migration route, or changing the nature of the surrounding ecosystems may cause unacceptable consequences for the nearby communities. Economic spin-off, cultural erosion, and social difficulties are all potential problems that nearby communities may experience as well. If possible, make arrangements to encourage nearby communities to join your own self-help systems. If this is not possible, try to have legal means to hold the proponent responsible for any negative impacts on the nearby communities.

DEFINE INDIRECT EFFECTS

Both communities and proponents may be legally responsible for indirect effects as well as the more obvious direct effects. For instance, harm may be done inadvertently by sharing traditional knowledge that another communities would prefer to keep confidential. Financial benefit based on support services required by the community or proponent hosting the project may cause problems in the long-run. If the financial benefit modifies the life-style of the second community away from traditional, but is too small to support the complete transition to a market economy, the nearby community may have been damaged and may feel it has some right to compensation. Whenever this is a possibility, carry out a joint assessment of the situation to map out how all the communities will cope. This may take the form of a multi-community business or management plan.

INDIGENOUS GUIDELINE #6: COMMUNICATE AND NETWORK

USE COMMUNICATION TECHNIQUES TO MEET YOUR NEEDS

What are your best ways of keeping everyone informed? Whatever they are, use them all the time. In some communities, the only means is by sending people to talk to others. Organize networks of people to get the word out.

In some, but certainly not all communities, there will be access to telephones, radio, and television. Use phone-in talk shows to allow everyone in the community to express his or her views. Try to get the local television station, if there is one, interested in doing a news feature on the project. Arrange with the proponent to schedule regular field trips to the project for the community.

A simple principle to use is that *people forget what they hear, remember what they see, and learn what they do*. Using maps, diagrams, flip charts, artifacts all ensure that people will not forget. If you have the means, use some of the many modern methods, including computer displays and programs that can be shared with the community so people can take them home. Put them up in community centres, churches, tribal or band head offices, or any other central community facilities. Call general meetings and include the proponent representatives. Remember to arrange translation. Or one of the local people may be able to do it, although formal translation can be complex. Try to make sure that the proponent gives the community information in advance. If you are making the presentation, try to get information about the subject to the community before the meeting. Use visual aids. If it is at all possible, have a local person record the decisions for the community.

In general, person-to-person contact is the best method of communication. It may not be enough for decisions. All decisions, however small, need to be written down. Open discussion meetings and other meetings should always have some information available to the local community or representatives well in advance. This information should be available for everyone to read, or if reading is difficult, use another medium, such as small gatherings, or poster diagrams, so that everyone can discuss it before the main meeting. At meetings, have an official record of decisions. Use someone from the local community if possible. Make sure everyone agrees that it was recorded correctly. Read the words and modify the record until everyone agrees with it. A video record of the meeting, a copy of which is deposited with the local community, would be both useful and a sufficient record if later issues need to be settled.

WORKING WITH THE MEDIA: BE MESSAGE DRIVEN, NOT QUESTION-DRIVEN

Working with the media can be a two-edged sword. Often the media are extremely sympathetic to indigenous people's causes, but sometimes the media can get a twisted slant on a story. Be careful in framing your story to help sway public opinion if you are going to use the media. The key to a successful interview when it might turn hostile is to establish about four or five messages and write them down. Then write down about two or three examples to illustrate each message. Finally try to find at least one very powerful phrase of about five to ten words to state each of the four or five messages. The phrase is what you want the media to pick up as headlines. During the interview, be message driven, not question driven. Always come back to your message

as you answer the questions. Do not allow the interviewer to draw you into saying something you don't want to say.

ASK LOTS OF QUESTIONS

In some countries, the local communities are invited to participate very early. In others there may be no opportunity unless public pressure is brought to bear. Get into the process as soon as it is possible. “Early” is the right time to set up the way in which you will participate, and the best way the proponent will interact with you. What is the schedule? How much time do you have to react? What if you need more time?

Another area of importance is the legal aspect. What regulations will be brought to bear by the proponent? What regulations should the community bring to bear? What regulatory agencies will be involved — and what is the community relationship with them? How will the community participate? Can one assume round-table discussions, and town hall meetings? Or will it be representative counsel and behind-closed-door decisions? To what degree will individuals and the entire community be involved in contractual arrangements? You may need to get answers to all of these questions.

Many of these questions can also be asked by taking direct action, such as developing ownership partnerships in which local and state government agree on ownership regimes. Partnerships can be developed with the proponent in which traditional and other forms of knowledge are used together in planning and making decisions. Consider carefully what the long-range targets are and ask yourself if it would be a good idea to create a management partnership in which you and the proponent collaborate to put joint plans into effect. This puts the community directly in partnership with the proponent. This may be especially useful when negotiating continuing monitoring and evaluation over the long-term.

INDIGENOUS GUIDELINE #7: KNOW THE RULES

GOVERNMENT SETS THE RULES, YOU CAN HELP DEFINE THE PROCESS

It is all very well to participate, but you must know the rules before you agree to start, or you could be at a great disadvantage. The rules are set by the government regulatory agencies. Find out how the proponent usually acts. The proponent will have had many opportunities to devise methods of getting permission to carry out its projects with the least interference from outside parties (including local communities). But this may be your first.

The following are useful questions to ask:

1. What is the policy of the regulatory agency?
2. What is the process?
3. Was the process reliable for indigenous peoples in other projects?
4. Did the agency follow through on its commitments?
5. What legislation does the agency use?
6. Is the legislation under revision?
7. What resources can the regulatory agencies offer to the local community?
8. What resources can the local community offer to the agency to help the process?
9. What techniques can be used to involve the public, and when can they be used?

For many indigenous peoples, the mother language, and possibly the only language, is likely to be the local language. This may be a problem because the common languages of business are rarely local languages. One solution is to conduct discussions and written communication in the language of the speaker or writer, but to have instantaneous translation available for discussion. It is not uncommon for major proponents to hire translators full time.

DEVELOP AND PROMOTE A CODE OF PRACTICE FOR YOUR REGION

Development proponents or government may not know how to inter-act or behave with indigenous peoples. It may also be that they are not as well aware of the areas you consider to be ancestral domains, or where you routinely need access to resources. Perhaps there are special ways in which your community makes decisions that you would like honoured when you are asked to share traditional knowledge.

Consider using these guidelines as the basis for creating your own draft code of conduct for proponents and for government that you can share with them for suggestions and ideas from improvement. Let them know you are doing this to help them work with you and your community. Suggest that they adopt the final draft as official government or corporate policy when dealing with indigenous peoples.

Have it ready when a new development project comes along so that the new people can enjoy the benefits of your ideas and experience in dealing with others.

WOMEN HELP INTERPRET THE RULES

Ensure from the beginning that women are offered the opportunity to participate as equals in the process by designing the process specifically to accommodate them. Women themselves are the only ones able to ensure the process will accommodate them effectively, so women need to be encouraged to be pro-active about their involvement. Make sure that the way this is done does not contravene the traditional ways of the community. It may be formal or informal, direct or indirect, depending on your own systems.

NEGOTIATE THE TIMELINE

Be sure to negotiate enough time to do the necessary work and think about the results. Business spends as little time as possible to make decisions. But it takes a great deal of time to carry out the work to understand the potential impacts of a project, to make sure all the local people have been involved, to have time to reflect on the long-term implications of the project, and to ensure that the work and cultural schedules of the community have not been disregarded. From a local community's perspective, business may seem to be impatient. From a business perspective indigenous peoples may seem to take too much time. This is a very difficult part of setting the rules, but also very important. Make sure you have enough time to correctly judge the impacts of the project.

When establishing schedules, encourage the proponent to base the schedules on traditional milestones, such as harvest times, hunting periods, and sacred festivals.

PRESERVE YOUR CUSTOMARY TRADITIONAL RIGHTS

The ILO Convention 169 recognizes that all indigenous communities have a series of assumed or customary rights and privileges. Because they are assumed, they are not usually recorded anywhere. These can be traditional rights of way, hunting rights, fishing rights, dress, ceremonies, and a host of other rights and privileges that are so much a part of everyday life that most indigenous peoples no longer think about them as rights. However, the loss of these traditional rights to resources can have a profound effect on individuals and on communities.

Most international law governing these rights defer to the national laws of the country in which the indigenous peoples are located. The specific legislation in countries varies widely. Try to become familiar with them so that you can present your case well.

The best projects will have a means of considering these questions immediately and a cooperative discussion is often the best way to resolve any possible problems. To make these discussions easier, it is best to plan ahead.

Early in the planning process or in the assessment of the project, make sure that the project will not interfere with these rights. Define which customary rights will remain. Consider getting an outside legal specialist in traditional rights to prepare a report on what these customary rights are. Or form a small group within the community to list what everyone thinks it should have as rights. This then becomes a part of the agreement between the community and proponent. The list will be considered a beginning point in a negotiation, not the end result.

If the project is unacceptable to the community, or if certain parts of it are unacceptable, be sure to understand the rules governing the proponent's application, and for making your objections. It is not very effective to object simply because you do not want the project. It is important to be able to state why the project is not acceptable. Increasingly, the loss of traditional rights to resources is seen as an appropriate reason to ask for modifications in the project.

Take advantage of the planning and decision-making processes. Use your traditional knowledge and focus on the mechanisms that are available to find opportunities for community influence and involvement in the proponent's methodology or planning process; work carefully to define the damaging environmental impacts. These are the factors that will influence the people who will evaluate your objections.

If you find yourself against the proposal, stay involved. This is the only way you can influence the outcome — boycotting the process simply means you do not have a voice. Sign a statement that your involvement in the assessment process in no way prejudices your views on the need for the development. Then later when the rules allow it, continue to use the understanding gained from traditional knowledge to voice your objections to the project explaining why there remain issues with it.

Also be prepared to change your mind. If you later find that the project is better than you originally thought, it is OK to change your position and go along with the project. In fact, it may be an excellent way to establish a good discussion for other parts of the project.

INDIGENOUS GUIDELINE #8: USE AND KEEP YOUR TRADITIONAL KNOWLEDGE

SHARE TRADITIONAL KNOWLEDGE ON YOUR OWN TERMS

Try to imagine how you could give someone else a feeling for what you know, even if this other person has never been in a forest, never lived outside a city, never heard the legends, and is suspicious about any non-scientific approach? Because traditional knowledge comes from experience in nature, from teaching and apprenticeship, from working with the land, by absorbing the feel of wild animals and plants, and by listening to legends and stories, it is not easy to share it with some one who may have no experience. Perhaps mostly because traditional knowledge is a way of life, it is important that it be shared in ways that keep it as a way of life.

Proponents are very interested in getting on with the job, or finding the answer to a question about the project. The proponent may not be familiar with the way indigenous peoples share their knowledge through stories and anecdotes. Indeed, the proponent may appear to have no interest in understanding your way of life or the stories, but instead is focussed on the specific question he or she is trying to solve. The person you are speaking to may be completely or largely unfamiliar with traditional knowledge, does not understand traditional knowledge, and does not see it as a priority to get his or her job done.

This apparently disrespectful attitude is probably not intentionally disrespectful.

From your perspective, and when sharing traditional knowledge is not working very well, one of the most effective ways to gain understanding of the benefits of using traditional knowledge is to offer to help solve the problem — not just to provide the information. In this way, you are bringing your own understanding to bear on the problem. This added understanding may bring a swifter solution than simply providing information.

DISTINGUISH BETWEEN ANCIENT AND MODERN TRADITIONAL KNOWLEDGE

Those unaccustomed to indigenous knowledge often assume it is old-fashioned and out of date. Whereas it is in fact a modern and evolving method of understanding the world around us. It is based on the teachings handed down through the generations. In sharing traditional knowledge, distinguish carefully between ancient traditional knowledge, that which is passed down from generation to generation, and modern traditional knowledge, that which has been acquired in present-day circumstances, and will be handed down in generations to come.

Ancient traditional knowledge is often more spiritually oriented. An argument is developing in some countries that there actually is a distinction between sacred and secular traditional knowledge. In this view, there is “empirical knowledge” acquired from experience, and “belief” acquired through spiritual teachings.

The argument has been used to discredit the use of traditional knowledge in assessing environmental impacts because spiritual aspects are non-scientific, and can not be tested. Critics have argued that this means the local people could make a false claim to know the future and no one would be able to say they are wrong. Several

examples of North American native people killing large whales in a traditional festival have drawn these kinds of criticisms. This, the critics say, is unacceptable because the local person has a conflict of interest.

If you find yourself in this position, try to understand the true nature of the objection. Are there alternative ways of reaching mutual agreements in the project? If the problem is a sacred location, are there alternatives for the project that can be offered. If the problem is a long-practiced travel route, are there alternatives for both sides?

In other words, it is not likely that the solution to the difference of opinion will be resolved on philosophical grounds. It is better to search for practical solutions that preserve your own ideals.

PARTICIPATE BY USING YOUR TRADITIONAL KNOWLEDGE

Use your traditional knowledge in its original context. It is not nearly as informative to share information as it is to participate as an expert. The participation might in round-table (or shared) discussions. Another excellent form of participation is to be part of the research effort. The research you and your community can undertake is traditional forms of research.

Use your knowledge to find answers. Classify sites from a traditional perspective: are they used for hunting, left to rest in a fallow condition just now, ancestral resting places? Do this before or at the same time as the project is gathering information.

It is better to make decisions about the land and its resources before the community is asked to respond. In this way, when the community is asked to react to the proponent's requests, the community will already have a clear understanding of the collective way in which particular areas of land of resources are to be used.

Establish the worth of traditional knowledge advice. Worth can be measured in many ways, but a relatively simple approach is to assign a monetary value (e.g. paying Elders and other people who hold traditional knowledge as equivalents to scientific professionals, establishing payment of royalties, and many other financial aspects). Be prepared to encounter resistance or outright rejection by the proponent of your request that it pay for knowledge.

There are many other forms of compensation that would be as good as money, especially if payment is to be made to the community rather than to individuals: schools, hospitals, training, Internet setup, and many others that you might think of.

SHAPE YOUR TRADITIONAL KNOWLEDGE ACCESS AGREEMENTS CAREFULLY

Ensure that access agreement(s) to traditional knowledge define terms for at least the three most common requests for access to traditional knowledge:

1. where the aim is to manage the resources in partnership,
2. where the aim is to invent patentable products for commercial use,
3. where the aim is to share knowledge freely with others.

Access agreements should also specify precisely how access to the traditional knowledge is to be allowed, and by whom.

Once an agreement has been reached that the project will incorporate traditional knowledge in some way (such as participatory research or actual transfer of knowledge directly to the project), it is important to recognize and guard against potential pitfalls.

1. Avoid participating in token use of traditional knowledge. Establish the extent of traditional knowledge that is needed at the outset. Tokenism often takes the form of hiring a couple of people for a few days consulting and claiming traditional knowledge has been used.
2. Avoid providing poor quality traditional knowledge by establishing internal quality-control mechanisms. Have the community participate in ensuring the information that is to be shared is accurate and informative. Not all sources of traditional knowledge within the community may be high quality. Because the community will depend on the answers derived from the process, ensure good quality information goes into the process.
3. Avoid poor translations. Ensure that whoever is doing the translation has the maturity to understand the nuances of meaning that are important. If possible, have a second person translate it back to the person who spoke the knowledge to correct any misinterpretations.
4. Finally, be sure to treat science and the people who come to your community with a science background with the same respect and equity you expect from them. It is often tempting to test government or proponent staff knowledge of the animals, plants, land, and water. They will certainly know less than you do at the beginning. But concentrate on where their knowledge can be used in cooperation with your own. Cooperation, not competition, is the best practice for development projects.

INDIGENOUS GUIDELINE #9: CLAIM YOUR TRADITIONAL RIGHTS, SHARE AND PROTECT TRADITIONAL KNOWLEDGE

KNOW YOUR RIGHTS

Intellectual property rights are the key to many of the benefits that can accrue from the use of traditional knowledge. Intellectual property rights include the right to own, and therefore to sell or barter ideas, information, special wisdom or understanding, and knowledge about plants and animals that are the result of intellectual, artistic, or creative efforts. In western society, ownership is protected by patents and copyrights. Try to learn about patent and copyright laws that apply in your country or region. The community or group that you have formed may need to apply for patents or copyright protection; your own representative NGO may be an effective spokesperson on your behalf.

Because the transformation of traditional knowledge into marketable products often requires technical skills and commercial investment, it may be in the group's interest to enter into a partnership with the proponent. Partnerships can take a wide range of forms, from simple royalty arrangements where the group receives an agreed percentage of the gross revenue or profit from the commercial use of the resulting product, to full equity share partnerships in which each partner takes risks and benefits in proportion to the combination of financial and other investments in the project.

Indigenous peoples have the right to own the genetic traits of plants or animals under certain circumstances, and if your country recognizes copyright law (most countries do). If you routinely groom or "manage" wild stocks of plants or animals, it is likely they have unique genetic characteristics — you have the rights to those unique plant or animal traits. To keep the rights, you need to apply for them through your representative group.

SAFEGUARD YOUR RIGHTS

There are certain safeguards that must be taken if the group is to realize the benefits and not lose them to someone else. One of the very first steps that must be taken is to define who will be able to use the traditional knowledge and how it can be used by both local and non-local people. It is normally used every day in the community, yet it is not common knowledge among non-indigenous peoples. You must figure out how you are going to keep it within your community until you want it released. The release of the information should always be through an agreement, legal if possible, with the owners of the knowledge. The agreement should specify how the knowledge can and cannot be used. It should also specify the benefits to the community.

Other traditional communities may have the same or similar knowledge, which creates an added complication. They may not necessarily have the same agreement as you do, or may not be aware they should not divulge the information freely. In many areas, neighboring communities may not be on the best of terms. If this is the case, you will need to decide how to deal with the situation in which another community decides to allow access to traditional knowledge that you do not want divulged. Obviously, this is not the best time to exhibit internal disputes. Try to set up the protocol between communities before the project is underway.

SETTLE THE QUESTION OF LAND OWNERSHIP

Another whole area of rights has to do with ownership of the land, ownership of the resources on the land, and the right to occupy the land even if it is not “owned” by the group. Find out what your legal, or treaty, or traditional rights are to land ownership, resource ownership, and your right to occupy the land. Once you know what they are, you must insist on them. Sometimes these rights are acquired more by practice than by documents, so it may turn out to be a complicated negotiation. The more information you have the better your chances are. If treaty rights or land ownership is in dispute, these questions should be settled before the project is initiated. If disputes are not settled first; the project agreements may no longer be valid once the disputes are settled.

One strategy that might be considered is to establish ownership and resource rights immediately. Why wait until a project comes along? Once there is a project in place, the land will be perceived as valuable, whereas it may not be seen to have much value if no one other than the local community is interested in it. This will make it easier to negotiate the ownership or rights.

STATE YOUR LIMITS TO THE PROJECT

Define which land areas, which resources, what waters can be used, what limits on air, soil, and water pollution will be acceptable. Also define what is off limits, and what is not acceptable to be developed. Are there cultural limits? For example, in tourist development there is always a danger of trivializing native culture and turning it into trinkets. How much of this is acceptable, and how much is not?

Once the limits to the project are agreed within the community, and with the proponent, try to establish enforceable standards and codes of practice. It is not useful to have a wish list of standards that no one can monitor or enforce.

DO A COST BENEFIT ANALYSIS

This will be one of the most controversial and sensitive issues you will face. How will the project benefit the community? What is the cost to the community? What damage will be done to the environment? What social and cultural sacrifices will be made? Estimate the costs of these. Estimate the revenue or other benefits to the communities in monetary or other terms. Add up the benefits, and add up the costs. Subtract the costs from the benefits, and this will help you decide how beneficial a project really is. Get this spelled out in detail, and written down. This will be the foundation for the negotiation about what additional benefits the community might want, or where the potential costs to the community need to be brought to a lower amount.

THIRD-PARTY INTERVENORS CAN HELP

There may come a time when negotiations stall. Calling for assistance can be a means to get past these non-productive situations. Mediation or even arbitration carries with it the need to establish the basic assumptions and to agree on an acceptable person to help with negotiations. It helps if both parties first define the qualifications such a person should have. Sometimes it must be a respected member of the judicial system; in other situations, it might be someone who has the status of a wise person. Courses are available in many countries so you can learn what to do if mediation or arbitration is required in the process. If there are no courses nearby, try to find someone who has successfully participated in mediation and ask for advice.

GUIDELINES FOR PROPONENTS

SUMMARY OF THE PROPONENT GUIDELINES

There are eleven guidelines in this section, presented roughly in the order that you will likely need to refer to them during the course of a project.

1) Learn about local customs and etiquette before contacting indigenous peoples

Many advantages accrue if you know how to behave and interact with indigenous people. Customs vary widely, so be sure of the specifics in regard to the particular group you will be contacting.

2) Build community and individual capacities to include indigenous people

Many indigenous communities do not yet have the capacity to be able to work with your project. These may be lack of travel funds, language differences, or unfamiliarity with technical details. Providing the necessary support to remove these barriers to participation is important.

3) Include the local community in the work of estimating project impacts

One of the best ways to find effective ways to enhance project objectives and mitigate damage is to engage the local communities in the definition of impacts. They will often suggest alternative options that are better than your first choices.

