

Areas of Collaboration – Outputs of item 5

Challenges

- Pressures: Urbanization, encroachment, illegal settlements, urban economic development, loss of habitat;
- Socio-economic challenges: poverty, lack of human and financial resources, illegal deforestation and hunting, lack of knowledge, protected areas are without economic value;
- Local challenges: Standardized landscaping, aged and outdated infrastructure, waste discharge, pollution of water bodies;
- Global environmental threats: Climate change, invasive species.

Lessons learned and solutions

- Solutions lie within cities themselves;
- You cannot have a healthy society without protection of biodiversity;
- Communities directly depend on ecosystems;
- It's much cheaper to preserve ecosystems than paying for end-of-pipe technologies or recreating habitats and ecosystems later;
- Every city can change within 3 years – financial resources or level of development are no impediment;
- Correlation between ecological integrity and viability.

What we need:	How we can get there:
Political leadership	<ul style="list-style-type: none"> ▪ Identify champions in cities for each term of office; ▪ Perseverance.
Vision for the city	<ul style="list-style-type: none"> ▪ Public participation; ▪ Sustainable use of natural resources.
Sensitive spacial planning	<ul style="list-style-type: none"> ▪ Planning in favour of undeveloped areas; ▪ Integration of biodiversity into urban plans; ▪ Biodiversity treated as a platform infrastructure just like transport etc.; ▪ Increase green spaces, forests and protected areas in a way that is compatible with city development and growth; ▪ Create green corridors or systems of city-wide interconnected green spaces to promote species migration.
Implementation tools for management of urban biodiversity	<ul style="list-style-type: none"> ▪ Environmental impact assessments of development projects; ▪ Monitoring: by involving local communities (river pollution assessment kits distributed to schools); ▪ Communication with land owners; ▪ Establish the economic value of open space system; ▪ Land acquisition by municipality; ▪ Breeding programmes for endangered species; ▪ Bring biodiversity closer to people and people into biodiversity; ▪ Build living places through introduction of biodiversity; ▪ Urban legal reserve which limits human interventions

	<p>such as tree felling;</p> <ul style="list-style-type: none"> ▪ Tree planting: establish a target per inhabitant (trees have shown to provide oxygen for 4 persons and an 8°C difference has been recorded between green areas and “concrete” areas); ▪ No cutting of branches allowed in birds’ nesting season; ▪ List of invasive species and monitoring of alien species.
Create strategic partnerships	<ul style="list-style-type: none"> ▪ With local communities; ▪ National and provincial governments; ▪ With other cities (nationally and globally), e.g. City Friends of the the Amazon; ▪ Private sector (“What is good for communities is also good for business”); ▪ NGOs; ▪ Donor agencies; ▪ Other departments of the same city.
Fundraising	<ul style="list-style-type: none"> ▪ Local authorities develop a project and propose it to private sector for implementation.
Participatory approach and community involvement	<ul style="list-style-type: none"> ▪ Early negotiation with communities supported by assessments; ▪ Clear goals that can be met; ▪ Manage rehabilitated areas with communities that formerly occupied them; ▪ Constant contact with communities through social and health workers; ▪ Give people viable alternatives and meet local needs (provide new housing, nursery for medicinal plants used by traditional healers); ▪ Getting land owners to “adopt a tree” outside their property - can reduce vandalism by 80%.
Create benefits for poor communities	<ul style="list-style-type: none"> ▪ Job creation in biodiversity management; ▪ Make fruits of policies visible to citizens, planning needs to contribute to well-being.
Awareness raising and education	<ul style="list-style-type: none"> ▪ Consumer awareness and campaigns on products from far-away ecosystems, promoting fair trade (e.g. Amazon); ▪ Campaigns on local organic farming; ▪ Promoting sustainable lifestyles; ▪ Botanical gardens have evolved to become interactive: it is no longer sufficient to simply see/observe; ▪ Public fairs, lectures, excursions, free environmental university, eco-bus, eco-library, environmental village; ▪ Educate children to change future consumption habits; ▪ Establish a target for environmental education: 10% of children population = number of environmental education days; ▪ Environment and health programmes; ▪ Children fish invasive fish species; ▪ River pollution assessment kits distributed to schools, visualization of results;

	<ul style="list-style-type: none"> ▪ “Plant Life” (tree planting of indigenous species for citizens who sign an agreement of responsibility).
Legislation	<ul style="list-style-type: none"> ▪ Integrated environmental management policies; ▪ Integrated programmes across city boundaries (e.g. with provincial governments); ▪ Green by-laws; ▪ Enforcement mechanisms through decentralization of power, giving legislative authority to municipalities; ▪ Energy adaptation policies and strategies in favour of biodiversity, e.g. 2% mix of biofuels as city by-law. ▪ Green procurement.
Compliance through incentives	<ul style="list-style-type: none"> ▪ Get developers to cooperate with sustainable policies by giving tax incentives: no tax/rates payable where land is used for biodiversity; ▪ Incentives for land owners to protect biodiversity: “servitudes”; ▪ “Offsetting policy” or “no net loss policy” where developers are given development rights on inner city sites instead of biodiversity-sensitive sites.
Compliance through penalties	<ul style="list-style-type: none"> ▪ Municipal environmental police; ▪ 24 hour green telephone where citizens can report environmental aggressions; ▪ Developers have to “off-set” environmental impact by financing green strips/parks along highways or paying compensation, replacing felled trees; ▪ Monitoring systems.
Locally adapted technologies	<ul style="list-style-type: none"> ▪ “Bio Lung” (green wall that absorbs CO2 emissions and avoids heat island effect); ▪ Integrated horticulture programmes to reduce use of pesticides; ▪ Use of species as “green tools”, e.g. as noise barriers, erosion control, decontamination and carbon sinks.
Sector examples:	<ul style="list-style-type: none"> ▪ Transform waste into economic assets, food for waste programmes; ▪ Engage in carbon trading around land fills for methane reduction; ▪ Bus Rapid Transport Systems: quicker, cheaper, easier to implement. Future lies in integration of transport systems, systems must not compete. Five compromises: 1. Less use of cars; 2. Separate waste; 3. Mixed use (bring living and working closer together); 4. Sustainability equation is spending savings; 5. Reoccupy city centres.

Areas of Collaboration

- a) Information exchange and dialogue: Use positive success stories and share experiences nationally (through city associations) and globally (through partnerships).

- b) Promoting cooperation: City-to-city cooperation; project partnerships between cities; partnership of global research centers linked together to share info; rally multiple parties around 2010 target.
- c) Strengthening of local-national dialogue: Use institutionalized mechanisms with legislative and normative power.
- d) Support to local action: Development of tools to integrate biodiversity into city planning.
- e) Promotion of research and development of up-to-date data in cooperation with universities.
- f) Training and capacity building of stakeholders and environmental education.
- g) Commit to global environmental goals and action.
- h) Create political capital at local level through a global partnership and global visibility.