

ENVIRONMENTAL HEALTH

- Water
 - Quantity/ Quality/ Sources/ Uses
 - Disease/ Transmission/ Disease
- Sanitation
 - Disposal of faeces/open/latrines/sewage/sewage systems
 - Solid waste/household garbage/commercial garbage/demolition debris
 - Industrial waste/hazardous chemicals/hospital waste
- Waste Management (Sustainable Development)
 - Input/process/outputs
 - Linear and cyclic systems

DIMENSIONS OF THE ENVIRONMENTAL ISSUE

The dimensions include:

- Problem definition
- The symptoms
- The causes
- Spatial scales and spheres of influence
- Temporal scales
- Barriers to solutions
- Strategic approaches to solutions
- The themes of the seminar

DEFINITION:INTER-RELATIONSHIPS

The environment is natural and built. It comprises the air, the land, soil, water, living things and built facilities; and most importantly the linkages among these such as matter, energy and information flows and associated relationships.

SYMPTOMS OF ENVIRONMENTAL PROBLEMS

- Solid waste
- Sewage and liquid waste
- Drinking water quality and supply
- Degradation of the coastal and marine environment
- Soil erosion
- Management of toxic and hazardous substances
- Forest and water shed degradation
- Dumping of extra-regional hazardous and toxic wastes
- Air and noise pollution
- Ozone depletion
- Global warming - sea level rise/storms
- Historical resources degradation
- Natural disasters

CAUSES OF ENVIRONMENTAL PROBLEMS

Root causes lie in:

A value system which stresses maximal accumulation of material wealth rather than moral and ethical values, equity and social justice.

- Man's ability to produce waste faster than natural ecosystems can absorb and recycle them, i.e. in exceeding nature's assimilative capacity.
- Over consumption and excessive waste generation due to affluence.
- Disregard for the intrinsic linkages between society and nature.
- Local degradation due to poverty.
- Unequal access to natural resources, technology and financial resources.
- Production patterns and structure of the economic output.
Ignorance of how to do things better.

SPATIAL SCALES AND SPHERES OF RESPONSIBILITY (1)

The problems are caused and appropriate corrective action has to be addressed at different levels of social organisation, e.g.:

Individual - education, changes in value system

Local groups - advocacy awareness

Families

Village communities - demonstration projects

Churches

Professional organisation - involvement in national decision making

NGOs

SPATIAL SCALES AND SPHERES OF RESPONSIBILITY (2)

National Level

- National policy
- Development planning and control
- Legislation
- Fiscal and economic incentives
- Globalisation and decentralisation

SPATIAL SCALES AND SPHERES OF RESPONSIBILITY (3)

Regional Level (CARICOM)

- Protection of the Caribbean sea
- Trade Policies
- Harmonisation of legislation, standards and guidelines
- Common foreign policy positions

SPATIAL SCALES AND SPHERES OF RESPONSIBILITY (4)

International level

- Debt crisis, third world poverty and the north-south divide; waste trade
- Conventions and treaties
- Financial flows
- Technology transfer

Global (Planetary Ecosystem)

- Atmospheric pollution and consequences

BARRIERS TO SOLUTION OF ENVIRONMENTAL PROBLEMS

(after Trudgill, 1990)

- **Agreement** - on what we (social groups) want to achieve
- **Knowledge** - what do we need to know in order to solve the problem
- **Technology** - do we have the technology that is required
- **Economic** - the economic considerations necessary for problem solving
- **Social** - the social realities that must be taken into account (including cultural)
- **Political** - lack of political will/ priority or support

A.K.T.E.S.P.

These barriers need not all exist nor in the order listed. Several might also overlap.

STRATEGIC APPROACHES TO SOLUTION (OVERCOMING THE BARRIERS)

- Public education and awareness
- Research, training, information acquisition/
dissemination
- Formulation of policies and plans
- Institutional strengthening
- Legislation, (standards and guidelines)
- Fiscal and economic incentives
- Financial and technological support
- Development and packaging of appropriate tools,
e.g. EIA's, audits, etc.

POVERTY (1)

- **Typologies**

- Absolute/ \$1 a day/ 2000 calories/ physiology
- Relative/ income/ expenditure/ consumption lines
- Income poverty *v.s.* human poverty (capabilities failure)
- Public and Private Poverty
- Temporary/ chronic/ structural
- Depth of poverty/ poorest of the poor

POVERTY (2)

- **General Definition**
 - Access to options
 - Condition of poverty v.s. processes of impoverishment
- **Empowerment of the poor**
- **Causes**
 - Local/ national/ international
 - Access to assets/ markets/ inputs/ information/ power

POVERTY (3)

- **Solutions**

- Self- Empowerment
- Access to options: assets,activities,entitlements
- Governance arrangements
- Policy/ technology/ investment

The Sustainable Livelihoods Approach

POVERTY MEASUREMENTS

| | UBN Poor | UBN Non-Poor | Sum |
|-------------|-----------------|---------------------|------------|
| PL Poor | 40.7 | 13.5 | 54.2 |
| PL Non-poor | 16.5 | 29.3 | 45.8 |
| Sum | 57.2 | 42.8 | 100.0 |