4) It's to your advantage to play straight

Most indigenous peoples work together based on trust and respect for interpersonal relationships. If this relationship is damaged, it is very difficult to repair it. Being honest and straightforward is the best practice for dealing with indigenous peoples.

5) Adjust the way you communicate to suit the indigenous peoples

Living and working with indigenous peoples provides the stranger with a new perspective on life and a new time frame in which to consider the world. Often the local people will not work easily with text-based documents. Make adjustments so they can easily interact with you and understand your messages.

6) Respect intellectual and traditional resource rights

Indigenous people have usually been in a given location for so long that their presence pre-dates modern legal instruments of ownership. Because of this, international standards recognize their right to continued access to the resources that they have traditionally used, even if there is no documentation of their ownership of the resources.

7) Work with indigenous knowledge experts as equals

Indigenous knowledge is a complex and sophisticated knowledge system requiring many years of study and experience to understand and use effectively. It is similar in depth and scope, although different in character to scientific methods. One effective way to include it in the project is to include the indigenous knowledge experts as co-equal with the other technical and scientific staff.

8) Negotiate based on trust, equity, empowerment, and respect

These four factors are the basis for all successful negotiations with indigenous peoples.

9) The local community will need lots of information

Almost any development project, whether resource-based, policy, or skills-transfer can have a major effect on the community. Have lots of information ready to provide to the community when they ask for it. Make sure it is in a form they can easily comprehend.

10) Respect indigenous peoples' daily routines

Many indigenous communities have a rigorous life style with few labour-saving devices. This means that their available free time is limited. It is important to include them in the project tasks, but it is also important to schedule those tasks around their seasonal tasks and events.

11) Try a simple self-examination

If, after the project has begun, the relationship with the community begins to break down, it is time to do a self-analysis to make sure all the best practices have been used. If the situation continues to feel irretrievable, ask for an intermediary to mediate between the two sides.

***P*ROPONENT GUIDELINE #1: LEARN ABOUT LOCAL CUSTOMS AND ETIQUETTE BEFORE CONTACTING INDIGENOUS PEOPLES**

BEFORE CONTACT, LEARN ABOUT THE COMMUNITY'S CHARACTERISTICS

In the pre-planning stages of the project, and before you approach an indigenous group of people, experience has shown that it is very effective to learn about the socioeconomic and cultural characteristics of the community prior to contact. Understand who the members of the communities are. Determine what experience the community has had handling environmental or socioeconomic issues.

Working with indigenous people can be a rewarding and happy experience. When approached with respect, they respond with enthusiasm and will often forgive minor breaches of etiquette with grace and charm. Time and money spent on learning about the community is well invested. Mutual agreements are much more easily reached and finding appropriate ways to integrate them properly into the decision-making process is much simpler. Be prepared to study the local customs and language and to understand the implications of the project from the perspective of the local community, especially the way it will feel about its rights to the continued use of its traditional lands and resources.

Following your instincts may not be the right thing to do when dealing with indigenous local communities — especially if you do not share their cultural roots and experience. Traditional enterprise and indigenous ways of thinking are often based on cooperative or “communal” values.

Business interests may not resonate well with indigenous peoples. Sometimes simple things can become major problems. For example, indigenous peoples need time to assess you as a person. It is an important part of the way they will subsequently deal with you. Take the time to get to know them as people. If you rush this process, or if you show cavalier disregard for the local ways, you can get off to a very bad start.

Talk to them about the way they do things. Probably the easiest mistake to make is to assume that your way is the right way. Develop your understanding of the culture. Be prepared to be flexible, and change your attitudes and behavior to match those of the people who have always lived where you propose to carry out work. They will respond by working with you to find ways to accommodate your requirements.

CONSIDER TRAINING FOR STAFF WHO WILL INTERACT WITH INDIGENOUS PEOPLES

Make sure personnel have had the necessary training to design or conduct a consultation program with traditional cultures. Occasionally there are courses offered in the region to introduce business people and diplomats to the ways of the local indigenous peoples. In Kenya, for example, the Friends Association of the National Museums offers a two to three week course that can be geared to a particular ethnic group with which the diplomat or business person will be interacting. The study topics includes proper etiquette, a basic course in the rudiments of the language, and an introduction to some of the leaders of the tribes. If such

programs or courses do not exist, it would be wise to think seriously about hiring specialists in public consultation who have worked with indigenous peoples. Such experts can significantly improve the probability of creating an effective relationship including traditional knowledge.

TREAD CAREFULLY — PROPER PROTOCOL IS IMPORTANT THROUGHOUT THE PROJECT

To begin the project, a contact should be established with the local community in the pre-planning stages. Observe the local etiquette carefully. In some cultures, the leaders begin negotiations through intermediaries, not directly. Gifts specific to a culture (tobacco, kava, feather, whale teeth) are often part of the opening of a discussion. It may be appropriate to meet the entire village in the community gathering area. This is especially common in tropical cultures. Traditional groups may not delegate authority to a single person, but they often have a main contact person or spokesperson.

Once the initial contact has been made correctly, invite the community to create a group to represent it in planning the project. Perhaps there is an existing group that is trusted by the community. Or perhaps the community might create a separate NGO to represent it. Acknowledge the traditional means of making decisions. If they usually require group decisions, suggest a team to bring recommendations back to the community for decision. The decision-making modes will differ, make sure you are flexible and operate in a manner which makes them feel at ease.

Elders are the most important keepers of traditional knowledge. They are also usually the most respected people. Encourage the representative group to include Elders. Other representatives should include people who have special knowledge of the areas specifically affected by the project. If the local culture allows it, women should be included in the representative group. Women should not be a subsidiary or "special interest group" working off to the side and reporting to the main group. If the cultural traditions make this difficult, consider a series of training sessions in which the proponent trainers will be training community trainers. The community trainers will then be able to work through any cultural barriers.

DEVELOP AND PROMOTE A CODE OF PRACTICE FOR YOUR ORGANIZATION

Representatives of proponents or government may not be well acquainted with indigenous peoples or aware of concepts such as ancestral domains, or traditional rights to resources, indigenous self-government. Perhaps there are special ways in which your organization makes decisions that you feel are important, but which might not work well with indigenous peoples.

Consider using these guidelines as the basis for creating your own draft code of conduct. Offer to share the code with indigenous communities that you will or have worked with for suggestions and ideas for improvement. Let them know you are doing this to help them work with you. Suggest that you will adopt the final draft as official policy when dealing with indigenous peoples.

***P*ROPONENT GUIDELINE #2: BUILD COMMUNITY AND INDIVIDUAL CAPACITIES TO INCLUDE INDIGENOUS PEOPLES**

INCLUDE INDIGENOUS PEOPLES RIGHT FROM THE BEGINNING

Including indigenous people is a simple and effective means of acquiring the informed use of indigenous knowledge. Include them at all stages, from the beginning pre-planning stages, all the way through to the monitoring and management of the project, and ultimately in the evaluation stages. Their use of the local knowledge will be brought to bear on the relevant issues at the different stages. In this way, the full indigenous knowledge system is at hand throughout the project, without the expense of having to develop a database of knowledge from the indigenous peoples.

One common mistake is to assume too much and to make decisions about the project without involving the local community. This is guaranteed to offend indigenous peoples and endanger the whole project. You may be accustomed to dealing with governments first. Because governments sometimes make critical initiating decisions in isolation from affected parties, it is easy to make this mistake. It is completely logical to get permission from the government first, then approach the local communities.

However, there is a better way when dealing with indigenous peoples. Ask the government for permission to contact the local community – not to get permission to undertake the project. In this way, once you have a clear understanding of how the community will react, you can then ask for governmental permission for the project. The advantage of this approach is that the local community will feel you have maintained their trust, and invited them to participate in the initial decision. Furthermore, you do not have to be as advanced in your planning, nor have invested so heavily in the project before approaching a traditional community as you would before requesting authority to proceed. In the event the local communities would rather not approve the project, your losses are considerably less.

It may seem easier to pre-empt the decision of the local community. In the past this may have been effective from a business perspective. In many countries today, however, this is a risky business strategy because the local communities can often harness public opinion and legal forces to overturn a hastily granted authority. This is very costly and no one wins from these confrontations.

Indigenous communities want to be able to exercise free, prior informed consent to all development projects.

ENCOURAGE THE COMMUNITY TO CHOOSE THEIR OWN REPRESENTATIVES

Be sure that the group or people who will be representing the community actually have the community's agreement to represent them. Several different forms of representation are not appropriate:

1. Try to avoid using a government appointed representative for the community.

2. Try to avoid using a government staff member as the community representative just because he or she is indigenous. Make sure the community has an opportunity to assess the person's qualifications and agree that this person is an appropriate representative.
3. Be careful to distinguish between tribal leaders who have the community's approval to represent them and those tribal leaders who are only interested in brokering a deal.
4. Watch out for tribal "dealers." Sometimes a tribal dealer, who may not have the community's agreement, will offer to "approve" the project in return for provision of basic services. Be sure that the community agrees with this approach.

HELP THE COMMUNITY TO BECOME INVOLVED — IT IMPROVES RELATIONSHIPS

Traditional cultures may signal rejection by turning their backs. If the community is silent, it may mean rejection, not acceptance. On the other hand, if people are standing on the sidelines and perhaps complaining, don't mistake this for a lack of cooperation. They simply may not know how to become involved. Find ways to help the community get involved. In traditional cultures, often the entire community or a very large proportion of it is involved in decision-making. Individuals may be influential — as in any social system — but collective decisions may be the norm.

Whenever the project has an impact on the environment, there are both national and regional special interest nature or environmental clubs and non-governmental advocacy organizations that may be interested in the project. By encouraging their assistance, the proponent can involve a wider advisory group to its benefit. In any development project, there may be fringe groups that polarize or inflame situations, rather than helping to solve them. By doing a little research on the background of advocacy and advisory groups, you can get a feel for their potential role as helpers or not. If helpful groups are involved early in the process, it makes it more difficult for the confrontational groups to successfully criticize your project.

FINANCING COMMUNITY PARTICIPATION HELPS PREVENT CHARGES OF EXCLUDING THE COMMUNITY

Most local traditional communities do not have the financial resources to undertake a major development planning exercise nor to participate in a formal environmental assessment. By assisting the traditional community to participate, you ensure better relationships and give the local community a sense of ownership in the enterprise that will be extremely valuable in later discussions if there are contentious issues. They will have been involved and you can demonstrate your assistance in making that involvement possible.

Try to keep women informed in an appropriate and timely manner, paying attention to the local cultural etiquette involved in communicating with women. If this needs to be done with women only involved, make sure your personnel making the contact are themselves women. Make sure the information reaches them in language they can understand, and that addresses their concerns.

PAYMENT FOR SERVICES, NOT KNOWLEDGE

In this approach, the traditional knowledge practitioner is providing the project with the added value of his or her experience and wisdom by using the basic traditional knowledge. Yet the base knowledge is not lost nor even transferred to the proponent — it remains within the community. In this way also, the community does not feel it has lost or given away part of its identity. The proponent can pay the advisors in the same way any other technical advisor would be paid, or the community may wish to encourage some other form of benefit.

INCLUDE THE COMMUNITY IN MANAGING AND MONITORING THE ON-GOING PROJECT

Make sure that contact with the local community is maintained and stays dynamic. A common error is to make the initial contact, establish the agreement, and then forget about staying in touch. This will gradually erode the confidence of the local community. Information flow is essential. Involve the community in managing and monitoring the project activities as well as the environmental effects and resources throughout the project. Some very good examples of co-management of resources are now available from many parts of the world. Long-term perspective is important in managing resources. The community is especially interested in the long term. Partnerships and co-management directly use traditional knowledge and its long term perspective, a factor that can often save you a great deal of time and money.

Be careful that the cultural fabric and the social integrity of the community is not damaged or even destroyed. It may well be that the community is anxious to change the status quo and begin the process of “catch-up development.” Although this makes change easier to accept within the community, it is still not without its dangers. One of the techniques that works well is to underwrite the cost of travel for a small group from the local community to see a successful model from your own corporation. This radically improves the credibility of the exercise.

Finally, to keep people involved you will need to communicate effectively. See Guideline #5 for further information on using effective communication techniques.

***P*ROPONENT GUIDELINE #3: INCLUDE THE LOCAL COMMUNITY IN THE WORK OF ESTIMATING PROJECT IMPACTS**

SAVE TIME AND MONEY: WORK WITH THE COMMUNITY TO DEFINE ISSUES AND CONCERNS

Asking the community to help list the most important concerns they might have, is an excellent way to ensure that the community understand you want to hear what they have to say. Listing key issues focuses the research, planning, scheduling and funding. With a clear definition, you may avoid spending unnecessary resources examining issues that are not of concern to the community. Sometimes the aspects that are important to indigenous people are not what you might have expected. Work with the community to find the best solutions to the concerns. These actions will demonstrate your cooperation and will help to build greater trust with the community.

COMBINING SCIENCE AND TRADITIONAL KNOWLEDGE IMPROVES UNDERSTANDING

The science of predictive ecology has made great strides in being able to model the environment, but, given the complexity of the environment, the models are still a relatively simplistic when dealing with long-term predictions and when dealing with very local situations. Indigenous peoples usually have a far better grasp of the local conditions and a better understanding of the significant environmental variables than a visiting scientist. The local people have lived with the land, and have seen it react to the natural forces over long periods of time. Using their help can improve the understanding of how the entire ecosystem will react if ecological variables shift gradually over time. Because science does not yet have accurate means of predicting local long-term effects, it is important to make the estimates of the impacts of a project with broad margins of error.

Instead of trying to acquire data from traditional knowledge, create a partnership with the holders of this knowledge and carry out the research jointly with them. When specific questions or problems arise in the development or operation of the project, invite them to help solve the problems. This is much better than acquiring the traditional knowledge as data and then attempting to feed it into a scientific model. By including them as problem-solvers, you will gain their experience and wisdom, not just their information. They will make the transformation of traditional knowledge as they help to solve problems the project poses. This helps in several ways — it increases the predictive capacity of the science, improves the credibility of the researchers if they work with local people, and avoids the tangle that often happens when local people are called on to give up their traditional knowledge.

BALANCING BASIC HUMAN RIGHTS AGAINST PROFIT IS A WIN-LOSE SOLUTION

Working closely with the community will improve the probability of finding comfortable, win-win solutions, and ensure that everyone benefits. Inevitably in certain projects, the benefits for people at a distance from the location of the development project may be considerable, while the damage created locally may be potentially quite significant.. The best practice is to try to find mutually acceptable ways to mitigate the damage and

compensate for any damage that remains. If that is simply not possible, the best practice is to cancel the project.

If the estimates of environmental, social, and cultural impacts are seriously negative, the local people will want the project cancelled. You, on the other hand, will have invested a great deal in the project so may still want the project to go ahead.

This is probably the most serious and difficult question a proponent will have to decide. The final decision rests in a multitude of hands. The local community will probably have some, but not very many, legal rights in the situation. They will have access to international conventions, covenants, and declarations (see the reference list). If the predictions and the community reactions become available, public opinion and media attention will be important factors. Policies, regulations, laws, and practice of the governing state will be critically important in the courts.

Locally, the weight human rights are given will depend largely on the culture and practice in the region. Interest in human rights is growing rapidly among industrialized countries. If you operate internationally and implement projects locally, you will need to respect policies of the parent countries. If the country is lenient or even lax with regard to human rights, it may be relatively easy to forge ahead with the project. but result in a damaged corporate image.

International press coverage will, of course, highlight any spectacular problems and that may become a success factor for later projects.

In the final analysis, however, you may have a moral and ethical decision to make regarding the ultimate fate of the indigenous people. In these situations, take a very serious look at the ILO Convention 169 Concerning Indigenous and Tribal Peoples in Independent Countries, it is an excellent source of information and international opinion.

***P*ROPONENT GUIDELINE #4: IT'S TO YOUR ADVANTAGE TO PLAY STRAIGHT**

YOU NEED TO HELP THE LOCAL COMMUNITY TO UNDERSTAND YOUR NEEDS

The success of the project is important. One way to improve the ultimate success of the project is to include the well-being of the local indigenous people in the planning and implementation.

One relatively easy step is to help them understand how the regulations, policies, and laws work. Make sure they understand the steps that have been defined for the assessment or planning process, and that they understand what their roles will be in the process. It is to your advantage to do this well, because it will significantly reduce the time lost in having to go back over stages if they have not been done correctly and the local community successfully requires that it be repeated. Your corporation or government may have had many experiences and know how to get permission to carry out projects with the least interference from outside parties (including local traditional communities). Resist the temptation to use this advantage unfairly — many communities are becoming more informed and the tactic may backfire badly.

The local community has only just been introduced to the project, but it has been yours for some time — give them a chance to get up to speed. Talk to the community leaders about when key decisions are to be made, or critically important actions to be taken. They may not be able to meet your deadlines if they come at times when the community is engaged in time-critical activities. In planning your project, recognize they made need different amounts of time to make decisions, so that if the community needs more time, you can offer it.

Finally, arrange the schedule, if possible so that the milestones and deadlines are defined in culturally significant ways: after the spring harvest, before the solstice festival, or any number of other culturally significant dates. The advantages are many to both you and the community. The single disadvantage is that the dates are based on the behavior of animals and plants, not on the calendar or clock. Although these behaviors are not as regular as a clock, they are surprisingly consistent, varying only by days from one year to the next.

In some areas of the world, such as Malaysia, the behavior of the people, plants and animals is tied to rain and floods. Experience shows these to be aperiodic and geographically inconsistent. In these cases, the indigenous people have other means of dealing with time markers. Consulting them for the best way to measure when activities will take place is the best practice.

BE ENTHUSIASTIC, BUT ACCURATE

Everyone is enthusiastic about new projects. This enthusiasm will help to convince local communities of the value you intend to bring to the community. It will also encourage their participation. Enthusiasm also sets expectations.

Most indigenous cultures are careful about setting expectations. Your statements about the benefits the community can expect should be carefully considered. Modern corporate marketing norms for hyperbole in

“salesmanship,” for instance, could be misinterpreted by indigenous people as a dishonest presentation if the “promises” do not come true.

Thus, predictions to the community about revenue or other benefits resulting from the project will need to be realistic views of the growth and profit level. Be prepared to answer questions about where the profit goes, what portion of it will stay in the community, what will go to head office. Local communities will be particularly anxious to know who will be employed, and in what kinds of jobs. Enterprising communities, and those in transition from subsistence styles of living, will want to know what support industry or services could be started up, and how long the project will last. Can the community come to rely on the industry being a permanent part of the community, or is it temporary? Communities rightly worry about the consequences of becoming dependent on the project. They may well ask what would happen if it closed or did not live up to its expectations, and you should be prepared to involve the community in a study to determine these answers.

WORKING WITH LOCAL PEOPLE IS BENEFICIAL TO BOTH PARTIES

Ensure that the community has a chance to develop its own knowledge base at the same time as the proponent develops local knowledge. Avoid the situation, for instance, where the community is forced to react to the proponent’s definition of land classification. Bring both sets of land use and needs definitions to the table at the same time and give them equal weight. Allow the indigenous peoples to ask themselves how they view nature and culture in the context of your project. If this is a large project there is considerable benefit in spending as much as several years discussing and verifying findings, building up the knowledge base on both sides before moving ahead. To move too quickly and without proper consultation can lead to lengthy battles in court that end up being extremely costly. The project will classify areas within the site for future use. Indigenous peoples will already have specific uses for the land — work with them to find ways to avoid conflict over land use. They will need to develop a definition with you of valued ecosystem locations used for hunting, left temporarily to rest in a fallow condition, or ancestral resting places. Be certain that the community agrees with your use of the sites to avoid a long series of confrontations. Sometimes indigenous peoples are reluctant to give precise locations for sacred or other sites where they do not want development. Ask where development can take place, not where it cannot take place; this will protect their sacred sites.

Explain the regulations within which the corporation intends to act, which regulatory agencies will be involved, and how you envisage the community being able to participate. Indigenous peoples often have a practice of involving the entire community. But you will need to find out what the norms are. The most successful approach in most cases seems to be a series of round-table discussions or open-forum meetings. The least successful is when representatives meet behind closed doors.

Ensure from the beginning that women can be invited to participate in the process. It may be that the culture will not allow direct interaction of women and men. There are many informal ways to understand their needs and concerns. In culturally sensitive situations, it is always best to encourage your own female staff members to be the prime contacts, or even the only contacts.

IF YOU ARE WORKING IN REMOTE REGIONS, YOU MAY BE A HEALTH RISK

If you are going to work with a group that rarely contacts outside societies, your staff may present a risk to the health of the local community. Non-indigenous peoples often bring diseases to which the local community may have little or no resistance. What to you may be a sniffle, can be a fatal infection to a vulnerable traditional person. Similarly, unusual food, or drastic changes in the food habits can bring serious difficulties to a local community.

Finally, the social effects of instantly creating a class of “wealthy” people amongst subsistence people can be disastrous. This wealthy class is created when proponent staff (workers and managers) arrive to work on the project. They come with obvious desirable material wealth to which the local community may have extremely limited access. Young people will be drawn to this wealth and will want to find ways to acquire similar materials. Consult carefully with the Elders and leaders of the community to determine how this social stress will be mitigated and handled.

