Chapter 5

The Framework of Environmental Management Performance

Audits for a Tourism Organisation

5.1. Introduction

As discussed earlier, the concept of environmental audits is still relatively new and has not yet been widely applied by the tourism industry. There are many interpretations of exactly what is meant by the term, "environmental audits" (Buckley, 1991a). It has principally been seen as a management tool providing a systematic, regular and objective evaluation of the environmental performance of the tourism organisation (Goodall, 1992). Some large hotel groups with facilities in different countries have been implementing environmental auditing procedures as part of their internal management system, but much practical experience is not yet available. Typically, an environmental auditing program aims to facilitate the implementation by tourism organisation of a structured, flexible and recognised approach to the management and improvement of environmental performance.

Environmental auditing programs can set new environmental performance requirements for tourism that bring change in many ways, from waste management practices (reduce, reuse, recycle), and energy consumption, to packaging. Environmental audits for the tourism industry arise because of pressures from outside, or as opportunities to achieve benefits from inside. Whether a large company or a small operation, the opportunities and potential benefits are great and the risk of non-compliance equally high. Environmental audits can be applied by many tourism

organisations and can contribute to success in environmental management which is becoming an important consideration in tourism development and progress towards the goal of sustainable development.

5.2. Objectives and Benefits

The objectives and benefits of environmental auditing programs for tourism are broad and varied, and some of these have been identified in the context of sustainable tourism development (Ding and Pigram, 1995). In an effective environmental auditing program, the objectives should be clearly defined and these objectives should be consistent with the whole organisation management's needs and expectations, and be realistic given available resources. In addition, the objectives should be communicated throughout the organisation. There are many objectives which an environmental auditing program can attempt to achieve. Accordingly, some or all of the following objectives may be selected as a basis for the development of an environmental auditing program by tourism organisations in Australia:

1. Identify and document the environmental compliance status with regulations, licences and standards.

Actually, all environmental auditing programs, to some degree, are compliance oriented, and established to provide a systematic, objective check on the extent to which the organisation complies with the terms of its various environmental operating permits (Greeno, Hedstrom, and Diberto, 1985).

2. Improve organisation environmental management performance.

In Australia, some large hotels have environmental policies (manuals, guidelines, etc.) that have been established by their head office, often overseas. However, less attention appears to be paid to assessing or auditing the effectiveness of these policies, and their implementation. Sometimes, some policies leave out elements essential to Australia and are not readily applicable to this country. Furthermore, in other cases, established environmental policies may need to be reviewed and modified as operating conditions, environmental legislation or government policies change. Therefore, it is often necessary to review or modify existing environmental policy to apply it more directly to Australian conditions.

However, as stated earlier, tourism is a fragmented industry dominated by relatively small scale or independent operations. Many tourism operations do not have a formal environmental management policy. Without such a policy, there is no mandate for the managers of that operation to undertake environmental management performance improvement programs. More often, there is no environmental management structure, no specific budget for environmental performance improvement measures and no staff training. To be effective, the environmental policy must be endorsed at senior management level. The proposed framework of environmental auditing in this research is mainly designed to be applicable to those tourism organisations which do not have a formal environmental policy. Therefore, the principal objective of the proposed environmental auditing program for tourism is to improve environmental management performance and increase the overall level of environmental awareness.

3. Minimise or eliminate environmental risk.

The recognition of environmental risk is an important objective of an environmental auditing program for tourism. The audit should pay particular attention to identify risk areas and minimise or eliminate human exposure to risk from the environment and to ensure appropriate health and safety provision.

4. Identify and assess environmental impact of tourism operations

Many tourism operations have undertaken an environmental impact assessment (EIA) process before approvals have been given by government decision making authorities. However, there are few cases where adequate monitoring programs have been established to determine if the predictions and commitments in the EIA process have been met. One objective of an environmental auditing program for tourism organisation may be to identify and assess current environmental performance against EIA predictions, or if data are not available, to advise on monitoring programs adequate for the verification of impact predictions.

5. Improve resource utilisation.

Many tourism operations, to some extent, have not rationalised their resource use. There are a number of factors that could be considered in an environmental auditing program, ranging from the source of the raw materials for building construction, suppliers, purchasing specifications, and the reuse or recycling of materials within the operations, to the collection and disposal of wastes.

6. Promote "Green" image and service.

There is strong evidence that many tourism organisations are examining ways in which they can promote services or products as "environmentally friendly". An environmental auditing program may include the objective of assessing the environmental opportunities for tourism operations.

As the tourism organisation becomes successful in meeting the objectives of its environmental auditing program, some specific benefits can be summarised as:

- Identification of environmental problems and how they can be addressed;
- Provision of the basis for developing or reviewing the tourism organisation's environmental policy and follow-up action plan;
- Avoidance of legal sanctions against the organisation or its managers and staff under environmental legislation;
- Increase in employees' awareness of environmental responsibilities;
- Identification of potential opportunities for cost savings from energy efficiency,
 and waste reduction, reuse and recycling;
- Improvement of the organisation's reputation in the community and among regulatory authorities for good environmental performance;
- Identification and development of market opportunities created by growing community expectations and awareness of environmental issues.

5.3. Principles

An effective and efficient environmental auditing program for the environmental management performance of a tourism organisation requires the identification and

application of clear and well understood principles to assist in achieving the objectives of sustainable tourism development. The emphasis here is on the principles for an environmental auditing program for environmental management performance in tourism. In consideration of the specific characteristics of tourism and the environmental audit experiences of many other organisation around the world, some principles can be identified which are considered appropriate as guidance for the development of an effective and efficient environmental auditing program. Each of these principles is discussed briefly below:

1. Clear and Explicit Objectives and Scope

Before designing an environmental auditing program, clear and explicit objectives and scope should be defined that will established a benchmark against which the audit conduct and result can be judged.

