II. STRATEGIC PLAN ELEMENTS

A. TOURISM-RELATED INFRASTRUCTURE

The operation and functioning of tourism facilities, services and amenities are often dependent on a number of travel infrastructural networks. These networks include: transportation, water supply, energy/power, waste disposal, and telecommunications. In addition, so that the quality of the environment is monitored at an acceptable level, tourism facilities should have mechanisms, procedures, and regulations concerned with pollution control.

There is some ambivalence towards the expectation that all the infrastructure networks must be in place before tourism activity can take place. The reason is that in some developing countries, resort developments seem to function adequately and to the satisfaction of their clients without full infrastructural systems being in place. In the case of some forms of tourism development, the lack of a complete network of modern highways may be advantageous in that the absence of the network acts as a deterrent to the penetration of mass tourism to environmentally sensitive areas. For some isolated tourism development, such as the independent and sometimes remote integrated resorts, all the basic operating infrastructure systems are incorporated in the overall design, and in respect of infrastructure the resort may be self-sufficient without needing any connection to any more general urban or regional system. The problem with the independent resort unit may be that it solves satisfactorily all its infrastructural needs within its own territory, but by doing so, may "export" some of the water supply and waste disposal problems to other areas.

The most usual case in tourism planning is for infrastructure development to precede the completion of the tourism facilities. This may mean that the installation of the infrastructure becomes a public sector responsibility, with some escalation of the cost for development as a contribution to the overall costs of tourism development. A rationale for the infrastructure services being a public sector responsibility includes consideration of the fact that:

- the network of services is most likely available to both tourists and residents of the area
- achievement of consistency in standards is desirable
- the construction of an integrated system may facilitate non-tourism development within the region
- the network will facilitate development which contributes to the economic welfare of the resort or region
- the network will need to be policed and maintained by public agencies to ensure that prescribed standards are met.

Some tourism development plans set stringent infrastructure guidelines. In the following section there is a review of many of these.

1. Transportation

It is generally considered that easy access to tourism destinations in terms of international transport and facilities for easy movement within the destinations are prerequisites for the development of tourism. In addition, these two elements are best considered as complementary and as part of a comprehensive communications system.

One of the forces which may impede the cohesiveness and comprehensiveness of a communications strategy is the fragmentation of responsibility for the various modes of transportation and the different route systems and networks.
For the Pacific region, it is convenient to consider transportation as being composed of:

- international air services and international airports
- domestic air services
- land transport systems
- land route systems
- sea transport.

a. International air services

One of the controlling factors of the nature and magnitude of the international visitor market is the availability of international air access. Some Pacific island countries have their own national flag carrier. There are few truly international air carriers that service the region with transit stops within the region; many fly over the region. The total number of seats on aircraft flying scheduled routes, augmented by special charter flights helps determine the level of international visitors. A complication in the calculation of the potential number of international visitors – equated with numbers of seats available on aircraft – is the negotiated agreement by carriers of the proportion of seats dedicated to intermediate points on routes. This process attempts to ensure that all points on routes can be serviced, and that the aircraft will not fly any internal leg of a route without paying customers or cargo.

It must be remembered that not every seat is occupied by a visitor; many could be returning residents.

The significant determinants of international visitor numbers using international air services are:

- flight schedules and frequency
- seat capacity of aircraft on the routes
- proportion of seat capacity dedicated to intermediate points
- flight routes and linkages (through hubs)
- journey times
- fares
- flight origins (and onward destinations)
- choice of airline.

Some of these determinants are themselves affected by such factors as the operating characteristics of the international terminal, including:

- operational time-frame (hours per day)
- operational category
- operational characteristics
  - navigation system
  - runway
  - apron (standing area for aircraft) and handling capacity
  - passenger terminal capacity
  - cargo handling capacity
  - fuel storage
  - car parking
- facilitation processes (immigration, customs, quarantine)
- special facilities (administration, emergency services, VIP lounge)

Even so, a satisfactory performance level of all these factors will only partially determine the success of tourism activity; the passenger level must be matched by services and facilities which are described in the following sections.
b. Domestic air services

Some Pacific island countries have a poorly developed and service internal or domestic air network, whereas others, perhaps with converted military airfields, have a reasonable network of airports. The number and distribution of the domestic airports has been determined by such factors as location of inhabited islands, use of the islands during the Second World War, commercial development levels away from the capital cities and their airports, location of tourist resorts, and entrepreneurial initiative.

The aircraft used on the internal routes are usually small, and may include seaplanes and helicopters. The special flexibility of small aircraft contributes to the haphazard network of services and airports. If there is a need for a service, and if load factors can sustain a service, there is a high probability that a service will be introduced even though the service may be infrequent.

Many of the facilities and services are privately owned and operated. It is this additional capacity which needs to be recognised and harnessed; it should not be a public responsibility to provide all the facilities of a complete internal air network. If the tourism market needs air services and facilities, and if the visitors in that market are willing to pay for the service, there will be opportunities for private operators to manage the service.

The entire international and domestic network will need to be supervised in terms of air navigation, standards of service, linkages of operation, connectivity of services, and standards for aircraft and terminals. These matters are best managed by a government department or agency charged with statutory responsibilities. The air transport services and networks will be significant determinants of international visitor levels.

c. Land transport systems and routes

In many Pacific island countries, it is the road transport system which is the least developed of the communications sectors. This may be explained, in part, by the dispersed and fragmented nature of many island groups, and by the topographical configuration of many islands. In addition, few islands need internal connector road systems linking areas of major development. The shallow seas and lagoons of the island groups provide a ready and inexpensive means of transport between islands, between points around the islands, and between points of entry and the destinations of passengers and goods. Some of the reasons for this are historical and socio-cultural.

For many Pacific islands, the needs of motorised transport are fixed geographically by the points of tourism concentration and the points of tourists interest. One result of this is that most roads are graded rather than sealed. The road systems in the major tourism areas are usually sealed, but in the rural areas even main routes may be graded, dirt or coral or gravel surfaced.

Most island countries have developed priority trunk route networks (at least at the planning stage) and road linkage schemes to international airports, major tourist facilities, and major resorts.

It is necessary to develop a land transport strategy to complement the land use strategy, so that:

- major circulation systems can be identified, planned and budgeted for
- major centres and points of tourism can be linked
- road systems can be placed into appropriate hierarchical categories
- routes can be used to open up new areas, properly service emerging tourism resorts, provide access to natural tourism attractions, and provide circuits for tours.

It is not necessary to achieve a comprehensive sealed road network to service tourism: in fact, some routes may be left unsealed deliberately to restrict and limit visitor access.

In a comprehensive land transport system, there need to be assessments of the availability for tourists of adequate private vehicles, buses, taxis, private rental vehicles, and by any indigenous “means of transport”. These are matters best left to private enterprise and market forces, with licensing controls by the government.
d. Sea transport

From the point of view of tourism development, sea transport is an important item in the assessment of transport for domestic travel between the islands of many multi-island countries and visitor travel to islands. In some cases, there are regular schedules for passengers and goods traffic; in other cases, travel takes place only when there are sufficient customers. Some sea transport is by licensed operators engaged in cruises.

Interruptions to regular schedules can cause inconvenience to remote islands, with delays in the delivery of goods and stranding passengers. The problems created by interrupted schedules may act as deterrents to the incorporation of outer islands in a nation-wide tourism strategy.

In the development of the sea transport component of the transport strategy, due recognition should be given to the different types of vessel and their distinct purposes, which include:

- inter-island transport (for residents, business people, government officials, and tourists)
- island circuit transport (primarily by tourists)
  - island access vessels, to transport tourists from the “mainland” to offshore island resorts
- day trip, and sight-seeing and excursion boats
- short-duration island cruise transport
- specialised boats for diving, snorkelling, off-shore marine pursuits, sport fishing, lagoon cruising, and underwater viewing.

The nature of sea transport is such that a specialised government agency should be responsible for licensing operators.

2. Water supply systems

One of the most important requirements for the development of tourism facilities is an adequate and continuous supply of safe water for drinking purposes and for domestic and recreational use. In some developing countries, the responsibility for the supply and treatment of water lies with the tourism development project; in other cases it is a responsibility which is accepted by the government in the interests of both the visiting and the residential communities. There are some compromise measures where drinkable, bottled water is imported to the tourism region, while the natural water supply is treated and rendered safe for most other purposes.

For some island countries, there is an uneven quality and quantity of water in the major townships, smaller townships, rural areas and “outer” islands. The upgrading of the various aspects of the water systems then becomes a responsibility of the tourism developer, and there may be a benefit to the adjoining local community.

Water needs are diverse and are increasing. Supply requirements for resort developments include water for:

- domestic purposes
- hotels and restaurants
- laundries
- swimming pools and other recreational uses (such as for watering golf courses)
- street cleaning
- irrigation
- fire fighting
There are basic quantitative measurements which, while useful, do not take into account the special demands generated by particular climatic conditions, the tendency towards extravagance in water use of holiday-makers, the increased levels of water use in food and drink preparation in remote locations, and the tendency for corporate and government agencies to be more lavish in their use of water in the maintenance of sites in areas which experience high levels of tourist visitation. A matter commented upon in some tourism development plans is the apparent excessive per capita water consumption in tourist areas due to sabotage and the illegal tapping of pipes. In addition, assessment of the capacity of systems is sometimes frustrated by acts of vandalism, by leakage and breakdown of inefficient systems leading to reduction in water pressure, and failures. There is evidence that poor services actually stimulate increased demand.

a. Water demand

Tourism activity demands a high per capita consumption of water. A general standard used throughout the South Pacific (in the early 1990s) is about 6,000 litres per hotel room per day (for 2 or 3 – star hotels), inclusive of water needs for restaurants, swimming pools, hotel site irrigation and direct visitor usage. Most areas in locations with particularly humid climates, and with higher grade hotels, may experience higher water demand levels. Areas with many golf courses may experience a demand level which is up to 2.5 million litres per day.

The demand for water is not constant regarding quality. Treatment of water for drinking purposes produces a different quality than water necessary for the purposes of irrigation, site cleaning, recreation area watering, or fire fighting. Some of the various quality requirements include:

- for drinking, cooking and dishwashing
  - sterilised water, free from contamination
- other domestic uses, including personal washing and laundry
  - similar to the above, but treated underground supplies would be acceptable.
- swimming
  - clean, sterilised, filtered water, including filtered sea water
- irrigation
  - recycled and filtered waste water.

Treatment by means of chlorination is common in the Pacific region.

b. Water sources

Principal water sources include rainfall, underground acquifers, and river systems. The sources relied upon by Pacific island countries vary considerably. Water supply is dependent on rainfall, catchment and acquifer recharge, and storage capacity.

