

# Uncertainty, a Manager's Natural Habitat



# Uncertainty, a Manager's Natural Habitat

- Environmental management involves the application of a mixture of objectives scientific and more subjective, often qualitative approach.
- It is a blend of a policy making, planning and management, but there is no single widely adopted framework to shape its application, although there are guides to policy and procedures, and standards and system.
- Each situation faced by an environmental manager is to some extent unique, and the approach adopted reflects the attitudes and background those involved, the particular situation, time and funding available, and many other factors.

# The Case Solutions. com Elements of Environmental Approaches

- Top-down (authoritarian)
- Bottom-up (inclusive/participatory)
- Centralised:
- Decentralised;
- · Socialist;
- Free market;
- Western;
- · Company focus;
- Non-business focus;
- Non-western;
- Light-green (technology accepted)
- Dark-green (technology opposed)
- Giving priority to social development (poverty alleviation)
- · Giving priority to environmental before human welfare

#### **Environmental Management Focus and Stance**

- In an ideal world ethics and laws would provide strong guidance but in
  —practice these are inadequate.
- In the past, planners often neglected environmental issues, were insufficiently aware of the dynamic nature of Earth processes, and failed to identify natural limits, hazards and potential.
- Environmental planning might be defined as a effort to strike a balance between a resource use and the environment, the primary objective of planning being to make decisions about the use of resources.
- Environmental management overlaps a number of other fields. Landscape planning has a long traditions and runs parallel with environmental management, focusing on aesthetic issues.
- Environmental planning overlaps with environmental management especially during implementation.

- In 1989- The Netherlands adopted a National Environmental Policy Plan (NEPP)
- Bennett, 1991– Is the first serious attempt by a national government to develop an integrated environmental policy based on explicit control principles and clearly formulated long term objectives

Environmental
Management may
be subdivided into
the following
components:

- 1. Advisory
- 2. Economic
- 3. Regulatory

Environmental management can adopt three (3) distinct stances

- 1. Preventive Management
- 2. Reactive or Punitive Management
- 3. Compensatory Management

#### Participatory environmental management

- In recent years it has become more common to inform citizens or involve them. Indeed, participation (or collaborative approaches) and empowerment are currently so fashionable that they are almost politically correct.
- Where environmental problems result from human attitudes, participation is crucial because resolution depends upon people altering their views. There are a number of well-established approaches, particularly Participatory Rural Appraisal (PRA) and Rapid Rural Appraisal (RRA). (picture or logo of PRA or RRA)
- These have evolved since the 1960s, but more especially since the 1980s, to support agricultural development, healthcare, decentralised planning and democratic decision-making.
- Participatory approaches are widely seen to be valuable in any quest for sustainable development.
- PRA and RRA rely on multidisciplinary study and close contact with people to get a full picture of their needs, capabilities, limiting factors, opportunities and threats.
- An example of a successful participatory approach is the LANDCARE programme launched in Australia in the 1990s; this provided government support for voluntary rural groups of farmers, and other folk who seek to counter land degradation. (with picture of Landcare)

## Adaptive environmental management and adaptive environmental management and assessment

#### The Case Solutions.com

Adaptive environmental management means different things to different people:

- It is seen by some as a tool or approach that can be quickly modified to suit a particular situation:
- Systems modellers see it as meaning the ability to explore various 'what if?' scenarios;
- Or it can be an approach that is flexible and able to cope with poor data availability, and to respond to new challenges as they arise.

Adaptive environmental management is a learning-oriented approach, which is suitable for managing complex situations with high levels of uncertainty. Policies are monitored and adapted if necessary, a learning process.

It seeks to integrate scientific, local and social studies knowledge. Adaptive environmental management stresses an integrated approach which considers social, economic, political and environmental; it makes use of science and social studies. This means it accepts uncertainty and can abandon experimentation to arrive at decisions; it is also more management focused. There is usually quite a lot of reliance on modelling (Walters, 1986; Trudgill, 1990; McLain and Lee, 1996).