2. Participation

An effective and efficient environmental auditing process should involve the participation of senior managers, staff and communities. The participation will allow all interested people to identify their interests in the audit process and ensure these are taken into account in the process.

3. Independence and Objectivity

In the process of environmental auditing, independence and objectivity should be maintained primarily through senior management support.

4. Integrity

Environmental auditing should include the study and evaluation of the tourism operating management systems. Integrity can also help management to have confidence in the outcomes of the audits.

5. Sufficient evidence

Based on the identified objectives, the auditing process should obtain sufficient and reliable evidence through planned and supervised fieldwork including inquiry, observation and verification.

6. Flexibility

Considering the fragmentary and seasonally fluctuating nature of tourism, it is important for an environmental auditing program to retain a sufficient degree of flexibility to allow the effective and efficient auditing of aspects of environmental issues of tourism organisations. This flexibility should be used to ensure that the auditing program focuses on the desired results rather than merely ensuring that the formalities have been completed.

7. Practicality

An effective and efficient environmental auditing program needs to be practical and designed to meet its objectives. The auditing process should reflect the practical reality of management concerns regarding the environment, and commercial and technological realities. Similarly, the results of the environmental audits, such as follow-up action plans, need to be practical and relevant to the desired outcomes.

8. Clear and Appropriate Reporting

An environmental auditing report with appropriate form and contents should use language and concepts common to the management, employees and experts to ensure full and formal communication of audit findings.

9. Cost-effectiveness

An effective environmental audit should achieve its objectives while imposing the least possible cost on tourism operations in the process. Cost-effectiveness also seeks to achieve the desired results of proposed follow-up action plans at the least cost. Achieving least cost in the environmental auditing process can reduce the cost of environmental protection and management in an organisation and allow greater improvement in environmental performance without greatly increased costs.

5.4. Types

From the above discussion, it is quite obvious that comprehensive principles or guidelines on how to conduct an extensive range of environmental audits are demanding. There are many different types of environmental audits that may be carried out for an individual tourism organisation. The most common example is specific to the type of compliance. Others are generally designed by the requirements of industry. In Chapter 2, the classification of environmental audits for general use is discussed. However, in the context of tourism, only one documented example of a comprehensive set as proposed by Goodall (1995) could be found. Goodall proposed

11 different types of environmental audits that can be undertaken in tourism industry.

Table 5.1 lists these with a description of the scope of each and examples of possible application by tourism organisations.

Table 5.1. Types of audit and examples of possible use by tourism firms

Audit type	Scope	Possible application by tourism firms
A: Full Audits		
1. Corporate	Entire firm: to ensure roles and responsibilities understood, technical and advisory support available, and environmental management system operational.	A multi-establishment company, eg. international hotel chain or national restaurant chain, ensuring comparability of implementation of their environmental policy in all their bases or establishment.
2. Life cycle	'cradle and grave' assessment of the environmental impact of product or service over latter's "life-span".	Car hire firm evaluating its vehicle fleet in respect to type of vehicle purchased, usage pattern over vehicle life, repair and maintenance, and replacement/disposal of vehicles.
3. Site	Environmental impact of operations from a specific site, including external environment, especially the local community.	Hotel checking energy efficiency of its heating and lighting systems, waste recycling and disposal practices etc. Car wash evaluating water recycling, energy use and disposal of effluent. Airport authority checking noise level near to landing and take-off flight paths. Destination authority checking bathing beaches for water quality.
B. Partial Audits		
1. Activity	Overview of activity or process that crosses business boundaries within the firm.	Hotel chain reviewing staff travel on company business, may be extended to include journey to work. Review of waste management and disposal throughout restaurant chain. Hotel reviewing its purchasing policy to increase use of local products. Trekking tour operator reviewing impact of its camping activities on local environments.
2. Associate	Supply chain linkages-agents, sub- contractors, suppliers.	Tour operators ensuring hotels used have adequate waste water and sewage treatment or disposal. Tour operator checking out possibility of excursions to local handcraft centres.
3. Compliance	Compliance with current statutory environmental regulations affecting operations, and with firm's environmental policies.	Airlines checking its aircraft comply with noise certification for that class of aircraft at critical operating conditions of take-off, landing and sideline. Fast-food takeaway ensuring its street frontage is not persistently littered.

(continued)

4. Divestiture liability	Assessment of environmental costs of disposing of subsidiary firms. Plants or sites.	Airline selling off its hotel interests. Hotel chain selling its in-flight catering subsidiary.
5. Health and safety	(a) Process safety: identification of hazards and quantification of risks from production processes, including accident and emergency procedures.	Review of hotel fire escape routes and of staff awareness of fire precautions and drill routines.
	(b) Occupational health: exposure of workforce to environmental risks.	Checks of ventilation and water systems regarding legionnaires disease, etc, at conference centres. Tour operator advising clients on health and safety precautions for destination to be visited.
6. Issues	Assessment of consequences of firm's activities on a specific environmental issue (often global scale but could be local).	Global - ozone depletion: hotel checks using CFC-free aerosols, alternatives to CFC-blown plastic loam for insulation, and retrieves CFCs used in air-conditioning and refrigeration plant. Airline considering its output of CO2 and NOx in relation to global warming. Destination-Tour operator considering whether preferential employment opportunities can be offered to locals. Hotel or tour operator issuing briefing packs to tourists about respect for the destination's natural and cultural environment. Boat operator checking his trips do not damage coral reefs. Safari/ecotour operator ensuring minimum disturbance to plant and animal populations caused by presence of tourists.
7. Pre-acquisition (Transactional)	Assessment of environmental liability of companies involved in merger, acquisition and other joint ventures.	Airline taking over a regional carrier.
8. Product	Ensure existing products and proposed products meet firm's environmental policy criteria.	Tour operator reviewing package holiday's impact on destination resources. Coach tour operator evaluating routing and operation of vehicles. Tour operator using locally owned vemacular accommodation and services. Tour operator restricting numbers participating in wildlife and natural history tours.