If weather patterns are variable, good storage and treatment becomes critical. It may be that due to the variable nature of the sources, new tourism developments may need to be self-reliant in terms of sources, catchment, and treatment.

With the dispersed nature of the islands in many Pacific nations, there may be little consistency in supply and sources of water. It major tourism developments such as hotels and integrated resorts are required to become self-reliant in their sources, a number of planning and design safeguards need to be introduced, including:

- protection of the water source
- assurance of supply from the source
- appropriate treatment of water from the source
- careful maintaining of water storage facilities
  - selection of sources well away from waste discharge and built-up areas.
In general, there is a preference for centralised water systems which draw on a public supply system in which the protective measures listed above may be pursued consistently, and monitored. With a reticulated system, which is generally available to tourism and residential communities, it may be necessary to augment gravity systems with pumping – a matter which becomes cheaper per user if the costs are spread across diverse user groups.

For tourism development on small islands, the water supply system may be complicated. Resort locations may be determined by the proximity of clean and reliable water supplies, with augmentation of the supply from streams, underground acquifers, and innovative solutions for catching and storing rainwater (such as using zinc-aluminium roofs rather than traditional leaf roofs).

c. Water storage and distribution

Storage systems are needed to ensure adequate supply, and constant pressure, and to provide a reserve against interruptions of flow and for emergency and fire-fighting requirements. The location and siting of reservoirs are critical and must be incorporated into the integrated infrastructure plan. Capacity criteria of water storage varies between 8 and 72 hours supply, although on some remote island locations a greater capacity may be needed if there is any likelihood of intermittent flow or shortfall due to weather patterns.

Distribution systems will be determined by the factors of source and storage. In developed areas with major townships, the water distribution system may be a public responsibility, so that a reticulated system linking many of the developed sectors of the urban areas is in place or is being constructed. For other situations, a direct flow system from storage to usage points such as resorts or hotels may be the only feasible option. In some Pacific island countries, especially those with visitors or with dispersed townships or communities, it may be necessary for each major resort and tourism facility to make provision for its own water supply, treatment, storage and distribution. For some resorts, desalination plants may offer the only realistic source of usable water.

The need for the principal tourism development areas is an integrated infrastructural development plan, so that the services provided to resort areas may be accessed to improve the infrastructural circumstances of the resident community.

3. Energy, and power

Power needs reflect the expectations of international visitors, which reflect the standard of services to which they are accustomed. Important considerations are the adequacy of supply to meet peak-load requirements, certainty of service, and compatible power supply types (especially as regards voltage).

If each major resort and hotel is not required to be responsible for its own power supply, then the public system needs to be designed so as to meet the demands of tourism development created by such requirements as:

- air conditioning
  swimming pool, spa and other water circulation systems
- cooking and food preparation
  dish washing, laundry, and dry-cleaning
- lighting
- entertainment, including videos, TV, radio, night clubs, and discos
- basic hotel servicing cleaning, and lifts

The demand levels of visitors will greatly exceed the projected demand levels of average residents.
Generating capacity for many small island countries may often be at a crucial threshold, because available supply creates its own increasing demand. For many of the small island countries, it may be necessary for each of the major tourism developments to incorporate their own generating facilities to cover the circumstances of local power generating or supply failure. In many cases, the existing power systems are operating close to maximum load conditions, so that major power users such as hotels and integrated resorts need emergency generating capacity. There needs to be a requirement that all new major developments should proceed only after consultation with any national or regional electricity or power generating authority, to ensure that demands for supply are within the capacity of the existing system, or so that suitable alternative plans can be prepared.

Power distribution systems take one of two forms: underground systems or above ground systems. There are significant aesthetic, operational, maintenance and cost differentials between the systems, and these need to feature in the preparation of any integrated power distribution plan. In sensitive environmental areas and in prestigious tourism districts, it may be that the adoption of underground distribution systems is determined according to aesthetic, rather than cost and operational, factors. There must be stringent safety codes relating to power generation and power distribution.

A crucial matter in the planning of distribution systems is the problem of routes through communal land.

Conventional oil-powered generators are dependent on imports with cost structures which are beyond the capacity of the island countries. Any additional generation source is often considered to be an augmentation of existing systems.

The climatic conditions of most island countries would seem to be conducive to a more widespread adoption of solar power systems – in small tourist resorts it could be that solar power could meet almost all power needs.

An additional energy source is liquefied petroleum gas (LPG).

4. Waste disposal systems

The disposal of waste of various kinds is a matter of critical concern for two reasons:

- the adequacy of the methods chosen for the disposal of liquid waste (sewage) and solid waste will be significant in the protection of the health of the tourists and the resident community
- the adequacy of the method will influence the condition of the environment in general, and of reefs, lagoons, beaches, streams, lakes and groundwater in particular.

Tourism destinations retain attractiveness if, among other things, the environment is clean, pleasant, and pollution-free. If the methods of waste disposal prove to be inadequate, then the environment will deteriorate as the result of pollution, and the outcome could well be a reduction in tourist visitation levels, with resultant reduced economic benefits. In addition, environmental degradation will be unacceptable to local communities.

The principal objectives of all waste disposal systems should be the complete elimination of health risks and environmental damage. This issue should be considered at two levels:

- at the policy level, where the principal consideration is to achieve the highest level of effective waste disposal and the lowest level of environmental degradation
- at the technical level, where the choice and design of the most effective system should be in the hands of planners/architects/engineers, working within the framework of environmental impact assessment procedures.
This section avoids the specific details of impact assessment and of the planning and design of particular waste disposal systems. There are technical manuals which deal specifically with the planning and design issues. In this section, there is a review of:

- the basic nature of liquid waste – sewage
- the basic nature of solid waste
- the methods of treatment commonly used
- some guidelines.

As with all strategic plan elements, there needs to be a consolidated infrastructural systems plan.

a. Liquid waste – sewage

Sewage is the combined liquid waste from toilets, sinks, swimming pools, kitchens, and laundries. These wastes are composed almost entirely of water (more than 99 per cent by volume), but have considerable potential to cause a range of adverse environmental effects and health hazards. The pollution potential from these wastes is very high; planning needs to ensure that health conditions and environmental conditions are safeguarded. The degree of harm to health and the environment is dependent upon the volume of the waste, the quality of the treatment, and the method (and location) of disposal.

Major problems arise from the release into the environment of organic compounds, nutrient salts, pathogenic bacteria, and toxic compounds. These products are capable of causing health problems, causing changes to the natural ecosystem, destroying coral areas, reducing the aesthetic appeal of a tourism area, and causing the loss of its principal attraction for visitors.

The principal dangers arising from the content of the four groups of liquid waste listed are as follows:

- **Organic compounds:** If large amounts of effluent with a high organic content are released into marine waters, the subsequent bacterial action may cause a depletion in oxygen levels so that fish, coral and plants may be killed. The objectives of sewage treatment and disposal are to maintain high oxygen levels and to release the effluent in such a way as to achieve rapid dilution or to sites where there is no wildlife.

- **Nutrient salts:** Water-borne effluents may contain fertilising chemicals used in agricultural practices, such as phosphate and nitrate. On their discharge, they may lead to damaging of marine plants which will tend to smother existing growth in lagoons, lakes and even coral reefs.

- **Pathogens:** Pathogenic bacteria are disease-causing organisms. The task in effluent disposal is to control the release so that the risk of contamination of downstream water supply is not unacceptably high.

- **Toxic compounds:** These will be present if chemical wastes are disposed of through the sewage system.

b. Treatment and disposal of liquid waste

Treatment may include up to three levels of processing, with the adoption of any level being determined by the quality of the effluent required, the financial resources available, the technical resources available, and the site characteristics of the resort or resort area.

Primary treatment consists of removing floating solid materials and allowing time for the partial bacterial decomposition of organic materials. The septic tank is the most commonly-used type of primary treatment, and the most suitable method in most cases on Pacific Islands, together with carefully monitored disposal of the effluent. Many resorts have their own, independent septic tank system. Engineering manuals provide guidance on the design and operation of septic systems.
Secondary treatment involves forced aeration of effluents and solids in special tanks, and tertiary treatment includes the addition of chemicals to dispose of remaining heavy metals, nutrients and other potentially harmful compounds. The effluent at the completion of the third level of treatment is of high quality. However, the achievement of that quality is dependent upon the operation of expensive technology and trained personnel.

In general, the expectation is that for most Pacific island countries secondary and tertiary levels of treatment are unlikely because of their comparative expense, dependence on complicated technology, high energy costs, and because the output effluent quality may not be of the expected quality. However, in a well-developed tourism region where the skill able to operate complex systems may be more readily available, and where site conditions may impede the achievement of satisfactory outcomes of the process of treatment if it is conducted only at the primary level, then the secondary and tertiary levels may be carried out.

The effluent from the treatment systems may still pose health and environmental problems. Therefore, the choice of disposal options becomes critical. The options are as follows:

- **Ocean outfall**
  - Dilution is achieved by mixing the effluent with sea water
  - The method is expensive to install, but cheap to operate.
  - The outfall site should avoid popular swimming and diving locations, and should take advantage of currents and tides carrying the effluent away from the beach.
  - The outfalls should not be sited in lagoons, lakes, or small rivers.

- **Subsurface Irrigation**
  - The effluent is discharged into drainage trenches.
  - Efficiency is dependent on the permeability of the soil.
  - This method is not suitable if the potential irrigation area coincides with the area from which a resort draws its groundwater.
  - Contamination of surface water could occur if the drainage area becomes flooded.

- **Evapotranspiration**
  - The effluent is taken up by surface vegetation and the water content is expelled through the leaves.
  - This method is unsuited to areas liable to flooding.

In developed areas with reticulated systems of water collection and disposal, the location of sewage disposal works becomes a critical planning issue, especially so that the chosen location is sustainable through later phases of expansion of tourism activity and development. The general advocacy is that any installed system must have the capacity to:

- exceed present demand
- be extended without serious disruption
- be augmented by the addition of new capacities
- adapt to new technology.

**c. Solid waste**

The methods and processes of solid waste management are no less important than of liquid waste management. The principal issues of concern are: storage, collection, treatment, and disposal. Tourism resorts and integrated resorts generate large quantities of food waste, paper, plastic, chemical products, bottles, and metal. Each has the potential of causing a health hazard, and if the disposal method is inadequate can be the cause of environmental degradation, aesthetic disruption and danger to foraging animals and fish life.
The principal hazards and problems associated with solid wastes include:

- breeding grounds for disease carrying insects
- rat and other pest infestations
- fire and fumes
- odour from rotting waste
- environmental degradation, especially visual pollution
- pollution of surface and groundwater caused by rainwater run-off.

