

WWF,  
가  
Nicole WONG,  
WWF, Hong Kong

1.1 가 (ESD) 가?

*ESD* 가 ,  
가  
가  
가  
*(undertaking)* .

1992 21 가  
21 36  
가  
10 가  
2002 57  
2005 2014 10 가 UN 10 (UN Decade  
of Education for Sustainable Development, DSED)  
가 가 . DESD

ESD (stakeholder)가  
가  
가

## 1.2. WWF ESD

WWF ESD가 가  
ESD .  
1981 , WWF 가  
, WWF  
1984 (Mai  
Po) , 1987  
(the Island House Conservation Studies Centre)  
2003 (Hoi Ha Wan Marine Life Centre)  
WWF  
WWF ,  
( , , ), SAR(  
) WWF  
EDS 가 5

## 1.3. WWF ESD

ESD ,  
WWF .

(local level) :

(formal education) :

(non - formal education) :

(informal education) :

(regional level) :

가 (multipliers)

( 가 ) (Deep Bay)

Shenzhen

- ( )

### 1.4 ( )

80

‘ (Learning in the field) ’ . WWF

#### 1.4.1 (Mai Po) ESD

가, ESD  
가 ,  
가  
4 : , ,  
가 ,  
가 가

A.

1985 ,  
Mai Po/Inner Deep Bay가 1995

*Deep Bay*

*Deep Bay*

*Deep Bay* 가

.  
가 !

5km

4 - 6

**B.**

1993 < >(the Wildfowl  
and Wetlands Trust :WWT)

2km

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가

**C.**

1986

( ) 가 가

06 - 07 4,090  
40 가 가 400  
ESD  
300 100

1.4.2. ( )

A.

3  
WWF

가

B.

가 1980 ( )

1994

1.4.3 (Hoi Ha Wan) ESD

WWF 1998

가 8 , 1996 7

, WWF ‘ , .

. 2004 가

A.

가 . 3

가 가? 가 가?

B.

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4 - 6 “

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2007 11  
 , WWF

### 1.5

, WWF

가

#### 1.5.1

##### A. Ocean ' s 10 programme

, WWF

가

10 public awareness campaign

10

. 2005

3

가

. 10

가

가

3

가

##### B.

:

(Humphead wrasse)

Humphead wrasse

가

가

가

, WWF

가

가

WWF, IUCN, TRAFFIC , 가 .  
the IUCN ,  
2004 CITES II 가 ,  
가가 .

**1.6**

WWF ( ) , 가 ,  
, WWF  
( ) .

**1.7 ( )**

WWF ,  
가 .  
WWF 5 .

26 WWF , , , , ,  
CD-ROMs, , 100가  
. WWF < >  
< > .  
, WWF .

**1.8.1.**



가 , WWF

WWF HK

### 1.9 ESD

가 WWF

가

, WWF NGOs, WWF

가

### 1.10. 가

가 WWF

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# WWF Hong Kong

## Education for Sustainable Development Program

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### 1.1 What is Education for Sustainable Development (ESD)?

ESD is a dynamic and expansive undertaking that envisions a world where every person has the chance to benefit from educational opportunities and to learn the lifestyles, behaviours and values necessary to create a sustainable future.

UNESCO

The UN Conference on Environment and Development in Rio De Janeiro in 1992 gave a high priority in its Agenda 21 to the role of education to achieve sustainable development. Chapter 36 of Agenda 21 emphasized that education is a driving force for promoting sustainable development and building people capacity to address environment and development issues. Ten years since Rio, education continued to be regarded as the foundation for sustainability. The United Nations General Assembly in its 57th Session in 2002 proclaimed the UN Decade of Education for Sustainable Development (DESD) from 2005 to 2014. UNESCO is the lead agency. The basic vision of the DESD is a world where everyone:

- is the stakeholder in the process,
- enjoys equal opportunity to benefit from life wide and life long education to acquire the positive values
- behaves and has a lifestyle towards a sustainable future, and
- contributes towards a positive social transformation.

### 1.2 WWF Hong Kong ESD programmes

WWF Hong Kong believes that weaving ESD as a thread from early learning stage to

higher education institution will maximise its impact to achieve the sustainable future. By offering various learning opportunities through our education programmes and building partnerships with stakeholders, we seek to encourage stronger commitment from individuals to take responsibility to protect our precious natural resources.