(Source: Goodall, 1995:33)

As tourism is a resource-dependent industry, in Goodall's classification, the type of site audit can be especially important. Most tourism managers recognise the need to safeguard the environment in principle, but few have implemented formal environmental auditing. Some examples can be found of individual large tourism companies using particular types of audit, but none use the full range of audits. Site audits are most likely to be undertaken, perhaps along with product and compliance audits (Goodall, 1995). At present, the application of environmental auditing in any

sector of the economy is mainly voluntary, but future legislation could well make it mandatory and environmental auditing will become an important part of best practice environmental management for the tourism industry.

As stated in Chapter 2, an environmental auditing program places emphasis on the environmental management performance of a tourism organisation. This audit is conducted in a such a way as to encourage the tourism organisation to increase environmental awareness of managers and employees and seek continually to improve its environmental performance. Where issues are identified that reflect poor environmental management performance, the emphasis is on working together to identify solutions to problems in the quality of environmental practice.

5.5. Some Special Considerations

As noted earlier, environmental auditing is still a relatively new concept, although ample documentation exists of its application in manufacturing industry where it has proven to be a very useful tool in environmental management. However, specific application of environmental audits to tourism development appears to be the exception (Butler, 1993a). More generally, most governments and private tourism sectors have little or no experience in how to develop effective and efficient environmental auditing programs properly for tourism organisation. Furthermore, there is no comprehensive conceptual framework for environmental auditing which has been applied to tourism organisations. It seems that constraints exist which are, in part, related to the particular characteristics of the tourism industry, and which, if not

overcome, may influence the implementation and effectiveness of the environmental auditing process for tourism organisations.

The following constraints can be identified:

1. Lack of Relevant Legal Requirements, Policies and Standards in Tourism

A key element in the environmental auditing process is the determination of whether the selected tourist operation is in compliance with regulatory requirements, policies and standards. Obviously, the essential prerequisite for this is existence and awareness of such requirements and standards. Various levels of government have introduced a range of policies and standards, and constant changes can occur. However, the predominant feature of government involvement in tourism is often the stimulation and promotion of the industry, not in controlling or managing it (Butler, 1993a). More important is the absence of legislation and policies dealing with environmental issues specific to the tourist industry.

2. Lack of Mechanisms for the Implementation of an Environmental Auditing Process in Tourism Development

In the public sector, there is some recognition of the need for implementing environmental policies relevant to tourism development. For example, the Australian Tourist Industry Association (ATIA, 1990) issued "Environmental Guidelines for Tourism Developments" which recommend that the tourism industry monitor environmental effects and audit environmental performance during the construction and operation phases of a project. Unfortunately, as noted earlier, there is no effective

mechanism to ensure the implementation of these guidelines. As Pigram points out, "despite the acceptance of sustainable tourism as a desirable alternative to more predatory models of development, a gap commonly exists between policy endorsement and policy implementation" (Pigram, 1990, 2). Currently, environmental auditing is undertaken on a voluntary basis by the private sector and is largely a question of self-regulation. However, self-regulation is likely to be more effective and successful when it is supported by consistent and comprehensive standards and regulatory procedures (Buckley, 1991a; ATIA, 1990). Legislation, incorporating sanctions and incentives, may be needed to encourage implementation of environmental auditing in the tourism industry.

3. Difficulties in Defining the Explicit Boundaries of an Environmental Auditing Process for the Tourism Industry

Generally, in designing and developing an environmental auditing process, specific boundaries must be defined and the scope and focus of the process designed in advance in order to optimise the resources and enhance the effectiveness of auditing (Greeno *et al.*, 1985). However, tourism is a complex phenomenon and a very decentralised industry (Przeclawski, 1993). It consists of many different types of businesses, providing a wide variety of products and services which make it very difficult to define the explicit scope and focus for the auditing process. Thus, different frameworks for environmental auditing may need to be established (Butler, 1993a).

4. Lack of the Necessary Authority and Ability to Undertake Environmental Auditing for Tourism Development

Typically, there is no specific legislation which requires the tourism industry to be subject to environmental auditing. Even when tourism developers conscientiously seek to undertake an environmental audit, they may be faced with non-uniform requirements from different authorities which lack the power and responsibility to deal with auditing issues. For example, in Australia, although the Australian Tourist Commission Act (1987) gives that body the responsibility for monitoring and managing the impacts of tourism on the environment, the Commission has no power under the legislation to ensure that the objectives of the Act are achieved (Parliament of the Commonwealth of Australia, 1992). Further, the existing administrative structure is complex, leading to inconsistency in standards. Too much management is left in the hands of local government which lacks expertise and frequently fails to enforce effectively established standards and controls. Even where the tourism industry has implemented its own internal environmental auditing process, there is no authority or professional expertise to assess the effectiveness of this process. This problem can only be overcome by legislation, and by training in environmental auditing, and education in tourism.

