

Workshop on Cities, Ecosystems & Biodiversity
Thursday, 21 September 2006
at Kenya Wildlife Service Headquarters, Nairobi National Park

- NOTES -

Introduction

Introduction by Moderator - Mr. Julius Kipng'etich, Director, Kenya Wildlife Service (KWS)

- Kenya is the size of France – 580,000 km²
- 10 percent of Kenya's land mass is dedicated to protected areas, managed by a) the state, b) local authorities, and c) private individuals.
- A quarter of Kenya's GDP is earned through protected areas.
- The KWS protects 64 protected areas, 6 of these being marine parks. Four out of five water towers fall within these areas.
- KWS has a staff of 3,600
- Kenya's Tsavo National Park is the 3rd largest conservation area in the world. The Park is the size of Israel.

Nairobi National Park

- Is the only area in the world where wildlife lives next to a capital city
- There are benefits and challenges to this particular circumstance
- The park contains, for instance, 60 black rhinos, and 10 cheetahs

Lake Nakuru National Park

- Another national park that is next to a city is Lake Nakuru National Park
- This park is the largest bird sanctuary in the world

Opening Statement and Welcome – Rebecca Nabutola, Permanent Secretary, Ministry of Tourism and Wildlife of Kenya

- When talking about ecosystems it is crucial to look at global, regional and local linkages.
- Ecosystems are important, as they provide services such as pollution cleansing, watershed protection, carbon sinks, recreation, varied habitats, and economic benefits through employment.

Keynote Speech – Achim Steiner, Executive Director of UNEP

We are faced with two challenges, which are:

Workshop on Cities, Ecosystems and Biodiversity
Thursday, 21 September 2006 – Kenya Wildlife National Headquarters

- Notes -

1. the need to make the notion of a systems perspective reflect an urban perspective
2. the need to redefine how cities look at nature.

A new communications approach to link these two is necessary.

Raised four distinct points:

1. Efficiencies. Reducing the urban footprint is something cities can do. Cities can disconnect growth from consumption by reducing the consumption of wood, energy, water, etc.
2. Ecosystem management within a city environment is needed; people want nature in the city.
3. Payment for ecosystem services. A link must be made between the environmental benefits and economic pricing. One should think about models to pay communities for maintaining ecosystems.
4. The biodiversity target from the World Summit on Sustainable Development (2002) to reverse the loss of biodiversity by 2010. How do we take practical steps at the local level? Many local governments in Europe have, for instance, committed themselves to that target by reducing the urban footprint and creating green spaces to preserve biodiversity.

Presentations on “Cities: Manager of Ecosystems. An Introduction”

Cities and Ecosystems – Rob de Jong, Acting Head, Urban Environment Unit, UNEP

- Kampala (Uganda) – the wetland, located between the city and Lake Victoria, provides fish, water treatment, and drainage in the rainy season. Now, water treatment and drainage are completed by expensive services, while the city is working to restore the wetlands.
- Accra (Ghana) is now expanding beyond the current city limits, into the wetlands, seriously damaging this ecosystem.
- Cairo (Egypt) – the city is encroaching in on the pyramids.

There are 34 biodiversity ‘hotspots’ around the world; all are in the area of major cities. Cities need to learn how they can live and work harmoniously with these biodiversity ‘hotspots’,.

Value of Biodiversity to Cities – Ted Tryzna, Chairperson, IUCN, Task Force on Cities and Conservation

- IUCN currently has 1,000 members, which include governments, government agencies and NGOs.
- IUCN has a strong presence in Africa.
- IUCN previously was not interested in cities and their role, but now has a task force with 80 members representing 40 countries around the world on the role of cities. The website is www.citiesandconservation.org
- Connecting cities and biodiversity is a complex question.