There are separate guidelines available for the storage of the various forms of solid waste, in many cases to contribute to ease of collection and disposal. The principal collection systems include delivery of domestic, commercial and tourism-generated waste to central collection points and collection by a public agency or by private contractor from the points of waste creation.

Solid waste disposal is critical in maintaining environmental quality: In the preparation of the waste disposal strategy, the following factors need to be considered:

- the nature, quantity and quality of the waste
- the land available for disposal, including its physical suitability and appropriateness
- technological options to land fill methods
- economic costs of the various options.

The disposal options include controlled tipping, in which waste is dumped and covered by inert material (soil, sand, gravel, or sawdust), covered pits, special toxic material dumps, and incineration plants. There are particular engineering requirements and guidelines for each method.

d. Recycling

There is a world-wide trend towards processing and recycling solid waste. The reasons for this are ecological, economic and geographical.

The ecological reasons for solid waste recycling are linked to the likely eventual environmental damage and pollution which may occur if the procedure has been to dump solid waste products in the ocean, in close proximity to coral reefs and in locations not aided by wave and sea change patterns. In addition, even if the disposal is on land fill sites, there is considerable doubt that the ecological processes acting on the waste will not cause detrimental impact to the area of the sites, and especially to any water sources within close proximity. The economic rationale is that it is proving to be more economically sound to develop other means of waste disposal than to incur the costs of environmental rehabilitation. The third reason lies in the eventual loss of all suitable and available land sites as they become filled to capacity.

For various reasons, processes of solid waste disposal are focusing increasingly on recycling as the most suitable means of operation. The processes in use include: separation of the solid waste products which can be recycled (paper, plastic, glass, and some metals) and creation of appropriate methods of collection, storage, compaction, and incineration.

In the case of developed mainland countries, there may be little difficulty in achieving appropriate methods of collection, distribution and reformulation, because there is a ready market for the recycled products in various industries. The same may not be true of Pacific island countries. However, investigations of appropriate methods of recycling particular forms of solid waste may lead to new developments or export opportunities, reduced pressure on sensitive environments which are being used to store the solid wastes, and new materials for new types of local manufacture.

e. Waste disposal opportunities in Pacific island countries

Each type of liquid and solid waste which is generated in the Pacific region, and each type of storage, collection, treatment and disposal system has been considered in the infrastructure planning of most Pacific island countries.
At present, there is limited legislation providing specifically for environmental sanitation and pollution control, with regulations controlling waste disposal being outdated, monitoring processes being incomplete, and illegal and unregulated disposal rife, in many cases leading to health hazards, environmental degradation, danger to wildlife and visual pollution. One of the difficulties is in the adoption of consistent approaches between local communities and townships, so that degradation in one district is caused by inadequate practices elsewhere. Another difficulty is in imposing controls retrospectively.

While most Pacific island countries recognise the existing or emerging difficulties, there is some ambivalence towards the necessary processes of control and regulation. This matter is considered in the section on pollution control mechanisms.

5. Post and telecommunication services

The accessibility of post and telecommunication services is crucial across the dispersed region of Pacific island countries. Even if inter-nation communication is not critical in general terms, communication is critical with the Pacific rim nations, and, for the purposes of tourism, the nations of the principal visitor groups. The ease and reliability of communication is especially critical for the business traveller.

The infrastructure system of post and telecommunication services includes postal services, telephones, telexes, facsimile and other electronic machines, radio relay, and television relay. In addition to the public networks for these services, some large resorts may operate internal systems of their own. Infrastructure plans for this group of services need to identify transmission routes exchanges and relay stations, antenna systems and relays. This is an area of infrastructure susceptible to rapid technological changes, with progress into the realm of advanced technology requiring new skills in management and operation.

The provision of an efficient communication network within an island nation and linking the island nation with the outside world is necessary for the development of an effective tourism industry.

The postal service linking any tourism destination with locations outside the Pacific region is dependent on the international airlines, with domestic carriers (air or sea) linking outer island and remote areas. To a significant degree, the efficiency of the postal system's linkages off-shore are not within the control of any Pacific Island nation. Internal distribution is within such control, and different systems of mail collection and delivery are possible, including unlimited or limited door-to-door domestic delivery systems, district collection systems, and centralised collection and delivery systems. For much business communication, especially with off-shore destinations, the postal system is inadequate. This degree of inadequacy shifts demand for services on to telephone and electronic mail systems.

Telecommunication strategic planning needs to take into account:

- opportunities of satellite systems to link islands by voice and electronic mail
- telephone digital switching systems using satellite systems
- upgrading rural and small island stations to automatic digital unit exchanges
- expansion of cabling
- establishment of digital microwave links
- needs of maritime links and aeronautical telecommunication networks
- the need to upgrade any existing HF radio linkage with remote locations and island to microwave links.

Many Pacific Island countries are engaging in negotiations to upgrade both domestic networks and international links. The increasing level of demand, especially for resort developments, is such that delays are occurring, with significant time lags in the provision of services. New technology should make the increase in capacity possible; however, that technology is expensive to install and requires particularly skilled managers and operators. One of the basic problems for the region is that the quantitative demand for sophisticated services is not high; as a result, there may always be a time-lag between the availability of telecommunication services on the mainland of the Pacific Rim and the island countries. For recreational tourism this may not be disadvantageous. However, the time-lag in the introduction of the modern services may be an impediment to business tourism.

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The pace of change in telecommunication technology may not make it possible to incorporate a sub-strategy in the overall tourism plan and strategy. An additional complicating factor is likely to be the dependence of most Pacific Island countries on overseas aid and funding, especially from international or regional donor agencies, for any upgrading and extension of an existing telecommunication network to take place. Another complication in the alignment of any communication route might be the need to recognise the significance of traditional land ownership.

6. Pollution control mechanisms

It is becoming recognised that the need to achieve and maintain a clean environment is imperative. In general, the tourism attractiveness of a destination will be influenced by the degree of environmental cleanliness, the extent to which the environment (especially water and air) is pollution-free, and the degree to which the aesthetic environment is pleasant. This is especially so in the Pacific Islands, where most international visitors have formed a pre-visit expectation of an exotic and pollution-free environment. If adequate facilities and infrastructures are not provided to cope with solid and liquid waste products, and if there are inadequate mechanisms of control, then it is likely that the pre-visit expectations of the international visitors will not be met. As a consequence, the tourist potential and expected economic benefits will be reduced. Not only will environmental pollution have incurred reduced economic benefit for tourism (through the loss of attractiveness and reduced visitor numbers) but the quality of the environment will have declined for all users, including the local community.

The human, technical, financial and political resources which are necessary to implement procedures of pollution control are in short supply in many of the Pacific Island countries. Although it is alleged that some of the countries in the Pacific region have no major pollution problems, the potential for the problems to emerge as a result of increased urbanisation, industrialisation and (to a lesser extent) tourism remains high.

Environmental sanitation and pollution control is often included in health ordinances, water control regulations, waste discharge standards, local council bylaws, and general infrastructure standards. In some countries, there is Environmental Impact Assessment (EIA) legislation which includes regulations about acceptable standards and measures which may lessen the impact of various forms of pollution. Some of this legislation provides for environmental monitoring programmes. The monitoring and enforcement of pollution control measures are often assigned to government departments or responsible agencies concerned with public health, public works, lands and conservation, and environment and conservation. In addition, specialised agencies concerned with fishing protection may become involved.

a. Principal areas for control

The principal matters which may be subjected to pollution control measures include water pollution, air pollution, noise pollution, and land pollution, with the pollution being caused by inappropriate or inadequately policed controls over such matters as

- waste disposal
- litter
  - sewage waste disposal
  - outfall sites
  - landfill sites
- odour emission
- exhaust emission
- industrial noise.

Modern procedures for refuse/garbage and solid waste collection include the separation of items into categories of waste so that, where appropriate, the materials can be incorporated in recycling processes.
b. Pollution control structure

To be effective, pollution control mechanisms need the support of a structure which includes the following:

- appropriate legislation, supported by laws/ordinances/regulations
- an agency, or group of agencies, charged with the statutory authority to provide leadership so as to monitor practices and enforce the regulations
- a set of performance standards
- an organised, system of surveillance, probably public-sector managed,
  - a set of penalties for violations and poor performance.

The aim of the structure would be to safeguard and enhance the quality of the micro-environment of a resort or destination area, and the more general quality of the macro-environment of the tourism area.

In some island countries, a pollution control structure may not exist, may be outdated, may suffer from inadequate statutory support, may lack adequate financing, and personnel, or may lack visibility and strength. Many countries have primitive forms of pollution control. However, the degree of attention paid to the potential and actual levels of pollution is indicative of the preference of some governments to champion development of any kind and with any consequence at the expense of environmental sanitation and public health. It is necessary for governments to understand that the measures of pollution control should not be interpreted as barriers to development, but rather as a useful planning tool to be used for the benefit of the developer, the resident community and, in the case of tourism, the visitors.

Pacific Island countries which are beginning tourism development, and those which are already experienced with such development but which have limited capabilities to detect, measure and control various forms of pollution, need to initiate legislation which provides for the creation of an agency with the special responsibility to oversee pollution issues, the proper funding for such an agency, and realistic powers of supervision and control. Such a structure, with a manual of performance standards and guidelines, should place the onus of environmental protection on site and facility developers and users rather than on the recovery from unsatisfactory performance with costs borne by the community.

Although the decision to introduce and maintain measures of pollution control is political, the operation of these measures is technical. Therefore, any acknowledgement of the need to create an efficient monitoring and control system will imply a recognition of the need to create a new technical agency.

B. FACILITIES AND SERVICES

In the context of the integrated tourism strategy, it is necessary to know the potential uses and capacities of resources, the types of facilities which will be required and the appropriate standards. It has been claimed that the various tourism facilities and services hold an important key to the success of a tourism destination, not least in the way in which they contribute to the image of the destination which may induce visitors and tourists to stay longer or to return for a repeat visit.

This section provides a summary commentary on the basic considerations upon which tourism planning proposals may be framed for the provision of tourism facilities and services. The subject of this section is the range of facilities and services which support the attractiveness of the tourism destination. It will concentrate on tangible, physical elements, their geographical distribution, and on some spatial standards. Attention is directed in this section to such indicative geographical and planning issues as:

- the basic description of the principal facilities and amenities
- the location, distribution, scale and scope of the facilities, amenities and services
- the spatial standards (as appropriate)
- the opportunities for integration.
In a plan already in operation in the region, it is suggested that the higher the standards and quality of facilities and services, the greater will be the appeal of the country as a tourist destination. This is indicative of the importance to be given to the matters considered in this section. It is convenient to examine these matters in three groups:

- Primary tourist facilities and services: (accommodation/hotels, restaurants, and travel and tour services)
- Secondary tourist facilities and services: (shopping, recreation, entertainment, and visitor information services)
- Tertiary tourist facilities and services: (health services and care, emergency, and safety services, financial services, and personal services)

1. Basic characteristics

In planning systematically and methodically for facilities and services, it is necessary to be aware of their basic characteristics, and of the opportunities to plan for them in an integrated fashion. The basic facilities and services described in this section occur in various combinations and geographical arrangements in most tourism resort areas. In some cases, they are concentrated into precincts, in other cases many of the facilities and services may be separate from each other. This makes it difficult to advocate specific planning advice; in addition, the variations may be the outcome of the difference in scale of tourism activity between island countries which attract few tourists and others which attract many. This has to be a matter for interpretation of these guidelines by users.