5. The Absence of Up-to-Date Environmental Monitoring Data in Tourism

Adequate and effective monitoring data are essential for implementing environmental auditing for tourism projects. Effective monitoring can ensure that environmental standards are being met, provide an evaluation of the effectiveness of environmental impact assessment, and enable mitigation to be taken where environmental problems

occur. Up-to-date monitoring is crucial to ongoing environmental management and to assessing the cumulative impacts of tourism development. Unfortunately, fragmentation of the tourism industry makes the establishment of monitoring programs very difficult. The present level of understanding of this complex environment is insufficient and incomplete (Jenkins, 1990) and it is not possible to specify detailed indicators of monitoring programs applicable to the tourist industry. A further important aspect of monitoring data is that it appears there is little or no detailed information on the social impact of tourism development. More generally, the lack of monitoring data may be attributed to a reluctance by developers to invest in environmental studies (Buckley, 1991a). There is rarely a specific budget for establishing an environmental monitoring program before a project is confirmed. The adequacy of environmental monitoring data should also be closely linked to consistent legislation and industry standards.

6. The Absence of Examples and Comparative Studies

As Butler (1993a) notes, discussion of comprehensive impact assessments, including environmental audits, is generally absent from the tourism literature. Furthermore, there are no benchmark studies and there appears to be a lack of long-term commitment to the development of an environmental auditing process for tourism. The multidisciplinary nature of the industry underlines the need for comparative studies concerning environmental protection in tourism (Przeclawski, 1993). However, there has been little or no evidence of this, and consequently there are limits to the application of the environmental auditing approach in sustainable tourism (Butler, 1993a).

Environmental auditing can be a very useful management tool to meet the goals of sustainable tourism, and, although many problems still remain, there appears to be a clear need for an effective environmental auditing process in the tourism industry. As Hugo *et al.* (1992) point out, once an environmental auditing process for tourism has been developed, new insights will undoubtedly arise as to the measures needed to improve the environmental performance of a tourism organisation. As a consequence, the industry, government and communities can benefit substantially from the implementation of a proper, applicable and effective environmental auditing process.

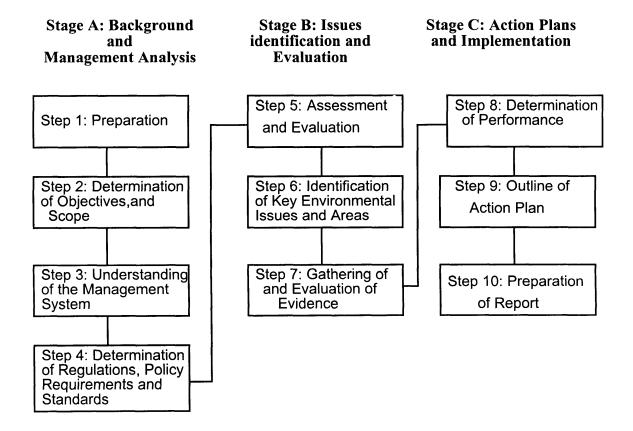
5.6. The Framework of Environmental Management Performance Auditing (EMPA) for a Tourism Organisation

As discussed earlier, environmental auditing is a necessary part of environmental management. It can play a significant part in providing feedback about overall environmental performance and specific problem areas and necessary corrective actions. To be an effective approach, environmental auditing needs to be undertaken within the context of a comprehensive management program for addressing environmental problems.

Once the principles and guidelines are established, the next step will be developing and implementing an effective environmental auditing program for the tourism organisation. **Figure 5.1**. presents a model identifying the key steps in the audits process. It provides a systematic framework within which a series of activities and

decisions can be made that help define a set of desired performance and the management actions necessary to maintain or improve this performance. Environmental auditing generally involves gathering information, analysing facts, making judgements about the status of the organisation and reporting the results to some level of management (International Chamber of Commerce, 1991). Although the proposed model is designed to be generic, the implementation tools that are used allow tourism management to ensure that the contents of the program are relevant to environmental management in the organisation.

Figure 5.1. The Framework of an Environmental Management
Performance Auditing (EMPA) Program for Beach Resorts



The model aims at simple solutions, with the focus on clearly identified problems that are relevant to the organisation's environmental management issues, such as environmental awareness, energy management, waste control and reduction, reuse of materials and recycling. It is primarily an internal and voluntary audit. The Environmental Management Performance Auditing (EMPA) framework, ideally, should be carried out by the tourism organisation's managers and/or third party consultants, not by regulatory authorities (Ding and Pigram, 1996). The following chapter will discuss the basic procedures for implementing the EMPA framework for beach resorts in Australia. It should be noted that, although the emphasis is on beach resorts, the framework is also applicable to other tourist organisations in different situations.

5.7. Conclusion

The Environmental Management Performance Auditing (EMPA) program is the means to control and improve the environmental performance of the tourism organisation. It is a form of environmental audit but with a specific focus on environmental management performance. To establish an effective EMPA program for a tourism organisation, it is necessary first to have defined the objectives of the program clearly and these objectives should be consistent with management's needs and expectations, and be realistic, given available resources. As the auditing program achieves its objectives, a range of benefits can be realised.

This chapter provides generic principles or guidelines which could be applied in the development of an environmental audit process for tourism organisations. It must be emphasised that the EMPA should be undertaken on a voluntary and internal basis by tourism organisation. The chapter also identifies the constraints which may influence the development, implementation and effectiveness of the environmental auditing process.