***P*ROPONENT GUIDELINE #5: ADJUST THE WAY YOU COMMUNICATE TO SUIT THE INDIGENOUS PEOPLES**

Respect the traditional methods of conducting a meeting. Be patient, it may seem foreign, but indigenous peoples emphasize social aspects of a gathering to bring people together in an atmosphere of trust and comfort before business is actually conducted. This social period, sometimes with ritual food or drink, is used as an opportunity for everyone present to make initial judgments about each other, and how easily the relationship will develop. These initial gatherings are usually very interesting and pleasant, so enjoy them. You are also being tested, so be tactful, respectful, and polite.

Here are some principles for the proponent representatives who will contact and work with indigenous peoples:

AN EMPATHETIC ATTITUDE IS IMPORTANT TO SUCCESS

1. Work to create trust through tact and patience.
2. Slow down. Adapt your pace to the people.
3. Learn directly. You can only do this if you spend time with families; live, work, and eat with them.
4. Encourage people to share knowledge with you, but do not demand it.
5. Ask people to tell their stories, to talk about their lives, events in the past: remember that story-telling is the traditional way.
6. Discuss how life has been changing, what is good, and what is bad about the change.
7. Talk about the seasons with the specific problems for each season.
8. Discuss a case or something that has happened to illustrate what was difficult, what went wrong, what went right.
9. Recognize that women have a distinct perspective, and distinct values that are essential components of the whole and which cannot be represented by men.
10. A walk through the village with a talkative person may provide good information as a starting point.
11. Meet again with people who were helpful. Follow up on conversations. Check for accuracy of unexpected information. How can it be like this?
12. You may hear something that seems strange. You are wise to respect what you hear. Disrespect will make future collaboration difficult.
13. Check that you have met everyone. Do not favour any groups or persons.
14. Provide information back to the people in return for information they provide to you; and involve them in the work.
15. Do not create false hopes by making rash promises.

16. Remember first impressions. This will help if you start to feel discouraged.

WORK IN GROUPS

1. Listen! This is the key.
2. Try to use the local language.
3. Don't be a teacher. These people will be your partners, you can learn from them.
4. Use simple language — jargon is weak speech.
5. In any group of people, if the concepts are complicated, speak slowly and use short sentences. It is the easiest style for people to follow.
6. Do not read a speech from a piece of paper. Talk freely.

GET THE INFORMATION ACROSS IN AN EASY-TO-GRASP MANNER

1. Start with talk, but remember: What we hear, we forget:
 - ⇒ Brainstorming — to get lots of ideas out
 - ⇒ Smaller groups let the shy speak out. Often called “ Buzz-Groups”
 - ⇒ If people get bored, use motivational techniques such as singing a song, or telling jokes
2. Move to graphic image. Now backed up with words, the motto is “What we see, we remember”:
 - ⇒ Use a simple flip chart with lots of paper
 - ⇒ Big, bold letters
 - ⇒ Write key words
 - ⇒ Use different colors
 - ⇒ Make up pages in advance (send small copies — or typewritten equivalents to the community)
3. Finally, engage people in activities, the most powerful teacher: “What we do, we learn and understand”:
 - ⇒ Explain what is to be done or what is needed
 - ⇒ Show them how to do it, by doing it yourself
 - ⇒ Invite them to try doing it themselves with you there
 - ⇒ Leave them to practice
 - ⇒ Role-playing can help — simulate a situation and have people act it out.

EVALUATE THE SUCCESS OF YOUR COMMUNICATION

1. Evaluate progress at regular intervals.
2. Do it together with the local community — do not use outsiders unless the community agrees.
3. Questions:
 - ⇒ Can everyone follow the project?
 - ⇒ Does everyone understand the implications?
 - ⇒ Are the corporate representatives perceived to be helpful, hostile, competent, relevant?

- ⇒ Do the men and women participate equally — or appropriately for the culture?
- ⇒ Let's talk it over — how do you think it is going?

***P*ROPONENT GUIDELINE #6: RESPECT INTELLECTUAL AND TRADITIONAL RESOURCES RIGHTS**

DETERMINE THE RIGHTS OF THE TRADITIONAL COMMUNITY FOR YOUR OWN BENEFIT

Indigenous peoples will try to protect their intellectual and cultural property rights while at the same time using their knowledge to the benefit of the project and in assessing its impact on the environment. The concept of intellectual property rights is an important cornerstone in protecting traditional knowledge from inappropriate exploitation. Intellectual property rights define the right to own, and therefore to sell or barter, ideas, information, special wisdom or understanding, and knowledge about plants and animals, that are the result of intellectual, artistic, or creative efforts. The results need to take some tangible form if they are to be protected; pure knowledge is not subject to copyright.

Most local communities have never formally applied for patents or copyright, nor have they specifically defined the parts of traditional knowledge they regard as their own. Increasingly indigenous peoples are finding new ways to use their knowledge base so that it can be protected. Local community may not have these skills or the needed investment capital to turn traditional knowledge into commercial ventures. If some unusual idea or concept comes from their traditional knowledge, you should consider inviting the community to become a business partner to bring the products from traditional knowledge into the marketplace. Partnerships can take a wide range of forms, from simple royalty arrangements where the group receives an agreed percentage of the gross revenue or profit from the commercial use of the resulting product, to full equity share partnerships in which each partner takes risks and benefits in proportion to the combination of financial and other investments in the project.

SETTLE LAND OWNERSHIP QUESTIONS BEFORE INITIATING THE PROJECT

You should determine very early what the legal or treaty rights are to land ownership, resource ownership, and the right of the group to occupy the land where the project is proposed to go. These rights are more often held by practice than documentation, so it may turn out to be a complicated negotiation. A common mistake that can turn a project into a media nightmare, is to assume that because the local community has no documented legal ownership rights, the proponent can simply take over by applying to the government for permission. The recent experience in several countries suggests that this is a risky strategy. Work with the local people, not against them. It is wise to have all land ownership questions settled clearly before the project is initiated. The possibility of a significant loss due to an unexpected decision on land ownership can be quite high.

TRADITIONAL RIGHTS ACTIVITIES AND RESOURCES SHOULD BE DEFINED EARLY

All traditional communities have a series of assumed or customary rights and privileges. Because they are assumed, they are not recorded anywhere, except in practice. These can be traditional rights of way, hunting rights, fishing rights, dress, ceremonies, and a host of other rights and privileges that are so much a part of

everyday life that the people using them no longer think about them. Early in the planning, you need to ensure that the project will not interfere with these rights. It is usually not sufficient simply to record the fact that traditional customary rights will remain; they need to be defined in practical terms so the project will not inadvertently remove them. Encourage the local community to list customary rights as they understand them. This can be the basis of a discussion leading to an agreement between community and proponent.

***P*ROPONENT GUIDELINE # 7: WORK WITH INDIGENOUS KNOWLEDGE EXPERTS AS EQUALS**

SITE-SPECIFIC TRADITIONAL KNOWLEDGE IS OF GREAT VALUE TO A PROJECT

Traditional knowledge can be of great benefit to a project because it is so site specific and because it has a very long timeline of information, often stretching centuries into the past. To assemble such a wealth of information would require nearly as much time as the indigenous peoples have been living in the area. Elders often hold a great store of knowledge that has been gained from decades of living on the land, and centuries of wisdom having been passed down by their Elders. Hunters and trappers also hold vast stores of local knowledge. Traditional knowledge is basically information about ecosystem components, rules for using them, relationships among different users, technologies for using the rules and tools to meet the subsistence, health, trade, and ritual needs of local people. It is also a view of the world that makes sense of the above in the context of a long-term perspective in decision-making. It is used every day, yet it is not common knowledge among non-indigenous peoples.

To acquire the knowledge base, it is best to work with the holders of traditional knowledge much as one would work with a technician. It is not particularly easy or fruitful to attempt to transform the traditional knowledge into data that can be plugged into a scientific equation.

INVITE INDIGENOUS PEOPLES TO PARTICIPATE IN CRITICALLY IMPORTANT ACTIVITIES

Because of the nature of the knowledge and the way in which it is stored (in people's memories and activities), it may not be an easy task to re-assemble it into a scientific or technical format. The people who hold the information in their minds, have skills and understanding to add to the information in ways that can be as valuable as or even more valuable than the data itself. One of the most effective ways to use traditional knowledge is to invite holders of traditional knowledge to participate as equal status advisors in the solution of problems. As participatory researchers or problem solvers they will add value to the actual data that is part of the fabric of their understanding. This has the added advantage of establishing them and their knowledge as having validity and value in the development of the project.

If it is feasible, developing a partnership in which traditional and other forms of knowledge are used together in making decisions is demonstrably effective. Participatory research, joining forces among scientists and indigenous peoples, draws on a wealth of local understanding without needing to have traditional knowledge in a science base. As the project progresses, using these same people as partners in co-management of resources, or as partners in monitoring progress, enhances the working relationship and sense of ownership by the community for the project. Because the local people know the land so well, they can also be highly sensitive to unexpected changes and alert the corporation of potential problems that would otherwise have caused damage to the project resulting in a loss of money.

For many indigenous peoples, the mother tongue, and possibly the only language, is likely to be the traditional language. Because the common language of business is usually not traditional, there is a possibility

that a barrier to communication will be finding a common language. The solution is to have instantaneous translation available for discussions and translated versions available for written material.

It is not uncommon for major corporations working in countries with languages unfamiliar to the management to hire translators full time. Try to make this part of your policies.

Use local experts to interpret and assess the accuracy of information or predictive models proposed by the corporation to be used for this project. Be careful, however, in how you judge the reactions of the local traditional community. They may be embarrassed to point out the inadequacy of your knowledge, or the culture may prevent them from observing fault. They may also simply accept your opinion and assume it has a different context, so is not appropriate to the situation here — their silence indicating the rejection of the information as relevant. Silence, therefore is not necessarily acquiescence or agreement with your perspective, and may in fact, be unaware they have valuable information that could help resolve the issues. Try to encourage them to talk about their reaction to your predictions.

TRADITIONAL KNOWLEDGE AND THE WORK OF INDIGENOUS PEOPLES IS NOT FREE

Do not assume the knowledge or the working partnerships will be yours just for the asking, and at no cost. This would be unfair to the local community. Just as a consultant might work for hire for you, local people have expertise in local knowledge and will appropriately approach the situation as a consultant might. The increased precision in modelling the environmental impacts that their knowledge provides is well worth the expense. Many proponents have not initially built the cost of acquiring traditional knowledge or traditional knowledge workers into the initial estimates of the cost of the project, and then find themselves with little or no flexibility to pay fees. There may be precedent in your country for rates to be paid by corporations for traditional knowledge work. If not, consider them equivalent to other technical consultants.

In large and small projects, there may be other ways to pay the local community for their participation. Adding to the local infrastructure, such as schools, hospitals, training systems, scholarships, and many other mechanisms are available. Before deciding on the correct approach, discuss it with the local community.

If the decision is to receive traditional knowledge in the form of data — as opposed to value-added participation in research — the traditional community will want to know what you intend to do with the knowledge, particularly as it is partly the basis for their cultural identity. The best way to ensure that everyone understands the access to and use of the traditional knowledge is in the form of an agreement, preferably legally binding on both sides. However, do not start off by presenting a legal document to the local community representative. It is important to discuss what should be the appropriate means of acquiring the knowledge, what part is going to be shared, and what part is not, how it is going to be allowed to be used, what restrictions apply to subjects, land areas, and many other facets. Only after there is a general understanding should you document it.

Furthermore, it is crucially important that the access agreement(s) define terms for at least the most common requests for access to traditional knowledge that you will make: 1) where the aim is to manage the resources in partnership, 2) where the aim is to invent patentable products for commercial use, and 3) where the aim is to share knowledge freely with others.

Define who will be able to use traditional knowledge and how it can be used by both traditional and non-indigenous peoples. The release of the information should always be through a legal agreement with the owners of the knowledge, which specifies both the way the knowledge can and cannot be used, and also the benefits to be accrued to the community.

Assuming the proponent successfully negotiates access to traditional knowledge, personnel should be prepared to share their knowledge with the local community. This will give the community a feel for the richness of the corporation's understanding of local phenomena. From this can be derived a feel for the amount of original research that will be needed to use both the traditional and science bases to come up with reasonable predictions of impacts.

***P*ROPONENT GUIDELINE # 8: NEGOTIATE BASED ON TRUST, EQUITY, EMPOWERMENT, AND RESPECT**

BE RESPECTFUL

Proponents should be respectful in dealing with local communities. The initial impression you make may color the local attitude to your subsequent requests. Be sure to observe local etiquette. Be careful not to create initial expectations that you are not likely to be able to deliver. And perhaps most important of all, be sure to invite them to participate in meaningful consultation before irrevocable decisions are made that affect them. If possible have them as part of the decision-making process. If possible include both women and men in the discussions.

You are going to make many decisions, and you will need to make them as expeditiously as possible. It is wise to know what is reasonable, and what is outside the limits of reasonable expectations of a community. You may assume that the project is a great contribution to the community. You may intuitively feel you can expect considerable cooperation in return. The community may not share these feelings however; its concern will be to know if the benefit is worth the added cost, and their assessment may not follow your logic. There will also be limits beyond which the community will not or cannot go in responding to requests.

Remember that your first thoughts will be about how to accomplish the project, the community's first thoughts will be to understand if the project is a good idea or a bad idea. You need to respect that difference.

BE SURE TO INCLUDE EVERYONE IN THE NEGOTIATIONS

In your project, you may need a full dialogue with the community, including men, women, and children. It is important to establish the way in which the dialogue will proceed. This should be done collectively, not by dictate. The organizational structure of the community is important in making decisions. The local community should be able to describe the organizational structure of the community and who its leaders are, although the hierarchy may be very loose or complicated.

It is normal business practice to have a project manager assigned within the corporation to be the prime contact and communication link for decisions. Indigenous peoples do not usually operate in this manner, so do not assume that this will be familiar or comfortable to them. In many traditional communities, everybody is involved in decisions. There is no reason why this cannot continue to be the case. The solution is to establish a number of communication routes and methods. If the community needs to decide as a group, it is wise to support this preference. Suggest that you will always send the same person to the meetings, so they will get to know this person. Suggest further that the "most senior person" of the corporation will participate only during certain times, but that he or she will always be informed about the project status. Describe how there may be limits to what the project manager can decide without going back to the boss. If the community requests a decision from the most senior person of the proponent at a meeting of the community, try to comply. Do not have the most senior person placed in a position, however, where it is clear that he also is not capable of making the needed decision. Such an event will destroy your credibility. The local community will, at times, need to see and talk to the final decision-maker, not in a hostile confrontation, but just to be assured

that they know the face of the boss. It is important for members of the community to see and judge how much the final decision-maker can be trusted.

Below the level of the representative or prime contact, there will be working level contacts that are routinely in operation. You can ask to have a continually updated “list” of contacts, resource people and their experience (the list may be an oral recitation of names).

EMPOWER THE COMMUNITY THROUGH MEANINGFUL CONSULTATIONS

Avoid developing a process that will reduce the use of traditional knowledge to tokenism. Meaningful consultation is the key to success. A definition of consultation that met with the approval of indigenous peoples in the Yukon Umbrella Agreement in Canada is:

Consultation is to provide to the party consulted, notice of a matter to be decided in sufficient form and detail to allow that party to prepare its views on the matter; a reasonable period of time in which the party to be consulted may prepare its views on the matter; and an opportunity to present such views to the party obliged to consult; and full and fair consideration by the party obliged to consult of any views presented.

HELP THE COMMUNITY TO DEFINE ITS EXPECTATIONS SO YOU UNDERSTAND THEM

You will need to know the long-range goals of the community. These may be deceptively simple, and couched in a sense of forever. Invite the community to define what it wants from the project. You need this information to predict social, cultural, and economic impact, and it is much more accurate if all participants understand they have been part of the group to define these expectations. You may want to investigate possibilities for joint ventures with the community, especially if there are long-term business possibilities.

***P*ROPONENT GUIDELINE # 9: THE LOCAL COMMUNITY WILL NEED LOTS OF INFORMATION**

PROVIDE A COMPLETE REPORT WITH TECHNICAL DETAILS IN PLAIN LANGUAGE

The local people will need to know a great deal about the project so they can participate in all phases. To help open the discussion, and to get the community involved, begin to provide the official representative group with general information about the project. Be sure to provide examples of all the promotional materials, but do not expect this to be sufficient. Fairly early in the discussions, the representative group should be offered a technical report on the project. If the technical reports are large and complicated documents, prepare an accurate summary in easy-to-understand language.

The context and manner of presentation of the plans is important. Define where the plans are flexible, and where changes can still be made. Talk about the role the community representatives can play in the continuing development of the plans. The plans as you have them in the early stages may recommend actions that may be unacceptable to the community. Be sure to indicate that changes are possible, and can be worked out collectively. Clearly indicate that the documentation is not a final definition of the project. The final project is to be developed in consultation with the community. The document you present should be clearly marked to indicate it is still in the development or draft stages.

The technical report should describe the project plans and proposals:

1. What is this project all about? Why did the corporation choose this location and what other locations were considered?
2. How big is this project intended to be? Define both the development and construction phases, and the completed and operational stage. For instance, how many workers will there be? Are they going to be drawn from the local community or brought in from afar? Of the locals, how many will be in management, how many in blue-collar jobs?
3. What obvious environmental issues does the project present? How is the waste to be treated? What are the planned transportation routes? What are the current plans for post project clean-up? What commitments has the project already made to other organizations to take care of these aspects? Can the community take a dominant role in some of the ancillary operations instead of hiring other companies to do it?
4. What is the total cost of development? Who will be paying for it. Is this completely corporation financed? Are there partners? Can the community play an investment role?
5. How long will the project last? Define the time frame for both the development and construction phases, and also the operation of the project? Does the corporation plan for a “permanent” home in the community? Just what is the long-term picture from the corporation’s perspective?

6. What is the corporation's view of the potential impacts? What are the impacts to air, land, and water? Are there any unpleasant ethical implications to what the corporation proposes to undertake — such as inevitable loss of cultural roots? Some large mining companies have taken representatives of the community to visit projects completed with other traditional groups. This is an excellent way to establish a base of credibility with the community.

PROVIDE A COST-BENEFIT ANALYSIS

From your perspective, how will the project benefit the community? How will the project benefit you? Because it will be critically important to have the community's participation funded — at least to some extent — you should make available financial resources for the community to hire technical advisors and independent reviewers. It is not enough for the local community to depend on local volunteers to help with the many tasks involved in an environmental assessment of planning a development.

REACH AGREEMENT ON THE LIMITS OF THE PROJECT

Work with the local community to define which areas, which resources, what waters can be used, what the limits on air, water, or soil pollution will be acceptable, and any other aspects that become apparent from the particular project. Also define what is off limits, and what is not acceptable to be developed. Are there cultural limits? For example, tourist development presents a danger of trivializing native culture and turning aspects of it into trinkets. How much of this is acceptable, and how much is not? Once these are agreed within the community, and with the corporation, establish enforceable standards and codes of practice on both sides. It is not useful to have a wish-list of standards that no one could monitor or enforce.

JOINT ASSESSMENTS OF IMPACT ARE IMPORTANT

Often a project will have an effect on one or more distant communities. In some cases the effects are environmental, such as changing the water flow, altering a migration route, or changing the nature of the surrounding ecosystems. In other cases, the effect may be cultural, such as sharing traditional knowledge that is be regarded as proprietary by another community. Still other potentially harmful indirect effects are financial. A project may, for example, have financial benefit large enough to modify the community's life style away from traditional, but not large enough to make the complete transition. Usually these intermediate positions are extremely difficult for the community and give rise to accusations of unfulfilled promises. These are subtle situations requiring sensitive behavior on the part of the proponent. The simplest way to avoid problems with neighboring communities is to include, or at least inform any communities that might possibly be affected.

Neighboring traditional communities may not all be on good terms with each other. This is especially true if they are not from the same cultural groups and may have completely different decision-making and value structures. Some communities may attempt to exclude others from the planning process. In these circumstances, it is your responsibility to make sure that the other communities are informed and involved. This is a situation where the assistance of an authority in cultural relations is of real benefit.

***P*ROPONENT GUIDELINE #10: RESPECT INDIGENOUS PEOPLES' DAILY ROUTINES**

GIVE PEOPLE THE NEEDED TIME

Indigenous people will need sufficient time to undertake your project tasks and still carry out their daily routines. It takes a great deal of time to make sure all the indigenous people have been involved, to have time to reflect on the long-term implications of the project, and to ensure that the hunting, gathering, and cultural schedules of the community have been completed. Discuss the time schedule with the community and explain the proposed time frame. Define carefully what work you believe the community will need to undertake. Then listen to what time frame is comfortable for them. Finally, come to an agreement as to how much time will be required to carry out the work.

The next step is to determine when the local community will be able to spend this amount of time on your project, as opposed to their daily needs. By combining these together, it is possible to get a good estimate of the time period over which the tasks can be carried out. After all, a traditional person may correctly answer your question by saying he or she can get the answer to your question in a week. You may incorrectly interpret this to mean starting now, whereas the traditional person may have many commitments that will mean the week's work will be spread out over two months.