A further complication lies in the underlying attitude of the national governments to the concept and process of planning. For some Pacific Island countries, the planning philosophy may be market-driven, so that the existence of the various facilities and services, their quality and quantity and their geographical distribution and association is the outcome of the interplay of market forces. In contrast, some island countries with a philosophical commitment to government guidance or control over tourism development may prefer to pursue policies and practices fitting any development to a carefully prepared land use and economic strategy. The commentary in this section is generally relevant to both approaches, although its application is more likely in the controlled approach to tourism planning.

For tourism resort areas planned on an integrated basis, it is possible to rationalise the provision of facilities and services so that they are complementary in standard, range, distribution, and scale. In general, the basic characteristics of tourism facilities and services include:

- diversity – in range, scope, scale, quality, and quantity
- fragmentation into enclaves or precincts, with some tendency towards linear arrangements along principal linkages and routes
- common features of architecture, advertising, or site preferences
- frequent changes in ownership, type of enterprise, range of goods or services, or style of enterprise
- dominance of “magnet” facilities, either in the form of a major enterprise (such as a major hotel), as a distinctive district or precinct of similar enterprises (such as a collection of banking outlets), or in the form of a major retail store
- the degree of patronage reflects the aggregate quality of facilities and services, which could be disturbed by the intrusion of facilities and services which may detract from the image or attractiveness of the precinct.

There is a tendency for facilities and services to concentrate according to type, quality, standard, status, and historic legacy. In addition, depending upon local attitudes and visitor expectations, the distribution of facilities and amenities may be determined by outlets for indigenous crafts, arts and performances. Another matter reflecting local circumstances is the degree to which the conventional facilities and the services are augmented by the loose arrangements of open air markets, which may occur at a defined time of day or perhaps on a particular day in the week in public market places.
All these comments are indicative that the range of tourism planning opportunities and possibilities is such that the various feasible permutations will be dictated as much by the peculiarity of local circumstances as by the claimed efficiency of these guidelines.

2. Facilities and services in precincts

Before considering each of the facilities and services, it is appropriate to consider, as a guideline, a useful planning tactic or device which may be used to bring about planned geographical cohesion. Integrated planning of tourism facilities and services may be achieved by the use of the planning device of the Tourism Business District (TBD). This planning device is derived from:

- the conventional Central Business District (CBD) in which the principal commercial activities (shopping, entertainment, and offices) are commonly concentrated; and
- the Recreational Business District (RBD) derived from a North American study of commercial activities in a number of tourism-oriented towns.

The TBD may take one of three forms:

- an entire commercial district, especially in a small resort town, where it may be geographically concordant with the conventional CBD;
- a special concentration of tourism-related enterprises which form a definite, observable and distinct precinct, similar to the RBD;
- a linear corridor linking two commercial districts, or a corridor running parallel to the coast of a beach resort or along a route to a particular tourist attraction.

In each case, the TBD needs special attention because the planning standards applied to the development and the planning concept applied to the physical arrangement of the facilities and services may have a significant impact on the image of the tourism resort.

There may be a strong argument that market forces should be left to define their own clusters and arrangements of facilities and services. That may be the preferred planning strategy, and a reasonable course of action to be taken, provided there are controls on building construction, traffic circulation, health conditions, and aesthetics. Whether or not the laissez-faire, market-driven approach has been adopted, it is worth considering whether the alternative tourism planning approach of a precinct form of TBD may contribute positively to the overall attractiveness, efficiency and customer satisfaction of the tourism commercial centre.

The TBD, despite being a focal point for tourism-related facilities and services, would not be for the exclusive use of visitors and tourists. It would be accessible and usable by the resident population. In some commentaries, it is considered that this specialised TBD is a social phenomenon as well as an economic one, in which visitors and residents may mingle and congregate to “window-shop”, to enjoy open-air/street entertainment, to access specialised shopping, to use open-air restaurants and side-walk cafes.

This precinct could become the focal point of the tourism land use and activity strategy, in one of three forms – a concentrated commercial district, a discrete tourism-related precinct, or a linear corridor of tourism activity.

One concluding comment: the precinct is not a planning device for use only in major resort areas. The principle of the precinct is to organise tourist-related facilities and services so that they form a distinctive zone in the resort with characteristics of attractiveness, efficiency and convenience.

The TBD as a planning device may be used to achieve cohesion and to give conspicuous identity to the collection of facilities and services which are created to meet the needs of tourists. It is a device which does not need to be prescribed and implemented at one time, or over an extensive area. For some island countries which are reacting progressively to the requirements of tourism activity, the precinct could be created as a planning concept to which development, as it occurs, may be encouraged to conform. It may be that for some small island countries, the TBD will be geographically concordant with the conventional CBD. If this is so, then the TBD can be used positively as a structural device to give a planned form to the resort or township.
3. Accommodation

In terms of investment, and certainly private investment, tourist accommodation represents the most expensive facility in tourist resorts. Essential in the early stages of plan preparation is a detailed survey of existing tourist accommodation, and a projection of trends and requirements. In addition, it is at this early stage of the production of an integrated plan for assessments to be made of preferred geographical positioning and arrangement (as isolated elements, or clustered into precincts), and of preferred architectural styles.

There is evidence that the character and composition of tourist accommodation has undergone considerable change in the last few decades. New types of accommodation – such as self-catering units, budget hotel accommodation, and camping sites – have evolved to meet market demands for increased levels of independence, self-sufficiency, informality, economy, and convenience. Such changes have been influenced by the emergence of the new types of traveller and of the tourist who invests in a holiday home or unit in a preferred tourism destination. There have been changes in the requirements of traditional hotel accommodation as the spectrum of travellers has undergone transformation. Some of these changes include development to meet special purposes:

- the specific needs of the short-term traveller – motels and concentrations of hotels at airports
- the specific needs of recreationists – marina-hotels, and sports and health resort hotels
- the specific needs of the business traveller, including delegates to conferences and conventions
- time-share apartments and other investment
- comprehensive commercial development in which the tourist accommodation is one element of a complex which includes shopping, entertainment, and offices.

a. Survey of existing accommodation

The principal information needed is:

- the number of registered establishments, rooms, and bed spaces
- the geographical distribution by location, type and standard, and number of registered establishments, rooms, and bed spaces
- the range of services and amenities available to guests on-site (restaurants, and recreation facilities) and off-site (transport linkages).

In addition, it is necessary to clarify at the outset of the survey the classification of tourist accommodation, which may include:

- hotels – downtown and in CBD and TBD locations
- independent resort hotels in isolated settings
- transit hotels – at airports, or along highways
- apartment hotels – especially for absentee owners/part-time occupants, investors, and time-sharers
- condominiums
- boarding houses, guest houses, small private hotels and houses with rooms for rent to travellers
- hostels for backpackers
- camping sites
- camping lodges, including forest lodges, and “safari” lodges in which the services may be minimal.
b. Realistic interpretation of demand

Whereas the island countries with a well-developed or developing level of tourism activity may be able to make confident projections based upon recent visitor levels and investment commitments, other island countries need to be somewhat circumspect in their expectations of growth. This is not the place for a detailed examination of the processes of demand forecasting and the translation of that into physical requirements of accommodation. However, a few pertinent comments can be made.

It should be realised that the high proportion of capital tied up in the fixed assets of hotels and similar accommodations means that there is little scope for flexibility in the short-term to change to meet variations in market conditions. As the operational break-even point is often finely balanced, the imposition by governments of severe constraints may cause the development proposal to fail at the conceptional or feasibility stage. This does not mean, however, that building and planning regulations need not be stringent. In particular, tourist accommodation should be expected to cope comfortably with predictable climatic and volcanic problems.

Demand projections should take into account:

- the general attractiveness of the destination
- the availability of easy access by international travellers (international air routes, schedules, and cost structures)
- regional competition
  - the general flows of international visitors
- the accommodation types suited to the expected market
- the preferred type of international visitor
- seasonality.

For some island countries in the Pacific region, the magnitude of possible future tourism development is determined less by market demand and its potential and more by the capacity of the country to develop tourism facilities and services to support natural and cultural visitor attractions. The real test is the ability to create a tourism product, the supply end of the equation. In some cases, realism in demand projections needs to take into account:

- the existing level of tourism development and of overseas interest in the tourism opportunities
  - the availability of visitor attractions
- the physical constraints on development, such as suitable locations and sites
  - the availability of government and private capital to support the introduction of new tourism accommodation capacity with the complementary facilities, services and amenities
- the local availability of basic construction materials, manpower and technical and managerial competence.

In some cases, the level and pace of tourism development will be determined by the capacity to build hotels and resorts, and to complement the tourist accommodation with facilities, services, amenities and attractions. If there is little to see and do, why should travellers visit?

The systematic linkage in the assessment is as follows: in the demand-supply equation, it will be the availability of the tourism product which will be the determining factor. The creation of that product becomes the crucial first step. This product will be led by the development of suitable tourist accommodation. This development will determine the number of visitors. After that has been determined, it will be possible to link assessments of demand for transport, travel and tour services, and the related tourism facilities and restaurants, and entertainment.
Demand assessments may be demand-driven, (where there is an established tourism product, and where there can be a reasonable expectation of further growth), or supply-driven, (where any development is dependent upon the primary construction of tourism accommodation).

For many of the small Pacific island countries where the present visitor arrival numbers are relatively low, it is most likely that the tourism planning strategy will be supply-driven. In these cases, the importance of the scope and scale of tourist accommodation is a crucial step in the preparation of the planning strategy.

c. Development of tourist accommodation

The principal issues of tourist accommodation development include quantity, quality, and location.

There are manuals which recommend spatial and design standards for the different types of accommodation. However, a matter which deserves consideration as a matter integrated tourism planning is location/distribution of tourist accommodation.