The framework in which the EMPA program should operate includes a series of activities. The details of these activities will be discussed in the next chapter.

Chapter 6

An Environmental Management Performance Auditing (EMPA)

Program for Beach Resorts in Australia

6.1. Introduction

"Beaches, and for that matter, the entire Australian coastline, should be recognised as an important economic resource which should be utilised in a manner that will maximise commercial tourism potential without promoting indiscriminate or environmentally insensitive development" (Burrell, 1986:375). Sun, sea, surf and sand are essential elements of the Australian lifestyle (Dutton, 1985). The beautiful and extensive Australian beach is the most important tourist attraction both for domestic and international visitors. In New South Wales, the inherent beauty of beaches makes it a focal point for the State's tourism industry. Over 80 per cent of tourism within New South Wales are concentrated in the coastal regions. In 1991/1992, over 64 million visitor's nights were spent in New South Wales, of these; over 28 million were spent in the coastal region outside of Sydney. Over 36 per cent of all hotel rooms in the State are in coastal regions outside Sydney, and approximately \$2 billion or 12 per cent of total investment in New South Wales in tourism facilities is committed to the coastal regions (The Coastal Committee of New South Wales, 1994). Therefore, tourism has had a major impact on the coastal environment in Australia, particularly in areas such as northern Queensland, the Gold Coast and northern New South Wales, where tourism development has been concentrated. However, the coast is a sensitive ecological system which needs to be managed in order to ensure its values as a tourism resource (Chape and Chalmers, 1984; Buckley, 1991a).

One of the most common forms of tourism is some type of resort-based development. "A tourist resort can be defined as a destination area that is relatively self-contained and typically provides a wide range of tourist facilities and services including those designed for recreation and relaxation" (Inskeep, 1991:161). In this research, the term "resort" is used to refer to purpose-built tourist facilities on the one relatively selfcontained site, and offering accommodation, food, shopping outlets, and opportunities for recreation and entertainment (Ding and Pigram, 1996). In recent years, a number of sophisticated resorts have been developed along the coastline in Australia, many of which have become highly popular holiday destinations. They offer international-style facilities with a full range of sporting and recreational activities, entertainment and beach access, etc. The success of these resorts can be largely attributed to the integrated management of their development and careful planning and implementation that took into consideration local environmental, economic and socio-cultural factors. In many respects, these establishments reflect the "greening" of beach resorts along Australia's coast. The emphasis is on the attractions of the local environment, with construction materials, architectural design and landscaping in keeping with the inherent scenic appeal of the site (Pigram and Ding, 1996). Comprehensive programs for recycling and waste management, energy conservation, and protection of the natural environment are features of the resort's operation. The success of these resorts also is a good indication of the marketing advantage to be gained from environmentally sensitive tourism development, and the monitoring and selfregulation of environmental performance (Ding and Pigram, 1996).

The framework of an environmental management performance audit (EMPA) program for assessing and evaluating the environmental performance of beach resorts is presented in **Figure 5.1**. The following section analyses the basic procedures for implementing EMPA. It should be noted that, although the emphasis is on beach resorts, the framework is also applicable to other tourist enterprises in different situations.

6.2. Overview of the EMPA Framework

Steps in the framework are not intended to stand alone but to be incorporated as part of an integrated tourism management process. They are essentially the steps through which the process can be expanded to include specific issues relevant to environmental aspects.

It must be emphasised although that the following discussion is comprehensive, it should not be taken to imply that all the points identified should be addressed in all auditing procedures. It should also be recognised, however, that environmental auditing is not a one-off exercise, but a continuing activity. Environmental pressures and community concerns change, and it is necessary to update environmental management procedures for tourism operations on a regular basis.

The EMPA framework is a strategic management approach. It includes three stages:

Stage (A) - background and management analysis;

Stage (B) - issue identification and evaluation;

Stage (C) - action plans and implementation.

The first stage (A) comprises mainly pre-audit activities and aims to produce the basic directions for the succeeding stages. These activities include the selection of the facilities to be audited in the resort, and the development of an audit program which includes defining the objectives, scope and focus of the audit. This stage also includes gathering background information such as regulations, policy requirements and standards. The second stage (B) is the key part of the audit. It consists of assessment and evaluation, identification of key environmental issues, and gathering and evaluation of evidence. The third stage (C) includes the determination of performance status, the outline of an action plan, preparing implementation programs and the auditing report.

6.3. Step 1: Preparation

Once the resort management has decided on the need for an environmental management performance audit, some preparation activities are undertaken to help ensure that audits are carried out in an effective manner. These activities include:

1. Selecting the area and facilities in the resort to be audited

The selection process often depends on the specific requirements by the resort management and the goals of the EMPA program. It should include the facilities and functional areas which have environmental significance and these are generally determined by regulatory requirements or business considerations.

2. Gathering and reviewing background information

This is a most important activity in the preparation. Information gathering and reviewing generally begins well in advance of the audit and in some situations, can extend to the whole EMPA procedure. It is important to identify the information needed or desired and to review it in sufficient detail.

The information required during the preparation include the following:

Previews Audits Report (if available)

Application Documents

Formal development application including the conditions imposed by the regulatory authorities, and the environmental impact statement.

• Organisation Structure Information

Current resort organisation chart annotated to illustrate the characteristics, and staff responsibility for environmental issues and areas.

Resort Layout

Maps or diagrams to illustrate location, surroundings, control system components, and major tourist attractions of the resort.

