

10<sup>th</sup> Anniversary Book  
Volume 2



**ENGINEERS  
WITHOUT BORDERS  
HONG KONG  
2008-2018**



## Engineers Without Borders Hong Kong 2008-2018

### 10<sup>th</sup> Anniversary Book

### Volume 2

© Engineers Without Borders Hong Kong Limited 2019

This publication is published for personal and non-commercial use, all or parts of this publication may be reproduced on condition that copyright and source indications are also copied and no modifications are made. Please inform the Engineers Without Borders Hong Kong Limited on the usage of the publication content.

Chief Editor: Edward CW Chan, Chairman, EWB Hong Kong

Editors: Secretariat (led by Lee Siu Hoi)  
EWB Global Citizenship Programme (led by Raymond Lopinski)  
Hong Kong Projects Committee (led by Manual Kwong)  
Humanitarian Engineering Training Committee (led by Horace Mui)  
Overseas Projects Committee (led by Sam Chan)  
Young Members Group (led by Henry Ng)

10<sup>th</sup> Anniversary logo design: Camise Wong, Communication Manager

## CONTENT

---

### **Volume 1:**

Foreword

Engineers Without Borders Hong Kong

Engineers Without Borders International

Hong Kong Projects

Mainland China Projects

Overseas Projects

### **Volume 2:**

Humanitarian Engineering Training

Young Members Group

Humanitarian Engineering Challenge

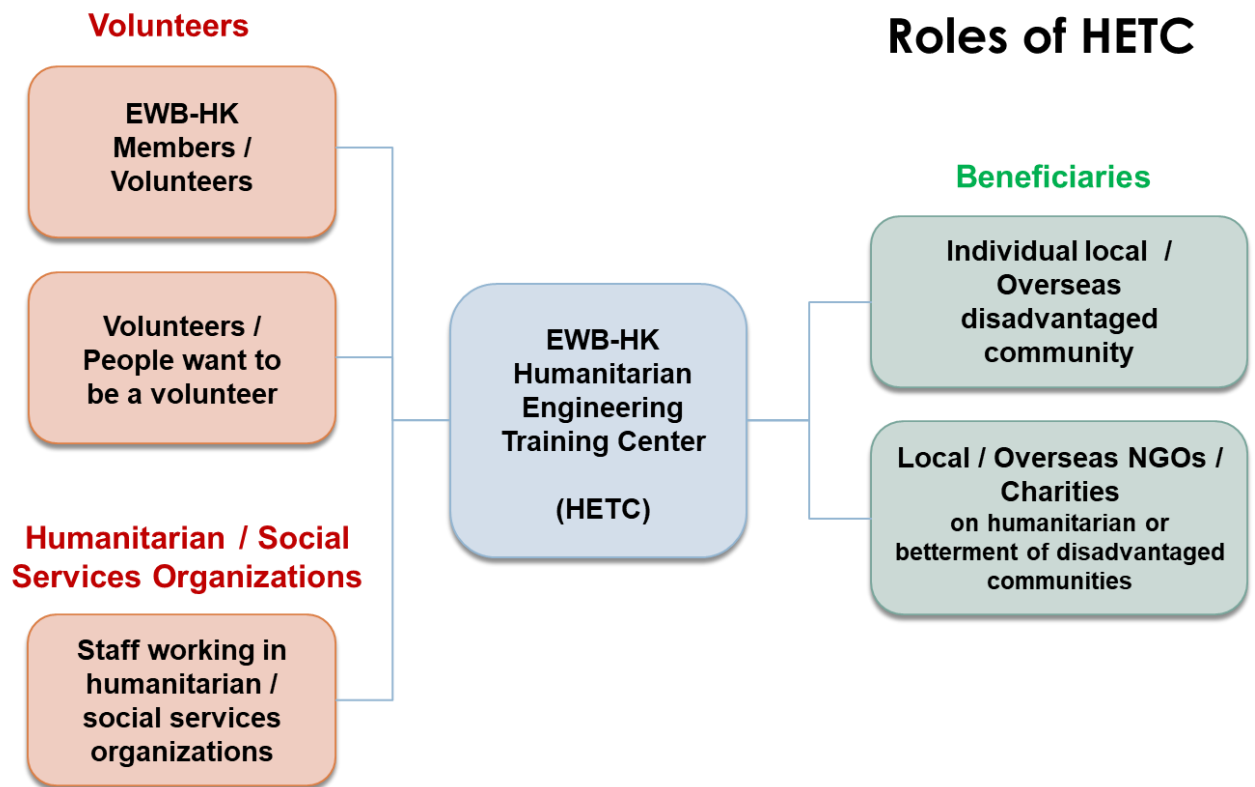
EWB Global Citizenship Programme



**Humanitarian  
Engineering  
Training**



## Humanitarian Engineering Training



### Vision:

To establish a humanitarian engineering resources hub in Hong Kong and serving nearby regions, such that the trained people (whatever background) can equip both basic soft and technical skill and then serving NGOs on humanitarian and social related services.

February 2017

### Objectives of the HETC

Conduct trainings that align with the missions of HETC and address the aspects rendered in the United Nations' Sustainable Development Goals;

1. Foster the capacity building on humanitarian engineering in humanitarian and community services related NGOs;
2. Enhance the technical and non-technical competence of volunteers, that in turn with benefits to the projects managed by EWB-HK and other NGOs;