The scale and concentration of tourist accommodation will be determined to a significant degree by the basic tourism planning development concept and by the planning standards adopted by the resort area. Such concepts and spatial standards will be crucial particularly in areas of high scenic, historical or architectural and cultural value. The attractiveness of a resort is often determined by the character of the buildings and the extent to which the planning and design is integrated into the district and site. The crucial questions are related to scale, height, bulk, aesthetic treatment (including landscaping), and the "fit" with indigenous styles. In addition, there are important matters concerned with accessibility, serviceability, and on-site circulation (pedestrians and vehicles). For the tourist, there are important on-site issues such as range of services, availability of public places and spaces, accessibility between various elements of the hotel/resort complex, and standard of accommodation.

Planning and design manuals available to architects and planners offer specimen or model spatial standards for room size, ancillary space, circulation space, companion service areas (such as restaurants, shopping), and support services.

An important issue in the development of tourist accommodation is its location. In some cases, the TBD formula may be used to guide the future location of new tourist accommodation. There is considerable evidence to substantiate a proposition that the distribution and location of tourist accommodation is a significant determinant of the extent and pattern of the TBD. This is probably so where the tourist accommodation tends to concentrate at beach frontages. It is a reasonable sub-strategy to identify in advance the crucial spatial and location magnets in the TBD and to induce subsequent visitor-related services development to fill in the gaps. To achieve this, a principal set of decisions will include:

- whether to restrict tourist accommodation to magnet locations within the TBD
- whether to devise a number of potential tourist accommodation precincts, either as self-contained precincts or as districts composed of compatible tourism-related uses
- whether to concentrate tourist accommodation in a single, major area, or to allow a number of dispersed locations
- whether to concentrate tourist accommodation at beach-front locations
- whether to pursue a strategy of balanced geographical dispersal
- whether to adopt a strategy of graded exclusivity to defined tourist accommodation precincts.

The crucial decision to be made about the geographical patterning will be whether to concentrate tourist accommodation development at the capital city or on the main island, or to plan for dispersal to include a number of other locations. In some cases, where the necessary investment will be derived from offshore sources with their own particular locational preferences, the decision will be predetermined. In other cases, where the developments may be small-scale and the product of local investment, the decision may also be predetermined by land ownership and indigenous entrepreneurial willingness. The preparation of a spatial strategy with which to guide the future development of tourist accommodation may not be easy, but it is a necessary task if such accommodation is to contribute positively to the attractiveness of the destination.
4. Restaurants

There have been noticeable changes in recent years in the preferences of international tourists. The previous inclination to use the restaurant facilities of the tourist hotel, because it formed an integral component of the hotel or resort enclave, is being replaced progressively by a trend towards eating in restaurants of different types. It is claimed, for example, that the provision of good restaurants and other food outlets is a crucial determinant to visitor satisfaction with a tourist destination. The changing demand is adding local and indigenous cuisine to the range of international cuisine. This demand is being met with the development of restaurants independent of the hotels and integrated resorts. Such restaurants are often based on Asian cuisine, local, indigenous cuisine, and use of local products, especially seafood, vegetables, and fruits.

The major concentration of restaurants catering to international tourists are to be found in the CBD or TBD, with many associated with the principal hotels. Other concentrations tend to gravitate to beaches or near the airports.

Some visitor surveys have revealed some concern about the standards of hygiene, the standards of service, the quality of meals, the price of meals, and the quality of the restaurants (furniture, fittings, and decor). These matters have been articulated especially in regard to some of the more isolated and allegedly authentic local restaurants, often in remote locations. As the restaurant experience contributes significantly to overall visitor satisfaction levels, it is necessary for a government inspector to oversee standards, and to recommend training and operating procedures through a system of licensing.

This is an area of enterprise which may fall within the scope of feasibility of local entrepreneurs. Some tourism plans are advocating this with accompanying tax incentives, duty concessions, loan facilities, and training facilities.

As restaurants are complementary services to accommodation, the geographical dispersion will be determined largely by the distribution of the tourist accommodation. However, favoured locations may include: beaches, viewpoints of spectacular scenery, major highways, areas close to major tourist accommodation, major, commercial areas, and major transport terminals.

Technical manuals are available which offer suggested spatial standards per expected visitor numbers. Some of these spatial standards are classified according to the various types of restaurants, cafes, and bars. In addition, such manuals often indicate design parameters for free-standing premises, restaurants within commercial centres or hotels, open-air premises (side-walk cafes), beachside premises, and premises at natural, cultural or other visitor attractions.

As eating and drinking is an important element of visitor experience, the efficient planning for restaurants should be integrated in the general tourism destination planning process.

5. Shopping

Shopping is another of the complementary experiences which contribute to the overall attractiveness of a tourism destination. As such, it should be considered as an element in the integrated tourism plan. In an increasing number of tourism plans, special consideration is being given to improving the attractiveness of shopping by providing more attention to the detailed design of shopping areas, shopping precincts and to the hours when shops are open. In terms of the range of merchandise, most commonly the attention of tourism planning is given to outlets for imported quality goods, indigenous handicrafts, duty-free merchandise and leisure wear. There are two principal tourism planning issues: the location and distribution of shopping facilities, and the range of goods available, and especially the potential contribution of locally-made goods.
As with other aspects of planning and design, there are technical manuals which explain the finer points of designing shopping malls, shopping precincts, shops within hotel and resort complexes, and the conventional shopping street.

In general, any tourism destination can be expected to accommodate a range and a number of shops which exceed the per capita expectations of the resident population. This may render the resort vulnerable to an over-supply of shops, especially if the resort experiences seasonal peaks and troughs. It may be that many tourism destinations have a surfeit of shops. To a large degree this is a matter best left to market forces.

Shopping has become an integral social as well as economic activity in the tourism experience. Either by natural circumstances or as a consequence of planning design, shopping areas in many tourism destinations are quasi-recreational and entertainment facilities, with a natural or created atmosphere of activity and informality. The exception may be the enclosed shopping mall of up-market boutiques and quality stores where the shopping experience can be expected to be more sophisticated.

For the purposes of planning, tourism shopping areas may take any of the following forms:

- enclosed, climate-controlled, shopping malls
- conventional shopping streets
- shopping complexes, forming part of a major hotel building or commercial building or airport
- major department stores
- covered or open-air street markets
- district shopping centres—mainly used by residents
- small shopping areas along highways
- isolated shops
- shops associated with a major visitor attraction
- shops in areas of indigenous people—mainly shops retailing handicrafts and works of indigenous art.

Increasing attention is being given to encouraging and facilitating the establishment of shop premises providing outlets for locally-produced goods. This strategy has the benefit of extending the economic benefits of tourism to the village population and, for some very dispersed island countries, to the populations of remote islands. Such shopping opportunities may provide a stimulus to local production and may help to sustain local crafts and culture.

Tourism shopping constitutes an important element of the TBD, and may provide the cementing agent linking the magnets of major tourist accommodation and integrated resorts. Such shopping "strips" may be used positively as corridors linking the other major nodes of activity. Shop premises may be used to form the core of the TBD.

A particular problem besetting tourism shopping areas throughout the world is the danger that genuine authentic locally-made goods become supplanted by cheap, imported substitutes. This is a matter for government regulation and control through customs and excise powers.

As shopping has become an integral element of the total tourism experience, it needs attention commensurate with that significance, not only with a concentration of attention on major shopping complexes and conventional shopping streets, but also with due attention to the special attributes of the Pacific region—open-air markets, village handicraft stores, and wayside handicraft stalls. It should not be overlooked that, in addition to purchases of souvenirs, leisure-wear, momentos and duty free goods, tourists need to be serviced with the more conventional shop outlets stocked with pharmaceuticals and provisions.
a. “Life-Support” services and facilities

It is appropriate to refer to what may be described as the “life-support” services and facilities. These are the services which meet the needs of personal care (pharmacies, hairdressers, and laundrettes), professional advice and care (legal advice, banking, and currency exchange), and maintenance (vehicle repair, fuel, dry-cleaning, and camping requirements). Market forces, through the impact on land values and rents, often cause these facilities and services to gravitate towards the less visible and prestigious locations in shopping areas and precincts. It is those same market forces which determine the need for such services and facilities. As a planning strategy, the tactic may be to make allowance spatially for these services and facilities to be incorporated around the margins of any defined TBD.

There is a tendency for banking and currency exchange facilities to concentrate in the capital and major townships, although agencies and services may be available at major resorts and hotels and in some larger villages. This is not a matter which falls easily within the scope of tourism planning.

6. Travel and tour services

Travel and tour services are essential elements in a national integrated tourism plan. These service providers are the intermediaries between tourism destinations and the potential (and actual) visitors. Their functions include greeting services, airport transfers, sight-seeing tour operations, servicing individual travellers, servicing tour groups, providing ticketing and accommodation reservation services, and providing links with off-shore tour agencies. In addition, these travel and tour service providers link the tourist and the local tourism service and facility operator.

A tangible element of the travel and tour services is attention to detail, especially in supervising the standard of accommodation which is booked on behalf of clients and the standard of the vehicles used (buses, coaches, taxis, water taxis, or boats).

Another element of the travel and tour service which may be a cause of concern is the standard of tour guiding. Some countries are progressing rapidly to a style of training and licensing to ensure a quality service is provided. In addition to tour guiding, many of the activities of the travel and tour services are suited to the operations of indigenous entrepreneurs. There are increasing examples, especially in the development of ecotourism operations, that indigenous entrepreneurs are seizing opportunities to capitalise on advantageous natural and cultural circumstances.

a. Visitor information bureau

(This matter has been considered briefly in the section on Institutional framework, and it will be considered again in the section on Promotion and marketing.) It is necessary to emphasise the importance of the location and visibility of the visitor information service. The visitor advice centre must be located centrally, conveniently and visibly. In some cases, visitors’ bureaux have adopted conspicuous architectural forms with indigenous styles.

It is expected that visitors’ bureaux maintain a stock of information about the area, the visitor attractions, the range of accommodation and the transport options, and tours. In addition, such centres are extending services to include permanent displays of traditional arts and crafts, audio-visual displays and visitor souvenirs. There are some problems encountered with the degree of knowledge about the range of tourism activity options and transport and accommodation in the visitor centres. This may be the manifestation of a lack of attention being given to the training of staff in these centres. It may also be the outcome of a decision to provide minimum information services, whereas most tourists have an almost insatiable appetite for information. Any mismatch of supply and demand here will affect the visitor experience.

