




**WIPO REGIONAL EXPERT MEETING
ON THE ESTABLISHMENT OF A
CARIBBEAN FRAMEWORK FOR THE
PROTECTION OF TRADITIONAL
KNOWLEDGE, FOLKLORE AND
GENETIC RESOURCES**

**Kingston, Jamaica –
18th & 19th March, 2008**



**Cultural and Economic Importance of
Traditional Knowledge, Traditional
Cultural Expressions and Genetic
Resources for Caribbean Countries**

**Presentation by
Mary-Ann Richards
WIPO Regional Coordinator/Consultant**

**Kingston, Jamaica
18th March, 2008**

Increasing Importance in Global Economy of Intellectual Property

- ✦ The world has entered an era of knowledge-driven growth and development. Some call it the “post-industrial” era.
- ✦ Resource-intensive growth is being replaced by **economic development based on knowledge, innovation and creativity**. As a result, Intellectual Property has assumed greater importance and pre-eminence. It impacts every facet of our lives and has become a critical tool for policy making with socio-economic, technological and cultural repercussions.

Traditional Knowledge

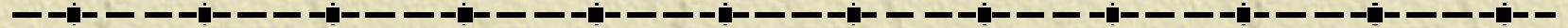
There is no universally recognized definition for Traditional Knowledge as such.

WIPO uses the term “Traditional Knowledge (TK)” to refer to tradition-based innovations and creations resulting from activity in the industrial, scientific, literary or artistic fields.

The term “tradition-based” refers to transmission from generation to generation. However, TK is not merely learnt by rote and handed down from one generation to another. It is inherently dynamic and subject to a continuous process of verification, adaptation and creation.

TK innovations and practices have contributed significantly to the body of knowledge in such disciplines as traditional agriculture, medicine, environmental conservation, traditional selection and breeding methods, pest and disease management, to name a few.

Traditional Knowledge



TK encompasses a broad range of subject matter and can include

- ❖ agriculture, scientific, technical, ecological, health, medicinal and bio-diversity-related knowledge;
- ❖ expressions of folklore in the form of music, dance, song, handicraft, designs, stories and artwork, elements of language such as names, geographical indications, symbols and cultural objects.

WIPO's FFM's 1998 & 1999

-
- ✦ WIPO's 9 Fact-Finding Missions undertaken in 1998 & 1999 (which included missions to Guyana, Jamaica and Trinidad and Tobago), revealed that TK systems are frameworks for continuing creativity and innovation in most fields of technology, ranging from traditional medicine and agricultural practices to music, design and the graphic and plastic arts.
 - ✦ Stakeholders consulted considered TK to be a constantly renewed source of wealth, both as an economic asset and as cultural patrimony. In many cases, TK holders did not separate “artistic” from “useful” aspects of their intellectual creations and innovations.

www.wipo.int/traditionalknowledge/report/

Caribbean Identified TK During FFM

In the absence of an internationally accepted definition of TK, the subject matter identified in the Caribbean included:

- ✦ Traditional usage of fruits, plants and animals for medicinal purposes;
- ✦ Spiritual healing;
- ✦ Traditional Fishing Methods;
- ✦ Traditional Birthing Methods;
- ✦ Traditional bone-setting techniques;
- ✦ Cultural heritage;
- ✦ Folk songs, dances, dramas;
- ✦ Rites and Rituals;
- ✦ Traditional Psychiatry;
- ✦ Religion;
- ✦ Trapping, hunting and fishing techniques;
- ✦ Traditional Food Culture and preservation techniques;
- ✦ Handicrafts;
- ✦ Traditional environmental preservation and conservation methods
- ✦ Language.

Folklore/Traditional Cultural Expressions

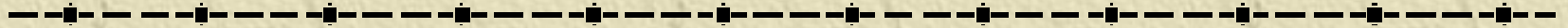
Folklore in its broadest sense, is often referred to as a set of literary, artistic, religious, scientific, technological and other traditions and productions which are transmitted from one generation to another.

- ✦ It may also include literary works of any kind, oral or written such as tales, legends, proverbs and myths. It includes music, dance, religious traditions and ceremonies.
- ✦ **Folklore has traditionally been approached from a copyright perspective.** However, while copyright may be relevant to protect some aspects of Folklore such as literary, musical and artistic works, the technological and methodological content of Folklore such as inventions, craft, designs and carvings may not be protected.

Biodiversity and Genetic Resources

-
- ✦ In a study funded by NASA, a team of paleontologists recently concluded that the tropics are both the cradle and museum of biodiversity. Twice as many species originated in the tropics as other areas and fewer species became extinct. So what happens in the tropics in the future will impact the biodiversity of the planet. (<http://www.sciencemag.org>)
 - ✦ Since much of the biodiversity of the planet is to be found in tropical developing countries and there is **growing demand for biological or genetic resources** for use in biotechnology, pharmaceuticals, cosmetics, agriculture and other industries, the commercialization of potentially useful plants and animals is seen as a **viable option for sustainable development**, for reducing poverty and generating wealth in these countries.