Resort Policies

Applicable resort management manuals and guidelines, operating procedures and reporting requirements,

Regulatory Requirements

All applicable federal, state and local regulations, such as environmental permits, and agencies responsible for review.

• Other Resort Reports

Selected environmental status reports or other applicable reports, completed tourist surveys, etc.

The information gathered should be reviewed before formal audits or on-site audits commence in order to develop an audit plan effectively. The result of this review is generally a list of questions and issues to be used in developing the audit plan.

There is no doubt that the quality of the gathering and reviewing of the background information can greatly influence the efficiency of the audit.

3. Developing the Audit Program

As the necessary background information is gathered and reviewed, the development of the audit program should start. The program is commonly an outline of what steps need to be done, how each step is to be accomplished, who will do it, and in what sequence. This process generally includes the selection of the priority topic for auditing, designation and modification of the audit checklist or questionnaire, and confirmation of the administrative arrangements with resort management about the time, responsibilities, etc.

Good preparation for an EMPA will depend on the following factors:

• Senior resort management commitment and support clearly communicated throughout the whole resort operation.

- Sufficient resources (human and financial) allocated to implementing the audit program.
- The understanding and support of all employees regarding the EMPA program's objectives.
- The requirement of the EMPA to fit with the existing resort management system and not be viewed as burdensome.
- The willingness and co-operation of management to disclose the needed environmental performance information.

6.4. Step 2: Determination of Objectives and Scope

6.4.1. Objectives

An effective EMPA program should have clearly defined objectives and these objectives should be consistent with management's needs and expectations, and realistic given available resources. In addition, the objectives should have been communicated throughout the operation. When the objectives are not clearly defined, the audit process is subject to varying interpretations, which can contribute to differences in approach and influence the audit results.

As discussed earlier, an environmental audit serves to check on the environmental management performance at a given resort. It also serves to identify environmental problems and to initiate corrective actions necessary to reach the overall objectives set by the resort management and regulatory authorities. The process involves analysis, testing and confirmation of procedures and practices at a resort operation.

Some general objectives of environmental audit for tourism development have been developed, including compliance with regulatory requirement, policies and guidelines, and application of the best environmental management practices set out in earlier chapters. In support of these objectives, some specific objectives of EMPA for beach resorts can be established as follows:

- to assess the resort's environmental management performance,
- to identify compliance status with relevant regulations,
- to identify an effective environmental policy context and appropriate standards
 within which to apply Best Practice Environmental Management,
- to assist the resort management in understanding regulatory requirements, resort policies and guidelines and good practices, and identifying the compliance problems,
- to increase the overall level of environmental awareness at the resort,
- to identify all key environmental issues in which there are present or future likely impacts,
- to identify external influences that have an impact on the resort's environmental management,
- to encourage resort management to formulate more formal procedures and standards for improving environmental performance,
- to identify and assess the resort's risk resulting from environmental failure of its management activities,
- to propose an outline of an action plan, and

 to advise the resort's senior management on other actions and resources required to develop further and implement the environmental performance improvement program.

6.4.2. Scope

As stated in Chapter 5, an effective environmental audit program has clearly defined boundaries for the overall scope of the program, which should be understood and agreed to by management. It is important to program success. The scope of the audit also should match available resources to ensure that audit objectives are met, the topics included in the scope are investigated thoroughly, and audit findings are based on sound and unbiased information.

The scope of an environmental audit, in general, will depend on the size of the resort, the types of processes and management practices, the extent and efficiency of existing management practices, and the purpose of the audit.

The scope of EMPA for a resort can be defined as follows:

1. Functional scope:

Compliance

Regulatory requirement, policies, standards and guidelines,

• Waste management

Reduce, reuse and recycle, non-hazardous waste separation,

Hazardous material

Use, handling, or disposal of hazardous materials,

• Energy consumption and management

Electricity, gas, fuel,

• Water conservation and management

Water use and waste-water treatment,

Air quality

Indoor air quality and pollution, external emission,

Noise

Transport, entertainment,

• Product purchasing and store policy

Food, etc,

• Environmental education and training

Employees, guests,

• Community impact

Resident's attitude

• Communication

Regulatory authorities, resident, interest groups,

• Green or sustainable development.

2. Locational scope

Accommodation

Rooms, apartments, villas,

Commercial facilities

Restaurants, bars, retail shops, barber's shops, beautician services,

• Recreation and cultural facilities

Golf courses, tennis and other game courts, swimming pools, beach, children playgrounds, cultural centres and performance stages,

Health facilities

Massage and exercise facilities, gems and sauna rooms,

- Convention and meeting rooms
- Specialised entertainment facilities

Night clubs, cinemas, and performing theatres,

- Resort administration utility and maintenance facilities
 Roads, parkings, warehouses, gardens, waste treatment plants and workshops,
- Laundry and kitchen
- Landscaped areas and buffer zones

6.5. Step 3: Understanding of Resort Management Systems

Management is generally viewed as a series of functions such as planning, organising, staffing, directing and controlling the operations of an organisation (Budzix, 1992). Understanding the resort's management system is one of the most critical tasks in the EMPA process. It recognises that:

- All the activities of the resort may have significant environmental impacts.
 Environmental management in the resort is not solely restricted to controlling pollution from operational processes;
- Environmental management is a responsibility shared by all managers and staff and is not the unique preserve of a specialised technical department or person. It must become integrated with other management processes.

