

## INTRODUCTION

### Introduction

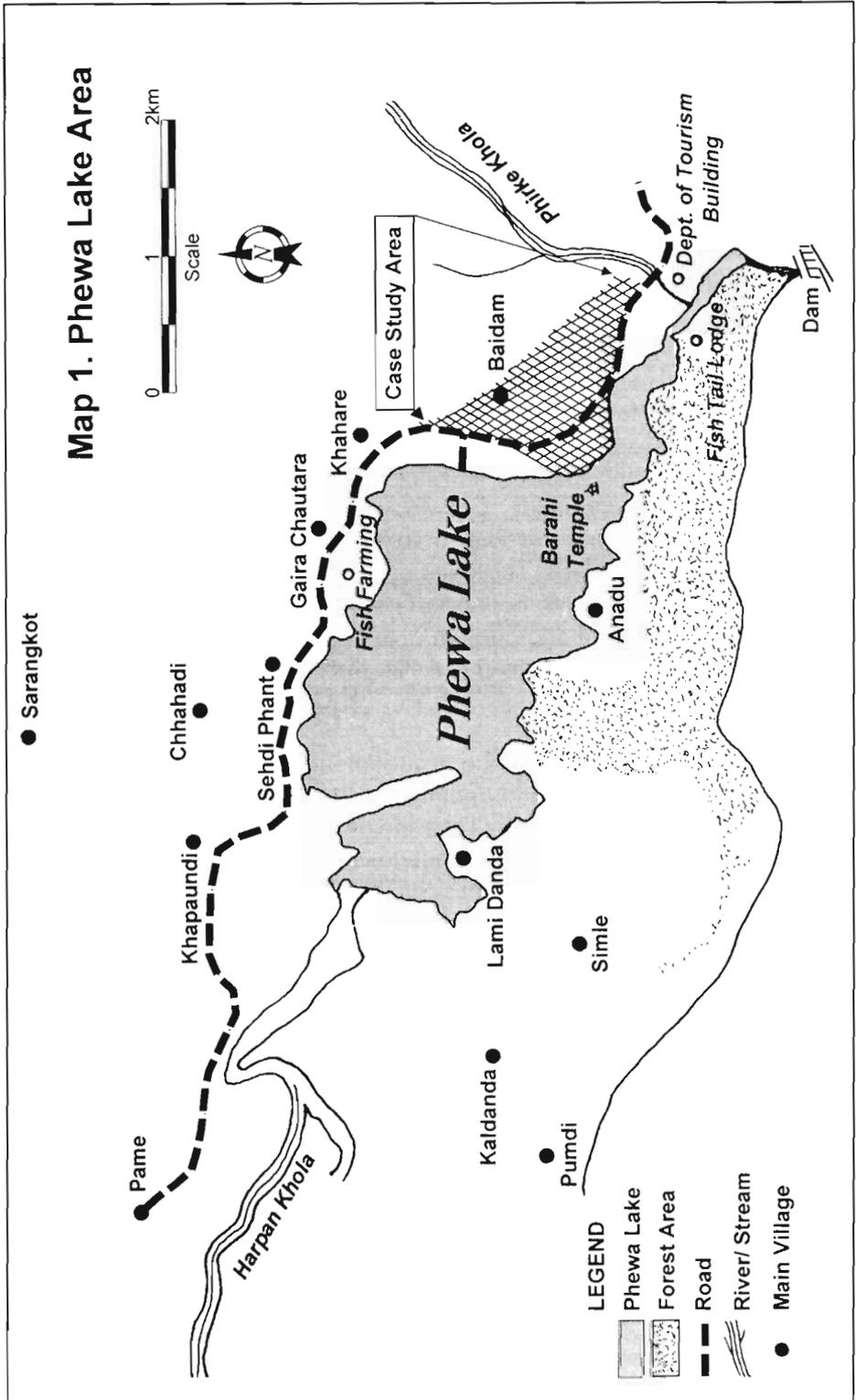
The natural and scenic beauty of Pokhara has attracted many visitors from different parts of the world. The panoramic view of the Annapurna Himalayas and the majestic peak of Machhapuchhre, along with the Phewa Lake, contribute to Pokhara's unique natural beauty. The local economy has also benefited from the inflow of tourists and the private sector has invested heavily to cater to tourists' needs. Pokhara is a rapidly growing city and the second tourist destination in Nepal after Kathmandu. The growth of tourism in Pokhara, and especially in the Lakeside area, in particular Ward Number Six of the municipality (Map 1), has rapidly changed the lifestyle of the people and their surrounding environment. A second factor that has contributed to Pokhara's growth may be attributed to it being the Regional Headquarters of the Western Development Region.