And as mentioned earlier, the best way to ensure a clear understanding is to translate your schedule into a traditional schedule, using their essential or traditional tasks and events (hunting, gathering, festivals) as markers for your deadlines.

***P*ROPONENT GUIDELINE #11: TRY A SIMPLE SELF-EXAMINATION**

IF RELATIONSHIPS ERODE, TRY A SIMPLE SELF-EXAMINATION

It is an ominous sign when trust disappears and confrontation replaces cooperative negotiation. Examine your own performance with the community. Did you expect self-financed participation by the community? Did you ignore local practices, such as traditional hunting times or sacred ceremonies, to suit your project schedule? In consultations, did you make sure the community understood the consequences of each decision, and the specific actions that would follow? When confronted with a problem, did corporate managers show consistent respect for community opinion?

If you answer yes to these questions, go back to the community and tell them of your findings and that you want to change the way you operate to better suit the community. You may be greeted with skepticism, but persistent good behavior will be beneficial.

AGREE ON AN ACCEPTABLE INTERMEDIARY

There may come a time when negotiations reach a stalemate. Try to understand the frustrations of the local community. It may take a determined effort on your part to overcome these obstacles. Calling for help from someone that both the community and the proponent respect can be a means to get past non-productive situations. In choosing an acceptable intermediary, it helps if both parties first define the qualifications such a person should have.

It is recommended that proponent use a planner with a background in cross-cultural planning, or at least experience in socioeconomic impact assessment to act as a key contact between the corporation and the indigenous peoples. Many planners in the field of socioeconomics have had training in cultural planning, in consultative methodologies, and in methodologies for interpreting matters of cultural significance. If possible, personnel serving as key contacts between the proponent and the traditional community should belong to the staff of the proponent; they should not be contractors, because contractors are not seen to have access to the decision-making process and are often not seen to be accountable. Furthermore, proponent personnel often lose the opportunity to play an active role in working with the traditional communities if contractors are used.

GUIDELINES FOR GOVERNMENTS

SUMMARY OF GUIDELINES FOR GOVERNMENTS

Governments have many ways to innovate, support, and encourage the inclusion of indigenous knowledge and the participation of indigenous peoples in the development of their national, regional, or local resources and the well-being of their citizens. The following five guidelines may assist governments at all levels to focus their attention in a few critical areas that can significantly improve the capacity of any government to benefit from the inclusion of indigenous peoples and their traditional knowledge.

1) Establish policies to foster sustainable development

Most indigenous peoples are interested in maintaining the cultural and natural environment in an evolving, but sustainable fashion that reflects generations of wisdom through traditional practice. Including indigenous peoples in developing the national concepts of sustainable practices helps to conserve both the environment of the government's jurisdiction, and also its cultural heritage.

2) Develop strategies by involving all stakeholders

Policies are implemented through strategies that use tools and resources available to meet the goals embodied in the policies. By including all the potential stakeholders, including indigenous peoples, a greater likelihood of reaching the goals is achieved.

3) Separate program delivery departments from regulatory departments

Strategies are delivered through programs. Programs take place in a regulatory and enforcement framework that is defined by government. Separating programs that encourage the use or harvest of resources from the departments or agencies that enforce, regulate, or conserve, removes much of the potential for conflict of interest.

4) Acknowledge the traditional resource rights of indigenous peoples

In many development projects, it is necessary to protect the livelihood and access to places and other resources that are used by indigenous peoples. The traditional rights to resources of indigenous peoples protect this access. Be sure your legislation and policies reflect these rights.

5) Fund traditional knowledge capacity-building amongst your nation's indigenous people

Indigenous knowledge represents a valuable resource that can benefit the development of any area. Indigenous peoples are usually willing to share this knowledge and understanding, but may not have the money to travel, the ability to read the documentation, the language, or other skills needed to participate in processes that can benefit from including their knowledge. Relatively small investments can build this capacity with a large net benefit to the larger community.

GOVERNMENT GUIDELINE #1:

ESTABLISH POLICIES TO FOSTER SUSTAINABLE DEVELOPMENT

Consistent with the national goal of ensuring the longevity and prosperity of the nation, specific policies to keep the nation's natural resources available over the very long-term should be a high priority. There are essentially three types of resource management: 1) non-renewable, 2) renewable a) wild, and b) domesticated.

The distinction is made within the renewable resources because a significant proportion of indigenous people subsist or augment their diets and other needs with wild stocks. The management style is quite different between wild and domestic stocks.

Development projects often consider that the management of resource utilization rationalizes the use of non-renewables and finds solutions for a balanced use and production or protection of renewable ones.

SET POLICIES TO RATIONALIZE THE EXPLOITATION OF NON-RENEWABLE RESOURCES

Mineral resources are finite and non-renewable. Development policies may be such that exploitation of mineral resources is based on national economic needs and commercial interests. Mining projects that affect rights of local communities should ensure that the commercial as well as traditional interests of local communities are given equal consideration.

Especially when indigenous peoples are involved, however, the potential for both damage and benefit is very high. It is wise to understand that if non-renewable resources are sold as raw products, there is no value added to the national industrial capacity. Thus, extracting these when there is no immediate need to build the minerals into the technological capacity of the nation, must be based on a real and immediate need for the cash resources that result from selling your natural capital.

Forest products can also be managed as a non-renewable resource. Typically in this style of management, the forest is cut down, the forest products sold, and the land transformed to some other use such as urban development. In some projects of transformation, the forest is burned to make way for agricultural use. These two approaches do not allow regeneration of the forest. As many indigenous peoples live in forest environments, this loss of forest may need to take these indigenous populations into consideration as a special factor.

National and regional strategies should be established before wholesale reduction of forests is undertaken. The basis for these strategies should be to consider the long-term needs for self-sufficiency for both fibre and non-fibre forest products and by-products. While in the short or medium term, offshore purchase of forest products may be acceptable, in the long-term, it will not be a sustainable practice. The strategy should also be based on the need to preserve a degree of diversity in forest plants and animals that will allow for the needed genetic diversity in case of crop failures and general ecosystem health.

Traditional systems of management are often based on a sustainable use of all or most of the assets and products the forests provide. Selective enhancement of productivity without significant reduction of diversity

is the principle of traditional management. Modern plantation management is based on very limited diversity to enhance productivity to the maximum – a risky long-term strategy, but an effective short-term strategy.

Although a definition of the necessary diversity to maintain ecosystem health is not well established in science, there are some simple guidelines that can be used. In most habitats, a reduction of area by 90% reduces the diversity of life by about 50%. A 50% reduction in biodiversity has been sufficient in geological history to cause a landslide loss of life on the planet with the most affected species being the dominant forms. In such a scenario, human kind would be a victim.

Many environmental experts suggest that a 30% to 40% maintenance of original ecosystems in any region may be sufficient to stabilize the decline of biodiversity at a sustainable level of health for the world's ecosystem. This assumes some reasonable resource management of urban and suburban environments as well. Targets such as these can form the basis for forest management strategies when removal, not renewal, is intended.

Establish benchmarks and indicators for maximum use of non-renewable or extractive use of renewable resources based on scientific and indigenous knowledge.

Natural environments can be better managed as a renewable resource.

Managed this way, the indigenous peoples within them are able to sustain their traditional way of life. For the long-term health of the planet, as much of the natural environment as possible should be managed and harvested as renewable resources.

Certain forest extraction processes, for instance, are not sustainable. Clear cutting in boreal forests can eliminate the forest under certain conditions. Clear cutting in certain tropical forests may expose lateritic soils that not only cannot support regeneration of the forest, but also cannot support agriculture.

Many natural environments can be systematically harvested forever on an ecosystem basis (there is a vast literature on how to do this in a sustainable fashion). In other schemes, the ecosystem is replaced by a monoculture or plantation. Plantations are less able to maintain the biodiversity of the world, and the indigenous populations in a traditional life-style.

Living wild resources, whether terrestrial or aquatic, can all be managed in a sustainable fashion if sufficient knowledge and political will supports the management policies and regulations.

So far, the record is not good. In aquatic resources, for example, most world fisheries for wild stocks are over-harvested. The number of wild terrestrial stocks that are now harvested on a commercial basis is very limited, almost all have been brought to commercial extinction.

Where they occur, wild terrestrial stocks may be harvested by indigenous peoples. New policies will need to be developed because the advent of modern weaponry and transportation systems, as well as the sharp increase in populations of indigenous peoples has placed even wild terrestrial stocks managed by indigenous peoples in significant danger of over-exploitation.

SET POLICIES ON THE BASIS OF SUSTAINABILITY OF QUALITY OF LIFE FOR INDIGENOUS PEOPLES

When these policies are being designed, it is important to remember that within projects to extract natural resources or develop infrastructure away from the urban core, interaction with indigenous peoples is common. Developing policies that encourage the participation of indigenous peoples in the development, management, and economic base that results from these projects avoids confrontations and enhances the

capacity of the indigenous peoples. These same policies need to be based on the principle that indigenous peoples have traditional rights to use their traditional resources.

Governments need to assist their indigenous peoples by combining traditional and scientific knowledge in cooperative ventures. This will help the participating members of these ventures to understand how to manage the population wild stocks under different regimes: 1) natural traditional management styles, 2) during the transformation toward market-economy-based management, and then 3) under full market-economy-based management.

GOVERNMENT GUIDELINE #2: DEVELOP STRATEGIES BY INVOLVING ALL STAKEHOLDERS

GOOD STRATEGIES COME FROM INCLUSIVE CONSULTATIONS

Strategies for sustainability discover ways and means of developing resources without diminishing the resource. To be effective, the process of developing these strategies should include the many participants, stakeholders, shareholders, and special interest groups in meaningful consultation.

Consultation intended only to inform may sometimes lead to increased short-term profitability, but sustainable development must be based on the inclusion of all parties. Good strategies are not the result of votes, or polls, or the lowest common denominator of a self-interested group. Good strategies are carefully designed to achieve sustainability while respecting the values and needs of all the people.

A large body of literature is developing world-wide on multi-stakeholder or round-table techniques for communication, with case-histories to demonstrate the value of the end results. See the appendices on web sites, literature, and traditional knowledge centres for sources of information.

CONSULTATION TECHNIQUES MAY REQUIRE FINANCIAL SUPPORT

Round table consultation does not work in all nations or in all cultures. Other techniques are available to include many viewpoints. These include such techniques as involving people in training and capacity-building sessions. If certain groups are not able to participate directly, representatives from the community can be trained to train them. Informal groups can form networks of communication allowing information to flow through the community.

One impediment to successful participation can be funds. A policy of requiring a certain amount of funding for potential intervenors and participants be part of the project can significantly improve the communication and negotiation process.

DEVELOP AND PROMOTE A CODE OF PRACTICE FOR YOUR REGION

Staff members of development proponents or government departments may not have had experience interacting with indigenous peoples. It may also be that they are not as well aware of the ancestral domains, the traditional rights to resources in your area the special ways in which local community make decisions when asked to share traditional knowledge.

Consider using these guidelines as the basis for creating a draft code of conduct for proponents and for government that you can share with the indigenous peoples for suggestions and ideas for improvement. Let them know you are doing this to help them work with you. Suggest that your government will adopt the final draft as official government policy when dealing with indigenous peoples.

ACCREDIT GROUPS REPRESENTING INDIGENOUS COMMUNITIES

Indigenous groups may want to form organizations such as corporations or NGOs to represent them. If an indigenous community has not already done this, governments should invite them to create their own

representative groups. It is the best practice to have indigenous communities participate freely in creating or forming their own groups. It is also a best practice to provide advice and examples on how to do this in the context of national and regional laws.

Once this has been accomplished and the indigenous community indicates their acceptance of the group, government can support this endeavor further by officially recognizing the representative group.

There are several practices governments should avoid.

1. Governments should avoid assigning indigenous peoples representative groups. Instead, the government initiative should be to invite the indigenous communities to form their own groups to represent them.
2. Governments should avoid using indigenous peoples who are part of government departments, especially departments that are directly involved with the development project, as representatives of indigenous communities, unless the community has specifically recognized the government representative as their own representative. It is wise to follow this advice or the community will lose trust and respect for the government department.
3. Governments should not appoint or select the representatives of indigenous communities, but should officially recognize representatives appointed or approved by local communities.
4. Governments should avoid accrediting representative groups that have been formed using “divisive tactics, such as tribal leaders versus tribal dealers, or the use of tribal leaders as brokers in negotiations.
5. Governments should avoid the use of promises to deliver basic service in return for obtaining indigenous peoples’ consent for a development project.
6. Government corporations should avoid unilateral planning and implementation of development projects within ancestral domains, even if they are within the charter of the government company, without proper consultation with the affected indigenous peoples.

GOVERNMENT GUIDELINE #3: SEPARATE PROGRAM DELIVERY DEPARTMENTS FROM REGULATORY DEPARTMENTS

REGULATORY AGENCIES SHOULD NOT HAVE AN INHERENT CONFLICT OF INTEREST

Strategic development is achieved through programs and projects. Multi-stakeholder and round-table advisory groups can assist in supplying the knowledge base to support these programs and projects. This support creates a base of support for the strategies themselves. Creating a suitable infrastructure to monitor and enforce these policies and strategies is a crucial part of ensuring that the practice remains true to the goal of the strategy is attempting to achieve.

Government policy departments should be separate from government departments that are responsible for delivering programs. When departments are responsible for both harvest and regulation, the goals become confused.

If both functions are combined in one department, typically the department emphasizes harvest and the revenue that comes from that harvest. It is very difficult within a single department to rationalize the demands of both conservation and exploitation.

Policies and strategies that seek to impose sustainable practices can all too easily be forgotten in the other departmental goal to increase productivity in the short term. This confusion of goals means that it is often difficult to develop a workable combination of strategies to both increase revenue and maintain a sustainable set of harvest practices. This confusion is not uncommon, but can ultimately lead to loss of economic health in a country or region.

The solution is to separate policy and regulatory departments from program delivery departments.

NEGOTIATE LAND CLAIMS BEFORE DEVELOPMENT IS PERMITTED IN GOVERNMENT PARKS AND RESERVES

Parks and protected areas of various kinds are often set up specifically to protect or to use pristine rural landscapes in special ways. If these areas are also the ancestral domain of indigenous peoples, it is important to settle any land claims before the issues of development projects are considered. If land claims and development projects are considered at the same time, and especially if they are considered by only one department (for example the parks regulatory department), there is an inherent conflict of interest in which the land claims will be settled in the context of development, rather than from their inherent claim on the basis of ancestral rights.

MANAGE ACCESS TO ISOLATED INDIGENOUS PEOPLES TO MAINTAIN THEIR SOCIAL, CULTURAL, AND PHYSICAL STABILITY

Establish policies on access to indigenous peoples by non-indigenous peoples as a safeguard against health and social damage. Even today, projects can decimate traditional communities through the importation of diseases, or by introducing foods so unfamiliar that they cause digestive problems and malnutrition. The sudden introduction of non-indigenous peoples can be destructive to the social fabric of a traditional community. Sensitive policies can minimize the damage due to development.

REQUIRE REGULATORY AGENCIES TO WORK TO THE BENEFIT OF THE SOCIOECONOMIC AND CULTURAL CONDITIONS OF TRADITIONAL COMMUNITIES

The following checklist is a helpful guide to information a program officer in a regulatory agency might need before a program of public consultation begins with traditional communities:

1. Is there a political, historical, or social tie between this community and others nearby that might influence the development project?
2. Who are the community leaders? Do they represent the majority of the community, or a small segment? If the latter is the case, is it likely to be an important factor in the success of the project?
3. Has there been a recent change in the community leadership; if so why? How might this affect the project?
4. Is the community divided in its allegiance to the leaders, i.e. will you be dealing with more than one faction?
5. What are the political systems within the community? How are they allied to external political systems?
6. What significant changes to the social, cultural, economic, political, or environmental conditions of the community have taken place recently or even not-so-recently that could be important in how the development project is structured?
7. What experience or participation has this community had with development projects or agencies?
8. Has this community ever participated in a consultative process? If so, was it successful? Why was it successful? If not, why?
9. Does the community in general approve of the project or its ideals and goals?
10. What are the respective roles of Elders, men, women, and youth within the community?
11. Who is most knowledgeable about the community's biophysical, socioeconomic, and spiritual resources?

GOVERNMENT GUIDELINE #4: ACKNOWLEDGE THE TRADITIONAL RESOURCE RIGHTS OF INDIGENOUS PEOPLES

BE AWARE OF RELEVANT INTERNATIONAL STATUTES AND CONVENTIONS

There are many international conventions, laws, and declarations that govern the traditional rights to resources that indigenous peoples have or should have. Use these as a guide to the manner in which the people are treated in your country. The following is a selected list of the most important such sources of information:

1. Convention on Biological Diversity
2. UN Convention to Combat Desertification in Countries Experiencing Serious Drought and Desertification, Particularly in Africa
3. UN Convention on the Elimination of All Forms of Discrimination Against Women
4. UN Convention on the Elimination of All Forms of Racial Discrimination
5. UN Convention on the Prevention and Punishment of the Crime of Genocide
6. UN Draft Declaration of Principles on Human Rights and the Environment
7. UN Draft Declaration on the Rights of Indigenous People
8. UN Declaration on the Human Right to Development
9. Draft International Covenant on Environment and Development
10. International Undertaking on Plant Genetic Resources
11. Non-Legally Binding Authoritative Statement of Principles of Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests
12. UN International Covenant on Civil and Political Rights
13. UN International Covenant on Economic, Social, and Cultural Rights
14. International Labour Organization Convention 169 Concerning Indigenous and Tribal People in Independent Countries
15. Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations
16. Rio Declaration
17. Universal Declaration of Human Rights
18. Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property

19. Recommendation on the Safeguarding of Traditional Culture and Folklore
20. Declaration on the Principles of International Cultural Cooperation
21. Convention Concerning the Protection of World Cultural and Natural Heritage
22. Model Provisions for National Laws on Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions
23. UN Vienna Declaration and Programme of Action

In the long run, the world will need to adjust to the growing interest in individual rights. Governments set the legal limits on human rights, and corporations need to live within these limits. But it is never a bad thing to err on the side of excellence in caring for the human beings who live in traditional communities. Corporations and governments gain immensely in stature from managing these situations humanely. Increasingly, indigenous peoples are recognized as having traditional rights to resources.

To read a concise and helpful summary of many of the important issues concerning indigenous rights in the international arena, see Posey, D.A. *Traditional Resource Rights: International Instruments for Protections and Compensation for Indigenous Peoples and Local Communities*. Published by the IUCN, Gland, Switzerland.

GOVERNMENT GUIDELINE #5:

FUND TRADITIONAL KNOWLEDGE CAPACITY-BUILDING AMONGST YOUR NATION'S INDIGENOUS PEOPLE

BUILD LOCAL SKILLS

Building the skills needed to cope with market-based economies and modern technology is an effective way of bringing indigenous peoples into the governing regime of any country, while enhancing the financial base of the indigenous peoples. Traditional knowledge does not need to be replaced or eliminated for indigenous peoples to enter a market-based economy. Parts of it can be transformed into products and services that are needed or desired by other societies.

When development projects take place, indigenous peoples will want to shape their own futures by having a part in developing according to their own decisions and traditions, while at the same time participating in a meaningful way in the process of the evolution of the nation and its economy.

Capacity-building can be carried out in a large number of ways. The most direct is to encourage local governments to empower indigenous peoples by holding training workshops or courses dealing with the way in which the indigenous peoples can fit into the project. If the resources or cultural values limit the number of people who can be trained by outsiders, consider offering courses to develop community trainers in the same subjects so they can offer the course work. This has the added advantage that the financial support that would have gone to non-indigenous trainers can be diverted to indigenous trainers. Aid agencies and NGOs from around the world are often willing to bring in the expertise and resources necessary to carry out the capacity building for your nation. Consider suggesting that the local communities be invited to offer their own training courses to assist the trainers to understand the local etiquette and value systems. Logistic support can often empower traditional communities to undertake these revenue-producing workshops or courses.

BUILD HUMAN RESOURCE AND ECONOMIC DEVELOPMENT SKILLS IN INDIGENOUS COMMUNITIES

Governments can markedly increase the effectiveness of development projects and at the same time increase the capacity of indigenous groups to build sustainable projects within their own framework by assisting them in the development of human resource skills as well as the development of economic and business skills.

WIDEN INFORMATION ACCESS

NGOs can undertake newsletters or cooperatives to share knowledge. This approach can be supported by national, regional, or local governments.

In areas where telephone access is possible, simple Internet cafés can be encouraged, possibly with a nation-wide or region-wide Internet service provider from the private sector on a contract basis, or provided directly by the government as part of its own internal system. The Internet is a huge reservoir of information available to all who can get access to it.

GUIDELINES FOR Non-GOVERNMENT ORGANIZATIONS

SUMMARY OF THE GUIDELINES FOR NON-GOVERNMENT ORGANIZATIONS

Non-Government Organizations involved in development projects are usually one of three types: support (e.g. fiscal, technical, medical, educational), advocacy (e.g. environment, legal, special interest), or representative. The *Guidelines* are in roughly the order you will need to use them as the project approaches and is made operational, but only sometimes distinguish between the different types of NGOs.