Since 1981, WWF Hong Kong has been working hard to promote environmental conservation. Sustainable Development is identified as one of the key strategies for long term conservation, and WWF Hong Kong has been actively committed to promoting environmental themed education programmes since starting its work at the Mai Po Marshes Wildlife Education Centre and Nature Reserve in 1984, the Island House Conservation Studies Centre in 1987 and the Hoi Ha Wan Marine Life Centre in 2003. There is a WWF Hong Kong Education Committee supervising education programme development. Committee members include the WWF Hong Kong staff, professors and lecturers from various universities in Hong Kong, and representatives of the Education Bureau, Agriculture, Fisheries and Conservation Department, and the Environmental Protection Department of the Hong Kong SAR Government. The committee provides consultation to develop five-year education strategy which provides guidance for the future direction of WWF Hong Kong's ESD works.

### **1.3 WWF Hong Kong ESD Programme inputs**

ESD is a life-long process and with reference to the wide variety of audiences and settings, WWF Hong Kong has identified and formulated following potential education inputs.

Local level:

- Implementation of Formal Education for school students in Hong Kong

- Education centres operated to promote Non-Formal Education (centre-based programmes for organised groups) in Hong Kong for public participation

- Informal Education (audiences outside, organised groups in the community) implemented in Hong Kong through media and annual events

Regional level:

- Education Centres operated to organise training courses for capacity building of both

local and overseas multipliers

Education implemented in Shenzhen to promote community action to conserve the Deep Bay Ramsar Site

Provide training and consultation for interested nature reserves which located along the East Asia – Australasian Flyway. Specifically, the works focused along the coast of southern China.

## **1.4 Education Centre based programmes (Formal and Non-formal Education)**

In early 80s', Environmental educators and the Hong Kong SAR Government's Education Bureau identify 'Learning in the field' as an indispensable component of the overall curriculum. The great strengths of the WWF education centres, are that they provide a natural setting and enrich the learning experiences of students and the general public.

### **1.4.1 ESD Programmes at Mai Po Nature Reserve**

Education in the field is an important hands-on experience. Hence, Mai Po Nature Reserve is a very good outdoor classroom for promoting ESD. By visiting Mai Po Nature Reserve, audiences have the chance to learn about what makes an area a nature reserve, its biodiversity, the functions it offers for both people and wildlife, the threats facing it, and the importance of wetland conservation.

In Mai Po Nature Reserve, special visit programmes have been developed to fulfil the needs of different audiences. Visitors can be classified into four main categories: Secondary School Groups, Primary School Groups, the General Public, and the Disabled. Full-time Education Officers guide the school groups in weekdays, while Part-time Interpreters, usually university students, guide the public groups in weekend and public holidays.

#### **A. Secondary School Visit Programme**

The visit programme for secondary school groups was first organised in 1985 to promote

an understanding of, and interest in wetland conservation. When the Mai Po/Inner Deep Bay was designated as a Ramsar Site in 1995, the visit programme was refined to focus on arousing school visitors' awareness of the importance of wetlands and the conservation of the Ramsar Site through an issue-inquiry approach. Altogether, six different modules have been developed for secondary school groups. These are:

Wetland Ecologist

Urban Planner @ Deep Bay

Mangrove Ecology in Deep Bay

Sustainable Development @ Deep Bay

Wetland Encounter

Who wants to be a Wetland Reserve Officer?

Each of these programmes is closely linked with the secondary school curriculum (geography, biology, and liberal studies) to enhance the integration of the field learning experience with classroom education. All visitors are guided along a 5 kilometres trail and the visit programmes last for four-hour to six-hour long in order to fit in with school administration needs.

## **B. Primary School Visit Programme**

The primary school visit programme was developed in 1993, with assistance in staff training and programme development from the Wildfowl and Wetlands Trust (WWT), UK. The programme aims to enhance student interest in, understanding of and concern about wetlands and their conservation. The programmes are conducted along a two kilometres trail and last for three-hour. In comparison with the secondary school programme, a shorter trail was selected for primary school groups with reference to their physical ability. Three modules specially designed for this target group include:

The Story of Birds

Wetland Detective

Summer Insect Watch

Natural interpretations, bird watching, and interactive environmental games are the main contents of the visit programmes. The programmes are not specifically related to subjects of the primary school curricula, but are meant to teach young children an appreciation of the environment and a concern for nature conservation through a fun, first-hand learning experience.

