Summary and Conclusion

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SUMMARY

The discussion during the three-day conference most vividly underlined the importance of indigenous knowledge systems (IKS) to sustainable development (SD) in Africa and the rest of the developing world. However, IKS as a concept needs to be properly understood. Knudsen for example posed a serious of questions on this issue in chapter 3: "What kind of knowledge is IKS? What is the theoretical underpinning of IKS? To what extent is indigenous knowledge systematic and structured? How do the categorization, translation and inscription of IKS affect the knowledge and the holders of that knowledge?"

Ansay extends the discussion in chapter 4 by postulating that the encounters between the North and the South have been marked by the "tabula rasa" philosophy - indigenous knowledge was considered as an impediment on the road of progress. For example, patents originated from a European worldview and as such contain certain characteristics that make them incompatible with some other worldviews. However, it appears that the current Western way of life is has serious sustainability problems and are incompatible with universal standards of living. In short, it is therefore important to work with indigenous knowledge systems.

The conference recognized that mobilizing appropriate and adequate knowledge capital is an imperative in the fight for attaining SD in Africa and the developing world in general. It was agreed that IKS all over the world are less harmful to the environment, natural resources management and human development than modern technologies and development models. Moreover, IKS have much to offer to biological and cultural diversity. It is therefore important that modernization does not lead to a renouncement of local customs, and traditional values. IKS is an important tool for promoting the participation of local people in SD. The conference identified key contextual issues on and challenges facing an effective application of IKS in Africa's SD process in and recommended strategies for redressing the challenges.

Key Contextual Issues

A fundamental issue identified during the

conference is that the culture and knowledge systems of indigenous people and their institutions provide appropriate and useful frameworks, ideas, guiding principles, procedures and practices that can serve as a good foundation for effective endogenous development options and for restoring social, economic and environmental resilience of many parts of Africa and the developing world in general. However, the continuous extinction of indigenous peoples and rural groups and their knowledge about the natural world may compromise feasible sustainable development opportunities.

Other important issues raised during the conference were shifts in the field of cultures over the past decades and some speculation on the future development of the study of cultures and knowledge systems. In addition, the application of the concept of IKS in the studies of African societies was clearly identified to be clearly sand strongly related to the emergence of the academic discourse on sustainable development (SD). Both IKS and SD research agendas were and are largely stimulated by UN initiatives. In Africa, the importance of IKS can be adduced from traditional agricultural practices, health delivery, trade, industry, construction, the arts, the extended family and inheritance systems and the informal social security system. Realizing the importance of IKS, each country should endeavour to introduce an IKS policy that seeks to facilitate a better understanding of their historical and cultural context and the worth of indigenous and local communities.

The conference also illustrated the importance of IKS in the SD process through a number of sectoral and sub-regional case studies. For example, the case studies on traditional agricultural knowledge in India, traditional knowledge and maritime fishing in Ghana and traditional water purification knowledge in Tanzania are very educative. The sub-regional case on Central Africa identified how the introduction of alien values can compromise sustainability prospects in Africa while the East African case used ecotourism to point out the value of IKS in Africa. The question is "How can natured-based tourism and indigenous knowledge systems help to promote sustainable development in the continent?" Two Southern African case studies underlined the role modernity plays in 254 EMMANUEL K. BOON

environmental degradation and the neglect of IKS in the development discourse.

The links between biodiversity, the exploitation of natural resources, patents and intellectual property rights was highlighted in the Brazil case study. A best practice learnt from this case is that the Government of Brazil has a constitutional responsibility to preserve the diversity and integrity of the country's genetic patrimony and supervises all activities related thereto, and the institutions involved in research and manipulation of genetic resources. The challenges of IKS in Latin America were clearly identified in the papers presented by Norka E. Paden and Gonzalo Oviiedo and Flavia Noejovich. These include demographic factors; national development policies/programmes; poverty, western oriented educational policies and programmes; modernization policies and programmes; and traded policies.

A concrete way in which multi-lateral organizations can contribute towards the promotion and development of traditional and sustainable development was clearly illustrated by the example of the United Nations Environment Programme (UNEP). UNEP recognizes that most indigenous cultures are based on a profound respect for nature and that their consumption patterns and lifestyles are premised on the principle of sustainability. The role of higher education in valuing IKS was the focus of the case study on the Philippines. Education and research on IKS in higher educational institutions is very important. Therefore, the Philippines Government has enacted legislation to support indigenous peoples' rights to give legitimacy to the establishment of indigenous peoples' schools. The Vietnam case study exhaustively explained the role of ethnic minorities in promoting IKS and

Key Challenges Facing IKS and Sustainable Development

The biggest challenge facing IKS and SD is the fact that the plight of indigenous people and their knowledge systems has been discussed in many international and national fora but actual practice and concrete results are still to be seen. The main challenges facing research institutions, development agencies and actors in integrating IKS in development decision-making include the following:

 Development paradigms of Africa are still heavily western-oriented and fuelled by assimilation, integrationist and paternalistic policies.

