

UNCTAD Expert Meeting on Systems and National Experiences for
Protecting Traditional Knowledge, Innovations and Practices

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Traditional Medicine and its Knowledge

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The UNCTAD document states that many activities and products based on traditional knowledge are important sources of income, food, and healthcare for large parts of populations in a range of developing countries. Traditional medicine plays an important role in health care in both developed and developing countries.

I. Important Role of Traditional Medicine for Human Health Care

The Twentieth Century has witnessed a revolution in human health care. The dramatic decline in mortality, increase in life expectancy and the eradication of smallpox are all part of this success. Scientific innovation, leading to the development of new drugs and medicines, has played a major role.

However, despite these achievements, it is estimated that over one-third of the world's population lacks regular access to affordable essential drugs. For these people, modern medicine is never likely to be a realistic treatment option. In contrast, traditional medicine is widely available and affordable, even in remote areas, and generally accessible to most people.

In India, for example, 70% of the population uses Indian medicine, as reported by the Indian government.

In Africa the resolution on "Promoting the Role of Traditional Medicine in Health Systems: A Strategy for the African Region", which was adopted by the 50th Regional Committee of Africa in August 2000, states that the African Member States are aware of the fact that about 80% of the

population living in the African Region depend on traditional medicine for their health care needs¹.

In the last decade, there has been a global upsurge in the use of traditional medicine and complementary and alternative medicine in both developed and developing countries. Various reasons have been proposed for this increase, including affordability, but also changing needs and beliefs.

For example, the percentage of the population which has used complementary and alternative medicine, at least once, are as follows: Australia – 48%, Canada – 50%, USA – 42%, Belgium – 40%, France – 75% and the United Kingdom – 90% as stated in governmental and non-governmental reports.

The most widely-used traditional medicine and complementary and alternative medicine therapies are herbal medicines and acupuncture. The world market for herbal medicines, including herbal products and raw materials, has reached US\$43,000 million as reported by the Secretariats of the Convention on Biological Diversity (CBD) 2000. The annual world-wide growth rates for 91/92 was between 5-15%.

As a consequence, today traditional medicine and complementary and alternative medicine play an increasingly important role in health care and health sector reform globally.

II. Challenges for Protection of Knowledge of Traditional Medicine

The efficacy of certain types of traditional medicine, such as acupuncture and herbal medicine, has been widely investigated and reports have been shown.

Artemisia annua is one of the Chinese traditional medicines for the management of malaria since ancient times. Artemisinin and its derivatives have been developed recently by modern scientific research as one of the most valuable anti-malaria drugs of today, world-wide. St John's Wort is another example for the treatment of mild to moderate depression. Such findings have stimulated research to discover new drugs from traditional medicines.

The new issues are concerned on how benefits are derived from the use of biodiversity and how associated traditional medicine are shared, and how to protect the intellectual property rights between holders of traditional knowledge and researchers during the process of transfer of this kind of traditional knowledge to the modern technologies. The challenge is that the vast majority of plant genetic resources and other forms of biodiversity are found in – or originate from – developing countries. In most situations, knowledge of traditional medicine is at times appropriated, adapted and patented by scientists and industry, for the most part from developed countries, with little or no compensation to the custodians of this knowledge and without their prior informed consent. The protection of traditional knowledge, innovations and practices of indigenous and traditional medicine and equitable sharing of benefits have been receiving increasing attention on the international agenda in recent years.

Another urgent issue is that with the widespread use of traditional medicine and the tremendous expansion of international herbal products markets, the great commercial profit from traditional medicines and medicinal plants have also brought serious problems of global biodiversity loss.

¹ Promoting the Role of Traditional Medicine in Health Systems: A Strategy for the African Region 2001-2010, WHO, 2000, (AFR/RC50/)

Because pharmaceutical herbal production needs big quantity of raw materials of medicinal plants, many plants have been over collected and become danger species. For example, some information mentioned that African potato was good for AIDS in 1997. After two years, this particular specie has completely disappeared in Democratic Republic of the Congo.