Workshop on Cities, Ecosystems and Biodiversity
Thursday, 21 September 2006 – Kenya Wildlife National Headquarters

- Notes -

- There is one fundamental truth – urban people, especially children, need contact with nature for their well-being.
- Made mention of a book on this out in the US that is very popular – Last Child in the Woods.
- People with money can connect with nature by leaving their urban environment; poor people must stay in their neighbourhoods.
- The answer then is to bring nature to where the urban poor live.
- Examples:
 1. The London (UK) Biodiversity Strategy aims to have nature available a 10-minute walk for everyone in the city, and they are succeeding in this.
 2. In Los Angeles (USA), in a large, flat, poor area, an agency is using a piece of unused municipal land and are creating a park with indigenous species. The park is very popular.
 3. In Kenya, children are connecting with nature in their schoolyards.
- City governments need to work with other levels of government, NGOs, businesses, and educational institutions – success comes from partnerships.

Urban Protected Areas – Brett Myrdal, Manager, Table Mountain National Park, Cape Town, South Africa

- Similar to Kenya, South Africa has one of the most comprehensive park systems.
- Table Mountain, watching over the southern most tip of Africa, is a world conservation site (the local name for Table Mountain means “Watcher of the south”).
- The motto of Table Mountain National Park is – A park for all, forever.
- Cape Town is a very divided city, so the challenges for poverty relief are particularly acute
- Tourism is the growth sector of the Cape Town economy, a statistic that helps Table Mountain National Park when negotiating with the national government.
- Table Mountain National Park is the most visited park in South Africa, and a net surplus generator providing revenue to the rest of the city.
- The park also provides a window on conservation to the citizens of Cape Town, through their visits.
- The vision is conservation through two strategies: eco-tourism and people & conservation.
- Table Mountain provides employment for persons as guides; every year 830 are employed in a three-year program, leading to them being skilled contractors.
- The urban poor aspire to get these guide positions.
- Table Mountain National Park provides more benefits to the city: fire management through forest restoration and clearing of alien species, containing erosion through maintenance of paths, providing environmental education to youth, gives an image to the city that creates a competitive advantage to other cities.
- Biodiversity is part of the school curriculum in Cape Town.

- There is pressure to use land held by Table Mountain National Park for housing; land values around the Park are the highest in all of Africa.
- Table Mountain manages this crisis by occasionally giving up land, which is smarter than invasions on the land that would occur.
- Their belief is that urban protected areas are not “a lost space for development,” but are “an asset for the cities that have them.”
- Main learnings: create custodianship by local communities by inviting interest groups and establishing working groups, focus on areas of neglect by opening them for hikers, develop reputation for delivery (be a professional business manager), capture tourists without getting them into vehicles.

Panel Discussion

Accra’s Wetlands – Samuel Anku, Environment Protection Agency of Ghana

- Ghana has an urban population of 8.2 million, and a rural population of 10.6 million.
- 68 percent of Ghana’s built environment is used for residential purposes.
- Accra itself is home to 3 million people.
- The wetlands provide services such as water purification, micro-climate protection, habitat for fish, birds and amphibians, maintenance of water table, flood and erosion prevention and storm protection..
- Pressures on the wetlands in Accra come from recreation/tourism, agricultural resources, plant product extraction, fishing, water use, waste and sewerage, salt production, and sand and gravel production.
- Threats to the wetlands are:
 1. conversion of wetlands for housing development; this results in flooding, and health problems in the slum areas
 2. mining, land and soil degradation; this increases the sediment load, and leads to acidification of the water
 3. sanitation and water pollution.
- Accra has responded by passing a wetlands policy, developing coastal zone management plans, undertaking environmental sensitivity mapping, promote traditional management practices, proposing a green belt as a buffer to urban sprawl and involving communities.

Cape Flats – Tanya Goldman, Cape Town, South Africa

- The further away from Table Mountain, the poorer the neighbourhoods are.
- Cape Flats is a poor area, but also one of high biodiversity. On the Cape Flats alone, 1,400 plant species are found.
- The biodiversity strategy of the city of Cape Town identified a biodiversity network, but the problem arose of how to manage this against other priorities.

