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缔约方会议
科学和技术委员会
第七届会议
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临时议程项目 7

传 统 知 识

秘书处的说明

1. 缔约方会议在其第 16/COP.6 号决定中请各缔约方通过本国的联络中心动员有关政府和非政府组织、研究机构以及地方和土著社区就如何利用传统知识为实现《公约》的各项目标作出贡献，特别是就已提出的建立防治荒漠化传统知识网络的要素提出意见，并将意见提交秘书处。

2. 缔约方会议在同一项决定中还请各缔约方通过本国的联络中心动员有关政府和非政府组织、研究机构以及地方和土著社区参与汇编有关传统知识的管理和保护的国家、分区域和区域案例研究和经验教训，并将汇编提交秘书处。

3. 秘书处被要求对所提交资料进行汇编，并报告科技委下届会议。

4. 秘书处收到菲律宾的一项案例研究报告以及土耳其、摩洛哥和巴西的更新资料。这些资料已载入本文件供委员会审议，未经正式编辑。

5. 铭记科技委主席团的建议，秘书处已经完成两个传统知识特设专家组所提供传统知识材料以及背景文件的出版工作。所出版材料已准备好供向缔约方分发。

6. 本文件中还载有关于所提议的拉丁美洲和加勒比区域传统知识主题方案网络的简要资料。

7. 委员会不妨审议报告汇编，并对拉丁美洲和加勒比区域提出的关于建立主题方案网络的建议给予注意，然后向缔约方会议提出适当建议。

附　件

Annex I

[ENGLISH ONLY]

CASE STUDY CONTRIBUTIONS RECEIVED FROM PARTIES

Philippines – Case study on the Ifugao rice terraces

The Philippine case study of the 2000-year-old Ifugao rice terraces technology for rainwater harvesting in a high mountain ecosystem.

General information

1. The 2000-year-old Ifugao rice terraces were proclaimed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as a World Heritage Site in 1996. Up to modern times, the rice terraces have remained an important, unique and priceless national heritage noted for its excellent human-managed steep slopes, high mountain ecosystem and unique traditional micro-watershed ecosystem management technologies which rely on rainwater harvesting for the sustained production of rice, vegetables, fish and clean recycled domestic water, as well as for the support for the successful performance of yearly rituals, cultural festivities and other traditions of the Ifugao communities.

2. The Ifugao rice terraces are a classic example of the Millennium Ecosystem Approach where impacts of any deviation in the traditional management of the terraces would translate into terrace, soil and water degradation, a decline in productivity, a decline in its aesthetic values and in the end create a measurable impact on biodiversity and most specifically on the overall economy and quality of life of the Ifugaos, as well as on living conditions in other communities around the rice terraces.

A. Ecosystem components of the Ifugao rice terraces

3. Muyong is a clan/communally-owned and jointly-managed forest vegetation system on top of the micro-watershed. Its primary role is to maintain the balance of hydrology of the terrace watershed and sustain the rainwater supply for rice production and domestic requirements. The Muyong, being clan-owned, ensures joint community actions in maintaining watershed quality and controlled water flow.

4. Water conveyance networks are composed of creeks/natural drainage systems that act as receptor and distributor of rainwater in and around the rice terraces. The terrace-to-terrace water movement is well controlled through the use of a special native bamboo whose diameter approximates the amount of drainable water and which helps in minimizing scouring and soil erosion in the next recipient terrace.

5. Terrace ponds represent individual steps that connect the community to the Muyongs and which serve as areas for food, spring water and rice wine production. Only areas that receive full sunlight are developed into rice terraces, and shaded areas are left to natural and forest vegetation.

6. Natural springs serve as receptors of recycled and filtered water coming from the terraces that accumulates during irrigation of the rice terraces.

7. Housing areas are designated outside the terrace ponds and are located close to springs. The presence of houses in the terrace fields can be an indication of non-Ifugaos or migrants.

B. Science-based integrated food-fish water systems production technologies of the Ifugaos

8. The terrace engineering hydro-technology. The Ifugao rice terraces are classical examples of very simple bench terraces that have employed a unique and holistic micro-watershed ecosystem approach. The technology used for the high mountain watershed terrace has combined the principles of conservation engineering and hydrology with social science. The complex biological synergy in the terrace has created the very complex interdependence of overall micro-watershed hydrology with (a) water use/reuse, and recovery for ensuring access to year-round clean domestic water supply, (b) the production of rice-for-wine in support of the practice of their religion and spiritual beliefs, and (c) the long-term physical sustainability of the rice terrace structures.

