

# Safeguarding traditional knowledge in Africa: legal and ethical challenges

**Marisol Cardoso, Patent Consultant at Inventa, details the available protection for traditional knowledge crucial for the preservation of cultural heritage and the promotion of fair and equitable use.**

**A**frica covers about one-fifth of the total land surface of the Earth and is home to a rich and diverse animal, plant, and marine biodiversity. Africa is also a land rich in cultural diversity and Traditional Knowledge (TK), i.e., the ancestral knowledge passed down from generation to generation.

TK can be found in several contexts, from agriculture to medicine and cosmetics. However, since this invaluable heritage holds promising opportunities, especially for biotechnological innovation, its preservation and recognition face legal and ethical challenges.

## Legal framework:

Various African countries have implemented laws, regulations, and policies aimed at safeguarding TK, by covering aspects such as access to natural resources, fair and equitable use of knowledge, and participation of local communities in decision-making related to the exploitation of the knowledge.

## Intellectual property protection:

Traditional knowledge and traditional cultural expressions are products of creative intellectual activity and therefore fall within the scope of intellectual property. Even though TK as such - knowledge that has ancient roots and is often oral - is not protected by conventional intellectual property (IP) systems, innovations based on TK can be protected as patents, utility models, trademarks, industrial designs, and geographical indications.

Patent protection covers products or processes that provide a new way of doing something, for example, new tools and techniques for hunting or agriculture. Distinctive Indigenous words, names, and symbols can be protected as trademarks. Industrial design rights can be used to protect handicrafts, such as jewelry, to textile and fabric



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## Résumé

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designs. The geographical indication provides the holders of traditional knowledge with means to differentiate their product from a competitor by highlighting its link with the geographical area from which it comes.

African IP landscape encompasses two regional offices (the African Regional Intellectual Property Organization – ARIPO – and the African Intellectual Property Organization – OAPI), which provide practical ways to use the patent system and mitigate the burdensome acts and high costs of filing independent applications in a plurality of countries.

ARIPO is mandated under the Swakopmund Protocol on the Protection of Traditional Knowledge and Expression of Folklore to protect TK holders against any infringement of their rights and protect expressions of folklore against misappropriation, misuse, and unlawful exploitation. The Protocol has been in force since May 11, 2015, and has eight contracting states: Botswana, Malawi, Namibia, Rwanda, Gambia, Liberia, Zambia, and Zimbabwe.

Even though OAPI is committed to contributing to the promotion and protection of the expression of cultural and social values, there is no regulation or protocol in force today.

## Plant breeders' rights

Many plant-based technologies justify the commercial interest in natural medicinal resources and associated traditional knowledge used in the development of new plant varieties.

Plant varieties can be protected by an alternative *sui generis* system called Plant Breeders Rights (PBR) or Plant Variety Rights (PVR), wherein the cultivar must be new, distinct, uniform, and stable. The rights are granted to the breeder and give them exclusive control over the propagating material (including seed, cuttings, divisions, tissue



culture) and harvested material (cut flowers, fruit, foliage) of the new variety over a period of time.

However, not all African countries have a *sui generis* system designed to reflect the particularities of breeding, cultivation, and use of new varieties of plants. Currently, only Morocco, Tunisia, Egypt, South Africa, Kenya, Tanzania, and OAPI (with its 17 Member States from West and Central Africa) have joined the Union for the Protection of New Varieties of Plants (UPOV).

#### Trade secret

The concept of a trade secret is to protect confidential information (i.e., undisclosed knowledge) that would give a competitive advantage to a company, for example, a manufacturing technique or the components of a composition.

As regards traditional knowledge, the understanding is divided: while some people agree that the knowledge maintained within a community could be considered a trade secret, others argue that the secrecy requirement is not fulfilled once the information is disclosed amongst the individuals of such a community. Another point relies on the fact that, even though TK has cultural value, the information must have commercial value to be eligible for protection as a trade secret.

#### International agreements:

Various international agreements, such as the Convention on Biological Diversity (CBD) and the Nagoya Protocol, provide legal boundaries for the protection of traditional knowledge and access to genetic resources.