The development, including tourism, that has taken place in Pokhara has, however, been unplanned and spontaneous. Growing urbanisation and unplanned tourism development activities around the Phewa Lake have negatively affected the lake's recreational and amenity values. The deteriorating lakeside environment in physical terms (narrowing of the pathways, haphazard construction, and uncontrolled dumping of sewage in the lake) and the degradation of the assimilative capacity of the Lake are two major man-induced (development) activities that are impacting the environmental carrying capacity.

Concerns about the deterioration in the environment of the lake and its surrounding areas have been expressed time and again. Despite the various studies carried out to address the problems of managing the Lakeside and its watershed and tourism-related activities, adequate action is still to be undertaken. A high-level team headed by a member of the National Planning Commission (NPC) visited Pokhara in 1993 to assess the problems of the environment of the lake and Pame Road adjoining the lake in the north. This resulted in the preparation of the Phewa Lake Environment Conservation Guidelines with support from the International Union for the Conservation of Nature (IUCN). The study was carried out in a participatory manner by consulting various local people, local bodies, and different government institutions and guided by an environmental steering committee under the Kaski District Development Committee Chairman. However, an institutional mechanism to implement the action plan and manage the Phewa Lake area has yet to be developed.

For the purpose of the present study, a segment of the Lakeside area from Tal Barahi Temple to Khahare was selected (Map 1). This is the area most heavily used by tourists and hence is representative of tourism impacts and implications on the environmental, social, and economic carrying capacities of the Lakeside area. The study team visited the site for about a week during which periodic discussions were held with a wide range of people and institutions. A participatory approach (See Box 1) was applied to generate

**Map 1. Phewa Lake Area**



### **Box 1**

#### **Institutions Contacted**

Appointments were arranged with various institutions to discuss the different issues related to the Lakeside area. The discussions were held in an informal manner. It was not possible to bring all members of the institutions together because all were not able to give time. Cross references were made while discussing the issues with members in individual meetings. The following institutions were contacted.

- Chairman, Pokhara Chamber of Commerce and Industry
- Lecturer, Prithvi Narayan Campus
- Proprietor, Hotel Yak
- President, Hotel Association of Nepal, Pokhara Chapter
- Mayor, Pokhara Municipality
- Member, Pokhara Valley Town Development Committee
- Experienced Tourism Professional
- Pokhara Tourism Promotion Committee
- Hotel Dragon
- Secretary, Trekking Agents of Nepal, Pokhara Chapter
- Pokhara Tourism Promotion Committee
- Hotel *Byabasayi* Committee
- Chief, Tourist Information Centre, Pokhara
- President, Nepal Association of Travel Agents, Pokhara
- Member Secretary, Pokhara Valley Town Development Committee
- Visitors

information on a wide range of issues related to the Lakeside environment, tourism impacts and implications, role of existing institutions/stakeholders and their concerns, institutional coordination and linkages, existing gaps and shortcomings in the functioning of these institutions, and perceived roles of different actors and institutions. The list of persons and institutions contacted/interviewed is provided in Annex 1.