1) Ensure that your objectives and those of the indigenous peoples are the same

The best practice in assisting indigenous peoples is to begin by asking if they would like to have your assistance, and by explaining how your group can provide it. This will usually, but not always, engender a very positive reply. Avoid making the assumption the indigenous peoples will automatically find your presence beneficial or welcome.

2) Create a representative NGO for the community or join one

Developing a coordinated way in which indigenous people can interact successfully with others is a very positive step. Be sure to involve them in developing the appropriate mechanism.

3) Work with the indigenous peoples to help estimate the impacts

NGOs are uniquely able to provide sources of information and expertise to assist in estimating the impact of development projects. With deliberate planning the information and expertise should carry no bias.

4) Help by providing access to information

Indigenous peoples often live in relatively remote areas and sometimes have little access to information that is readily available to others. NGOs can tap these external sources to help the indigenous communities.

5) Assist indigenous peoples to communicate in different media

By offering a variety of means of communicating both within the community and with other stakeholders and interest groups, the base of information available to indigenous peoples is increased. In return, the capacity of indigenous peoples to share their knowledge is also increased.

6) Assist indigenous peoples to understand the powers at play

Many influences work on the decisions during the planning and implementation of any of the development project. It will assist indigenous peoples to be aware of what these influences are, who is involved and how the community can interact with them.

7) Be sure you understand the nature of traditional knowledge

Indigenous knowledge is a way of life that embodies the knowledge of centuries in practices and ways of interpreting indirect signals from nature. Be aware of how it differs from the more scientific methods often used in development projects. This is an important factor in integrating indigenous knowledge.

8) Encourage the inclusion of indigenous knowledge in finding innovative solutions

While indigenous knowledge is full of interesting and useful information, it is most effectively used in development projects as a source of innovative solutions because of its perspective of being intensely local and long term.

NGO *GUIDELINE #1:* ***ENSURE THAT YOUR OBJECTIVES AND THOSE OF THE INDIGENOUS PEOPLES ARE THE SAME***

MAKE SURE YOUR OBJECTIVES SUPPORT THE INDIGENOUS PEOPLES

If you are a special interest group (support or advocacy), your interest in this project probably comes from the impact of the project on your NGO's mandate or mission. Perhaps your group is interested in preserving the environment, culture, human rights, or health.

When you enter the realm of indigenous peoples, some of the players may be naïve about the larger world around us and others will be very sophisticated. The values of the indigenous peoples may be very different from your own. The values of the proponent and even the government of the nation where the project is about to take place may not shared you sense of priorities.

One of the difficult decisions we all must make as individuals is to determine whether we are sufficiently informed and wise to be the final arbiters of what is best for some other individual, some other community, nation, or even of what is best for the world. Most special interest groups have one major focus. In dealing with indigenous peoples, it is wise to consider whether they share your special interest in that focus. Consult in ways that encourage the indigenous group to help consider the goal of your organization in the context of their traditional knowledge. Perhaps the two ways of examining the issues may provide new ways of thinking about the application of the goals of your organization, especially as it affects indigenous peoples.

Now you must make the next decision: what other priorities take second place to yours. For example, if you are interested in preventing cruelty to animals, are you prepared to stop traditional hunting practices and thereby deny food to the people of the community? If you are interested in preserving the environment, are you prepared to stop a project from going ahead that a traditional community feels it needs and wants, even though there will be some damage to the environment? Your highest priority should be the lives and long-term welfare of the community, no special interest group has the right to endanger the lives of others for whom they have no mutually agreed responsibility or authority.

NGO *GUIDELINE #2:* **CREATE A REPRESENTATIVE NGO FOR THE COMMUNITY OR JOIN ONE**

NGOS CAN BE TEAM MEMBERS TOO

If you are in an advocacy or support NGO, invite the local community to recognize your group as part of their support team. Work with the community to understand what limits they want on your actions. Make sure everyone in the group understands the limits to his or her authority to take action in your special interest. Having your group recognized by the entire community will make relationships easier to define and accept.

If your views are in conflict with the proponent's views, the proponent may resist your official participation, claiming you have no real stake or place in the project. Temper your insistence on official recognition in concert with the best interests of the community. Special interest groups often have the most effective influence by remaining as support or by advocating a position in the background of the indigenous peoples' needs.

PARTICIPATION BY WOMEN

Since women will put different items on the agenda for discussion and review than men will, make sure that they are included, if possible, on the NGO team. In many cultures it is inappropriate for men to communicate directly with women on matters of business. Women on NGO teams can often act in ways that men simply are not allowed to act. This is especially important in training and medical assistance, but can also be a critically important factor in advocacy groups as well.

If your NGO is representing the community directly, women make an important contribution by providing their own perspectives, which are often different from men's views because of their different roles. If your culture is not able to include women directly, try to find ways to draw their views into the agenda through informal means.

ENHANCE THE COMMUNITY POWER BASE

In addition to your own group, think of inviting the community to consider adding other international, national, and regional special-interest nature or environmental clubs and non-governmental advocacy organizations to become a part of the community advocacy group. National or regional groups of indigenous peoples will be concerned about the potential impact on all aspects of the health of the community. Join forces with these other groups. If possible, cement the relationship in documentation; this will inform the proponent and the regulatory agency of your representation.

LEGAL SUPPORT

The community may need to have legal status. Can your organization offer support in this endeavor? If possible, use an existing corporate entity, such as an incorporated town or village. If there is no legal entity, consider creating one that includes the whole community. This will be part of the community's method of protecting traditional intellectual and cultural property rights, and traditional resource rights. NGOs acting as the representative of a community of people is a well-established practice in some countries, especially India.

The approach is relatively simple, and basically allows the NGO to be one step removed from the day-to-day activities of the community. It is set up specifically to handle the project, and essentially reports back to the entire community, but has the power of being a legal representative without the authority to govern.

TEACH THE PROPONENT HOW TO COMMUNICATE AND BEHAVE

Non-governmental organization can help proponents and communities by teaching officers and managers of the project the ways of indigenous peoples. In Kenya, Africa, for example, the National Museum's Friend's Association offers courses to diplomats and business people on proper etiquette for interacting with the many tribes in the region. Representative NGOs can take this activity as part of their role in assisting proponents to understand how to communicate effectively with the community, and at the same time improve their financial base. This enhances the experience of business and indigenous peoples working together.

OFFER MONEY AND EXPERTISE ONLY IF YOU ARE WANTED

Many traditional communities may not have financial resources to plan or to participate. Many NGOs are capable of underwriting the costs of participation for traditional communities. Surprisingly small amounts of money can be made to serve great purpose with local communities. Transfer of expertise to the local communities is also an important part of ensuring excellence in participation. Members of the team of NGOs can bring a broad spectrum of skills and expertise that the local communities might not have.

An old dictum states that it is better to train someone to fish than to give him fish for dinner. This applies to modern problems as well to old problems.

At the same time, it is important to understand that the communities may wish to proceed on their own and avoid the risk of having too many aspects on the agenda. Once you have assured yourself that the community understands the potential you have to assist, but has nonetheless decided to enter the project without your assistance, it is best to back away gracefully.

TRAINING TO BE INVOLVED

The people who are most directly involved will have to learn quickly. Some of the concepts may be difficult and even troubling. Training and capacity building are important. Here is where international, national, regional, and even local NGOs can provide quick courses in transport and construction policy, marketing strategy, project evaluation as well as other subjects. Help the local community get as prepared as they can to participate in a process that may not be familiar.

SET UP A TRADITIONAL KNOWLEDGE CENTRE: CREATE A NON-GOVERNMENTAL ORGANIZATION WITH A BROAD MANDATE

If you are a community of people who have extensive traditional knowledge, there will be others like you. Think about joining forces to develop a support group for your own traditions and knowledge base. These are themselves joined together in a worldwide network of centres. The hub is in the Netherlands and each national or regional centre is listed in the Newsletter. Refer to Appendix #5 for a list of Traditional Knowledge Centres. By creating a centre, you will be part of the world wide network and can gain both knowledge and strength from your association.

NGO *GUIDELINE #3:* **WORK WITH THE INDIGENOUS PEOPLES TO HELP ESTIMATE THE IMPACTS**

GOOD PREDICTIONS MEAN GOOD DECISIONS

Here is where many advocacy and support NGOs can shine. They often bring great skills and knowledge to the task of predicting outcomes of projects within the area of their special interest. Once these effects or impacts are defined, the community can make better decisions and plan what to do. In making your special interest case, however, remember that there are many other considerations that must be a part of the overall planning and decision-making. Try to cast your understanding of the specific situation so that it can be integrated into the rest of the community's concerns.

When developing your information-base, be sure to put your findings on paper. Document the evidence for your predictions well. They will be of great interest and value to the community. Your predictions may also be subject to intense scrutiny. Make sure that the information base is copied and in the hands of the community. If they do not have proper storage facilities for the paper or other media on which the information is stored, create the storage facilities for them. Do not keep the information private from the community. You should be working on their behalf as well as your own.

LEAVE BROAD MARGINS OF ERROR

Special interest groups are perceived, correctly or incorrectly, to have biased views, or even grossly radical views. Because neither science nor traditional knowledge has particularly accurate means of predicting long-term effects, it is important to make the estimates of the impacts of a project with broad margins of error. While it is always wise to err on the side of caution, extreme doomsday presentations by advocacy NGOs, may erode the credibility of your group.

Here is where your group can add traditional knowledge to its repertoire if it does not already use traditional knowledge. Complementing your views with the wisdom of ancient and modern indigenous peoples can increase the power of the final predictions. Don't forget that important knowledge can be derived by living on the land, and watching it react to natural forces over long periods of time. The locals have made this investment in time.

ASK LOTS OF QUESTIONS

In many countries, advocacy NGOs are not invited to participate as official stakeholders. Support and human health NGOs are often asked to participate in rescue operations. Prevention is often better than clean up. Get into the picture as soon as it is possible without destroying your credibility. "Early" is the right time to set up the way in which you will participate, and the way the proponent, government, and community will interact with you.

What is the schedule? How much time do you have to react? What if you need more time? What regulations will be in effect? What enforcement agencies will be involved — and what is the community relationship with them? How will the community participate? Can we assume round-table discussions? Or will it be

representative counsel and behind-closed-door decisions? To what degree will individuals and the entire community be involved in contractual arrangements? You need to get answers to all of these questions.

REPORT CARD ON THE PROPONENT'S PAST

Most proponents are good-intentioned and have the welfare of the local people in mind as the projects are implemented and managed over time. But nobody is perfect, and patterns of problems (small or large) can sometimes be discovered that will assist in shaping the negotiations.

It is unusual for a traditional community to have access or to know how to get information about the proponent's past performance. NGOs generally have relatively sophisticated means of gathering this information, especially from the press. In North America, the Better Business Bureau, or similar organizations in other countries, will have records of complaints. A list of all law suits can be obtained in most countries through legal libraries, on-line annual reports, securities commission findings and other sources. A history of law suits can be very informative.

All of this information, positive and negative can be drawn together and used to develop the strategy that will work best in negotiations with the proponent. This can also be helpful in predicting the impacts of their projects – not just from what their plans suggest, but also from their past performances.

HELP PROTECT THE COMMUNITY FROM SOCIETAL IMPACTS OF ALCOHOL, DRUGS, DISEASES, MIGRATION TO CITIES

Social support NGOs can be effective in local communities of indigenous peoples by alerting them to the dangers of non-traditional value systems. Traditional communities may suffer from alcohol and drugs inadvertently brought into their community. Young and old alike can fall victim to overuse of these substances. Health problems arise from the invasion of germs from non-indigenous peoples; these include simple viruses to sexually transmitted diseases. Indigenous peoples may be more vulnerable if the community does not regularly meet with people from outside their communities.

Increased wealth often draws people away from the local community to seek work or riches in distant towns or cities. This may leave the community without the necessary infra-structure and support system normally provided by the men. Under these conditions, disease and malnutrition are common results. Rapid erosion of the cultural and social norms follows abandonment of the local community by men and youth. If your NGO can move in early to assist in prevention, it will be less difficult to treat the problems that certainly will arise.

HELP PREVENT A DISREGARD FOR COMMUNITY STANDARDS

Traditional communities do not often have mechanisms to deal with whole scale mistreatment by more powerful forces. Most proponents will try to be careful of community standards. However, if a proponent does have a cavalier disregard for community standards, one of the actions a NGO might consider is to draw public attention to the misbehavior.

Another possible option is to draw on the executive exchange programs that many countries offer. Many of these executives have considerable experience in handling difficult situations. Their experience in executive positions may allow them to deal directly with the executive levels of the proponent management in ways that can alleviate the difficulties.

NGO GUIDELINE #4:

HELP BY PROVIDING ACCESS TO INFORMATION

BE ALERT FOR NEW PROJECTS

Projects are usually planned in confidence until they reach a point where the planners feel there is reason to broaden the circle of advisors. Members of special interest groups are often normal parts of advisory groups. Encourage this participation by respecting the confidentiality requests of proponents while at the same time encouraging proponents to involve local communities before critically important decisions have been made or resources committed to the project.

PRE-EMPTED DECISIONS ARE NOT ALWAYS PERMANENT

Encourage communities to participate in subsequent decisions even if the proponent or government has pre-empted some of the decisions. If the local community is clearly opposed to the development plans as they have been presented, NGOs can be effective with media and public pressure to have decisions reconsidered. If your group has experience with taking an advocacy stand, this experience gives you considerable power to influence the decisions. If at all possible, be sure the local community agrees with what you are going to say if it is to be seen as speaking for them or speaking on their behalf. Moral persuasion with both the public and government agencies can be brought to bear through the media. Be careful, however, not all governments accept criticism. You could bring disaster to the community.

If your group is a support group that has legal expertise, this can also be helpful.

THIRD-PARTY INTERVENORS CAN HELP

There may come a time when negotiations stall. If your NGO is skilled at intervening as an objective counsel, your assistance can be a means to get past non-productive situations. Perhaps your group can offer training to help the local community understand how to participate effectively if mediation or arbitration is required.

HELP ASSESS THE AGENCIES

The following questions are useful guides to evaluating the effectiveness of a regulatory agency that may be overseeing development planning processes:

1. What is the history of the regulatory agency responsible for this project? Has the process changed recently — if so why? Was the process reliable for indigenous peoples? Did the agency follow through on its commitments?
2. What legislation or policies does the agency use? Are the legislation or policies under revision?
3. What resources do regulatory agencies offer to the traditional community? What resources can the traditional community offer to the agency to help the process?
4. What techniques are used to involve the public, and when are they be used?

Based on the answers to these questions, governments can adjust and improve the processes and practices of the agency without referring back to complicated changes in regulations, policies, or legislation.

NGO *GUIDELINE #5:* **ASSIST INDIGENOUS PEOPLES TO COMMUNICATE IN DIFFERENT MEDIA**

USE NETWORK COMMUNICATION TECHNIQUES

Many NGOs, especially advocacy groups, are essentially networks. Invite the indigenous community to take full advantage of the many contacts that are part of the organization. Use the same techniques to come to understand the community and its needs. What are the best ways of keeping everyone informed? Whatever they are, use them all the time.

In some communities, the only means is by sending people to talk to others. Ask the community if they would like to have your group help organize networks of people to get the word out.

Some advocacy groups specialize in confrontation. Unless the situation is desperate, this is usually a poor way to get information across. If yours is a human rights advocacy group take great care not to implicate local people; it can be dangerous. Advocating changes to governments that are poor performers in human rights is also extremely dangerous for the advocates, including foreigners. The same is true for radical environmental activists. Be prepared to take the consequences yourself, but take care not to inflict them on the indigenous community.

TAKE CARE: THE MEDIA IS A TWO-EDGED SWORD

Often the media are extremely sympathetic to indigenous peoples' causes. But the intrusion of a well-meaning NGO can be used to create sensational side-effects by taking a twisted slant on a story. While your prime objective may be to promote your special interest, remember that the platform you are using may involve the lives and health of the indigenous community. Be careful in framing your story if you are going to use the media.

The key to a successful interview when it might turn hostile is to establish about four or five messages and write them down. Then write down about two or three examples to illustrate each message. Finally try to find at least one very powerful phrase of about five to ten words to state each of the four or five messages. The phrase is what you want the media to pick up as headlines. During the interview, be message driven, not question driven. Always come back to your message as you answer the questions. Do not allow the interviewer to draw you into saying something you don't want to say.

If you need time to think, tell the reporter you will call back in an hour, or that you are busy just now, but will be ready in an hour.

NGO GUIDELINE #6:

ASSIST INDIGENOUS PEOPLES TO UNDERSTAND THE POWERS AT PLAY

INFLUENCE THE RULES AND THE PROCESS

Support groups can assist by interpreting the rules and advising how to make best use of them. Advocacy groups usually attempt to get the rules changed. You must know the rules before you start, or you will be at a great disadvantage, and can potentially cause harm. The rules for project development and assessments are set by government regulatory agencies. Find out what they are before you begin to intervene.

USE INTERNATIONAL AND NATIONAL PROTOCOLS

The development of international instruments to protect the rights of indigenous peoples has been the single most effective areas where NGO advocacy and support groups have worked well together to assist in protecting the rights of indigenous peoples. The list is both impressive and useful when confronting situations where local people need to be helped to understand their rights and the ways in which the rest of the world can act on their behalf. Sometimes this is not very effective, but the influence of world opinion is growing. To prevent inappropriate process, use international protocols and conventions. They carry great political weight in some countries, but are ignored in others.

There are many international conventions, laws, and declarations that govern the traditional rights to resources that indigenous peoples have or should have. The following is a selected list of the most important such sources of information:

1. Convention on Biological Diversity
2. UN Convention to Combat Desertification in Countries Experiencing Serious Drought and Desertification, Particularly in Africa
3. UN Convention on the Elimination of All Forms of Discrimination Against Women
4. UN Convention on the Elimination of All Forms of Racial Discrimination
5. UN Convention on the Prevention and Punishment of the Crime Of Genocide
6. UN Draft Declaration of Principles on Human Rights and the Environment
7. UN Draft Declaration on the Rights of Indigenous People
8. UN Declaration on the Human Right to Development
9. Draft International Covenant on Environment and Development
10. International Undertaking on Plant Genetic Resources
11. Non-Legally Binding Authoritative Statement of Principles of Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests
12. UN International Covenant on Civil and Political Rights
13. UN International Covenant on Economic, Social, and Cultural Rights
14. International Labour Organization Convention 169 Concerning Indigenous and Tribal People in Independent Countries
15. Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations

16. Rio Declaration
17. Universal Declaration of Human Rights
18. Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property
19. Recommendation on the Safeguarding of Traditional Culture and Folklore
20. Declaration on the Principles of International Cultural Cooperation
21. Convention Concerning the Protection of World Cultural and Natural Heritage
22. Model Provisions for National Laws on Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions
23. UN Vienna Declaration and Programme of Action

KNOW ABOUT THE RIGHTS OF INDIGENOUS PEOPLES

Intellectual property rights are the key to many of the benefits that can accrue from the use of traditional knowledge. Intellectual property rights include the right to own, and therefore to sell or barter, ideas, information, special wisdom or understanding, and knowledge about plants and animals, that are the result of intellectual, artistic, or creative efforts. In non-traditional society, ownership is protected by patents and copyrights. In certain situations, indigenous peoples have the right to own the genetic traits of plants or animals. If they routinely groom or “manage” wild stocks of plants or animals, it is likely the stocks have unique genetic characteristics — the indigenous peoples have the rights to those unique plant or animal traits.

HELP PRESERVE CUSTOMARY TRADITIONAL RIGHTS

All indigenous communities have a series of assumed or customary rights and privileges. These are termed “traditional rights to resources.” Because they are assumed, they are not recorded anywhere. These can be traditional rights of way, hunting rights, fishing rights, dress, ceremonies, and a host of other rights and privileges that are so much a part of everyday life that the people using them no longer think about them.

Many, but certainly not all countries, allow indigenous peoples to exercise these rights. In most countries, these traditional rights are allowed under certain conditions. In the past, when these rights have been challenged, many indigenous groups simply lost the rights. Best practices, encourage all stakeholders and participants to discuss and try to find ways to accommodate the rights that allow access to traditional resources.

In a few cases, these challenges have been heard in courts of law. Most of the rights are to some form of land ownership or land access. In indigenous communities there is little likelihood that there will be legal documentation of these rights, so the local communities are at a distinct disadvantage. Several countries have formally recognized these rights but require demonstration of continued and constant use of the access. Sometimes this is not an accurate way of depicting the need to have access. Furthermore, evidence is not often allowed unless it is written.

A recent court decision in Canada (the Delgamuukwa decision) recognized the use of traditional legends, song, and performance as evidence of the existence of these uses. The decision of the court further recognized that the right to the resources did not require continuous unbroken occupation of the area. If the area was used periodically and on a regular basis, and this was recognized in the stories, songs or other traditional means of conveying information, then the court ruling was that the rights should be acknowledged.

NGO GUIDELINE #7:

BE SURE YOU UNDERSTAND THE NATURE OF TRADITIONAL KNOWLEDGE

USE TRADITIONAL KNOWLEDGE ON THEIR TERMS

Traditional knowledge comes from experience in nature, from teaching and apprenticeship, from working with the land, by absorbing the feel of wild animals and plants, and by listening to legends and stories. Traditional knowledge is a way of life. The most effective way to use traditional knowledge is to request help solving the problem — not just to ask for the data. In this way, the traditional knowledge expert is bringing his or her own understanding to bear on the problem. This wisdom may bring a swifter solution than simply providing information.

