

Natarajan Ishwaran

Biosphere Futures

“Sustainable development requires diverse and life-long learning” this is emphasized on page 39 of the 2005 publication “Full of Life: UNESCO Biosphere Reserves – Model Regions for Sustainable Development”, which has been a German contribution to the “Man and the Biosphere” Programme of UNESCO. In answering the question why they chose the word “learning” instead of “education”, the authors of the essay, Gertrud Hein and Lenelis Kruse-Graumann, emphasize that “learning” much more so than “education” refers to the process of actively changing patterns of behaviour, values, attitudes, motivations and future orientation of people – people being a dominant factor in influencing biosphere futures.



Photo © Natarajan Ishwaran

Since the eighteenth session of the International Coordinating Council (ICC) of the MAB Programme held in October 2004, the MAB Secretariat of UNESCO, in line with this spirit, has been emphasizing the potential role of UNESCO biosphere reserves as learning laboratories for sustainable development. At the nineteenth session of the MAB/ICC convened in October 2006 in Paris, this notion of learning laboratories received further support from all delegates and observers. The twentieth session in Madrid, Spain from 4 to 8 February 2008, together with the third International Conference on Biosphere Reserves is themed “Biosphere Futures, UNESCO Biosphere Reserves for Sustainable Development.” In preparation of this session the MAB/ICC requested the Secretariat to prepare a working document on the following: What are the policy and political initiatives needed to articulate and confirm the niche of biosphere reserves as learning laboratories for sustainable development?

In its wish to articulate the biosphere reserves as local, national and global laboratories for sustainable development, both the MAB/ICC and the Secretariat

aim to enable biosphere reserves to become places where conservation and development are reconciled and pathways towards sustainability are demonstrated. Global change has a deep impact on people, societies and nations. Sustainable development accommodates environmental, economic and social dimensions of global change. It is important to note that the implementation of the global principle of sustainable development depends on the specific context and therefore must be formulated differently according to specific temporal or local needs. The science of sustainability therefore depends on the availability of observations and reports of such context-specific sustainability scenarios. Biosphere reserves are predestined for that particular task.

UN Decade of Education for Sustainable Development

Analysing efforts to demonstrate sustainable development in biosphere reserves comparatively, based on internationally agreed upon methodologies could be a significant contribution of the MAB Programme and the biosphere



Photo © Gertrud Hein

reserves to the UN Decade of Education for Sustainable Development (DESD).

In UNESCO's internal plan for the implementation of the DESD, the Division of Ecological and Earth Sciences, which is home to the MAB Secretariat, has been identified as the theme leader for Decade activities related to ecosystems and livelihoods. Biosphere reserves are apt places for the implementation of Decade activities anchored on this theme and designed and implemented by all Sectors of UNESCO. The MAB Secretariat collaborates closely with the DESD Secretariat of UNESCO; together they prepared to present the principle of biosphere reserves as learning laboratories for sustainable development to the UNESCO Executive Board and General Conference in the fall of 2007. In addition, MAB prepares joint intersectoral action with other relevant UNESCO Programmes, such as MOST (Management of Social Transformations) focussing on the learning laboratories theme.

The German Government and the German National Commission for UNESCO are

strong supporters of both, the DESD and the MAB Programme. German biosphere reserves may take a lead in experimenting with the learning laboratories idea. The German MAB National Committee is invited to work even closer with the Secretariat at UNESCO, Paris, to connect German biosphere reserves with those in other selected countries to build international co-operation around the learning laboratories theme.

The DESD period 2005-2014 coincides with the international community's commitment to meet several global targets such as reaching the Millennium Development Goals by 2015 and the Convention on Biological Diversity target of minimizing the loss of biodiversity by 2010. Through UNESCO-wide intersectoral and interdisciplinary initiatives during the next medium-term strategy of UNESCO (2008-2013), biosphere reserves as learning laboratories could provide significant experimental momentum for getting closer to sustainable development. The results and outcomes of such joint initiatives could strengthen the contributions of UNESCO to attain

such global targets as mentioned above.

Biosphere reserves are the only internationally designated areas whose explicit mission it is to build context-specific and long-standing relationships between conservation, development, learning and practical knowledge. They are therefore the primary sites for UNESCO-wide action, experimentation and learning on sustainability.

Hopefully this publication will attract a wide range of readership including the Delegates and Representatives who will participate in the 34th session of the General Conference of UNESCO during October-November 2007. I hope that they may wish to consider the important role biosphere reserves could play in the activities of UN DESD.

Dr. Natarajan Ishwaran, Sri Lanka, is director of the Division of Ecological and Earth Sciences of UNESCO. Since 1986 he has been working for UNESCO, until 2004 he was in charge of Natural Heritage at the World Heritage Centre.

UNESCO Biosphere Reserve Wadi Allaqi

Egypt

The biosphere reserve Wadi Allaqi is situated 180 km south of Assuan in the midst of the Nubian Desert, which is an extreme desert with approx. 4 mm of rainfall per year. The area spans 2,380 km²; it was included into the world network of biosphere reserves by UNESCO in 1993. Right at the frequently flooded Wadi the vegetation consists of shrub groves of tamarix, acacias and tumble weeds, of groves of tooth brush trees and desert dates as well as of agro ecosystems.



Photo © Flickr Creative Commons: Iain Pitcairn

The population consists, in the main, of nomads. They use the natural resources of the biosphere reserve for livestock transhumance, charcoal production, the collection of medicinal plants and small-scale cultivation. Resource conservation has been a concept inherent to the Bedouin's livelihood and value systems. Their views, aspirations and accumulated knowledge are taken into account in the decision-making processes within the biosphere reserve.

The large-scale, multidisciplinary research at the South Valley University in Assuan which maintains partnerships with numerous foreign universities is worth mentioning. Its support comes from UNEP, UNESCO and the British Council. An exchange programme was established for young Egyptian scientists with Great Britain and the USA in line with the Seville Strategy. In return many students from European universities carry out research on the ecology

of arid regions and resource use, in areas such as hydrology, biodiversity, sustainable agriculture and soil science.

Recently, tourism has gained ground in this still very underdeveloped desert. Ecotourism is being promoted in the area in the form of desert safaris, excursions with a scientific or an educational focus as well as workshops and seminars.

Further information:

<http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=EGY+02>



Photo © UNESCO / Alexis N. Vorontzoff