9. The terrace biorhythm technology. The terrace biorhythm technology framework used for the production of food, fish and clean spring water in the Ifugao rice terraces is linked to the year-round maintenance of hydrological continuity across the entire terraced micro-watershed, where the surface and subsoil in each of the rice terraces are kept continuously saturated through the year. The cycle of food production, plant and water cycles are closely linked such that soil productivity in the last 2000 years has remained almost unchanged. This water-centred ecosystems management technique has enabled the lIfugaos to use the rice terraces continuously for their traditional food and water production for more than 2000 years with very minimal problems or land degradation. The integrated food-water production systems adopted a production programming that expressed full control of the harmonization of the seasonal variations in rainwater, temperature and sunlight availability, to maintain the food supply year round without creating conflict in the practice of culture and religious belief. The entire terrace production process is based on understanding and application of the synergy and rhythmic relationships of seasonal cycles/variations of climate with crop production, and spiritual/cultural practices. The environmental synergy and biological rhythm for terrace food production are directly linked with micro-watershed terrace ecosystems sustainability and various religious celebrations.

C. The biorhythm principles

10. Biorhythm principles are complex patterns of human life-food-water-environment harmony creation between and among the dynamics of food production systems, water use and changing climate systems, which are illustrated by the following:

11. Continuity of water movement in the terrace soil is central to the long-term sustainability of the Ifugao rice terrace. This is accomplished by planting rice at the period of low rainfall and increasing sunshine days (February – March) and finally harvesting after 7-8 months at the start of the rainy and cold season (July, August, September). Fish culture and on-the-ground vegetable production take placeduring the rest of the wet season, where evening and early frost is

a regular phenomenon. The planting programmes make available the maximum sunlight needed for rice biomass and grain production and at the same time harness the proper humidity and temperature at harvest time to get the best fermentation process for rice wine production.

12. The food-water systems terrace management adopted by the Ifugao farmers ensures that all portions of the rice terraces are saturated with water all year round, the condition needed for reducing erosion and collapse of the very steep terrace walls and which likewise ensures that enough clean filtered water is fed into the springs all year round.

13. Organic, pesticide-free farming practices and soil management are employed to ensure that water recovered in the spring is clean and safe for community use. Soil fertility management is basically done through incorporation of rice straw and farm residue management. The incorporation of the fish culture is a form of wet season fallow which also reduces land degradation and helps in maintenance of soil fertility.

14. The Ifugaos employ “zero soil puddling” and organic farming through rice straw use and residue management, a special combination of soil management technology that ensures high soil moisture storage, and the soil surface remains porous for better infiltration and percolation of water into the sub soil and finally drainage into the springs.

15. Irrigation water movement within the individual paddy and into the next paddy downstream is at a rate that is enough to distribute the silt evenly as well as to maintain sufficient gradient in each terrace paddy field for the safe drainage of excess water from one terrace to the next. This allows enough time for water percolation in individual terraces to ensure the supply of filtered water in the springs located at the terrace bottom.

Annex II

[ENGLISH/FRENCH ONLY]

INFORMATION UPDATES

A. Turkey

1. As knowledge, innovations and practices as well as the social and cultural costs mar behaviours of local communities, traditional knowledge has drawn increased attention through global discussions. Traditional knowledge is also a part of the cultural identity of indigenous and local communities which is mainly developed from experience gained over the centuries and transmitted from generation to generation.

2. Traditional knowledge is valuable not only to those who depend on it in their daily lives, but also to modern industry and agriculture. Many widely-used products are derived from traditional knowledge. However, agriculture, non-wood forest products handicraft as well as land-use types are the most popular field of traditional knowledge. The skill of local people and techniques which they have used provide valuable information to the global community. Traditional knowledge can also be regarded as a body of knowledge that has continuously developed over time without the assistance of formal science.

3. In Turkey, given the diversity of traditional land-use practices and the need to explore information for the contribution to sustainable development, related organizations and research foundations are encouraged to conduct studies on traditional knowledge. For that purpose, the Ministry of Environment and Forestry organized a “Forest Village Summit” in 2000 in order to provide a better understanding of people’s knowledge and their future expectations. In this summit, policies, strategies and constraints were broadly discussed by the multi-disciplinary groups. The outcomes of the summit have shown that the local communities and forest villagers as well as their cooperatives are strongly willing to take part in the management of nearby forests which are the main component of sustainable land management and protection of environment and soil.

4. The forest villages are the major centres of the poor living in remote rural communities in Turkey. Their daily lives are highly dependent on agriculture and forestry. The forestry sector has given significant privileges and priorities as well as some rights to increase their living standards. This approach and such a contribution mechanism have let them explore and use their traditional knowledge on land-use practices and resource management.