### **General Background and Tourism Assets of the Study Area**

#### *General Features*

The Phewa watershed is located in the southwestern corner of the Pokhara Valley at an altitude of 793 masl. Geographically, the area is spread over six Village Development Committees (VDCs) (Sarangkot, Kaskikot, Dhukurpokhari, Bhadoure, Tamagichapakot, and Pumdi Bhumdi), covering an area of approximately 123 sq. km. The length and breadth of the east-west oriented watershed is about 17 and seven kilometres respectively. The water level varies seasonally, depending on the withdrawal of water for power generation by a 1.00kW station located at the tail-end of the southeastern corner of the lake, irrigation, and the water inflow rate. The mean annual water inflow is about 9.2m<sup>3</sup> per second and the minimum is one cubic metre per second. The outflow occurs at Pardi dam where two canals divert water to irrigate 320ha of land. The average depth of the lake is about 8.6m and its maximum depth is 19m (IUCN 1995a). It extends about four kilometres northwest to southwest and is about two kilometres at its widest and only 100 metres at its narrowest. The surface area of the lake is about 443ha. The water storage capacity is about 46

million cubic metres. The south-facing slope of the watershed is comparatively gentler than the north-facing slope. Panchase is the highest ridge of the watershed.

### *Vegetation*

In the watershed area an estimated 50 per cent of the total land is under agriculture and 25 per cent is under forest. The vegetation is dominated by broad-leaved forests constituting 98 per cent of the total forest area of the watershed (5,393ha). About 38ha of the forest area have undergone degradation. Agriculture covers about 82 hectares. The major vegetation types found in the watershed include marshy vegetation, submerged and floating vegetation, Sal forest (*Shorea robusta*), Sal Chilaune (*Schima wallichii*) forests, katus (*castanopsis*), and others.

### *Wild and Aquatic Life*

There are 17 different types of native fish, four different exotic fish, six species of amphibians, 14 reptiles, 104 species of birds, and 34 species of mammals that depend on the Phewa watershed. Out of the 104 bird species, 14 are migratory. The wildlife, their habitat, and breeding grounds have also been affected to varying degrees due to development around the lake.

### *Socioeconomics*

The total population of the area in 1991 was 31,578 (excluding the town population) of which the male population accounted for 52.3 per cent compared to 49.7 per cent for females. The average family size is six as shown by the socioeconomic baseline survey of the Phewa watershed. The population growth rate in Pokhara municipality is amongst the highest (7.41%) in the country. The population density is about 258 persons per sq. km. *Brahmin(s)* are the dominant caste group (48%) followed by the occupational caste group, (27%) Gurungs (14%), and others (IUCN 1995a).

### *Tourism in Pokhara*

Despite being the second tourism destination after Kathmandu, as well as being the gateway to the Annapurna region, there is very little information on tourism with regard to Pokhara. Moreover, over the last half decade or so, Pokhara has become an important destination to Indian tourists, apart from being a longstanding destination for a large number of international tourists. An estimate indicates that the proportion of Indian tourists visiting Pokhara is more than 50 per cent of the total number of international tourists (IUCN 1995).

Table 1 shows the trend in arrivals of non-Indian tourists in Pokhara. Pokhara received about 64,000 non-Indian tourists in 1995, an increase over 59,000 in 1990 which gives an average annual growth rate of about 1.4 per cent over this period. This indicates

**Table 1: Tourist Arrival Trends in Pokhara**

Years	1990	1991	1992	1993	1994	1995
Tourist arrivals	59,488	62,138	69,049	56,499	59,201	63,750

Source : Pokhara Tourism Office 1996.

**Table 2: Tourist Arrival in Pokhara by Nationality ( 1995)**

Nationality	Japanese	American	British	Austrian	German	French	Others	Total
tourist arrival	6,027	5,307	7,812	4,606	5,697	3,617	30,756	63,750

Source : Pokhara Tourism Office 1996.

that overall the tourist flow to Pokhara was roughly 100,000 in 1995. Table 2 gives the breakdown by nationality of international visitors to Pokhara in 1995.

Table 3 provides an idea of existing tourist facilities in terms of hotels and lodges. Further details on the capacity of these facilities to accommodate tourists are analysed in the succeeding section of the report.

**Table 3: Hotel Lodges and Restaurants in Pokhara (1995)**

Number of Hotels and Lodges	Rooms	Beds	Remarks
96 (Registered )	1056	2476	2476
150 (Non-registered)	600	1200	1200
7 (Under construction)	337	674	674

Source: IUCN 1995.