### **C. Government subvention**

The Hong Kong SAR Government's Education Bureau first committed itself to support the education programmes conducted at Mai Po Nature Reserve in 1986. This was so as to address the problem of an insufficient number of field studies centres in Hong Kong, and to support teachers so they can fulfil the requirements of the secondary school curricula (mainly related to biology and geography).

The Education Bureau supports the programme by offering subvention for services provided to an agreed quota of school groups. The subvention covers the programme's operation costs for Education Officer staffing and a portion of the cost for general administration and maintenance of educational facilities. The subvention amount for the academic year 2006-2007 was HK\$4,090 per group, with a maximum of 400 groups of 40 students in each group. With the increasing demand for outdoor education programmes, the service provided today is no longer restricted to fulfilling only geography or biology teaching objectives, but instead is designed to integrate ESD objectives with various subjects in the formal curricula. The extension of the educational services to primary school groups is well supported by the increasing recognition of the importance of environmental themed education in formal education in Hong Kong. The reserve now provides the service to 300 secondary school groups and 100 primary school groups every year.

### **1.4.2 Non-formal Education Programmes (centre-based for organised groups)**

## **A. General Public Visit Programme**

Visit programmes are mainly organised for the general public during Weekends and Public Holidays. The three-hour guided visit is intended to arouse community support for wetland conservation. WWF Hong Kong's Education department provides support to run training programmes for a group of 25 Part-time Interpreters, who are mainly university science undergraduates, to guide the public visit programmes. Interpreters receive a subsidy for each guided visit. Recently, various themed and seasonal programmes such as night safari programme are developed to attract wider interested groups.

## **B. Disabled Group Visit Programme**

The idea of offering equal opportunity access for both physically and mentally disabled visitors to enjoy Mai Po Nature Reserve has been considered since the early 1980's. Nearly all of the educational facilities, including bird-watching hides and road-signs, are designed to accommodate visitors with wheelchairs. With funding from private companies, the disabled visitor programme has been serving disabled persons free of charge since 1994.

### **1.4.3 ESD Programmes at Hoi Ha Wan Marine Life Education Centre**

WWF has been working with the Hong Kong SAR Government to establish marine parks and reserves in Hong Kong since 1988. After eight years of active involvement and support - to the Government in drawing up guidelines and enabling legislation for marine parks and reserves, the bay at Hoi Ha Wan was designated as one of Hong Kong's first marine parks in July 1996. In order to promote marine conservation and provide continuing, hands-on environmental education, WWF has created the 'Hoi Ha Marine Life Centre'.

The unspoiled beauty and rich bio-diversity of Hoi Ha Wan provides a peaceful place for recreation as well as an ideal space for learning. It was against this stunning backdrop that the Hoi Ha Wan Marine Life Centre's first marine education programmes were launched in 2004. The programmes are designed to help participants understand more about the

marine environment and to encourage their participation in protecting precious marine resources.

### **A. Secondary School Visit Programme**

Hoi Ha Wan Marine Park is an ideal open-air classroom for marine education. These programmes enable secondary school students to learn about the marine environment through on-site interactive experiments and activities. Students are able to learn the importance of marine ecosystems and the challenges they face, through a series of activities. Three different modules have been designed for different levels of students, each with differing teaching objectives.

Marine Discovery

Who wants to be an Oceanographer?

Who wants to be an Coastal Ecologist?

### **B. Primary School Visit Programme**

Through a series of sensory activities, primary school students discover the natural beauty of the bay 's varying shoreline. The marine discovery experience culminates in a coral -watching boat trip, during which the students are able to explore the pristine coral community protected by the Marine Park. Presently, only one programme called Hoi Ha Detective is designed for Primary 4 -6 students.

The centre has been resumed after renovation in November 2007. In view of the continuous demand for on site marine education programme, WWF will develop more tailor make programmes for different target audiences.

## **1.5 Outreach and annual Event**

Although we maintain our centre-based programmes, our strategic objective is to widen the range of recipients so that more individuals can be exposed to the wetland



conservation message. Education Officers regularly present conservation talk in school and public venues. To celebrate annual conservation events like World Wetland Day and World Environment Day, WWF Hong Kong organises different activities and events at public venues to spread the message to wider community.