5. In order to integrate and harmonize the traditional knowledge gained through years and best practices of local farmers with innovative and new techniques, the State’s official television channels and radio stations set up special and systematic broadcasts daily. The “Voice of the Soil” is the most popular and effective one in Turkey.

6. Turkey’s national action programme for combating desertification significantly addresses and underlines promotion of the participation of local communities through their traditional knowledge and practices in land management for fulfilling the objectives of the Convention.

B. Morocco

7. Pour la décision 16/COP.6, le Maroc avait élaboré un référential technique des mesures anti-érosives et de gestion de l'eau qui intègre les connaissances traditionnelles, et ce à l'occasion de la mise en oeuvre de certains projets, notamment celui de l'aménagement du bassin versant de Sidi Driss dans la Province d'Azilal. Par ailleurs, la Chaire Organisation des Nations Unies pour l'éducation, la science et la culture-Gestion des ressources naturelles (UNESCO-GRN) Maroc, entreprend un projet de recherche sur la spatialisation agro-écologique du pays, les phénomènes de dégradation des terres et les pratiques de conservation des eaux et du sol.

C. Brazil

8. Regarding traditional knowledge, the Brazilian Government is mapping the traditional populations in the arid and semi-arid areas in order to identify and compile the relevant traditional knowledge and technology for promoting sustainable development in the areas affected by desertification.

Annex III

[ENGLISH ONLY]

SUMMARY OF THE PROPOSED THEMATIC PROGRAMME NETWORK ON TRADITIONAL KNOWLEDGE FOR THE LATIN AMERICA AND THE CARIBBEAN REGION

Establishing a thematic programme network on best practices and traditional knowledge in Latin America and the Caribbean (LAC)

1. It is the intention of the LAC country Parties to establish a TPN on best practices and traditional knowledge (BP-TK) in the LAC region, to enhance the implementation of identified initiatives in accordance with selected criteria and methodologies that provide, among other results, linkages with other proposed TPNs, such as the ones on benchmarks and indicators and the Information Network on Drought and Desertification in Latin America and the Caribbean (DESELAC).

2. The thematic programme responds, on one side, to several requests made to the UNCCD secretariat in different meetings, and on the other to the wide number of national reports that mention the need to address issues on sustainable practices and use of traditional knowledge under the UNCCD. Its purpose is to have at the disposal of countries existing instruments and mechanisms that could help them in the implementation of the UNCCD, through a regional programme of validated best practices and traditional knowledge, including local and indigenous knowledge, within the national action programme (NAP) implementation framework

3. The thematic programme on best practices and traditional knowledge will be launched through a three-phase process, consisting of three stages: the identification of practices and sustainable knowledge in the countries of the Region, the formulation and implementation stage of an international workshop, and the last stage or launch proper of the TPN through the creation of an international coordination on the theme.

Background

4. At the fifth LAC regional meeting held in Lima, Peru, in August 1999, the secretariat submitted to the participants a document on traditional knowledge and technologies, which mentioned that more than 2,000 technologies were identified in South America that needed to go through a validation process within the NAP framework.

5. On the occasion of the UNCCD second reporting process in 2002, some LAC countries reported positive experience with traditional knowledge and sustainable practices for soil conservation. During the first session of the Committee for the Review of the Implementation of the Convention (CRIC 1), Rome, November 2002, LAC countries made presentations on the "bio-mass increase" and "zero tillage" technologies.

6. The principles involved in the above-mentioned technologies include the development of agricultural activities and the protection of existing vegetation and biodiversity. Their effectiveness, as is clearly expressed in the case of the Quezungual technology, has been proven by the relatively non-existent damage caused by extreme climatic events, such as hurricane Mitch (1998), in regions where this technology was used.

7. At the fourth LAC regional meeting, country Parties decided to request the development of a regional project aimed at recovering and assessing traditional knowledge and technologies existing in LAC and, as a result, to adopt the proposal of Peru as regional coordinator and of Argentina, Cuba, Guatemala and Mexico as subregional coordinators. All activities under the regional action programme (RAP) provide and create direct links to each NAP to combat desertification and drought. It is envisaged that the close linkages among TPNs will enhance information exchange, as recommended by CRIC 1, and will constitute a sustainable source of information. TPN 3 (DESELAC) becomes the most efficient and cost-effective source on which to base information on best practices and traditional knowledge.

8. The desired criteria to achieve the end results of the TPN on best practices are based on the attainment of local objectives that move forward the activities of combating desertification and drought by including them within the Governments' strategies. Recognizing and understanding the importance of this mainstreaming is essential for achieving action at the local level using traditional technologies.

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