The visitor information centre should occupy the core location in the TBD, with complementing services available at the principal airports or ports.
7. Recreation and entertainment

It is axiomatic that recreation and entertainment facilities should be deliberately arranged so as to generate interest, to invite participation, to facilitate the linkage of complementary tourism land uses and activities, and to create an image of vitality and excitement. It may be necessary to ensure that recreation and entertainment venues are buffered from adjoining uses which they might otherwise disturb. This category of uses and activities may prove troublesome to tourism planners, perhaps for unexpected reasons. There is documentary evidence that tourists may be more inclined to create their own recreation and entertainment opportunities than to rely on custom-produced facilities and services; there is some recent contradictory evidence, especially in connection with golf courses. For example, one source quotes visitor interest levels in the performing arts and cinema as 25 per cent and in exhibitions and folk activities as 15 per cent, with only 10 per cent interested in organised sport. However, it should be remembered that the range of preferred activities will depend on the market of visitors, which will have been influenced by the attraction of the destination and its facilities.

The range of recreation and entertainment facilities will depend not only on the visitor profile and the resultant demand, but also on the scale and location of the resort area. The range may include:

- cinemas (now largely replaced by in-house video capacities in hotels)
- multi-purpose halls for concerts, theatre, social meetings, and local entertainment
- open-air theatres (depending on weather conditions)
- libraries, and reading rooms
- museums, and galleries with exhibits of indigenous crafts, art, folklore and history
- night clubs, and dance halls
- casinos
- playgrounds and parks
- sports halls
- swimming pools (even though the resort may be coastal)
- golf courses.

Some planning and design manuals offer guides to the spatial provision of these and similar facilities.

There is such diversity in these various uses – for entertainment, recreation, and culture – that there is little consistency in tourism planning guidance. For example, some of the indoor facilities for entertainment in a large tourism destination may be forced by location to form a distinct precinct. Other facilities may gravitate towards the administrative and political core of the township. Extensive land users, such as golf courses and playing fields, will be naturally located towards the periphery of the destination. An additional complication for this group of facilities and services is the propensity for some to be combined in one building.

In planning terms, the usual strategies adopted are of linear corridors and concentrations, with the corridors often being associated with shopping streets, and the concentrations with peripheral precincts. Large tourism resorts may have distinct entertainment precincts.

For most Pacific nations, one of the principal forces of attraction is the recreational opportunity of the beach and coastline. There is increasing evidence that many new integrated resorts are being designed with at least one golf course. Most resorts provide on-site facilities for tennis, squash and various sports. It would be appropriate for Pacific Island countries to approach the planning of these activities in three groups:
• land-based sports and recreation (tennis, golf, bushwalking, and trekking)
• marine-based sports and recreation (snorkelling, scuba diving, swimming, fishing, surfing, canoeing, boating, and sailing)

entertainment (traditional dancing and music, night clubs, discos, and organised sport) and to add sub-strategies for each group.

Evidence from many existing tourism development plans is indicative of the low degree of priority accorded this group of facilities and services. Especially important is the efficient management of available resources.

8. Health care, emergency and safety systems

This group of services and facilities provide the community support base to the more high profile services of accommodation, restaurants, shopping, entertainment and recreation.

The principal services and facilities in this group are:

• health care (hospitals, medical centres, accident centres, specialist health care and dental centres, advice on disease prevention, and pest eradication and ambulances)
• emergency and safety (fire prevention, police, beach rescue, and emergency services).

In addition to the general provision of the physical structures and the service personnel – which usually falls to governments – it is becoming incumbent on the major resorts, the major hotels and the large commercial enterprises to ensure that proper hygiene and sanitary standards are maintained on the premises and in the immediate environs.

There is little commonality in the spatial standards, locational and distributional preferences and design details. Few of these facilities and services would be located within the TBD. One common feature, however, would be the preference for each service to be at a location which affords efficient access to all parts (and for all parts) of the tourism destination. There are response route criteria which may provide locational guidance.

C. VISITOR ATTRACTIONS

Despite the complexity of the decision-making process undertaken by tourists before they commit themselves to travel, there is considerable evidence that it is the visitor attractions and activities which are the principal elements which stimulate interest and the eventual commitment. This being so, it is the nature, quality and quantity of these attractions which would influence the types and numbers of tourists likely to visit a destination and the duration of their visit. Thus it is the visitor attractions which form the potential tourism product base of most nations in the Pacific area.

Recent studies of the sources of attractions to potential visitors to the Pacific region refer to such matters as:

• the traditional South Sea Island image as a tropical paradise
• hospitable people
• fascinating history and customs
• diversity of sites and settings on large and small islands, some of which are developed and others which are not traditional lifestyle
• indigenous artefacts and crafts
• relics of the Second World War
- seaside and undersea adventures
- opportunities to learn and participate
- evidence of pre-independence administration
- mixes of racial groups
- cultural performances.

Research has shown there is considerable competition for “tropical paradise” vacations from such destinations as the Caribbean, the Seychelles and other areas of the Indian Ocean and from the rapidly growing destination centres of Thailand, Indonesia and elsewhere in South-east Asia. Therefore, to maintain their market share it is necessary for Pacific island countries to develop additional product advantages.

1 Inventories of attractions

Most inventories of attractions use three general categories of:

attractions dependent primarily on special natural resources
attractions dependent primarily on special cultural resources and history
attractions which are primarily special events, general tourist activities (such as special shopping areas), sport and recreation-focused, or to meet the requirements of the conference convention business.

In the preparation of the tourism plan it will be necessary to determine the existing range of attractions, potential additional attractions, and additional attractions which may be necessary to facilitate a niche market or a product advantage over competitors.

It should be recognised that the range, quality and quantity of attractions may not be sufficient to provide a satisfactory and viable tourism destination.

2. Attractions based on natural resources

Making inventories of natural attractions should be approached on two levels: the general attractiveness of the natural resources, and the specific attractiveness of readily-identifiable sites and settings. Some studies recognise that natural attractions are both general and specific. In establishing the inventory, it is appropriate to note:

- those resources which are or are coming under increasing pressure
- those resources for which programmes of protection measures are justifiable
- those resources for which expenditure may be necessary to maintain, so that they will sustain visitor interest.

If managed efficiently and appropriately, the natural resource base has the potential to be the major attraction for visitors. However, it should be realised that the abundance of coral atolls, reefs, volcanic island masses, tropical vegetation, and lagoons across the Pacific region will mean that for any destination to achieve an edge in the tourism market, these resources will have to be very special or be linked in some way to an advantageous tourism package.

There are four main categories of natural resource attractions, each of which is capable of further division into specialised categories. These main categories are:

- land forms, topography, and geology
- marine environments, coasts, rivers, and lagoons
- flora
- fauna
Any inventory of generalised resources will include these four categories and the specialised categories will reflect particular natural and physical circumstance of the islands within the nation. For some Pacific Island countries, a strategy has been pursued so that the most interesting, sensitive, fragile and vulnerable resources are absorbed into national parks.

There will be a general expectation on the point of visitors that the natural resources be relatively unspoilt. If there is a particular advantage in marketing the tourism product, the sustainability of its unspoiled state should become a vital element in the national tourism plan.

As for many Pacific Island countries the degree of interest in natural phenomena has developed only recently, it will be necessary:

- to prepare thorough inventories of resources
- to develop an information base on natural history which can be accessed readily by visitors
- to create special facilities so that the fauna, flora and landforms can be seen and experienced by visitors
- to develop and implement management policies and practices to ensure that the mix of visitor satisfaction and natural resource protection is achieved according to principles of sustainability
- to provide interpretative information at the sites and settings
- to develop, at appropriate locations, information services and guiding services.

In the assessment of the general attractiveness of the natural resources, it should be realised that the degree of interest and attractiveness may be influenced by the naturalness of the setting and the combination of habitats. It may be that, while the resource may not be spectacular by world or regional standards, it may be of interest because of its endemic qualities and its combination of habitats.

Many Pacific island countries have spectacular flora, fauna, marine environments, geology and landscape features, and beach areas. It is necessary to provide appropriate pre-visit information (in print, videos, slides, or colour cards), access, viewing facilities, and on-site interpretation in printed form or by guides.

It may be the special and unique ambience of the natural environment, together with the remoteness and relative isolation of a destination, which makes an island nation particularly attractive. The environment does not need to be incorporated in formal reserves and national parks to be a tourism attraction. A case can be made that landscapes and natural resources which are intrinsically bound to past and/or present practices of island people will constitute the most significant attractions.

3. Attractions based on cultural resources

Socio-cultural and historic attractions may be manifest in physical structures, living culture, customs, traditions, social organisation, art, crafts, architecture, music, dance, or history (indigenous history wartime relics, and former colonial influences). These attractions may be restricted to traditional villages, sacred sites, archaeological sites, or sites of historic significance.

It is a matter of marketing and promotion for the separate Pacific Island countries to draw attention to their special differences, even within the three broad groupings of Polynesia, Melanesia and Micronesia. As has been mentioned, it is important that the socio-cultural and historic attractions retain authenticity. It will be the subtleties of difference and the degree of authenticity which will be the principal forces of attraction for any particular island nation, and it will be these forces which will establish competitive edge.

There are six main categories of socio-cultural and historic attraction:

- traditional culture (dance, music, art, language, literature, and handicrafts)
- traditional behaviour (daily lifestyle, ceremonies, rituals, and social organisation)
- physical structures and architecture
archaeological sites and pre-colonial history
vestiges of colonial influence
wartime relics and sites.

While many of the items in these categories may be experienced in protected sites, others have been collected for presentation in galleries, museums, cultural centres, performance centres, and historic homesteads. In addition, many performances (music, dances, rituals, and ceremonies) may take place in up-market hotels and resort complexes, or in traditional villages (following schedules composed to meet itineraries of tourists).

As with natural resources, there may be a need for the preparation of a thorough inventory and prospectus of socio-cultural and historic resources. In addition, sound management practices will be needed so as to make the resources accessible to visitors, protect the intimate aspect of culture, make the meaning of what is being witnessed comprehensible to the visitors, and ensure the visitors do not degrade the site or become disrespectful of the ceremonies.

Any strategy of providing visitor access to socio-cultural and historic resources needs to take into account the need to protect traditional resources, the need to encourage the maintenance of authenticity, the preference to restrict the capacity of visitors, and the need to ensure the longevity of the ceremony, tradition, or custom.

Many Pacific island countries have incorporated into their customs and traditions features derived from previous periods of colonial administration, various church denominations, and various foreign influences, particularly from the Second World War. Some of these influences will be manifest in buildings, physical structures, relics and debris, and ceremonies and rituals. For the richness of the island culture in its present form to be realised, it will be necessary for each of these features and influences to be realised and revealed.

As with natural resources, the general features of socio-cultural and historic attractions will be supplemented by special and site-specific collections of phenomena. Such site-specific features may refer to particular events in history, special people, peculiar combinations of circumstance, particular forms of buildings, or structures, or particular site features. In each case, the management process and practice should ensure that adequate and appropriate access is provided and that there are suitable forms of interpretation available so that what is witnessed has meaning rather than being mere entertainment. This care to maintain the meaning of the socio-cultural or historic features is particularly important. It will be the attraction of culture which will appeal to visitors, provided the level of authenticity is maintained.