- Ineffective policy and legal frameworks defined to facilitate participatory processes for indigenous and local communities on biodiversities matters.
- Inadequate understanding of and research on indigenous knowledge systems. Therefore, IKS have not been captured and stored in a systematic way and are therefore endangered with extinction.
- The oral and rural nature of IKS in Africa has made them largely invisible to the development community and science.
- Wide spread poverty and marginalization of indigenous people and their knowledge systems due to the craze for modernity, westernisation, religion and globalization.
- The widening of ethnic inequalities in countries where indigenous and tribal peoples live demonstrates that conventional anti-poverty policies fail to tackle the social and economic exclusion facing these peoples.
- Lack of capacity to manage contemporary threats to biological diversity.
- The inability of African countries to build and mobilize appropriate and adequate knowledge capital for attaining SD in the rapidly globalizing world and evolving knowledge systems.
- The individualistic nature of intellectual property regimes creates several complications in giving value to indigenous knowledge, products and services.
- Ineffective implementation of access laws and regulations to protect traditional knowledge. Intellectual property rights regimes are still unable to transform its nature in order to grant traditional knowledge the same level of protection given to the innovations and inventions produced by the non-indigenous society.

Key Strategies

The key strategies identified for mitigating the above-mentioned challenges include:

- Recognizing, accommodating, promoting and strengthening the role of indigenous people and communities and their knowledge systems in SD at the national, regional and international levels. The conference called for a reappraisal of the North-South relations which must aim not only to "recognize" the right of the South to develop according to its own path but also consider the challenges of globalisation, the "best practices" and values of different cultures.
- Provide policy, legal and institutional frameworks to facilitate the implementation and

- regulation of IKS measures that are normally dispersed across government departments and agencies.
- Design development policies and plans more suited to the environmental, social and cultural characteristics of rural areas.
- Protect IKS because it is capital and is important for conflict resolution and reconciliation.
- Facilitate an effective design and implementation of appropriate development programmes and projects.
- Consider the rights, interests and needs of indigenous and local communities when designing legislation, policy and administrative procedures.
- Include participatory and consultation procedures for indigenous peoples and local communities, in accordance with ILO Convention 69, as a formal procedure in all activities affecting their lands and resources.
- Expand research and foster recognition of the value of customary laws for the preservation of indigenous cultures and traditional knowledge and practices.
- Creation of mechanism to promote IKS innovation. Governments should initiate programmes with the aim of auditing, documenting and supporting research on IKS.
- IKS requires dedicated funding as is with all knowledge systems.
- Increase public awareness of the importance of indigenous peoples' and local communities' traditional knowledge and practices.
- Enhance multicultural and bilingual education.
- Develop indicators and monitoring schemes, in cooperation with indigenous peoples and local communities, for development and environmental actions.
- Produce appropriate and accessible technologies that can easily be introduced in local communities or even transferred to other regions of the world.

- Establish an effective basis for self-sufficiency and self-determination in indigenous communities through participatory processes.
- Address poverty, migration, armed conflict and natural resource degradation as drivers of cultural change and knowledge loss of indigenous and local communities.
- An agreed mechanism for involving traditional leaders in the development of IKS should be established.
- Strengthen institutional capacity, decentralization, access to justice, access to information, and conflict resolution mechanisms for indigenous and local communities.

CONCLUSION

The preservation and protection of indigenous people and their knowledge has been recognized as a means to achieving SD. However, much still needs to be done at the policy and development programming levels to enable genuine and sustainable participatory processes of engagement of a multiplicity of knowledge systems. Indigenous knowledge is widely being abandoned by the elite in Africa who resort to alien and "modern" but unsustainable development values and practices. There is therefore an urgent need to nature it to form the backbone of SD in Africa. Governments and development agencies in the continent need to revitalize and re-engineer development policies/programmes, legal and institutional frameworks at the central and local government levels, and traditional institutions to support a vigorous promotion and development of IKS and SD. These measures should be backed by appropriate research to document pertinent information and define effective educational programmes to increase awareness and understanding on the subject. This process must be participatory and involve all stakeholders.

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