Potential Value of Genetic Resources, TK and Folklore



- ✦ With the emergence of modern biotechnologies, **genetic resources** have assumed increasing economic, scientific and commercial value to a wide range of stakeholders in the pharmaceutical, biotechnological, agricultural, veterinary, chemical and other fields.
- ✦ **Tradition-based innovations and creations** which are important parts of a community's heritage and cultural patrimony, can act as inputs into other markets such as entertainment, art, arts and craft, cultural tourism, music, multimedia, publishing, architecture and fashion.
- ✦ With the advent of the Internet, other traditional-based creations (e.g. **folklore**) have taken on new economic and cultural significance in a globalized information society.

Evaluating Traditional Knowledge

- ✦ It is very difficult to accurately estimate the value of Traditional Knowledge because:
 - ✦ ~~(i) TK is often an essential component in developing other products;~~
 - ✦ (ii) Most TK-derived products never enter modern markets
 - ✦ (iii) Much of TK has cultural or spiritual value that cannot be quantified in monetary terms.

- ✦ Back in 1992, a UNCTAD-ICTSD Project on IPRs and Sustainable Development put the estimated value of plant based medicines in the pharmaceutical industry at US \$61 billion. The link to TK was obvious in that of 119 plant-based compounds used in medicine worldwide, 74% had the same or related uses as the medicinal plants from which they were derived.

- ✦ W.H.O. has estimated that the global market for traditional therapies is in excess of US \$70 billion a year.

- ✦ The Indian Government estimates that worldwide, 2000+ patents are issued yearly based on traditional Indian medicines.

Whose Yoga?

-
- ✦ The USPTO has issued 150 yoga-related copyrights, 134 patents on yoga accessories, and 2315 trademarks. The yoga industry in the USA alone is said to be worth US \$3 billion a year.
 - ✦ The Indian Government has set up a task force that is cataloguing TK, including ayurvedic remedies and hundreds of yoga poses, to protect them from being pirated and copyrighted by foreigners. The data will be translated from ancient Sanskrit and Tamil texts, stored digitally, and available in 5 international languages so that patent offices in other countries can see that yoga did not originate in a San Francisco commune. [IHT 7th May, 2007 – “Can You Patent Wisdom”? - Suketu Mehta]
 - ✦ Burning issue in TK > “prior art” and “information on prior art” available to patent examiners.

Some Examples of Countries Deriving Benefits from TK

-
- ✦ Haiti has a long tradition of producing vetivier, an essential oil and prized ingredient for perfumes. Haiti is the world's leading supplier of vetivier for the international perfume trade.
 - ✦ Appetite suppressing qualities of the Hoodia Cactus (Khomani San community, South Africa);
 - ✦ Natural red pigmentation qualities of the uruku plant now used by Estee Lauder to produce lipsticks (Yawanawa, Amazon indigenous community);
 - ✦ Body Shop introduction of a line of Ayurvedic-inspired products;
 - ✦ Importation by companies such as L'Oreal and Revlon of Ayurvedic anti-wrinkle creams and shampoos from India which previously could only be purchased on the black market;
 - ✦ The widespread use of aloe vera in health care and wellness, cosmetics and pharmaceuticals.
 - ✦ Ginseng and ginkgo biloba are now staples in people's dietary supplements;
 - ✦ Goji, noni and mangosteen are deemed to be "super or miracle foods".

Why Protect TK?

-
- ✦ **The approach in treating with TK to date has been that if the knowledge has not been kept secret then it belongs to nobody. Hence, it can be used freely by anybody.**
 - ✦ However, recent developments as regards the controversial granting of patent rights, bio-prospecting and the misappropriation of the resources of local communities has brought an awareness, not only of the **economic potential of their genetic resources** but of the **critical role played by the traditional knowledge systems** on which communities have depended for their survival for centuries, and the need to ensure that this contribution is acknowledged and rewarded.
 - ✦ Over the years many traditional peoples and communities have condemned the unauthorized use and reproduction of their fixed and unfixed cultural expressions such as artistic works, handicraft, designs, dances, musical and dramatic performances. Outsiders often neglect to seek permission, fail to acknowledge the source of the creativity, and pass off production and works as authentic expressions or products when they are not

Problems Confronting TK Holders

The preservation of Traditional Knowledge is a major challenge for a number of reasons including:

- **Lack of respect and appreciation** for traditional knowledge;
- Encroachment of **modern lifestyles**;
- A younger generation reluctant to learn old ways resulting in the **decline of traditional knowledge and practices**;
- **Inadequate documentation and preservation** of the knowledge held by elders and communities before they pass away;
- **Ignorance of the invaluable contribution of local knowledge systems.** e.g. In traditional agriculture, TK includes knowledge about the uses of plants, plant conservation strategies, pest and disease management, environmental monitoring for ecological change and traditional selection and breeding methods.
- **The biggest problem** however, is the unauthorized, commercial exploitation (misappropriation) of the knowledge of TK holders by others which brings to the fore the question of the legal protection of TK.

