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 PEOPLE

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 defenses. 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 artifacts 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 practising 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 ensue 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 ionizing 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 compensation 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