III. The Gaps between Traditional Medicine Areas and Existing Modern Patent Law

Currently, some 95% of patents in the world are held in developed countries. At present, international patent law and most national conventional patent law protection requirements of novelty and inventive steps do not seem to be applicable to traditional knowledge and biodiversity.

For example, there is no act under patent law which could be used to protect the non-medication of traditional therapies, such as manual therapies and spiritual therapies. Because of the lack of database and the same medicinal plants growing and being used in various countries and continents, it is very difficult to identify the founder.

Pharmaceutical products can be protected by the existing conventional patent law. However, herbal medicines and herbal products are quite different from chemical drugs. They are very difficult to be protected by the existing patent law.

For example, there are only three key protectable subject matters in order to get patent for pharmaceutical products in the conventional patent law:

- ◆ Patent for discovering new chemical components
- ◆ Patent for know-how in producing the products
- ◆ Patent for the trademark

In addition to patent law, knowledge on herbal medicines could also be protected by keeping it a secret!

Firstly, the above-mentioned means are without little or no compensation to the custodians of this traditional knowledge and without their prior informed consent.

Secondly, herbal medicines have been defined by several WHO guidelines that they include crude plant materials, such as leaves, flowers, fruit, seed, stems, wood, bark, roots, rhizomes or other plant parts, which may be entire, fragmented or powdered. The products, which chemically-defined active substances have been added, including synthetic compounds and/or isolated constituents from herbal materials, are not considered to be herbal medicines. Therefore, it is impossible to get existing patent law protection for herbal medicines through the discovery of new chemical components.

Thirdly, the major dosage forms of traditional herbal medicines are directly derived from their herbal preparations, which include powdered herbal materials, or extracts, tinctures and fatty oils of herbal materials. They also include preparations made by steeping or heating herbal materials in alcoholic beverages and/or honey, or in other materials. The production process and major dosage forms of traditional herbal medicines is normally very simple. There is almost no know-how available to protect this by patent.

Fourthly, except for pharmaceutical companies and industries, other holders of traditional knowledge find it impossible to get protection for their product through trademark.

Fifthly, it is impossible to keep knowledge a secret, because registration of herbal medicines have to be made if the products want to be sold in the market. Therefore, all of the components in the products have to give account to their national drug authorities.

Some countries, however, have been aware of the important role of intellectual property rights for traditional medicine. India, Kenya and Madagascar, for example, have updated their legal system and national patent law in order to protect the knowledge of traditional medicine. We need to share national experiences.

IV. Future Cooperation

The issues on the protection of traditional knowledge, innovations and practices of indigenous and local communities have been raised in recent years. This Expert Meeting today has been initiated and organized by UNCTAD. Its purpose is not only to repeat the issues again, but it will further focus on what systems can be used for the protection of traditional medicine and the sustainable development of indigenous and local communities. How can existing systems be strengthened? How can national policies and measures be supported at multilateral level? How can developing countries obtain greater benefits from the commercialization of traditional medicine-based products and what would be the role of certain intellectual property regimes?

Traditional medicine continues to play an important role in health care in both developed and developing countries in the 21st Century. Biodiversity of natural resources, from which medicinal plants and herbal products are derived, have maintained their great potential with economic benefits. WHO will organize the “*WHO Interregional Workshop on Intellectual Property Rights in the Context of Traditional Medicine*” in Bangkok, Thailand from 6-8 December 2000 to discuss, in particular, solutions for the protection of knowledge of traditional medicine, and the outcome of this meeting would contribute to our workshop.

V. Conclusion

The intellectual property rights is one of the important means in protecting the benefits of traditional knowledge. It needs to be further developed and expanded. Patent law, however, is not the only means in protecting the benefits of traditional knowledge. Each government should develop its own means to protect the benefits of the knowledge of traditional medicine.

There is no doubt that these discussions will share ideas and information to facilitate our Member States to develop their own practicable systems, means and regimes for the protection of Intellectual Property Rights in order to achieve fair and equitable benefits in sharing traditional knowledge.

Traditional knowledge will greatly contribute to the development of economics and health care in 21st Century.