The Situation in the Caribbean – The Pluses

-
- ✦ The region is biologically diverse (marine and land)
 - ✦ The region has a rich plant heritage with many endemic species;
 - ✦ The Region has an extremely diverse eco-system (associated with most tropical countries)
 - ✦ The region has very diverse traditional knowledge systems conserved and developed both by its indigenous inhabitants (where these still exist) and its inhabitants originating from all corners of the globe;
 - ✦ The Region has a rich cultural heritage;
 - ✦ The region enjoys a high level of literacy.

The Caribbean Contd.- The Minuses

-
- ✦ There is tremendous pressure on land resources (population expansion and urban development);
 - ✦ There is environmental degradation and pollution
 - ✦ Agriculture consists largely of small holdings with limited opportunities for economies of scale and global competitiveness
 - ✦ Alternate land use is leading to genetic erosion
 - ✦ Sectoral linkages are often inadequate (agriculture/tourism/culture)
 - ✦ Investment in R&D is extremely low which means that innovation is low;
 - ✦ Where innovation does exist there is often a disconnect between innovation and commercialization of that innovation;

Policies Aimed at Optimizing GRTKF at National and Regional Level

-
- National Policy for Socio-Economic Development
 - National/Regional Science and Technology Policy
 - ✦ National/Regional Intellectual Property Policy (need to develop an appreciation of IP as a tool for socio-economic development)
 - ✦ National/Regional Environmental/Biodiversity/Biosafety Policies
 - ✦ Investment in Research and Development
 - ✦ Fostering a Culture of Innovation
 - ✦ Building capacity in biotechnology at the national and regional levels;
 - ✦ Building ICT Infrastructure capacity
 - ✦ National/Regional Plan of Action for utilizing biotechnology as a tool for sustainable development in a broad range of activities including agriculture, fisheries, forestry, human, animal and plant health; pharmaceutical, biochemical, cosmetics and food industries , waste management, environment conservation, etc

Optimizing GRTKF at National and Regional Levels

-
- ✦ Given cross-cutting nature of many of the important issues need for multidisciplinary approach to GRTKF
 - ✦ Establishment of Legal and institutional framework for the protection of GRTKF
 - ✦ Enforcement
 - ✦ Linkages with economic sectors
 - ✦ University /R&D Institutions/Public /Private sector partnerships
 - ✦ Access to technology and effective technology transfer
 - ✦ Need to optimize limited human and financial resources
 - ✦ Need to promote networking and regional cooperation

WIPO's Intergovernmental Committee (IGC) on Genetic Resources, Traditional Knowledge and Folklore

- ✦ The IGC, established in 2001, has sought to enhance understanding of the reciprocal relationships between IP, Biotechnology, Biodiversity and selected aspects of economic, social, cultural and technological development.

The IGC concentrates on 3 closely interrelated themes > access to genetic resources, protection of TK whether or not associated with these resources, and protection of expressions of folklore.

It has tabled a list of 16 Policy Objectives and some 14 Substantive Principles for the Protection of TK.

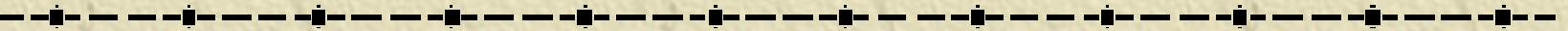
- ✦ Regrettably, although WIPO member states, few countries in the region follow (via reports available on WIPO's website) or participate in the discussions taking place in the IGC.

Summary/Proposals

-
- ✦ Traditional Knowledge, Folklore and Genetic Resources hold significant economic potential and opportunities for the Caribbean and its peoples.
 - ✦ The region is challenged by the fact that countries are not, as DG Idris terms it “IP-conscious”;
 - ✦ TK/TCE preservation and protection cannot exist in a vacuum. TK/TCE protection has to be another step in a national/regional system of acknowledgement of creativity and innovation and IP-protection of creativity;
 - ✦ Although things are happening in pockets here and there in every country, there is little concrete data to identify TK/TCE assets rather than an intuitive understanding of what “assets” countries and the region as a whole hold. Need for “Audit”, even preliminary in nature;
 - ✦ There is need for public education and awareness building of the tremendous value of knowledge and human capital in Caribbean countries. Need for own-evaluation of what is “worthy” as opposed to foreign or external approval and valuation;
 - ✦ Need for wider IP Public education and awareness;
 - ✦ Need to determine where there is and should be a nexus between IP, TK, TCEs and monetary rewards;

Summary/Proposals

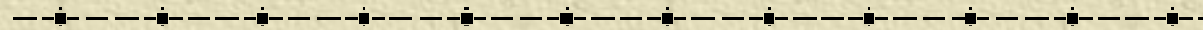
Countries must begin



- ✦ To engage relevant domestic stakeholders and experts on the issue of IP, TK, TCEs and GR;
- ✦ To become actively involved in exploring the issues and ways and means to protect and promote traditional innovations and creations at the local, regional and international levels. The field is so broad that there must be a **multidisciplinary and inclusive** approach;
- ✦ To become more actively involved in the IGC process at WIPO and the many other fora where the protection of TK is on the agenda;
- ✦ To begin to conduct TKGRF audits to identify assets.
- ✦ To make the critical link, where deemed desirable, between IP, TK, TCEs, GR and economic benefits and rewards.



THE END



Thank You For Your Attention