This step is based on the information collected during the design of program. It must be clear that how the resort operation manages activities which may affect its compliance with environmental regulation. This includes understanding of the resort operation planning and approval process, internal environmental management procedures, organisational characteristics and responsibilities. It also includes the identification of strengths and weakness of the operation's management. It must evaluate the aspects of environmental performance and determine whether the operation is functioning properly and will achieve the desired objectives (Ding and Pigram, 1996)

In undertaking this step, the information can be obtained from multiple sources, such as resort management records, discussion with staff and decision making authorities, a special designed internal questionnaire, resort tours, etc. The questionnaire which can be used at this step is set out in **Appendix 1 (Questionnaire 1 and 2)**:

6.6. Step 4: Identification of Regulations, Policy Requirements and Standards

Resorts, like other organisations, must satisfy the law and other requirements. Therefore, resorts generally have mechanisms within the management system to ensure that legislative regulation and other policy requirements and standards (e.g. tourism industry practices or resort-specific guidelines) are known, documented and monitored. This allows the resort management to feel confident about legal

compliance. Knowing which environmental performance requirements to meet is a key part of the EMPA process. They may include:

- Regulatory requirements, including Federal and State laws as well as regulatory permits, consents and authorisations at local level;
- The resort's own internal policies and standards.

Environmental performance requirements are different in the various parts of the resort and are dependent on legal and regulatory affairs in relation to the activities and processes of resort departments involved in such as accommodation, the golf course, restaurant, etc. The identification procedures will therefore need to be department-specific to be effective. The list of the legislative, regulatory and policy requirements should be relevant to the departments.

Environmental performance requirements will also be dependent on the expectations of guests, employees and local community. For example, guests may want to know if recreation products are safe, healthy and sanitary with no damage to the environment, and how well the resort managers manage their environmental responsibilities. The employees may want to know how safe and healthy their workplace is. The local community may be concerned with how environmentally responsible the resort's operations are, while the resort managers may want to know the potential for liability or damage of reputation.

The identification procedures must be comprehensive. The following is a checklist for the procedure:

- Assessed existing resort records;
- Examined resort-specific practices and guidelines;
- Focused on waste management practices;
- Purchase policies;
- Safety and health requirement;
- Local authorities requirement for control of accidents and emergencies, including planning consents;
- Consents for discharge water use, contamination and control, air and noise emission;
- Licences to deposit, treatment or dispose of waste;
- Dangerous substances-notification and marking of the sites;
- hazardous substances-site plans and substances.

6.7. Step 5: Assessment and Evaluation

After clearly understanding how various aspects of environmental performance are intended to be managed, and identifying the relevant regulations, policy requirements and standards for the resort, the next step of the EMPA process is to assess and evaluate the strengths, weaknesses, opportunities and threats.

1. Strengths

The strengths are those areas of management performance that are positive. The following is a checklist for identifying the strengths of resort environmental management:

- An environmental management program,
- Committed senior management on environmental performance,
- Personnel trained and experienced in environmental issues,
- · Responsibilities clearly defined and carefully assigned,
- Strong pollution control process,
- Effective waste and energy management process,
- Documented management procedures and compliance results.

2. Weaknesses

The weaknesses are those areas where the resort's environmental management performance is at risk and where the action plan will focus. The following is a checklist for identifying the weaknesses of resort environmental management performance:

- Breaches of regulation compliance,
- · Poor energy and waste management,
- Uses of hazardous materials with inadequate controls,
- Lack of environmental training program,
- Lack of clarity in the responsibility of environmental management.

3. Opportunities

The opportunities are areas where new actions or initiatives may bring benefits or improve environmental performance. These will need to be followed up in the action plan. Here is a checklist:

- The introduction of new programs, procedures or new services which will improve the resort's environmental performance,
- The introduction of skill training programs,
- Links to best practice environmental management.

4. Threats

Threats are risks which may not be clear, but may damage the short- or long-term development of the resort. These may need policy formulation before the action plan is implemented. Here is a checklist:

- New legislation being introduced,
- Changes in tourism market circumstances,
- Potential changes in the surrounding environmental conditions such as beach erosion by the rise of sea level,
- The effects of changes in guests' demands,
- The effects of changes in supplying sources,
- Community or financial institution pressure.

6.8. Step 6: Identification of Key Environmental Issues and Areas

After clearly understanding the various aspects of the environmental management system and characteristics of the resort operation, the next step is to identify the key environmental issues and areas which reflect the whole resort's environmental performance. Identification of the key environmental issues and areas can help the resort management focus attention on those matters that should be emphasised in the

management processes. However, it should still give utmost consideration to achieving balanced development, and meeting environmental, social and economic objectives of resort development.

This identification procedure should be undertaken by consulting with senior resort management. The key environmental issues and areas are commonly identified as:

- Pollution control,
- · Energy conservation,
- Recycling,
- · Landscaping and gardens,
- · Kitchens,
- Offices,
- Products purchasing,
- Resort's outside condition.

Questionnaires to address the issues of pollution control, energy conservation, recycling, landscaping and gardens, kitchens, office, products, and the outside condition of the resort are set out in **Appendix 1** (**Questionnaire 3-10**).

6.9. Step 7: Collection and Evaluation of Evidence

Having assessed and evaluated the strengths and weakness, and identified the key environmental issues and areas for the resort's environmental management, the next step of the EMPA process is to collect and evaluate evidence in order to identify and substantiate findings in accordance with EMPA's objectives. This evidence forms the basis for the audit opinion on the resort's environmental management performance.