DISTINGUISH BETWEEN ANCIENT AND MODERN TRADITIONAL KNOWLEDGE

Be sure to distinguish carefully between ancient traditional knowledge — passed down from generation to generation — and modern traditional knowledge — acquired in present-day circumstances. Ancient traditional knowledge is often more spiritually oriented. An argument is developing in some countries that there actually is a distinction between sacred and secular traditional knowledge. This is not consistent with indigenous traditional knowledge, but it is often true of other forms of traditional knowledge. In this view, there is “empirical knowledge” acquired from experience, and “belief” acquired through spiritual teachings. Be careful to understand that the traditional knowledge has its own context and can not necessarily be transferred directly to a western framework.

ENGAGING HOLDERS OF TRADITIONAL KNOWLEDGE

If possible, get traditional knowledge experts to participate in round-table or equal status discussions. They can be part of the research effort, using their knowledge to find answers. Ask if the local community would like assistance in establishing the worth of traditional knowledge advice so that a monetary value, or some other form of compensation, can be assigned to the traditional knowledge. One approach is to suggest Elders and other people who hold traditional knowledge be paid in the same way as scientific professionals, establishing payment of royalties, and many other financial aspects. Another is to suggest that the community consider other forms of compensation, such as training programs, building of schools, hospitals, or the assistance of other specialists. As a transfer executive or expert in some other field, your membership in an NGO can be valuable as source of information when the local people encounter resistance or outright rejection by the proponent of the request to pay for knowledge.

Be careful not to fall into several traps. A superficial understanding of traditional knowledge does not provide the enough capacity to use the knowledge effectively, and may cause problems.

The second trap to avoid is being fooled by poor quality traditional knowledge. Not all sources of traditional knowledge within the community are high quality. The community members can tell you who is good and who is not so good if you ask for help in understanding who you should rely on. Always ask the questions in a positive manner, not a negative one. For example ask who you should see to solve a particular question, not who you should avoid.

Thirdly, translations may miss nuances of meaning that are important. Young people may do the translating, and may not have the maturity to know what they are missing. If possible, have a second person translate it back to the Elder who spoke the knowledge. The Elder can then correct any misinterpretations. Many Elders say that you can never know the traditional ways unless you speak the language. This implies that the better the translation, the better will be the understanding of the traditional knowledge being imparted or shared.

DEVELOP AND PROMOTE A CODE OF PRACTICE

Staff members and volunteers of NGOs may not have had experience inter-acting with indigenous peoples. It may also be that they are not well aware of the ancestral domains, traditional rights to resources, or the special ways in which local community make decisions when asked to share traditional knowledge.

Consider using these guidelines as the basis for creating a draft code of conduct that you can share with the indigenous peoples for suggestions and ideas for improvement. Let them know you are doing this to help them work with you. Suggest that your organization will adopt the final draft as official government policy when dealing with indigenous peoples.

NGO GUIDELINE #8: ENCOURAGE THE INCLUSION OF INDIGENOUS KNOWLEDGE IN FINDING INNOVATIVE SOLUTIONS

WORK TOWARDS MEANINGFUL CONSULTATION

NGOs are sometimes included in the table of participants in an official capacity. Because support or advocacy NGOs may not have any real stake in a particular project, it not appropriate for most NGOs be considered a formal stakeholder. The role of NGOs is usually as a special interest group, bringing special expertise in one focused area. These organizations are often simply informed and are not part of the intimate dialogue of the project, but are part of the public dialogue.

This is not true for NGOs that have been formed specifically to represent communities, nor is it true of NGOs that have invested financial resources in the project. If you have some real stake in the project, and can demonstrate it, do not accept being informed rather than being involved and consulted. If there is a clear indication that the parties are not prepared to involve your group, and it does have the right to be involved, you may be forced to fall back on legal approaches or use the media to gather public attention and force a higher-level of participation.

Use this route carefully; confrontation of this sort almost never has clear winners.

ENHANCE THE CREDIBILITY OF TRADITIONAL KNOWLEDGE

Increasingly, traditional knowledge is included in environmental assessments or impact statements. Development project planning is also beginning to be interested in alternative knowledge bases. This is a wonderful development from the perspective of indigenous peoples, but it may be a problem for proponents and regulatory bodies if they do not know how to deal with the requirement. NGOs can play a prominent role not only in encouraging the inclusion of traditional knowledge in assessments and in project development, planning, and implementation, but also in providing guidance on how this is best accomplished.

Care should be taken that the NGO does not mistakenly allow itself to be seen to possess or represent traditional knowledge. NGOs that are formed by indigenous peoples are the only organizations that truly have this capacity.

OPEN DOOR NEGOTIATIONS INCLUDING INDIGENOUS PEOPLES ARE BEST

Occasionally, proponents will carry out closed door, or private negotiations in key areas while excluding community representatives. This often happens during government-to-proponent negotiations in which permits, regulations, or licenses are set out. Both advocacy and representational NGOs can take a role in encouraging an open-door policy during these discussions.

THE APPENDICES

APPENDIX #1:

GLOBAL KNOWLEDGE BASE

INTRODUCTION

Many organizations that routinely interact with indigenous and non-indigenous peoples of the world are interested in finding ways to improve the role of traditional knowledge and to improve their understanding of both the content and how to integrate traditional knowledge with other knowledge bases.

The following summarizes some important aspects of the needs and approaches currently being taken. The information is largely derived from Mathias, E. (1995) *Framework for enhancing the use of indigenous knowledge*, Indigenous Knowledge Monitor Vol. 3, (2) August 1995.

FIELD RECORDING, USING, AND TRANSFERRING TRADITIONAL KNOWLEDGE

At the present time there have been a limited number of methodological studies, although some projects involve testing by means of participatory approaches. A few projects integrate the recording of the use of traditional knowledge. A substantial number of small NGO projects uses traditional knowledge but very few experiences have been documented, not to mention exchanged. Perhaps the most useful approaches would include studies on how projects can assess and apply project-relevant traditional knowledge, support for NGOs to document and analyze their experiences, and systematic studies of transfers of traditional knowledge. Methodological studies that undertake an analysis of projects that record and use traditional knowledge so that we can learn from successful applications and transfers of traditional knowledge, that study successful amalgamations of traditional knowledge with foreign knowledge would be most useful.

Western experts continue to examine traditional knowledge from a “scientific perspective” and have made some attempts to undertake a validation of the traditional knowledge at an informational level. This effort is interesting, but sometimes misses the point. There have been limited efforts so far (with the exception of research on medicinal plants) information on effectiveness is scattered and difficult to access limited information on successful transfers. Proposed areas of investigation include field-testing and on-station research by national research institutions including economic analysis as well as studies of records of early century scientists and practitioners, missionaries. One promising area is to examine records of technology transfers of traditional knowledge. At the same time independent dissemination of information is occurring. Over the past years, the amount of records and exchanges has increased (documents, newsletters, videos etc. the number of conferences networks), but analysis is still limited. Considerable (academic and descriptive) information is available on web-sites, use-lists are in operation, and some databases on traditional ecological knowledge exist, but while mass communication coverage related to indigenous peoples and bio-diversity has increased, information activities not well coordinated in developing countries. Unfortunately, museums still exhibit local artifacts as manifestations of traditional knowledge, rather than as living information. One useful strategy would be to improve regional networking to promote exchange between traditional knowledge sources, projects, and actors to increase public coverage and to establish accessible databases. This would result in the production and dissemination of documents, audiovisuals and artifacts, especially if development agencies supported such things as conferences, existing and functioning networks, clearinghouses, databases,

demonstration plots, and exhibits in museums that deal with traditional knowledge as a living information base.

INCREASING AWARENESS

While it is recognized that it is important to raise awareness of the value and potential use of Traditional knowledge among local people, field level workers and organizations, teachers, scientists and other academics, policy makers and development planners, traditional knowledge is still not getting much use in project planning. This is mainly the result of limited activities that involve local people as partners or actors, limited integration of traditional knowledge modules into regular training courses on rural development, and information on traditional knowledge that is not suitably packaged for policy makers and development planners. Some policy papers recognize the value of traditional knowledge (such as the World Bank guidelines for working with indigenous peoples), but experience with practical application is not well recorded.

Helpful approaches include external involvement to help communities to record document and use their own traditional knowledge, participatory technology assessments, personal exchange between practitioners, integration of traditional knowledge modules into curricula of schools training institutes and universities, information packages for politicians decision makers and development planners, and specialized country or sector guidelines fashioned after guidelines such as those that are included here.

TOOLS AND SUPPORT

For these ideas to be useful, it is important to provide tools and methods for the recording and use of traditional knowledge in development projects. These could include field-worker handbooks how to record and document traditional knowledge by means of participatory approaches such as those that are available for manual and computer use prepared by the Center for Indigenous Knowledge for Agriculture and Rural Development (CIKARD). While case studies are available, they should be packaged in a user-friendly form such as can be see at the web sites for Indian and Northern Affairs, Canada, the World Bank, and UNESCO (See Appendix 2). In addition, individuals can be trained. This would include both government and non-government organizations. At the present time, there are limited courses available by the university of Edinburgh and intense workshops at the Banff Management Centre in Canada. Certainly much more is needed.

Innovative ideas such as strategic alliances or the establishment of regional clearing houses of traditional knowledge. (see other appendices for Traditional Knowledge Centres and web sites.) will help. At the present time, however, there are still many unresolved issues that impede progress. These include property rights and the sharing of power in decision-making as the prime issues. In most countries there remain disputes over land ownership, especially when resource exploitation is contemplated.

While there are many things that individuals and organizations can do to promote traditional knowledge, government and aid agencies have the most potential to speed up the process. They can do this through provide and operate documentation and access space (libraries, databases, info-centres, tele-centres etc.), produce information material (print, radio, TV, plays etc.), organize local exchange (advise, exchange visits, theatre groups, use of media etc.), organize regional exchange by networking. Governments specifically need to protect (intellectual) property rights, facilitate information access and exchange, include local knowledge in national curricula, facilitate regional travel, and facilitate access to media. The donor community in general can create internal platforms of exchange and cooperation, network with sources of IK and partners, and include traditional knowledge aspects in assistance strategies and approaches.

The main constraints include a nearly total lack of personnel trained in methodologies that allow integration and inclusion of traditional knowledge in project development. Prioritization of traditional knowledge is very poor. And finally, the widely practiced project financing for NGOs ignores role of documentation and

information activities because overhead costs are not covered, so information-gathering activities are curtailed.

APPENDIX #2:

TRADITIONAL KNOWLEDGE

WEB SITES

The following are a few of the most important traditional knowledge web sites to be found on the Internet. When searching for information the term “Aboriginal” tends to be used by Canada, Australia, and New Zealand, “Native American” or “Indian” by the United States of America, and “Indigenous” by the rest of the world. This can be helpful in specifying your search.

Organization	Web Site
Alaska Native Cultural Resources	http://www.ankn.uaf.edu/ANCR.html
Atlantic Policy Congress of First Nations Chiefs Secretariat	http://www.apcfn.ca
Aurora Research Institute	http://www.auresint.nt.ca
Australian Institute of Aboriginal and Torres Strait Islander Studies for the Indigenous Cultural and Intellectual Property Rights	http://www.aiatsis.gov.au/ http://www.icip.lawnet.com.au/
Bill's Aboriginal Links	http://www.bloorstreet.com/300block/aborl.htm
Canadian Arctic Resources Committee (CARC).	http://www.carc.org
Center for World Indigenous Studies	http://www.cwis.org
Centre for Indigenous Environmental Resources	http://www.cier.mb.ca
Centre for Indigenous Knowledge for Agriculture and Rural Development (CIKARD)	http://www.public.iastate.edu/~anthr_info/cikard
Danish International Development Assistance (DANIDA).	http://www.um.dk/english/danmark/danmarksbog/kap1/1-15.asp
Dene Cultural Institute.	http://www.deneculture.org/main.htm
Eagle's Nest Indian Village	http://www.treaty7.org
Four World's International Institute for Human and Community Development and Four Directions International.	http://home.uleth.ca/~4worlds

Honey Bee: A Newsletter of Creativity and Innovation at the Grassroots	http://csf.colorado.edu/sristi/honeybee.html
Honor the Earth	http://honorearth.org
Igloolik Research Centre	http://pooka.nunanet.com/~research/igloolik.htm
Indian and Northern Affairs, Canada (Case Studies)	http://www.ainc-inac.gc.ca
Indian Claims Commission	http://www.indianclaims.ca
Indigenous Environmental Network	http://www.ienearth.org
Indigenous Keepers Program	http://www.web.net
Indigenous Knowledge and Development Monitor	http://www.nuffic.nl/ciran/ikdm
Indigenous peoples Biodiversity Information Network	http://www.ibin.org
International Alliance of Indigenous Tribal Peoples of the Tropical Forests	http://iaip.gn.apc.org
International Development Research Centre, Canada	http://www.idrc.ca
Interregional Program to Support Self-Reliance of Indigenous and Tribal Communities through Cooperatives and Self-Help Organizations (INDISCO)	http://www.ilo.org/public/english/employment/ent/coop/indisco.htm
Inuit Circumpolar Conference	http://www.inuit.org
KIVU Nature Inc.	http://www.kivu.com
National Native Information Center	http://www.nnic.com
Native Americans and the Environment	http://cnie.org/nae
Native Net	http://nativenet.uthscsa.edu
Native Web Resources for Indigenous Cultures Around the World	http://www.nativeweb.org
North American Native On-Line	http://www.nativeonline.com
Nunavut (An enormous new territory in northern Canada inhabited mostly by indigenous peoples).	http://www.nunanet.com
Santa Rosa Carib Community of Trinidad and Tobago	http://members.tripod.com/~SRCC1CaribCommunity
Schoolnet First Nations Web Site	http://www.schoolnet.ca/aboriginal

The Centre for International Research and Advisory Networks (CIRAN) in co-operation with UNESCO (Case Studies)	http://www.unesco.org/most/bpindi.htm
The Earth Council (Costa Rica)	http://www.ecouncil.ac.cr
The Electronic Journal on Information Systems in Developing Countries (EJISDC)	http://www.is.cityu.edu.hk/Research/ejisdc
The Saami - people of the sun and wind (Sweden)	http://www.sametinget.se/english
Traditional Ecological Knowledge	http://www.ankn.uaf.edu/tek.html
Tribung Pinoy (Information about Philippine Indigenous peoples)	http://www.tribo.org
Wildlife Management Advisory Council (Yukon)	http://www.taiga.net/wmac
World Bank	http://www.worldbank.org/afr/ik/index.htm
World Conservation Union (IUCN)	http://www.iucn.org
World Intellectual Property Organization (WIPO)	http://www.wipo.org/index.html.en

APPENDIX #3:

TRADITIONAL KNOWLEDGE CENTERS

Indigenous Knowledge Centre	Mailing Address
ARCIK - African Resource Centre for Indigenous Knowledge (Nigeria)	Prof. Adedotun Phillips, Director Dr. Tunji Titilola, Research Coordinator Nigerian Institute of Social and Economic Research, PMB 5 - UI Post Office, Ibadan, Nigeria. Tel: +234-22-400500 Fax: +234-22-416129 or +234-1-614397 arcik@niser.org.ng
APIK - Association for the Promotion of Indigenous Knowledge	Dr. Amare Dejene, Director Addis Ababa University P.O. Box 1176, Addis Ababa, Ethiopia Tel/Fax: +251-1-550655 ehnri@telecom.net.et
BARCIK - Bangladesh Resource Centre for Indigenous Knowledge (Bangladesh)	IARD, 5/13, Block E, Lalmatia, Dhaka - 1207, Bangladesh. iard@bdonline.com
BRARCIK - Brazilian Resource Centre for Indigenous Knowledge (Brazil)	UNESP, Dept. Biologia, 14870.000 Jaboticabal, SP, Brazil. brarcik@jab000.uesp.ansp.br
BURCIK - Burkina Faso Resource Centre for Indigenous Knowledge (Burkina Faso) (Centre Burkinabè de Recherche sur les Pratiques et Savoirs Paysans)	Dr Basga E. Dialla H. (INNS), Director B.P. 5154, Ouagadougou 02, Burkina Faso. Tel: +226-360746 Fax: +226-315003
CARICKS - Centre for Advanced Research on Indigenous Knowledge Systems (India)	P.O. Box 1, Swaraswathipuram, Mysore 570009, India.
GHARCIK - Ghana Resource Centre for Indigenous Knowledge	Dr. M. Bonsu, Interim Director School of Agriculture, University of Cape Coast, Cape Coast Tel: +233-42-2240-9/2480-9 Telex: +233-42-2552 UCC GH
CECIK - Centre for Cosmovisions and Indigenous Knowledge (Ghana)	Dr. David Millar, Director c/o T.A.A.P., P.O. Box 42, Tamale, Northern Region, Ghana. aispcg@ncs.com.gh Tel: +233-71-22000

CIKARD - Centre for Indigenous Knowledge for Agriculture and Rural Development (United States)	Dr Norma Wolff, Interim Director 318 Curtiss hall, Iowa State University, Ames, Iowa. 50011, USA nhwolff@iastate.edu Tel: +1-515-294 7139 Fax: +1-515-294 6058
CIKFAB - Centre for Indigenous Knowledge Fourah Bay College (Sierra Leone)	Dr Dominic T. Ashley, Director Department of Sociology, Fourah Bay College, University of Sierra Leone, Freetown, Sierra Leone. Tel: +232-22-7387
CIKFIM - Centre for Indigenous Knowledge in Farm and Infrastructure Management (Nigeria)	Centre for Food and Agricultural Strategy, University of Agriculture, Private mail Bag 2373, Makurdi, Nigeria.
CIKIB - Centre for Indigenous Knowledge on Indian Bioresources (India)	c/o Institute of Ethnobiology, National Botanical Research Institute, P.O. Box 436, Lucknow 226001, India.
CIKO - Cameroon Indigenous Knowledge Organization (Cameroon):	Prof. C.N. Ngwasiri, Director P.O. Box 170, Buea, South West Province, Cameroon ngwasiri@ciko.sdncmr.undp.org Tel: +237-322181 Fax: +237-322181/430813
CIKFIM - Centre for Indigenous Knowledge in Farm and Infrastructure Management	Dr. G.B. Ayoola, Director Centre for Food and Agricultural Strategy University of Agriculture Private Mail Bag 2373 Makurdi, Nigeria Tel: +234-44-533204 Fax: +234-44-31020 (box 5)
CIKPREM - Centre for Indigenous Knowledge on Population Resource and Environmental Management (Nigeria)	Prof. D.S. Obikeze Department of Sociology and Anthropology, University of Nigeria, Nsukka, Nigeria
CIRAN - Centre for International Research and Advisory Networks (Netherlands)	Dr G.W. von Liebenstein, Director CIRAN/Nuffic P.O. Box 29777, 2502 LT The Hague, The Netherlands. lieb@nufficcs.nl or ciran@nuffic.nl Tel: +31-70-4260321 Fax: +31-70-4260329
CTK - Centre for Traditional Knowledge (Canada)	240 McLeod St, 3rd Floor east, Ottawa, Ontario, K1P 6P4. aemery@istar.ca
ELLRIK - Elliniko Resource Centre for Indigenous Knowledge (Greece)	Medical School, Department of Social Medicine, University of Crete, P.O. Box 1393, Heraklion, Crete, Greece. lionis@fortezza.cc.ucri.gr
GERCIK - Georgia Resource Centre for Indigenous Knowledge (Georgia)	Institute of Botany, Georgian Academy of Sciences, Kodjorl schosse #1, 380007 Tbilisi, Georgia. dato@botany.kheta.ge
GHARCICK - Ghana Resource Centre for Indigenous Knowledge (Ghana)	School of Agriculture, University of Cape Coast, Cape Coast, Ghana.

