

Planning for a Sustainable Future: Let's Put the Environment First!



According to a recent 'challenges for humanity' article in the National Geographic we live in an age of contradiction, wherein unmatched wealth and technology is available to a few, and grinding poverty is experienced by many. We face tremendous challenges as populations grow, mainly in coastal cities. For sustainable economic activity to support the inevitable process of urbanization, a productive environment is required. If we adopt a stewardship that reduces our burden on the earth's resources at local level, many opportunities will present themselves. This position paper outlines a path in that direction and argues for a change in the value system we apply to the planning of coastal development.

In many tropical coasts, conditions are ideal for outdoor recreation and water-sports facilities. The warmth and sunshine provide a cheerful atmosphere that contributes to the potential for year-round tourism. Most tropical coasts are blessed with a healthy water budget, which means that indigenous vegetation can be regenerated following disturbance, and landscapes can be restored to their natural state more readily. Although environmental productivity and water resources can be managed for sustainable use, there is already concern that our coastal environment is becoming irreversibly degraded by human activities.

Our level of environmental awareness is a function of educational background and philosophy on the role of mankind. There are those who feel that man should dominate his surroundings, that pollution is a fact of life, and that degradation leading from urbanization is inevitable. There are others who consider that mankind plays a supporting and interactive role in the ecosystem. Inputs such as pollution are reflected back onto the producer, and so a self-sustaining 'minimalism' is required whereby the prosperous, educated consumers strive to limit their impacts. Meanwhile, the poor seek a greater share of resources. Efforts to develop a synergy between coastal urbanization and environmental assets can succeed only if we put the needs of the environment first. This approach will reduce conflict between competing users of coastal resources, because they will all be subject to a commitment that stands above the interests of any one user. The mass media promotes the concept that consumption is status. We can counter this influence by creating influential prototype 'citizens-of-tomorrow' with inherently sensitive attitudes toward the environment - leading to a balance between urbanization and conservation, even in the infrastructure-poor third world.

The long-term benefit of access to natural landscapes for future generations is often at odds with the need for job creation in the short-term. Many factors can chase away investment capital: unplanned urbanization, a high crime rate, excessive pollution, degraded scenery, loss of habit, etc. In the face of these problems, local authorities often resort to liability management. This presents challenges to us all, to find alternative solutions that will generate jobs to ease poverty.

As the role of industry declines and is replaced by service delivery in the global economy, aesthetics become increasingly important. This is where asset management can create

opportunities. For example if national and local governments doubled the area set aside for conservation, softer eco-tourism and residential developments could occur. However, for this to happen the spread of urbanization must be checked through strict zoning regulations, and a 'roll-back' of transformed land from ecologically important areas should be considered.

Taking a look at our coastal plains, it is easy to find examples of urban or agricultural land use spreading across indigenous ecosystems with adverse effects. Crops may be planted in riverbeds resulting in siltation, reduction of flow, nutrient oversupply, and loss of botanical habitat for wild animals. If we plan on behalf of the environment, a reduction in the harmful impacts of subsistence agriculture could improve chances for the co-existence of eco-tourism and traditional lifestyles. In the human dimension, there is a growing degree of tolerance that affords opportunities for multi-cultural interaction, without loss of identity. Cultural barriers can be lowered as individuals perceive ways to infuse the best from one group into another. I believe that researchers can lead the way, with a long history of appreciation for cultural diversity.

The world population has doubled in 50 years, and it may double again in another 50. Within that time, more people will live within 10 km of the coast than elsewhere. Much of the scenic beaches, coral reefs and waterfront parks could disappear as coastal populations grow (at 1 million people per day!). It can be argued that tourism, which generates employment for 300 million people worldwide, places a high value on aesthetic conditions. But to strike a balance between man and nature, we'll need to put the environment first in planning these developments. Pollution levels must be limited through recycling, and residential estates should be planned to take advantage of natural scenic features without despoiling them.

To make things happen, a new vision is required. Researchers can play a role by initiating and publicizing constructive solutions that guide development within a more strict environmental code. For example, instead of accepting spatially-confined conservation parks, why not set aside large tracts of land as 'soft' nature reserves, within which people's needs may only be met through non-extractive practices.

Scientific monitoring of the health of our environment is an essential management tool in conjunction with local insight. This is where research can focus. Bio-indicators of coastal resources need to be carefully measured at regular intervals over long periods of time to underpin strategic planning. We can learn from our past through research, and find the correct points for intervention to ensure a sustainable future.

Once the tremendous monetary value of our natural environment and its attendant services is recognized, we can engender greater awareness in the public for the need to expand conservation areas and to limit urban sprawl. A new way of thinking needs to come into play that puts the environment first. This could seem difficult to implement in poor countries, but there are advantages in not focusing on man's immediate needs. Conflict becomes reduced and it is then possible to find win-win situations that preserve the natural environment, provide for peoples' livelihoods and restrain pollution. In this scenario, decision-makers and researchers can team-up to seek ways to deliver benefits to human users, whilst retaining the natural habitat for a wide diversity of animal and plants that comprise the foundations of our healthy environment. Our children will benefit greatly from these wise practices.