- In response, a partnership was established between the city, the South African Biodiversity Institute (SABDI), the World Wildlife Fund and the Botanical Society. The partnership allows these organizations to take necessary risks.
- The Cape Flats also works through a partnership with local communities, the benefits being:
 1. Local leadership opportunities
 2. Benefits to the ecosystem itself
 3. Education, through the Cape Flats as an outdoor classroom
 4. Recreation and well being, with the Cape Flats providing safe and beautiful places that provide for relaxation and beauty. Plants are also used in the local clinics for medicinal purposes.
 5. Job creation

Nairobi Protected Area – Wilson Korir, Assistant Director, Southern A, Kenya Wildlife Service

- Nairobi National Park was founded in 1946, protected under The Wildlife Act. The park would be gone if it were not protected by this national law.
- The park is 20,000 km²
- Beforehand, the wildlife in the park migrated to Amboseli and the Serengeti, but in recent years land near the park was sold to private land owners.
- Nairobi is the only city in the world with a large assemblage of wildlife in its environs
- The park is a major rhino sanctuary
- The park supports the second largest animal migration after Mara, and is a dry season refuge for most wildlife.
- One of the economic benefits of the park is employment – the park employs 120 permanent and 20 temporary staff, on a weekly basis.
- The park ranks 5th in terms of income generation and visitation rates for the country overall.
- The park has recreation and aesthetic values.
- The park is also an important carbon sink for the city of Nairobi, cleansing the city's air.
- Also serves as an education institution for Kenyans.

Challenges:

1. Increase in human population in Nairobi
2. Loss of dispersal and migration area for wildlife
3. Increase in human wildlife conflict, and poaching
4. Economic valuation and appreciation of wildlife to socio-economic development. For instance, the KWS had to convince neighbouring landowners on the importance of conservation. Need to convince them that conservation is the best way to manage the lands.
5. Fencing closes migratory routes.
6. Factories close by result in air pollution, and toxic waste dumping

Workshop on Cities, Ecosystems and Biodiversity
Thursday, 21 September 2006 – Kenya Wildlife National Headquarters

- Notes -

7. Waste burning results in toxic fumes going into the park

Impacts of the challenges are:

1. Loss of space and habitat for wildlife
2. Loss of wildlife species
3. Habitat degradation

The way forward:

- The park is actively involved in the development of master plans of neighbouring communities
- Active management of Nairobi National Park, in line with the Kenya Wildlife Service strategic plan
- Regulation and control of land subdivision in the ecosystem
- Security and wildlife conflict resolution
- Education and awareness
- Working with a collaborative group, the Friends of Nairobi National Park

Friends of Nairobi National Park

- Voluntary association of 450 members, both corporate and individual
- One of its goals is to sensitize the public to the importance of the park
- Have two programs:
 1. leasing scheme – farmers are compensated for keeping their land open from fencing
 2. compensation scheme – during the dry season, lions and leopards attack wildlife. Friends of Nairobi National Park have funds available so if livestock is mauled and killed, the farmer/family will be compensated at the market rate for that animal. As a result, leopards and lions are no longer being killed.
- Telling parting comment – if we lose Nairobi National Park, all of the other conservation areas in this country will go.

Working Groups

1. Cities and Ecosystems – Dependency and Impact of Cities on Natural Resources

Nairobi River Basin

- In 1950, the population of Nairobi was 100,000. At independence (1963), the population was 300,000. In the year 2000, the population was 3 million.
- ‘Nairobi’ is a Maasai word for cooling waters.