Evidence is collected in a variety of ways, including reviews of records, reports, files and other documentation mentioned by the resort, examination of available data, interviews with resort personnel, and observation of resort operations, facilities and activities related to the scope of the audit. Previously perceived strengths and weaknesses in the resort's management system are confirmed at this stage. It should be noted that evidence collection is generally a sampling or focusing activity rather than a thorough review.

Once evidence collection is completed, the evidence should be reviewed and evaluated in terms of the goals of the EMPA to determine both whether audit objectives are met and to identify the significance of this evidence. It should be confirmed that there is sufficient evidence to support all audit findings. In this step, a complete list of all strengths and weaknesses noted earlier is prepared and this list is analysed to identify any trends in findings that may be more significant than an individual weakness. The number and severity of the weaknesses are then evaluated so that a judgement on environmental management performance relative to the scope of the audit can be made. At this time, a list of observations (i.e. areas of concern related to practices not subject to either regulation or internal requirements noted earlier) can be prepared.

The following is a sample of a checklist of evidence:

- Resort environmental management system deficiencies,
- Good environmental management practices,
- · Listing of violations,
- Cost-effective operations,
- Strengths of the resort's environmental management program,
- Statement on the resort's ability to handle environmental risk, and
- · Permit status.

6.10. Step 8: Determination of Performance Status

This step is to finalise the determination of the environmental management performance of the resort operation. It includes a full assessment of identified key environmental issues and areas (step 6), and the evidence and the effectiveness of environmental management (step 7). Indicators for the degree of determination of performance will be designed at this stage and will become the crucial part of the EMPA process. This step also includes obtaining information from outside the resort operation about its environmental management performance. The outcome of this step will be developed as a framework involving categories or ranking order.

There are many indicators used to determine the environmental management performance of the resort. It is important to select the best indicators for meeting the resort's particular needs.

The following is a checklist of environmental management performance for a resort:

1. Management system

- (1). Environmental management responsibilities in the resort are defined and documented for all staff whose work may affect the environmental performance.
- (2). The resort has formulated an environmental policy and it has been distributed to and discussed with all staff.
- (3). Environmental factors are an integrated part of resort planning and decision making at all levels.
- (4) Written objectives/targets and assessment of performance against those targets are established, in particular regard to:
- waste reduction and recycling,
- energy conservation,
- water conservation,
- water effluent and air emission,
- noise control and reduction.
- (5). All regulations and requirements in relation to the resort environment are complied with.
- (6) There is a written program to control, reduce and eliminate the use of environmentally unfriendly products, and the program has been implemented.
- (7). Environmental performance against targets are regularly reviewed and assessed by resort senior management.
- (8). A program to provide training in environmental awareness and environmental issues is implemented.

2. Environmental Impacts and monitoring

- (1). Environmental impact assessments are taken into account in the planning of resort.
- (2). Cumulative impacts are considered in environmental impact assessments.
- (3). Impacts monitoring is carried out by satisfactory procedures.
- (4). There is a measure of regular feedback on the efficiency of environmental performance improvement measures.

3. External relations

- (1). There is an effective and clearly defined system for liasing with regulatory authorities, local communities, interest groups and the general public.
- (2). Attention is given to providing accurate information to the guests and local communities to enhance their appreciation and respect for the environment.
- (3). Complaints are investigated and recorded in a systematic way and appropriate actions taken.

4. Resort construction and maintenance

- (1). Environmental guidelines for construction firms.
- (2). Adoption of construction practices intended to result in minimal site disruption.
- (3). Use of environmentally friendly construction materials such as plantation timber and local materials.
- (4). Use of above ground construction for buildings and paths.
- (5). Use of endemic plants for landscaping purposes.
- (6). Use of biodegradable chemicals.

- (7). Use of energy saving technology and programs.
- (8). Use of alternative energy sources (e.g. wind and sun).
- (9). Use of controlled and reduced noise emissions.
- (10). Implementation of program for treatment, control and reuse of waste water and sewage.
- (11). Implementation of recycling program for solid waste.

6.11. Step 9: Preparation and Implementation of Action Plan

Based on the findings of the EMPA process, generic action plans for the improvement of the resort's environmental management performance must be developed responding to each of the audit's findings. This action plan serves as a mechanism for obtaining management approval and for tracking progress toward its implementation. It is imperative that this activity takes place as soon as possible so that management can be assured that appropriate improvement action is planned. If this action is not taken promptly, the primary benefits of the EMPA may be lost.

Generally, action plans include details of the proposed action to address each finding, and the responsibilities and timetable in which it will be completed. Typically, the resort management keeps track of action plans through regular status checks to ensure that all the action plans have been fully implemented.

6.12. Step 10: Preparation of Report

The final step of the EMPA process is to report the audit findings. Clear documentation and effective communication of the audit's results are key steps in the EMPA process. The report must be written at the end of audit process and be in such a form as to ensuring full submission of the audit findings. Audit findings should be communicated to senior resort management.

The general objectives of the audit report are to:

- document audit scope,
- provide management with information regarding the degree of compliance with regulatory requirements and internal policies, and standards,
- provide management with information on the effectiveness and reliability of environmental management systems for improving environmental performance,
- demonstrate the need, if necessary, for improvement or corrective action.

6.13. Summary

The overall objective of the EMPA is to promote the continuous improvement of environmental performance by the resort. This chapter has explained the detail of the EMPA process. It illustrates that the EMPA is characterised by a well-defined and planned structure, careful, methodical investigations and strong emphasis on identifying the key environmental issues and areas, and reporting to the resort management. These characteristics demonstrate that the EMPA can provide reliable

and useful information to resort management in improving environmental performance.