The CBD is a multilateral treaty that covers biodiversity at all levels (ecosystems, species, and genetic resources) and which aims to develop national strategies for the conservation and sustainable use of biological diversity. With 196 nations, the CBD has near universal participation

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among the countries of the United Nations.

The Nagoya Protocol is a supplementary agreement to the CBD and provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

#### Ethical framework:

African ethical frameworks prioritize the idea that traditional knowledge belongs to the communities that have generated and nurtured it. This further involves acknowledging the spiritual, historical, and social significance of the traditional practices, ensuring they are treated with sensitivity and respect.

Due to this fact, decisions about the use, sharing, and management of TK should be made collectively by the community and any commercialization or utilization must lead to tangible benefits for the communities that contributed to the knowledge.

Obtaining informed consent from the indigenous communities before using their TK is a central issue to be addressed. Such a measure ensures that the communities are aware of how their knowledge will be used, and they have the right to approve or reject such usage.

In the same way, collaborative research involving indigenous communities is encouraged. Incorporating indigenous perspectives can foster mutual learning and, at the same time, guarantees that research and documentation of traditional knowledge are done in consultation with and approval from the community.

The pursuit of harmonious collaboration between researchers, governments, and local communities is a way to make it possible for TK holders to receive fair recognition for their contributions to humanity's scientific and cultural heritage. The objective is not related solely to the protection



itself, but also to ensuring that no commercial use is carried out without prior consent and fair benefit-sharing.

#### TK databases

The importance of preserving traditional knowledge for future generations involves strategies to document, protect, and pass on the information. Some African countries have created registries and databases where the communities can register their Traditional Knowledge and medicines. In this way, documented evidence of the ownership and existence of this knowledge is established.

The National Indigenous Knowledge Management System (NIKMAS<sup>1</sup>), for example, is responsible for the recording, storing, management, and dissemination of Indigenous Knowledge (IK) and related information in South Africa. Up to the moment, the system has registered 33 communities and over 2400 IK holders.

The Ghanaian Indigenous Knowledge of Medicinal Plants<sup>2</sup> aims to identify, capture, document, and digitize indigenous knowledge, on forest foods and medicinal plants. The project, which aims to preserve IK information and explore its importance in livelihood and socio-economic development in Ghana, embraced nine communities.

At a regional level, the PROTAbase<sup>3</sup> is a repository of around 7,000 useful plants in tropical Africa. It details their scientific and vernacular names, geographical distribution, properties, and uses, including diagrams and images.

#### Other issues to address:

##### Cultural appropriation

The traditional knowledge is subject to cultural appropriation when members of a majority group

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adopt cultural elements of a minority group in an exploitative, disrespectful, or stereotypical way.

The African traditional knowledge represents a living repository of centuries-old wisdom, acquired through intimate relationships with the land, biodiversity, and ancestral practices. Cultural appropriation from such TK allows mass-produced products to flood the market and compete with products that were legitimately produced by such communities, which are “prevented” from commercializing their culture in their own ways and for the benefit of their own families.

#### Exploitation and biopiracy

Biopiracy, the unauthorized appropriation of traditional knowledge and genetic resources of farming and indigenous communities, continues to be a significant threat.

Apart from the effects on biodiversity (such as the extinction of existing species and deforestation of the wildlife), the biopiracy undermines the rights of local communities due to the gaining of exclusive monopoly control through patents or intellectual property by an external entity.

Thus, strengthening patent examination procedures to prevent the grant of unjustified patents based on existing traditional knowledge is essential.

#### Conclusions:

The protection of the traditional knowledge derived from African ancestral wisdom is crucial not only for the preservation of cultural heritage but also for the promotion of fair and equitable use, as well as sustainable development.

Developing robust and enforceable legal frameworks, construed with ethical principles, requires establishing *sui generis* systems or adapting existing laws to accommodate the unique features of TK.

By respecting the rights of local communities and fostering collaboration, this legacy will continue to thrive and contribute to the well-being of people not only in Africa, but all over the world.

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<sup>1</sup> <https://nikrs.dst.gov.za/>

<sup>2</sup> <https://www.csir-forig.org.gh/tikfom/database>

<sup>3</sup> <https://prota.prota4u.org/>