### **1.5.1 Selected examples of public awareness campaign**

#### **A. Ocean ' s 10 programme**

In order to educate the public about the biological heritage, WWF and a team of local and international experts chose 10 local marine species to be the heart of the Ocean ' s 10 public awareness campaign. This three-year programme, launched in 2005, offers a variety of interactive educational activities and events to engage the public and to encourage participation in environmental protection activities. Each of the ten has its own unique story to tell, and between them they represent an array of biodiversity and marine habitats. Collectively, they also highlight several different conservation issues for which public awareness is paramount. In the past three years, over 200,000 individual joined the activities of the campaign.

#### **B. A Campaign to Save Big Fish – Humphead wrasse**

Humphead wrasse is one of the world ' s largest and most distinctive coral reef fishes. Due to high demand in the market, individual fish are caught as juveniles before they have the opportunity to reproduce. To arouse the awareness of general public, WWF joined with Hong Kong ' s Ocean Park in a programme to raise awareness about it ' s sustainability in the wild. Park visitors were invited to join online signature campaign seeking greater protection of the species. Following advocacy work by WWF, IUCN, TRAFFIC and others, this species is listed as Endangered on the IUCN Red List, primarily due to overfishing in the Asia-Pacific region. The species also was added to Appendix II of CITES in 2004, meaning that a permit is required to import the fish into Hong Kong.

## **1.6 Multiplier Training Programme at Island House Conservation Studies Centre**

Apart from training programmes for local pre-service, in-service teachers and organisation group leaders, WWF recognise the importance of fostering greater interaction between Hong Kong and the Region. We aim to build up skills and capacity of the education sector, reserve officials and management authorities in South China through the development of education strategies, the provision of training workshops and mentoring programmes. By cooperation with other organisations, WWF aims to create opportunities for exchange and sharing between the local education sector and their counterparts from the region.

## **1.7 Environmental Education Materials Development (to support Formal EE)**

In addition to organising student field visit programmes, WWF Hong Kong regularly trains teachers on how to use WWF educational materials and how to enhance classroom ESD programmes. These teacher-training programmes are one of the elements to be further strengthened by WWF Hong Kong's five-year Environmental Education Strategy.

Over the past 26 years, WWF Hong Kong has produced more than 100 educational materials, including leaflets, books, slide packs, posters, documentary films, CD-ROMs, exhibition panels, and activity packs. WWF Hong Kong magazines About Life and Panda Club Post are published quarterly to report environmental news. These educational materials are donated to schools, public libraries and related government departments in Hong Kong. With the popularization of information technology, WWF Hong Kong makes use of the website channels to disseminate our conservation message both locally and internationally.

### **1.8.1 Involving Teachers in the Production of Education Materials**

Whenever possible, WWF Hong Kong involves in-service teachers to help develop its educational material. In-service teachers are involved in the design and field-testing of the educational activities. All education packs are linked with the school curricula to

promote and facilitate integration of environmental education with regular classroom lessons. Involvement of in-service teachers in the development of educational material not only helps secure the user - friendliness of the end - product, but the process itself also serves as a learning experience for both WWF Hong Kong Education Officers and the teachers involved.

## **1.9 Partnership with Government and stakeholders in promoting ESD**

Production costs for the educational materials are supported either by local green funds or by the private corporate. The Education Bureau is also an important partner with WWF Hong Kong in promoting the use of ESD materials in Hong Kong. Promotion includes organising seminars, workshops, or field trips for teachers in order to introduce and demonstrate how to use the materials. The educational materials and promotion circulars are sent to schools through the Education Bureau as a Government endorsement of the project to encourage greater attention from the schools. Education Bureau officers also help long - term promotion by introducing the materials to teachers or school heads during their regular school visits to teacher gatherings. Apart from Government supports, WWF also works closely with other stakeholders from the community, including other NGOs, business community and even individual from general public. WWF believes that raising public awareness through education is the most effective ways of creating and maintaining momentum to preserve and protect the environment.

## **1.10 Further information**

Please feel free to contact WWF Hong Kong ' s Education Officers for further information about our ESD programmes:

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