ICIK - Interinstitutional Consortium for Indigenous Knowledge (United States of America)

Ladi Semali, Director
The Pennsylvania State University, 254 Chambers building,
University Park, PA 16802, USA. lms11@psuvm.psu.edu
Tel: +1-814-865-6565 Fax: +1-814-863-7602

INRIK - Indonesian Resource Centre for Indigenous Knowledge (Indonesia)

UPT Inrik-Unpad, Ruang K-3< JI, Dipati UKUR 35, Bandung 40132, West Java, Indonesia. inrik@melsa.net.id

INRESC - Indigenous Resource Study Centre (Ethiopia)

Dr Tesema Ta'a, Director
College of Social Sciences
Adis Adaba University, P.O. Box 1176, Adis Adaba, Ethiopia.
Tel/Fax: +251-1-550655

KENRIK - Kenya Resource Centre for Indigenous Knowledge (Kenya)

Dr Rashid Aman, Director
The National Museums of Kenya, P.O. Box 40658, Nairobi, Kenya. nmk@africaonline.co.ke
Tel: +254-2-744 233 Fax: +254-2-741424

LEAD - Leiden Ethnosystems and Development Programme (Netherlands)

Dr. L. Jan Slikkerveer. Director
Institute of Cultural and Social Studies
University of Leiden, P.O. Box 9555, 2300 RB Leiden, The Netherlands.
tel.31-71-273469: fax 31-71-273619

MARCIK - Madagascar Resource Centre for Indigenous Knowledge (Madagascar)

Ms Juliette Ratsimandrava
Centre d'Information et de Documentation et Technique, B.P. 6224, Antananarivo 101, Madagascar.
tel/fax: +261-2-32123/20422

MARECIK - Maasai Resource Centre for Indigenous Knowledge (Tanzania)

Dr Nathan Ole Lengisugi
Simanjiro Animal Husbandry Vocational Training Centre, P.O. Box 3084, Arusha, Tanzania

NIRCIK - Nigerian Centre for Indigenous Knowledge (Nigeria)

Dr J.O. Olukosi, Coordinator
Institute for Agricultural Research, Ahmadu Bello University, PMB 1044, Zaria, Nigeria.
Tel: +234-69-50571-4 Ext. 4322,
Fax: +234-69-50891/50563
Telex: 75248 NITEZ NG

PHIRCSDIK - Philippine Resource Centre for Sustainable Development and Indigenous Knowledge (Philippines)

Philippine Council for Research, Forestry and Natural Resources Development, Paseo de Valmayor, P.O. Box 425, Los Banos, Laguna, The Philippines. rserrano@ultra.pcarrd.dost.gov.ph

REPIKA - Regional Program for the Promotion of Indigenous Knowledge in Asia (Philippines)

International Institute of Rural Reconstruction, Silang, Cavite 4118, The Philippines. iirr@phil.gn.apc.org

RIDSCA - Mexican Research, Teaching and Service Network on Indigenous Knowledge (Mexico)

Government centre. Colegio de Postgraduados, Campus Puebla, Apartado Postal I-12, C.P. 72130, Col. La Libertad, Puebla, Pue. Mexico. mantonio@colpos.colpos.mx

RURCIK - Russian Resource Centre for Indigenous Knowledge (Russia)	EkoNiva, P.O. Box 1, Nemchinovka -1, Moscow Region, Russia 143013.
SARCIK - South African Resource Centre for Indigenous Knowledge (South Africa)	Alwijn Dippenaar, Executive Director The Institute for Indigenous Theory and Practice, P.O. Box 2355, Somerset West, 7129 South Africa. alwyn@aztec.co.za Tel: +27-21-8543299
SLARCIK - Sri Lanka Resource Centre for Indigenous Knowledge (Sri Lanka)	University of Sri Jayewardenapura, Forestry Building, Nugegoda, Sri Lanka. rohana@sjp.ac.lk
UNCST - Uganda National Council for Science and Technology	Director Dr. Zerubabel M. Nyiira Plot 10 Kampala Road Uganda House, 11 th Floor, P.O.B. 6884, Kampala, Uganda Tel: +256 - 41 - 25 0499, Fax: +256 - 41 - 23 4579 Email: uncst@starcom.co.ug Web: http://www.uncst.go.ug
URURCIK - Uruguayan Resource Center for Indigenous Knowledge (Uruguay)	CEDESUR P.O. Box 20.201, Sayago, Montevideo, 12,900, Uruguay. dgsa@chasque.apc.org
VERSIK - Venezuelan Resource Secretariat for Indigenous Knowledge (Venezuela)	Centre for Tropical Alternative Agriculture and Sustainable Development, University of the Andes, Núcleo 'Rafael Range', Apartado Postal #22, Trujillo, Venezuela. cquiroz@ing.ula.ve
YORCIK - Yoruba Resource Centre for Indigenous Knowledge (Nigeria)	Centre for Urban and Regional Planning, University of Ibadan, Ibadan, Nigeria. egunjobi.wahab@ibadan.skannet.com
ZIRCIK - Zimbabwe Resource Centre for Indigenous Knowledge	Wahington Chipfunde, Director and Wilbert Sadomba 78 Kaguvi Street, New Book House, P.O.B. 4209, Harare, Zimbabwe Telephone: 263 (0)4 781 770 / 1, Fax: 263 (0)4 751 202 E-mail: wsadomba@africaonline.co.zw

APPENDIX #4:

TRADITIONAL KNOWLEDGE LITERATURE

The selections included in this list are intended to assist the reader in broadening information on topics in the handbook and also to suggest where case studies can be found. There are very few titles that directly describe how to include traditional knowledge in development projects, but this list includes most that are available. Finally, because indigenous resource rights, indigenous intellectual property rights and land ownership are complicated topics, some of the references refer to these issues.

Abel, K. and J. Friesen. 1991. *Aboriginal Resource Use in Canada; Historical and Legal Aspects*. 343 pp. University of Manitoba Press, Winnipeg.

Adamowicz, W., T. Beckley, and W. Phillips 1998. "In Search of Forest Resource Values on Indigenous peoples: Are Nonmarket Valuation Techniques Applicable?" *Society and Natural Resources* 11(1):51-66.

Agrawal, Arun. 1995. "Neither Having One's Cake, Nor Eating It; Intellectual Property Rights and 'Indigenous' Knowledge." *Common Property Resource Digest* 36:1-5.

Akimichi, Tomoya. 1995. "Indigenous Resource Management and Sustainable Development: Case Studies from Papua New Guinea and Indonesia." *Anthropological Science* 103(4):321-327.

Alcorn, Janis B. 1990. "Indigenous Agroforestry Systems in the Latin American Tropics." In *Agroecology and Small Farm Development*. Boca Raton, FL: CRC Press.

Altieri, M.A. and L.C. Merrick (1987a) 'In situ conservation of crop genetic resources through maintenance of traditional farming systems', *Economic Botany* 41(1):86-96. Altieri, M.A.(1987) 'The significance of diversity in the maintenance of the sustainability of traditional agroecosystems', *ILEIA Newsletter* 3(2):3-7.

Altieri, M.A., M.K. Anderson and L.C. Merrick (1987b) 'Peasant agriculture and the conservation of crop and wild plant resources', *Conservation Biology* 1(1):49-58.

Anderson, R. B. 1997. "Corporate/Indigenous Partnerships in Economic Development: The First Nations in Canada." *World Development* 25(9):1483-.

Ashby, J.A., T. Gracia, M. del P. Guerrero, C.A. Quirós, I.J. Roa and J.A. Beltrán (1995) 'Organizing experimenting farmers for participation in agricultural research and technology development'. Paper presented at the Workshop entitled 'Traditional and modern systems of natural resource management in Latin America'. Washington D.C.: World Bank.

Atran, S. (1990) *Cognitive foundations of natural history: towards an anthropology of science*. Cambridge: Cambridge University Press.

Atteh, Oluwayomi David. 1992. *Indigenous Local Knowledge as Key to Local Level Development: Possibilities, Constraints and Planning Issues in the Context of Africa*. Ames, IO: Technology and Social Change Programme, Iowa State University in collaboration with Leiden Ethnosystems and development Programme (LEAD), Leiden University. (Studies in Technology and Social Change, no. 20).

- Babu, S. C. and B. Rajasekaran 1991. "Agroforestry, Attitudes Towards Risk and Nutritional Availability: A Case Study of South Indian Farming Systems." *Agroforestry Systems* 15 (1): 1-16.
- Babu, S. C., D. M. Warren and B. Rajasekaran. 1994. "Expert Systems for Utilizing Indigenous Technical Knowledge in Farming Systems Research: The Case of Crop Varietal Selection." In D. M. Warren, L. J. Slikkerveer, and D. Brokensha (eds.) *The Cultural Dimension of Development: Indigenous Knowledge Systems*, London : Intermediate Technology Publications (in press).
- Badri, B. and A. Badri (1994) 'Women and biodiversity', *Development, Journal of SID* 1:67-71.
- Barreiro, Jose. 1991. "Indigenous peoples Are the 'Miner's Canary' of the Human Family." In *Learning to Listen to the Land*. W. B. Willers, ed. Washington, DC: Island.
- Bellon, M.R. and S.B. Brush (1994) 'Keepers of maize in Chiapas, Mexico', *Economic Botany* 48(2):196-209.
- Benzing, A. (1989) 'Andean Potato peasants are 'seed bankers'', *ILEIA Newsletter* 5(4):12-13.
- Berkes, F. and C. Folke (1994) 'Linking social and ecological systems for resilience and sustainability'. Paper presented at the Workshop on property rights and the performance of natural resource systems. Stockholm: The Badger International Institute of Ecological Economics, The Royal Swedish Academy of Sciences.
- Berkes, Fikret, Peter George, and Richard J. Preston 1991. "Co-Management: The Evolution in Theory and Practice of the Joint Administration of Living Resources." *Alternatives* 18(2):12-18.
- Berkes, Fikret. 1995. "Indigenous Knowledge and Resource Management Systems: A Native Canadian Case Study from James Bay." In *Property Rights in a Social and Ecological Context; Case Studies and Design Applications*. S. Hanna and M. Munasinghe, eds. Washington, DC: The Beijer International Institute of Ecological Economics and the World Bank.
- Berlin, B. (1992) *Ethnobiological classification: principles of categorization of plants and animals in traditional societies*. Princeton, New Jersey: Princeton University Press.
- Brouwer, Jan. 1998. "On Indigenous Knowledge and Development." *Current Anthropology* 39(3):351-. Brush, Stephen, and Doreen Stabinsky 1995. *Valuing Local Knowledge: Indigenous peoples and Intellectual Property Rights*. Washington, DC: Island Press.
- Bunyard, P.(1994) 'Bringing back the balance: Alternative economics for the Colombian Amazon', *ILEIA Newsletter* 10(2):10-11.
- Cashman, K. "Indigenous Knowledge and International Agricultural Research; Where Do We Go From Here?" pp. 10-20, In D. M. Warren, L. J. Slikkerveer, and S. O. Titilola (eds.), *Indigenous Knowledge Systems: Implications for Agriculture and International Development*. Studies in Technology and Social Change No. 11. Ames, Iowa: Technology and Social Change Program, Iowa State University.
- Caufield, Catherine. 1998. "Selling A Piece of Your Mother." *Whole Earth*:58-73.
- Chambers, R., A. Pacey, and L.A. Thrupp (eds) (1989) *Farmer First: Farmer innovation and agricultural research*. London: Intermediate Technology Publications.
- Chapin, M.(1988) 'The seduction of models: Chinampa agriculture in Mexico', *Grassroots Development* 12(1):8-17.
- Chatty, Dawn. 1966. *Mobile Pastoralists: Development Planning and Social Change in Oman*. New York: Columbia University Press.

- Clarke, Jeanette, ed. 1994. *Building on Indigenous Natural Resource Management: Forestry Practices in Zimbabwe's Communal Lands*. Harare, Zimbabwe: Earthware Publishing Services.
- Davies, S. and Ebbe, K. (1995) Traditional knowledge and sustainable development; proceedings of a conference, held at the World Bank in September 1993, World Bank, Environmentally sustainable development proceedings Series No.4 Washington D.C.
- Dei, George J. S. 1993. "Indigenous African Knowledge Systems: Local Traditions of Sustainable Forestry." *Singapore Journal of Tropical Geography* 14(1):28-41.
- DeWalt, Billie R. 1994. "Using Indigenous Knowledge to Improve Agriculture and Natural Resource Management." *Human Organization* 53(2)
- Donighi, P. 1994. *Indigenous or Aboriginal Rights to Property: A Papua New Guinea Perspective*. Utrecht, Netherlands: International Books.
- Drahos, Peter. 1997. "Indigenous Knowledge and the Duties of Intellectual Property Owners." *Intellectual Property Journal* 11(2):179-.
- Drolet, Charles A., Austin Reed, Mimi Breton, and Fikret Berkes 1986. "Sharing Wildlife Management Responsibilities with Native Groups: Case Histories in Northern Quebec." *Transactions of the 52nd North American Wildlife and National Resources Conference* 52:389-398.
- Easton, P. (editor, unpublished, 1998) Decentralization, self Governance and local capacity building in the Sahel: Results of the PADLOS-Education Study, Club du Sahel, OECD and CILSS
- Ellen, R. and Harris, H (1996). Concepts of indigenous environmental knowledge in scientific and development studies literature - A critical assessment; draft paper East-West Environmental Linkages Network Workshop 3, Canterbury
- Emery, 1997. Guidelines for Environmental Assessments and Traditional Knowledge. 67 pp. CIDA, Ottawa, Canada.
- Erickson, C.L. (1994) 'Raised fields as a sustainable Agricultural System from Amazonia'. Paper presented in the Symposium entitled 'Recovery of indigenous technology and resources in Bolivia'. Atlanta: XVIII International Congress of the Latin American Studies Association.
- FAO (1993a) 'From forum to the field: NGO perspectives and concern', Deep, Development Education Exchange Papers 11-13.
- FAO (1993b) 'Ciencia Indígena y biodiversidad', pp. 4-6 in La diversidad de la naturaleza: Un patrimonio valioso.
- Fernandez-Gimenez, Maria. 1993. "The Role of Ecological Perception in Indigenous Resource Management: A Case Study from the Mongolian Forest-Steppe." *Nomadic Peoples* 33:31-46.
- Flavier, J.M. et al. (1995) 'The regional program for the promotion of indigenous knowledge in Asia', pp. 479-487 in Warren, D.M., L.J. Slikkerveer and D. Brokensha (eds) The cultural dimension of development: Indigenous knowledge systems. London: Intermediate Technology Publications.
- Garming, Maximo B. 1984. "The Use of Indigenous Institutions as an Approach to Rural Development; A Case of an Upland Community." *Philippine Journal of Public Administration* 28(3): 227-250.
- Greaves, Tom. 1994. *Intellectual Property Rights for Indigenous peoples: A Sourcebook*. Oklahoma City, OK: Society for Applied Anthropology.

- Grenier, L. (1998) Working with Indigenous Knowledge - A Guide for Researchers, IDRC, Ottawa
- Gupta, Anil K. 1994 "The Honey Bee has Stung!" *Forests, Trees and People Newsletter*(18):8-16.
- Gupta, Anil K. 1996. "The Honey Bee Network: Voices from Grassroots Innovators." *Cultural Survival Quarterly* 20(1):57-60.
- Hambly, H.; Onweng, A. T., ed. (1996) Experience and perspectives from eastern and southern Africa IDRC Ottawa
- Haverkort, B., W. Hiemstra, C. Reijntjes and S. Essers (1988) 'Strengthening farmers' capacity for technology development', *ILEIA Newsletter* 4(3): 3-7.
- Hecht, S.B. and D.A. Posey (1989) 'Preliminary results of soil management techniques of the Kayap' Indians', *Advances in Economic Botany* (7): 174-188.
- Hobart, M. (ed.) (1993) Introduction: the growth of ignorance? An anthropological critique of development London: Routledge, pp. 1-30.
- Hobsbawm, E. and Ranger, T. (eds.) (1983) The invention of tradition. Cambridge: Cambridge University Press.
- Hunn, E. (1993) What is traditional ecological knowledge? In *Traditional ecological knowledge: wisdom for sustainable development*. N. Williams and G. Baines (eds.) Canberra: Centre for Resource and Environmental Studies, ANU, pp. 13-15
- Hyvarinen, Heikki J. 1993. "The Legal Status of Rights to Resources in Finnish Lapland." In *Common Property Regimes: Law and Management of Non-Private Resources; Proceedings of the Conference, Vol. II*. E. Berge and D. Ott, eds. Ås, Norway: The Agricultural University of Norway. (Man and the Biosphere).
- Inglis, J. ed., 1993. *Traditional Ecological Knowledge - Concepts and Cases*. Pp: 142, International Development Research Centre, Ottawa, Canada
- Iyer, K. G. 1996. "Land Alienation, Deforestation and Predicament of the Tribals in Bihar and Tripura: A Comparative Focus." In *Sustainable Development: Ecological and Sociocultural Dimensions*. K. G. Iyer, ed. New Delhi: Vikas Publishing House.
- Jentoft, Svein, and Knut H. Mikalsen 1994. "Regulating Fjord Fisheries: Folk Management or Interest Group Politics?" In *Folk Management in the World's Fisheries: Lessons for Modern Fisheries Management*. C. L. Dyer and J. R. McGoodwin, eds. Niwot, CO: The University Press of Colorado.
- Johannes, Robert E., ed. 1989. *Traditional Ecological Knowledge: A Collection of Essays*. Gland, Switzerland: World Conservation Union (IUCN).
- Johnson, A.W. (1972) 'Individuality and experimentation in traditional agriculture', *Human Ecology* 1(2):149-159.
- Johnson, Martha, ed. 1992. *Lore, Capturing Traditional Ecological Knowledge*. Pp 190. Dene Cultural Institute (Hay River) and International Development Research Centre (Ottawa).
- Kemf, Elizabeth, ed. 1993. *The Law of the Mother: Protecting Indigenous peoples in Protected Areas*. San Francisco: Sierra Club Books in association with the World Wildlife Fund and the International Union for the conservation of Nature.
- Kilahama, F. B. 1994. "Indigenous Ecological Knowledge: A Vital Tool for Rural Extension Strategies; A Case Study From Shinyanga Region, Tanzania." *Forests, Trees and People Newsletter* 24:30-35.

- King, S. R. 1992. "Pharmaceutical Discovery, Ethnobotany, Tropical Forests, and Reciprocity: Integrating Indigenous Knowledge, Conservation, and Sustainable Development." In *Sustainable Harvest and Marketing of Rain Forest Products*. M. J. Plotkin and L. Famolare, eds. Washington, DC: Island Press.
- King, S. R., T. J. Carlson, and K. Moran 1996. "Biological Diversity, Indigenous Knowledge, Drug Discovery and Intellectual Property Rights: Creating Reciprocity and Maintaining Relationships." *Journal of Ethnopharmacology* 51(1/3):45-57.
- Korovkin, Tanya. 1997. "Taming Capitalism: The Evolution of the Indigenous Peasant Economy in Northern Ecuador." *Latin American Research Review* 32(3):89-.
- Kothari, Brij. 1997. "Rights to the Benefits of Research: Compensating Indigenous peoples for Their Intellectual Contribution." *Human Organization* 56(2):127-137.
- Larson, J. (1998) "Perspectives on indigenous knowledge systems in Southern Africa", Washington D.C. World Bank Discussion paper No.3
- Lawas, C. M., Luning H. A. (1996) Farmers' Knowledge and GIS, Indigenous Knowledge Monitor Vol. 4, (1) April 1996
- Lehm, Zulema, and John Kudrenecky 1995. "Reflections on a Proposal for Forest Management and Harvest in the Multi-Ethnic Indigenous Territory of Beni, Bolivia." In *Case Studies of Community-Based Forestry Enterprises in the Americas*. Institute for Environmental Studies (IIES), ed. Madison, WI: IIES, Land Tenure Center, University of Wisconsin.
- Lickers, H. et. al., 1995. Building Respect - Native People and Environmental Assessment. pp. 18. Ontario Ministry of Environment and Energy
- Linguist, B. J., and David Adolph 1996. "The Drum Speaks--Are We Listening? Experiences in Development with a Traditional Gabra Institutions--The Yaa Galbo." In *Indigenous Organizations and Development*. P. Blunt and D. M. Warren, eds. London: Intermediate Technology Publications. (IT Series in Indigenous Knowledge and Development).
- MacDonald, Theodore. 1992. "From Reaction to Planning: An Indigenous Response to Tropical Deforestation and Cattle Ranching." In *Development or Destruction: The Conversion of Tropical Forest to Pasture in Latin America*. T. E. Downing et al., eds. Boulder, CO: Westview.
- MacDonald, Theodore. 1996. "The Routinization of Protest: Institutionalizing Local Participation." *Cultural Survival Quarterly* 20(3):57-60.
- Mathias, E. (1995) Framework for enhancing the use of indigenous knowledge, Indigenous Knowledge Monitor Vol. 3, (2) August 1995
- Mathias-Mundy, E. (1989) 'Of Herbs and healers', ILEIA Newsletter 4(3):20-22.
- Mathias-Mundy, E. and C. McCorkle. 1989. Ethnoveterinary Medicine: An Annotated Bibliography. Bibliographies in Technology and Social Change No. 6. Ames, Iowa: Technology and Social Change Program, Iowa State University.
- Mathias-Mundy, E., O. Muchena., G. McKiernan, and P. Mundy. 1992. Indigenous Technical Knowledge of Private Tree Management: A Bibliographic Report. Bibliographies in Technology and Social Change No. 7. Ames, Iowa: Technology and Social Change Program, Iowa State University.

