# THE ROLE OF INDONESIAN BOTANIC GARDENS IN EDUCATION AND TOURISM

## Introduction

Indonesian Botanic Gardens consist of four Botanic Gardens: Bogor, Cibodas, Purwodadi and Bedugul. The first three are located in Java, whilst the last one is in Bali. They have different climatic conditions. Bogor is a wet lowland city whilst Purwodadi is a dry lowland area. Cibodas is located at on the slopes of Mount Gede. Bedugul Botanic Garden is the largest (120 ha), whilst Bogor Botanic Garden is the oldest (1817) and the most famous.

People visit the Gardens for various purposes. The majority of them visit the Gardens for recreation. Film shooting is quite frequently conducted in the Gardens. The challenge now is how to capitalise on the public's visit to improve public consciousness of the importance of conservation. With the population growing at a rapid pace and industry expanding correspondingly, this challenge is urgent. Conservation is the responsibility of all members of society.

# Education

Indonesian Botanic Gardens (IBG) have been used as areas of education by a wide range of students, from university level to kindergarten. The number of students who used the Gardens in 1990 are presented in figure 1.

The figures show that the highest number of visits are made by elementary school students, followed by secondary school students. Figure 2 shows that student visits to Purwodadi Botanic Garden are concentrated during the months of May, June and July. In 1990, 28,861 students used Bogor Botanic Garden for their field study. The field study includes plant systematics, horticulture, physiology, ecology, landscape architecture. Social aspects were also studied, for example the social aspects of vandalism in the Botanic Gardens.

Although the university students come from various parts of the country, the majority of them are from Bogor where the biggest agriculture university is located. However, the students who conduct field studies are not only agriculture students and the various universities include schools of chemistry, education, nutrition and



Number in thousands of pupils, students and others visiting Bogor Botanic Garden free of charge between April 1990 and March 1991 (total 83.248)

A School for handicapped children	D Secondary School	G Youth Organization
<b>B</b> Kinder Garten	E High School	<b>H</b> Official Visitors
C Elementary School	<b>F</b> University	Others

religion. For general information on basic botany and taxonomy, the Gardens provide some guides. Light microscopes are also available. Field studies are mostly one-day visits. Longer visits are needed if the students want to collect data for their scientific papers. Libraries are available in each Garden and 50% ticket reduction is given to the students (figure 1).

### **Facilities**

The educational facilities in Indonesian Botanic Gardens need improvement. Information about the Gardens' plant collection, for example, is still very limited. Explanations about the need for plant conservation for human survival would be more effective if it were carried out using a well planned slide show. Our libraries conserve some antique literatures, but up-to-date books and journals are needed. Each Garden also has a guest house which can be used when visitors want to stay in the Garden.

#### **Tourism**

Indonesian Botanic Gardens have been attractive to domestic as well as international tourism with the number of tourists reaching 923,027 a year. The proportion of tourists visiting Bogor Botanic Garden is presented in figure 2. Their countries of origin are given in table 1. The majority of international tourists are from The Netherlands (26,304).

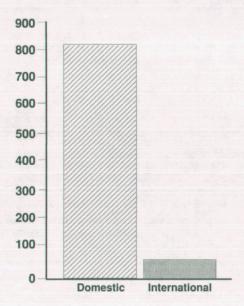


Figure 2

Number in thousands of domestic and international visitors to Bogor Botanic Gardens between April 1990 and March 1991 (total 871.682) The domestic tourists come into the Gardens mostly on Sundays or holy days. But the maximum number of visitors is reached during Iedul Fitri period (similar to Christmas) or Galungan in Bali.

Bogor Botanic Garden is attractive not only because of its beauty, but also because of its plant collections, its Dutch cemetery, which needs some improvement as a memorial of the pioneering spirit of Dutch people, and its historical background.

Tourists find interesting many of the historical plants grown. For

**Table 1**Number of International Visitors to Bogor Botanic Gardens between April 1990 and March 1991

Countries	Numbers
Japan	4.526
Taiwan	4.074
Singapore	941
Malaysia	967
Hongkong	455
Korea	1.196
Thailand	392
Philippines	92
India	281
Brunei	113
Germany	6.964
Netherlands	26.304
France	2.229
Austria	406
Switzeland	1.574
Belgium	557
The United Kingdom	1.112
Italy	539
Spain	150
USA	1.098
Canada	315
Latin America	79
New Zealand	211
Australia	1.248
Africa	70
Sweden	97
Others	1.896
Total	57.956

example, the specimen of *Elaeis guineensis* which was brought from West Africa and planted in Bogor Botanic Garden in 1848 and which became the mother of oil palm in South East Asia. Also of interest is the collection of timber trees (one of Indonesian major exports). Although the presence of tourists in Bogor has been assumed to have a positive economic influence on the city, it has never been studied.

Botanic Gardens of Indonesia, Kebun Raya, P.O. Box 110, Bogor, Java, Indonesia