4. Other attractions

Although the principal attractiveness of a Pacific Island destination may be its natural environmental resources, or its socio-cultural and historic resources, it may be that a combination of other attractions which complement the principal attractions are sufficient to improve the competitive edge of the destination. These additional attractions may include:

- special events (independence celebrations, pageants, sports tournaments, festivals, and commemorative events)
- special commercial facilities (casinos, integrated resorts, theme parks, wildlife reserves, and duty free shopping centres)
- government facilities and services (parliament buildings and precincts, specialised training or education facilities, and patriotic venues).

There may be attractions which have been added to itineraries of tourists, including farms, research stations, brewerries and wineries, manufacturing plants, philatelic centres, and religious buildings. If the real reason for visiting the Pacific region is to witness the special natural environments and culture, the incidence of these additional attractions will be to provide a balance, or to provide an alternative form of attraction and interest.

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5. Special interest attractions

With the general nature of the tourism profile becoming fragmented into mass, general tourism and special interest tourism, there is pressure on tourism destinations to determine whether they intend to cater for the mass tourism market, the special interest market, the niche market (which may be different from the special interest market), or the combined market of mass tourism, special interest tourism, and niche market tourism. For most Pacific Island countries, especially those with small visitor numbers, the choice may be restricted by the limited range of resources on which any strategy may be based.

Special interest tourism is a reflection in part with a dissatisfaction with the experience of mass tourism, and in part of a change to meet the different problems of emerging tourist groups, especially those who wish to learn during their travels. This form of tourism has been characterised as the tourists’ search for novel, authentic and quality tourism experiences.

The focus of the special interest tourist has four categories:

- urban tourism
- rural tourism
- nature-based tourism
- culture-based tourism.

In each, there is an element of challenge, adventure, knowledge-acquisition, experiential learning, exposure to “naturalism” and “authenticity”, access to pristine or culture-specific environments, and on-site participation (especially with indigenous peoples).

For some aspects of special interest tourism, living, travelling, and learning conditions are being designed to meet the experiential requirements of the tourists. One type of special interest tourism being canvassed widely for those island countries which are determined to create a special niche for themselves in the Pacific region is loosely described as eco-tourism.

6. Implications for tourism plans

In a world-wide, highly competitive market, few if any of the island countries in the Pacific region can consider that the range, quality and quantity of their tourism attractions is adequate. Any high levels of visitation which are enjoyed at present may be due more to proximity to major visitor markets, costs and duration of travel, costs at the destination, convenience of cultural empathy, and traditional linkages than to any particular advantage of attraction, whether natural, cultural or artificial.

Some key issues need to be recognised in the preparation of a tourism plan:

Although many island countries possess a wealth of natural attractions, few (if any) have single features which are of unique or exceptional quality in a wider regional or global context.

- It is likely to be a combination of features which leads to composite attractiveness – flora, fauna, landscape, marine environment, and customs and traditions.

Many of the cultural attractions are to be found more in daily manifestations of the living culture of the community rather than in physical structures.

The attractiveness of many cultural features is best realised when set in an appropriate historical and cultural context, which is best understood by visitors if there are appropriate interpretation services (guides, literature, and maps).

- National parks, reserves and special sites need to be well marked – otherwise, very worthwhile attractions will be missed.

Factors of attraction, depending on the experiential requirements of visitors, may include small size, remoteness, isolation, peace, tranquillity, and an unspoilt, non-commercialised environment.
• Spectacular marine environments with vast expanses of ocean interspersed with atolls, reefs and small islands contribute to the South Seas' unique ambience.

The distinctiveness of Polynesian, Melanesian and Micronesian culture may not be obvious to visitors, because they have few if any measures with which to compare them.

There is increasing evidence that the international traveller is becoming more discriminating and seeking a tourism experience which is more enriching. In addition, some of the attractiveness of South Seas destinations is being reduced because of problems with:

• ease of access by air from the main visitor origins
• costs of vacations
• adequacy of accommodation (quantity and quality)
• adequacy of facilities
• inadequate levels of awareness of what is available by travel wholesalers and retailers in the visitor origin countries
• insufficient information available to consumers about the various destinations.

The high profile destinations in the region experience few of the difficulties encountered by those Pacific island countries which are endeavouring to establish a viable tourism industry. For most of the island countries, the strategy of emphasising the image of a tropical paradise may be countered by aggressive marketing from destinations enjoying similar advantages – the Caribbean, and the Indian Ocean destinations, and Thai and Indonesian resort areas. In addition, the Pacific island countries face traditional competition from Hawaii and the growing tropical resorts of Australia. The market for beach-based vacations is no longer the sole preserve of Pacific islands. In order to maintain their market share, island countries in the Pacific region may need to emphasise (and even create) additional product advantages, such as:

• the largely unspoilt and non-commercialised environment
• the basic hospitality of the local people
• the historic links with particular European markets
• special activities such as a wide range of marine-based recreation or nature-based education for special interests
• multi-destination travel packages.

There is some evidence of concern among travel wholesalers and retailers that the range, quality and quantity of attractions in many Pacific island countries is insufficient for them to be considered as viable tourism destinations from their perspective. This may mean that either independently or collectively the Pacific island countries need to improve their marketing and promotion.

7. Eco-Tourism

The issue of eco-tourism is not well understood, not only because of lack of clarity with definitions, but also because it has so many different perspectives. A recent study, Journey through a Sea of Islands: A Review of Forest Tourism in Micronesia by Jerry Wylie, (United States Department of Agriculture Forest Sevice, Honolulu, 1994) has identified eight different perspectives of eco-tourism as:

• an activity
• a business
• a philosophy
• a strategy
• a marketing device
• a symbol
• a set of principles and goals
• an experience.
This variety has led to a range of expressions in practice, and to significant differences in strategy and policy. A difficulty facing Pacific Island countries is the interpretation of what tourism activities fall within the description eco-tourism. One danger of the present state of confusion is that some island governments will pursue a strategy of eco-tourism without appreciating completely what is being proposed. Some governments may be responding to the propositions of pursuing strategies of eco-tourism simply because it is advocated in recent global conferences.

Any serious attempt to produce a strategy for eco-tourism should recognise that:

- eco-tourism is becoming a devalued concept, mainly because of the confusion which surrounds it
- eco-tourism is not necessarily synonymous with adventure or alternative tourism
- eco-tourism is a special interest activity and a special niche product
- eco-tourism may have the following characteristics:
  - the participant has some control over the activity
  - the eco-tourism activity is spontaneous, authentic and natural, sensitive to the cultural or physical environments, usually small scale, dependent on low levels of servicing, usually involved with local communities, based on low-technology levels
  - high levels of participant/observer involvement
- eco-tourism is essentially a learning activity.

These attributes need to be set in a context in which the tourism activity is a viable business concept, because it is the private sector which can be expected to conduct the tours, provide the interpretation service, create the information sources, organise the accommodation, and travel, and ensure the cultural or physical environments are not disturbed. The public sector will provide the service of establishing visit regulations, issuing permits, reserving land, and maintaining standards of service.

Thus, eco-tourism should involve a partnership of public agencies and private enterprise to ensure that the experience is value for money spent by the tourist, the experience gained is the experience sought, the enterprise returns value for money invested by the entrepreneur, and the activity is in harmony with the principles of ecological sustainability, monitored by the government.

Eco-tourism should be interpreted as a sub-strategy within an overall tourism strategy. It should be integrated into the broader strategy and should not be considered or operated in isolation. Even if the total strategy is environment-dominated, eco-tourism (whether focused on the environment or culture) should not be the whole strategy. The integrated strategy will need to incorporate:

- a clear statement about what is environmentally attractive in the region
- an assessment of the tourism potential
- a statement about the particular eco-tourism potential
- a management plan to cope with the impact of tourists, recognising types of experiences and activities, degree of accessibility to the sites, sensitivity of the sites and settings, degree of authenticity or naturalness, degree of interaction with adjoining sites, degree of visitor intrusion to be tolerated, and on-site mix of uses.

Eco-tourism should be pursued as a deliberate strategy, not merely as a strategy which is an alternative to mass tourism. In addition, it should be based upon a systematic resource assessment and allocation process, rather than adopted as a response to a popular, largely industry-driven campaign. The sensitivity of the physical and cultural environments should require assessments and plans which are deliberately focused on achieving sustainable development.
D. RESORT PLANNING AND DEVELOPMENT

There may be some confusion about the use of the term resort. In order to clarify the planning implications, it is necessary to differentiate between a single, major hotel-resort complex, perhaps on an island, or a major development within a tourism destination area, and a tourism destination area, in which there may be many hotel-resort complexes.

A resort, and especially the hotel-resort style of independent complex, can be expected to:

- offer rest and relaxation
- provide a base for exploring a region
- provide an ecological area of familiar standards in an exotic setting
- provide an experience of different cultural settings
- provide a managed set of recreational experiences.

The basic design principles should provide a convenient, safe, structured environment, in which the tourist may pursue either a prescribed pattern of activities or an individual programme.

The resort planning process is similar to the general planning process already considered. A properly planned and designed resort can contribute positively to the image and tourism development capability of a destination area. A regional tourism strategy may incorporate a number of integrated resorts into a consolidated pattern of facilities, services and attractions. Alternatively, a strategy may recognise the independent contribution of particular resort, some of which may be island resorts, to the general image of a tourism region. In particular, the integrated resorts will be expected to exhibit the special characteristics of the island nation. For the purposes of tourism planning, it may be appropriate for Pacific Island governments to resist developing resort complexes which are too removed in concept and design from the characteristics of the nation in which they are set.

1. Site planning requirements

Good design is an important aspect of tourism resort development, because it will contribute significantly to the tourist’s perception of the destination and satisfaction with the experience. The scope of planning and design includes:

- siting of buildings, and especially their relationship with the site, the setting and the encompassing environment
- views within the resort and outside
- the use of the particular topographic features of the site
- the use and incorporation into the design of site flora, beach areas (or pool areas if the resort is not on a beach), and water and recreation areas
- the disposition of buildings, density of development, grouping of buildings, and relationships with beach
- accessibility to the site and circulation within it
- conspicuousness of buildings
- choice of architectural style, with a preference for local styles
- the degree of visitor clustering or separation (visitor carrying capacity).

In addition to these external matters, the development requirements include attention to the internal standards of water supply and availability, construction, decor and furnishings, air-conditioning, and effluent and waste disposal.

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a. Site planning process

Resorts and resort facilities are developed to provide satisfaction to a number of different, and sometimes incompatible, experiential requirements of visitors:

- relaxation, peace and quietness
- freedom from "congestion"
- recreation – individual and group
- social gatherings.