- Nairobi has 15 slum areas, the largest is Kibera, which is located upstream on a river valley. Their waste has ended up in the Nairobi dam, resulting in a high e-coli rate.
 - UNEP and UN HABITAT, both headquartered in Nairobi, are working together to address the issue of water sanitation.
 - UNEP and UN HABITAT are piloting a 2-year program, started in 2005, to be fully implemented by 2008, to clean up the Nairobi River Basin. Also involved in this project are Kenyan federal ministries, and the private sector and civic society.
 - Also, the private sector will be launching a resource mobilization project.
- Johannesburg has a similar problem with water resource management, a result of polluting companies. In Johannesburg, the government is taking a leadership role.
- In Accra, the community is involved in water resource management, for example traditional medicine healers are engaged to ensure the survival of the plants that they rely on.
 - A problem in Accra is there is no monetary value given to our natural resources and ecosystems.
- In Uganda, they have a similar program that is addressing the polluted water that is the water source for Kampala, which eventually feeds into Lake Victoria.
 - The river was full of garbage and silt.
 - The local government of that area widened the river, and put a mechanism in place so residents could take charge of garbage collection.
 - They put in metal screens in different zones, so if the screen was not cleaned, your community alone was flooded when the rains came.
- In Nairobi, the city is working with local industries to reduce the amount of waste produced.
 - Also, the private sector will soon adopt a mile of the Nairobi River, and protect it from waste disposal, and to stop erosion on the river banks.
- In Maasai Mara, the dispersal area is being diminished due to demarcation of the land around the park.

Working Group #1 - Conclusions

- Need to quantify our natural resources and ecosystems
- Need for integrated planning
- Need to use our resources in a sustainable manner
- Need for public education and awareness

2. The Value of Biodiversity to Cities

- This working group discussed the case of Onitsha, Anambra State, Nigeria. Onitsha is a regional market town which is located near a river
- The city is plagued by war lords – there is no rule of law.
- The value of the river to the city consists of: a more of transport, source of food and drinking water, silt and sand provider.
- The river is dying out as there is uncontrolled growth of settlements and lack of awareness of the vulnerability of the river.

Working Group2 – Conclusions

- Need to develop land use plans through consultative meetings. People should be owners of plans.
- Need for community awareness campaigns.
- Need for tree-planting along river banks.
- Need for legal framework for protection of the river.
- Revenues collected should be invested in protection of the river.

3. Managing Urban Protected Areas

The Group discussed the case of Tijuca National Park in Rio de Janeiro, Brazil.

- Rio has 9 Million inhabitants.
- Tijuca National Park is completely surrounded by 85 informal settlements and is fragmented by highways and roads passing through it. The park faces challenges such as crime, poaching, squatting and illegal logging.
- Sixty percent of the water provision of the city comes from the park.
- The park had a very low scale of priority for the Brazilian National Park Authorities, but they realized that the fight to preserve the Amazon will be won in the main cities, where policy-makers, law-makers, media, cultural trends are located.
- To address these problems, the management of Tijuca National Park was changed. The park director is answerable to a board consisting of 5 city representatives (including the city council and police), 5 National Park Authority representatives and 1 visitors' representative. The park director has reached out to and established close relationships with city stakeholders.
- The park provides new products such as recreational facilities (football fields) that are connected to a visitor's center, educational trails, free buses and subsidized entrance fees so that poor communities can visit the park. It also reaches out to schools and visits to the park are now part of school curricula in Rio de Janeiro.

Working Group3 - Conclusions

- Manage urban protected areas as a visitor card for national conservation;
- Reach out to all parts of society:
 - Provide free entrance and transport (e.g. Cape Town's Wild Card),

Workshop on Cities, Ecosystems and Biodiversity
Thursday, 21 September 2006 – Kenya Wildlife National Headquarters

- Notes -

- Establish recreational attractions (e.g. swimming pools, soccer fields) connected to a visitor's centre that provides information about the protected area,
- Establish trails,
- Work with schools to include visits to parks in school curricula and develop programmes to bring nature to schools (e.g. tree planting, vegetable gardens);
- Work with cities and communities in order to create partnerships and understanding:
 - Wildlife managers should be involved in city strategic planning and city representatives should be involved in park management (through the board);
- Manage communication as an essential tool to sell benefits of protected areas to the public;
- Offer capacity building to city councillors, city staff, and stakeholders;
- Address human wildlife conflict pro-actively in order to find common solutions that are of benefit to wildlife and communities alike:
 - Use alternative, sustainable ways to keep wildlife off agricultural land (e.g. chilly plants),
- Use schemes such as compensation and lease, fence mapping to open migratory paths.