- Matowanyika, Joseph Z. Z., Vielka Garibaldi, and Elizabeth Musimwa, eds. 1995. *Indigenous Knowledge Systems and Natural Resource Management in Southern Africa*. Harare, Zimbabwe: International Union for Conservation of Nature and Natural Resources. (Indigenous Knowledge Systems Series, no. 1).
- McCall, Michael K. 1994. *Indigenous Technical Knowledge in Farming Systems of Eastern Africa: A Bibliography*. Ames, IA: Center for Indigenous Knowledge for Agriculture and Rural Development. (Bibliographies in Technology and Social Change Series, no. 9).
- McConnel, P., ed (1995) Making a Difference: Measuring the Impact of Information on Development Workshop Proceedings, Ottawa, Canada, 1995; IDRC, in: Making a Difference: Measuring the Impact of Information on Development, edited by McConnel, P.
- McCorkle, C. (1994) Farmer innovation in Niger. Studies in Technology and Social Change Series No 21. Ames: Technology and Social Change Program, Iowa State University.
- McMahon, G. ed. 1998. Mining and the Community: Results of the Quito Conference. Pp 164. World Bank, NY, NY.
- Menon, Meena. 1998. "Vadhavan: Development versus People." In *The Hindu Survey of the Environment 1998*. S. N. Ravi, ed. Chennai, India: S. Rangarajan.
- Michaels, Mark A. 1998. "Indigenous Ethics and Alien Laws: Native Traditions and the United States Legal System." *Fordham Law Review* 66(4):1565-.
- Migot-Adholla, Shem et al. 1991. "Indigenous Land Rights Systems in Sub-Saharan Africa: A Constraint on Productivity?" *World Bank Economic Review* 5(1):155-175.
- Mishra, Smitra. 1994. "Women's Indigenous Knowledge of Forest Management in Orissa." *Indigenous Knowledge & Development Monitor* 2(3):3-5.
- Momberg, Frank. 1993. *Indigenous Knowledge Systems: Potentials for Social Forestry Development: Resource Management for Land-Dayaks in West Kalimantan*. Berlin: Technische Universitaet Berlin. (Berliner Beitrage zur Umwelt und Entwicklung, vol. 3).
- Mooney, Patrick R. 1993. "Exploiting Local Knowledge: International Policy Implications." In *Cultivating Knowledge: Genetic Diversity, Farmer Experimentation and Crop Research*. W. de Boef et al., eds. London: Intermediate Technology Publications.
- Moore, Christopher, and Mas Achmad Santosa 1995. "Developing Appropriate Environmental Conflict Management Procedures in Indonesia: Integrating Traditional and New Approaches." *Cultural Survival Quarterly* 19(3):23-29.
- Morin-Labatut, G.M. and S. Akhtar (1992) 'Traditional environmental knowledge: A resource to manage and share', *Development Journal of the Society for International Development* 4:24-29.
- Mundy, P. and L. Compton. 1991. Indigenous Communication and Indigenous Knowledge. Development Communication Report 74 (3): 1-3.
- Nietschmann, Bernard. 1985. "Torres Strait Islander Sea Resource Management and Sea Rights." In *The Traditional Knowledge and Management of Coastal Systems in Asia and the Pacific*. K. Ruddle and R. E. Johannes, eds. Jakarta, Indonesia: United Nations Educational Scientific and Cultural Organization, Regional Office for Science and Technology for Southeast Asia.

- Nietschmann, Bernard. 1997. "Protecting Indigenous Coral Reefs and Sea Territories, Miskito Coast, RAAN, Nicaragua." In *Conservation Through Cultural Survival: Indigenous peoples and Protected Areas*. S. Stevens, ed. Washington, DC: Island Press.
- Norem, Rosalie Huisinga, Rhonda Yoder, and Yolanda Martin 1989. "Indigenous Agricultural Knowledge and Gender Issues in Third World Agricultural Development." In *Indigenous Knowledge Systems: Implications for Agriculture and International Development*. D. M. Warren, L. J. Slikkerveer, and S. O. Titilola, eds. Ames, IA: Technology and Social Change Program, Iowa State University. (Studies in Technology and Social Change, No. 11).
- Oduol, W. (1995) Adaptive Responses to Modern Technology: Kitui Farmers in the Semiarid Regions of Eastern Kenya in *Technology Policy and Practice in Africa* edited by O. M. Ogbu, B. O. Oyeyinka, and H. M. Mlawa, IDRC, Ottawa 1995
- O'Faircheallaigh, Ciaran. 1998. "Resource Development and Inequality in Indigenous Societies." *World Development* 26(3): 381-394.
- Palmer, Craig T. 1994. "Are Folk Management Practices Models for Formal Regulations? Evidence from the Lobster Fisheries of Newfoundland and Maine." In *Folk Management in the World's Fisheries: Lessons for Modern Fisheries Management*. C. Dyer and J. McGoodwin, eds. Niwot, CO: The University Press of Colorado.
- Palsson, Gisli. 1995. "Learning by Fishing: Practical Science and Scientific Practice." In *Property Rights in a Social and Ecological Context; Case Studies and Design Principles*. S. Hanna and M. Munasinghe, eds. Washington, DC: The Beijer International Institute of Ecological Economics and the World Bank.
- Pawluk, Roman, J. A. Sandor, and J. A. Tabor. 1992. "The Role of Indigenous Soil Knowledge in Agricultural Development." *Journal of Soil and Water Conservation* 47 (4): 298-302.
- Pérezgrovas, R., P. Pedraza and M. Peralta (1992) 'Plants and prayers: Animal healthcare by Indian shepherdesses', *ILEIA Newsletter* 8(3): 22-23.
- Posey, D. and G. Dutfield, 1996. *Beyond Intellectual Property Toward Traditional Resource Rights for indigenous peoples and Local Communities*. pp. 303; International Development Research Centre, Ottawa, Canada.
- Posey, D., 1996. *Traditional Resource Rights - International Instruments for Protection and Compensation for Indigenous peoples and Local Communities*. pp 221. IUCN, Gland, Switzerland
- Posey, D.A. 1991 'Kayap' Indians: Experts in synergy', *ILEIA Newsletter* 7(4): 3-5.
- Posey, D.A., J. Frechione, J. Eddins, L.F. Da Silva, D. Myers, D. Case and P. Macbeth 1984 'Ethnoecology as applied anthropology in Amazonian development', *Human Organization* 43(2): 95-107.
- Posey, D.A. 1982 'The keepers of the forest', *Garden* 6(1): 18-24.
- Posey, D.A. 1985 'Indigenous management of tropical forest ecosystems: the case of the Kayap' indians of the Brazilian Amazon', *Agroforestry Systems* (3) 139-158.
- Posey, Darrell A. 1983. "Indigenous Ecological Knowledge and Development of the Amazon." In *The Dilemma of Amazonian Development*. E. F. Moran, ed. Boulder, CO: Westview.
- Posey, Darrell A. 1985. "Indigenous Management of Tropical Forest Ecosystems: The Case of the Kayapo Indians of the Brazilian Amazon." *Agroforestry Systems* 3: 139-158.

- Posey, Darrell A., and William Balee, eds. 1989. *Resource Management in Amazonia: Indigenous and Folk Strategies*. New York: New York Botanical Garden. (Advances in Economic Botany, no. 7).
- Puffer, Paula. 1995. "The Value of Indigenous Knowledge in Development Programs Concerning Somali Pastoralists and their Camels." Center for Indigenous Knowledge and Rural Development, University of Iowa, Ames, IO.
- Quiroz, C. (1996) 'Farmer Experimentation in a Venezuelan Andean Region' in D.M. Warren, S. Fujisaka and G. Prain (eds) *Indigenous experimentation and cultural diversity*. London: IT Publications.
- Rajasekaran, B. 1990. "Economics of Irrigated Rice Production in Mali." A Study Report, Sahelian Agriculture Division, Washington, D.C.: The World Bank.
- Rajasekaran, B. and D. M. Warren. 1990. "The Role of Indigenous Knowledge Systems in Drought Relief Activities." Report: Drought Disaster Workshop, United States Agency for International Development, USAID, Washington, D.C. May 1990.
- Rajasekaran, B. and D. M. Warren. 1994. "Indigenous Rice Taxonomies and Farmers' Rice Production Decision-Making Systems in South India." In D. M. Warren, L. J. Slikkerveer, and D. Brokensha (eds.) *The Cultural Dimension of Development: Indigenous Knowledge Systems*, London : Intermediate Technology Publications (in press).
- Rajasekaran, B. and M. B. Whiteford 1992. "Rice-Crab Production in South India: The Role of Indigenous Knowledge in Designing Food Security Policies." *Food Policy* 18 (3): 237-247.
- Rajasekaran, B., D. M. Warren and S. C. Babu 1991. "Indigenous Natural Resource Management Systems for Sustainable Agricultural Development - A Global Perspective." *Journal of International Development* 3 (4): 387-402.
- Rajasekaran, B., D. M. Warren, and S. C. Babu 1991. "Indigenous Natural-Resource Management Systems for Sustainable Agricultural Development: A Global Perspective." *Journal of International Development* 3(4): 387-402.
- Reijntjes, C. (ed) (1991) 'Raised fields for lowland farming', *ILEIA Newsletter* 7(4): 6-8.
- Reijntjes, C. and W. Hiemstra (1989) 'Farmer experimentation and communication', *ILEIA Newsletter* 5(1):3-6.
- Rengifo-Vásquez, R. (1989) *Experimentacion campesina*. Documento de Estudio No. 16. Lima: PRATEC.
- Rhoades, R. and A. Bebbington (1996) 'Farmers who experiment: An untapped resource for agricultural research and development' in D.M. Warren, S. Fujisaka and G. Prain (eds) *Indigenous Experimentation and cultural diversity*. London: IT Publications.
- Rice, Delbert. 1984. "Indigenous Forest Dwellers in Forest Development Planning." In *ASEAN Forestry Congress, 1st, Manila, 1983. Proceedings*. Quezon City, Philippines: Congress Organizing Committee, Bureau of Forest Development.
- Ross, Helen. 1995. "Aboriginal Australians' Cultural Norms for Negotiating Natural Resources." *Cultural Survival Quarterly* 19(3):33-38.
- Rural Advancement Foundation International. 1994. *Conserving Indigenous Knowledge: Integrating Two Systems of Innovation*. New York: United Nations Development Programme.

Sadler, B. and P. Boothroyd, 1994. Traditional Ecological Knowledge and Modern Environmental Assessment. pp: 75. Canadian Environmental Assessment Agency, Ottawa, Canada.

Salas, M.A. (1994) 'The technicians only believe in science and cannot read the sky: The cultural dimension of knowledge conflict in the Andes', pp. 57-69 in Scoones and J. Thompson (eds) *Beyond farmer first: Rural people's knowledge, agricultural research and extension practice*. London: IT Publications.

Salas, Maria A. 1994. "'The Technicians only Believe in Science and Cannot Read the Sky': The Cultural Dimension of the Knowledge Conflict in the Andes." In *Beyond Farmer First*. I. Scoones and J. Thompson, eds. London: Intermediate Technologies Publications.

Schafer, J. 1989. "Utilizing Indigenous Agricultural Knowledge in the Planning of Agricultural Research Projects Designed to Aid Small-scale Farmers." pp. 116-120, In D. M. Warren, L. J. Slikkerveer, and S. O. Titilola (eds.), *Indigenous Knowledge Systems: Implications for Agriculture and International Development*. Studies in Technology and Social Change No. 11. Ames, Iowa: Technology and Social Change Program, Iowa State University.

Scoones, I. and J. Thompson (1994) (eds.) *Beyond Farmer First* London: Intermediate Technology Publications.

Seibel, Hans D., and Andreas Massing 1974. *Traditional Organizations and Economic Development: Studies of Indigenous Co-operatives in Liberia*. New York: Praeger.
Stevenson, Marc G. 1996. "Indigenous Knowledge in Environmental Assessment." *Arctic* 49(3): 278-.

Slaybaugh-Mitchell, T. 1994. *Indigenous Livestock Production and Husbandry: An Annotated Bibliography*. Bibliographies in Technology and Social Change No. 8. Ames, Iowa: Technology and Social Change Program, Iowa State University

Srivastava, J.; Smith, N. J. H.; Forno, D. (1996) Biodiversity and agriculture: implications for conservation and development, World Bank Technical Paper WTP321

Stearman, A.M. (1994) 'Revisiting the myth of the ecologically noble savage in Amazonia: Implications for indigenous land rights', *Culture and Agriculture* (49): 2-6.

Tabor, J. A., Hutchinson, C. F. (1994) Using Indigenous Knowledge, Remote Sensing and GIS for Sustainable Development in *Indigenous Knowledge Monitor* Vol. 2, (1) April 1994

Tehan, Maureen. 1996. "To Be or Not to Be (Property): Anglo-Australian Law and the Search for Protection of Indigenous Cultural Heritage." *University of Tasmania Law Review* 15(2)

Thrupp, Lori Ann. 1989. "Legitimizing Local Knowledge: From Displacement to Empowerment for Third World People." *Agriculture and Human Values* 6:13-24.

Thurston, H.D. and J.M. Parker (1995) 'Raised beds and plant disease management', in D.M. Warren, S. Fujisaka and G. Prain (eds) *Indigenous Experimentation and cultural diversity*. London: IT Publications.

Titilola, S. O. 1990. *The Economics of Incorporating Indigenous Knowledge Systems into Agricultural Development: A Model and Analytical Framework*. Studies in Technology and Social Change No. 17. Ames, Iowa: Technology and Social Change Program, Iowa State University.

Warren, D. M. 1984. "Linking Scientific and Indigenous Agricultural Systems." In *The Transformation of International Agricultural Research and Development*. J. L. Compton, ed. Boulder, CO: Westview.

- Warren, D. M. 1989. "Linking Scientific and Indigenous Agricultural Systems." pp. 153-170, In J. L. Compton, (ed.), *The Transformation of International Agricultural Research and Development*. Boulder: Lynne Rienner Publishers.
- Warren, D. M. 1990. "Indigenous Knowledge Systems and Development." Background paper for Seminar Series on Sociology and Natural Resource Management. The World Bank, Washington, D.C. December 3, 1990.
- Warren, D. M. 1990a. "Indigenous Knowledge Systems for Sustainable Agriculture in Africa." Keynote Address, International Conference on Sustainable Agriculture in Africa. Columbus, Ohio: The Ohio State University, Center for African Studies.
- Warren, D. M. 1991 Using Indigenous Knowledge in Agricultural Development; World Bank Discussion Paper No.127. Washington, D.C.: The World Bank.
- Warren, D. M. 1991a. The Role of Indigenous Knowledge in Facilitating the Agricultural Extension Process. Paper presented at International Workshop on Agricultural Knowledge Systems and the Role of Extension. Bad Boll, Germany, May 21-24, 1991.
- Warren, D. M. 1992. "Indigenous knowledge, Biodiversity Conservation and Development." Keynote Address at International Conference on Conservation of Biodiversity in Africa: Local Initiatives and Institutional Roles. Nairobi, Kenya August 30 - September 3, 1992.
- Warren, D. M. 1992a. "Using Indigenous Knowledge for Agriculture and Rural Development." A Concept Paper for Exploring the Potential Utility of The Global Network of Indigenous Knowledge Resource Centers for International and National Agricultural Research Centers. Ames, Iowa: CIKARD, Iowa State University.
- Warren, D. M. 1992b. "Indigenous Knowledge and Sustainable Development: A Review of Critical Research Areas and Policy Issues." International Symposium on Indigenous Knowledge and Sustainable Development. Silang, Cavite, Philippines, September 20-26, 1992.
- Warren, D. M. 1992c. Strengthening Indigenous Nigerian Organizations and Associations for Rural Development: The Case of Ara Community. Occasional Paper No. 1. Ibadan: African Resource Centre for Indigenous Knowledge.
- Warren, D. M. 1992d. A Preliminary Analysis of Indigenous Soil Classification and Management Systems in Four Ecozones of Nigeria. Discussion Paper RCMD 92/1. Ibadan, Nigeria: Resources and Crop Management Division (RCMD), International Institute of Tropical Agriculture.
- Warren, D. M. 1994. "Indigenous Agricultural Knowledge, Technology and Social Change." In *Sustainable Agriculture in Eastern North America*. G. McIsaac, W. Edwards, and T. Riley, eds. Urbana, IL: University of Illinois Press.
- Warren, D. M., ed. 1991. *Indigenous Agricultural Knowledge Systems and Development*. Gainesville, FL: Agriculture and Human Values, Inc., Agriculture, Food, and Human Values Society. (Agriculture and Human Values; Volume VIII, No. 1 and 2).
- Warren, D. M., L. J. Slikkerveer and S. O. Titilola. (Eds). 1989. *Indigenous Knowledge Systems; Implications for Agriculture and International Development*. Studies in Technology and Social Change No. 11. Ames, Iowa: Technology and Social Change Program, Iowa State University.
- Warren, D. Michael, and Jennifer Pinkston 1998. "Indigenous African Resource Management of a Tropical Rainforest Ecosystem: A Case Study of the Yoruba of Ara, Nigeria." In *Linking Social and Ecological Systems*:

- Management Practices and Social Mechanisms for Building Resilience*. F. Berkes and C. Folke, eds. Cambridge, UK: Cambridge University Press.
- Warren, D. Michael, L. Jan Slikkerveer, and David Brokensha, eds. 1995. *The Cultural Dimension of Development: Indigenous Knowledge Systems*. London: Intermediate Technology. (Indigenous Knowledge and Development Series).
- Warren, D. Michael, Remi Adedokun, and Akintola Omolayo 1996. "Indigenous Organizations and Development: The Case of Ara, Nigeria." In *Indigenous Organizations and Development*. P. Blunt and D. M. Warren, eds. London: Intermediate Technology Publications. (IT Studies in Indigenous Knowledge and Development).
- Warren, D.M., L.J. Slikkerveer and D. Brokensha (eds) (1995) *The cultural dimension of development: Indigenous knowledge systems*. London: Intermediate Technology Publications
- Wehab, Bolanle W. 1996. "Community Development Associations and Self-Reliance: The Case of Isalu Community Development Union, Isyin, Nigeria." In *Indigenous Organizations and Development*. P. Blunt and D. M. Warren, eds. London: Intermediate Technology Publications. (IT Series in Indigenous Knowledge and Development).
- Williams, Nancy M., and Graham Baines, eds. 1993. *Traditional Ecological Knowledge: Wisdom for Sustainable Development*. Canberra: Centre for Resource and Environmental Studies, Australian National University.
- Wolff-Keddie, Jackie. 1996. "Aboriginal Agenda or Agency Agenda? Community-Development Planning Projects in Australia." In *Indigenous Organizations and Development*. P. Blunt and D. M. Warren, eds. London: Intermediate Technology Publications. (IT Series in Indigenous Knowledge and Development).
- Wolfley, Jeanette. 1998. "Ecological Risk Assessment and Management: Their Failure to Value Indigenous Traditional Ecological Knowledge and Protect Tribal Homelands." *American Indian Culture and Research Journal* 22(2):151-.
- World Bank, (1997) *Knowledge and Skills for the Information Age, The First Meeting of the Mediterranean Development Forum*; Mediterranean Development Forum,
- World Bank, (1998) *World Development Report 1998/1999: Knowledge for Development*.
- World Bank, (1999) *Indigenous Knowledge for Development – A Framework for Action*
- Wright, Andrew. 1985. "Marine Resource Use in Papua New Guinea: Can Traditional Concepts and Contemporary Development Be Integrated?" In *The Traditional Knowledge and Management of Coastal Systems in Asia and the Pacific*. K. Ruddle and R. E. Johannes, eds. Jakarta, Indonesia: United Nations Educational Scientific and Cultural Organization, Regional Office for Science and Technology for Southeast Asia.
- Yoder, R. 1990. *Amish Agriculture in Iowa: Indigenous Knowledge for Sustainable Small-Farm Systems*. Studies in Technology and Social Change No. 15. Ames, Iowa: Technology and Social Change Program, Iowa State University.

APPENDIX #5:

TRADITIONAL KNOWLEDGE NEWSLETTERS

BIODIVERSITY CONSERVATION STRATEGY UPDATE. Biological Resources and Institutions Program, World Resources Institute, 1709 New York Ave. NW, Washington, DC 20006 USA.

CIKARD News. Center for Indigenous Knowledge for Agriculture and Rural Development, 318 Curtiss Hall, Iowa State University, Ames, Iowa 50011 USA.

GATE – German Appropriate Technology Exchange, GTZ, Eschborn

HONEY BEE: Newsletter for Documentation and Experimentation of Local Innovations Developed by Farmers, Pastoralists,

ARTISANS, AND HORTICULTURALISTS. Centre for Management in Agriculture, Indian Institute of Management, Vastrapur, Ahmedabad-380015, India.

IFPP Newsletter. Indigenous Food Plants Programme, P.O. Box 48108, Nairobi, Kenya.

ILEIA Newsletter. Information Centre for Low-External-Input Agriculture, P.O. Box 64, 3830 AB Leusden, The Netherlands.

INDIGENOUS KNOWLEDGE AND DEVELOPMENT MONITOR: Newsletter of the Global Network of Indigenous Knowledge Resource Centers. CIRAN, P.O. Box 90734, 2509 LS The Hague, The Netherlands.

INTERNATIONAL TRADITIONAL MEDICINE NEWSLETTER. Program for Collaborative Research in the Pharmaceutical Sciences, University of Illinois, P.O. Box 6998, Chicago, Illinois 60680-6998 USA.

LA VOIX DU PAYSAN, Cameroun

LE GRENIER, Service Inter Africaine de Technologies Appropriées, Burkina Faso

SEEDLING. Genetic Resources Action International (GRAIN), Apartado 23398, E-08080 Barcelona, Spain.

IWGIA Newsletter. International Work Group for Indigenous Affairs, Fiolstraede 10, DK-1171 Copenhagen K, Denmark.

IK NOTES, World Bank 1818 H Street NW, Washington D.C. 20433 Monthly Newsletter in English, French, Portuguese and soon on local languages