The steps in the site planning process are:

- market research – to determine the type of clients to be serviced by the resort (setting resort objectives)
- selection of general locations, considering accessibility, scenic attraction, capacity to be developed, capacity of being serviced by infrastructure, and potential labour pool
- site selection
- concept creation (mindful of the market research)
- preliminary detailed site assessment (accommodating best features of the site, incorporating responses to engineering requirements, and allocation of sites for buildings, spaces, and communication links)
- refinement of the concept and the detailed proposals to achieve disposition of principal activities, disposition of building types, and confirmation of architectural parameters, including design, height, and site use.

b. Site planning requirements

The site planning of a resort proceeds from:

- the creation of an image
- the preparation of a concept plan to achieve that image
- the specification of site development details to match the concept.

A principal planning and design requirement will be to provide a distinctive image for the resort. This feature may be achieved by:

- adapting the plan components to the site (rather than imposing the plan on the site)
- incorporating buildings individually and in groups into the scale of the site, so that the site dominates, rather than the buildings
  - use of local construction materials
- adoption of local, vernacular design styles
- innovative linkages of accommodation service areas, service areas with site features, and “people areas” to “natural areas” to take advantage of landscape features and the climate
  - close proximity of the resort to local villages where mixing with villages is acceptable behaviour.

There are no definite recipes for planning tourist resorts; each situation requires individual appraisal and interpretation.
c. Concept plan

Some of the principles underpinning the concept plan will include:

- contact with nature
- integration with the natural environment
- authenticity in arrangements of buildings, spaces, and access and building styles
- clustering, rather than uniform distribution or isolated pockets of development
- expectations of clients
- size and scale, determined by intention of the resort and its market position.

The basic approach to preparing the concept plan should be to systematically:

- list reasonable alternative concepts and designs
- define the possibilities and constraints
- short-list those alternatives limited by the least constraints
- make a comparative assessment of the short listed alternatives taking into account marketability, competition, and cost implications
- select the best alternative for detailed assessment and preparation of detailed site and building plans.

Practice has demonstrated that concepts must be adaptable to changing circumstances (such as market preference changes), and, therefore, able to accommodate modification without serious disruption to the original concept.

Within the parameters of the basic concept, developer preferences may include:

- protection of panoramic views of distant landmarks
- integration of resort facilities with beachside, lakeside or similar physical determinants
- low-rise and low density development, so as to avoid dominating the local landscape with buildings
- clustering of buildings and activities, so as to leave as much of the site untouched by development as is possible
- interpenetration of buildings and landscaped spaces
- providing a resort “centre of gravity”
- variable densities and arrangements across the site so as to avoid monotony and repetition
- providing areas of relief from the extremes of climate
- creating a “natural” landscape if the site lacks one and creating interesting forms if the site has few spectacular features of its own.

Even at the conceptual stage, the design policy should be aimed at overcoming poor natural site and setting features, and at avoiding the creation of an artificial development.

The key features of the concept plan will be:

- harmony with the site
- individuality and image
- arrangement of buildings and activities
- internal access and communication
- opportunities for satisfaction of the experiences sought by the visitors
- serviceability
- implementability
- viability.
d. Site plan

The detailed specifications of the site plan are designed to achieve as far as possible the basic intentions of the concept plan. It may be that in the attempt to adapt the concept to the available site, either some aspects of the concept may have to be forgone or they will be modified so as to become implementable.

Efficiently and appropriately prepared site plans are necessary to ensure that the concept is faithfully implemented, the site circumstances are taken into account at the detailed level, and the planning and construction specifications are adopted. The plan will need to include all development (including natural areas) within the perimeter of the resort:

- buildings
- facilities, and amenities
- non-built-up areas
- infrastructure services
- access points
- circulation system
- landscaping plans.

In addition, the intended long-term use of the entire site must be specified, even though the development may take place in phases. The reason for this is a need to ensure rational future development of the site.

Design manuals and government siting specifications are available in many cases. These are few universal performance standards, and therefore, no precise spatial standards are listed here. Governments should be careful about importing spatial and building standards which have been derived elsewhere and in different circumstances for use in local circumstances. However, such performance standards may be used as convenient starting points, from which purpose-designed national or local standards can be created. The following list only indicates the range of issues for which spatial and construction standards will be necessary:

- Siting of buildings (relationship to beach, space between buildings, clusters, ribbons, isolation, relationship to site landscape features, density, and site coverage)
- Building construction (building materials, design, and height)
- Access (gateways, internal circulation system, and links between facilities.)
- Landscaping (indigenous species, planting patterns, retention of original landscape, transplantation, environment planning to supplement or repair vistas, "natural" corridors, and variation in open and closed spaces.)

It is expected that the site plan will recognise and adjust to the integration of circumstances considered by most visitors to be typical of the tropical life-style and experience. To achieve this, the site plan will need to include:

- a functional and visual relationship between interior and exterior environments, achieved by the resort layout, clustering of facilities, orientation of buildings to use climate advantages, covered passages, arcades, colonnades, and viewpoints
- grouped facilities, recognising the unique site characteristics of topography, flora, vistas, social group preferences, opportunities and variations, and servicing and maintenance efficiency
- simplicity of layout to help the visitor's orientation within the resort, achieved by route systems, clustering of facilities, a "centre of gravity", landscape corridors, and signs.
At the site planning stage, detailed consideration will need to be given to the matter of resort carrying capacity, which will be determined by:

- land space to be developed
- special site features to be conserved
- site coverage allowable
- density
- building forms
- visitor types
- ancillary on-site activity nodes.

In some cases, the price levied on visitors for accommodation and use of the resort may be a determining capacity constraint.

2. Resorts

Some resorts will be independent, isolated, and remote. In such cases, the degree of resort integration will be very high, because most of the visitors' needs and experiences will have to be met within the confines of the resort. The most obvious case is the island resort. In the design of such resorts, the market research, site conditions, and site design potential will need to be compatible. Such a situation does not preclude linkages to other island resorts for complementary services, amenities, and experiences. However, the island resort presents a challenge in planning and design which is different from that encountered by mainland resorts. In particular, the island resort will need to be integrated in its design and range of services and facilities.

What may be referred to as mainland resorts may be fully integrated, needing no other facilities to create a full tourism experience, or may be integrated on-site but dependent on linkages with other resorts, villages or nearby townships, and attractions beyond the confines of the resort to make the tourism experience complete.

a. Resort enclaves

The completely independent resort has been described as contributing to an experience referred to as "parachute tourism", in which the tourist flies into the international airport, spends the vacation at the resort, and then flies home. Such a vacation experience excludes interaction with any environment, culture or amenity which lies beyond and walls of the resort. Governments examining proposals for integrated resort developments should carefully weigh whether this is the experience they would like to see made available.

Part of the fascination in visiting tropical locations should be the interactions which are possible with the local natural environment, culture, life-style and indigenous peoples. Vigilance may be necessary by governments to ensure that tourists are able to experience some of the richness of the destination area. It may be this opportunity which gives one destination competitive advantage over another. This is a particular challenge to integration in tourism planning.

The phenomenon of the resort enclave is becoming common in one of two forms: (1) as an integrated beach resort area, where there may be more than one independent resort hotel and (2) as an isolated, separate self-contained and significantly integrated single resort. The second form is common on small islands.

The basic rationale for the resort enclave includes the need for the following factors:

- a consistent ambience
- a pre-determined or created image and identity
- economies of scale
- coordination of activities, and development styles
- ease of marketing
- preference of tourists for a protected, comfortable, recognisable environment
- managed security.
There are distinct planning advantages with the resort enclave, not only in meeting the preferences of visiting tourists, but also in providing a controlled model which has ease of management. The advantages include the fact that there is:

- a comprehensive plan – in terms of land use and activities to meet the requirements of the tourists
- a balanced plan, in which the various elements achieve harmony in quantitative terms, in spatial distribution of activities, and in relation to the environment
- a systematic plan, in which the tourism impact and tourism demand is spatially concentrated
- an opportunity to create a resort image and identity
- a coordinated plan, especially linking points of entry to the destination area to the resort(s)
- a basis for integrating infrastructural systems and providing services commensurate with tourist needs.

There will be a point of critical mass appropriate for each resort and for a combination of resorts in a resort enclave. For the resort enclave, the critical mass of services, attractions, amenities, accommodation, and transport services will be determined by the occupancy aggregate of all of the resorts in the destination area. It is this aggregation of potential clients which provides the basis for extended quality and quantity of services. For the isolated, integrated resort, the critical mass may be determined by a combination of factors, including the space available, numbers and types of visitors, visitor expectations and requirements, and willingness of the visitors to pay for the services. Attaining a critical mass is important in viable integrated destination resort development.

Each integrated resort may be considered as either an enclave, in which all the requirements of the tourist are met, so that there is no necessity for the tourists to leave the resort once they have arrived; or as a base from which to go out and experience the natural environment, features of the local culture and heritage, and the life-styles and villages of the indigenous people.

b. Island resorts

The common characteristics of island tourism development include the fact that island resorts are

- concentrated in one usually coastal location
- either remote and isolated, or linked in some way to existing townships or villages
- located within convenient driving/flying/ferry time from the principal international gateway
- tending to cluster in precincts along favoured stretches of coastline, along major highway linkages to townships, or at trans-shipment points
- located on sheltered coastlines
- located on accessible off-shore islands or reefs
- often distinguished by their costs, range of facilities, and freedom of access to other islands, and the preferences of their visitors.

For planning purposes, concentrations into one or a few locations is a preferred strategy, so that:

- the environmental setting will be less disturbed, and manageable
- the critical mass can be predicted
- the infrastructure needs can be calculated with some accuracy
- the intrusiveness of tourism can be managed
- the quality of the resort complex can be fitted to the quality of the site and setting.
The development of the island resort may encounter particular problems, including:

- space for expansion
- distribution of buildings and activities
- water supply
- waste disposal
- servicing (labour pool)
- circulation
  - access (to the island)
- sustaining visitor interest and satisfaction.

These problems may be exacerbated if the resorts are on outer islands, unless this isolation is recognised and is built into its image, promotion, and specialisation of attraction.

Some Pacific Island countries have been preparing model guidelines for integrated resort development, with particular recommendations on

- preferred locations
- environmental conservation
- uses of adjacent areas and sites
- siting of buildings and activities
- architectural design
- infrastructure standards
- land tenure arrangements
  - creating an image
- interaction with any nearby villages
- access arrangements.

It needs to be recognised that the basic model of resort development may be generally applicable, but the isolated resort needs special consideration so there is a harmonious relationship between the expectations of the visitor and the amenities and services delivered. In planning terms, the challenge is to achieve integration at the resort site and integration of resorts across islands.