3. Create a knowledge and skill learning, sharing and transfer culture in EWB-HK;
4. Promote stakeholders collaborations in training course development and for relevant resources supports;
5. Manage training programs in financially sustainable basis;

## Humanitarian Engineering Training

### Training to Volunteers

#### HETC Areas of Focus

Fulfill the visions and missions of

1. EWB Hong Kong
2. EWB International
3. EWB Humanitarian Engineering Training

+ Needs of local & overseas humanitarian / social services organizations



Short Course 2017: Risk Management and Application to Humanitarian Activity



### 基礎義務工作及領袖訓練課程

#### Basic Volunteer and Leadership Training Course

**課程目的:** 透過課程增加學員對義務工作的基本認識，深入思考當中的價值及意義；並讓學員進一步了解義務工作的實用技巧及領袖技巧。

**課程內容:** 1. 義務工作的基本認識 2. 義務工作的實用技巧 3. 基本領袖訓練

**日期:** 2018年2月25日 (星期日) **對象:** 公界人士 ( EWB註冊義工優先 )

**時間:** 2:00pm-6:00pm (共4小時) **導師:** 註冊社工劉思潔

**地點:** 九龍旺角彌敦道388號 **費用:** 全免

**查詢及報名:** 2018年2月18日 (星期日) **名額:** 20位

**報名網址:** <https://goo.gl/7rimeh> 或 QR Code 碼。本會將於2018年2月16日(星期三)以前以電郵通知課程報名。

**備註:** 1. 本課程為非牟利活動，旨在為社會人士提供服務，不屬任何商業活動。  
2. 本課程為非牟利活動，旨在為社會人士提供服務，不屬任何商業活動。  
3. 本課程為非牟利活動，旨在為社會人士提供服務，不屬任何商業活動。  
4. 本課程為非牟利活動，旨在為社會人士提供服務，不屬任何商業活動。



Short Course 2017: Basic Volunteer and Leadership Training Course

### EWB Orientation

Partnership HETC and Member Management Committee





## Humanitarian Engineering Training

### Sharing / Talks to Other Organizations

ICE Innovation Summit 2018  
Masterclass for Tomorrow's Global Leaders



ICE Bicentenary Hong Kong  
Innovation Summit  
**Engineering our Future:**  
Masterclass for Tomorrow's Global Leaders  
Saturday 13 January 2018  
Wang Gungwu Theatre, Graduate House  
The University of Hong Kong, Pokfulam, Hong Kong  
(By Invitation)

INSTITUTION OF CIVIL ENGINEERS BICENTENARY HONG KONG



Future City Summit 2017  
Universities in Hong Kong



Future City Summit 2017:

### MEGACITIES

Fast Forward to 2030:  
The New Land of Opportunities and Crisis

- Smart Technology
- Sustainability and Green Living
- Humanitarian Affairs
- Entrepreneurship and Development

Chevening Festival 2017  
Sustainability, Resilience to Climate Change, Smart City



Training Supports  
by Partner  
Organizations





## Humanitarian Engineering Training

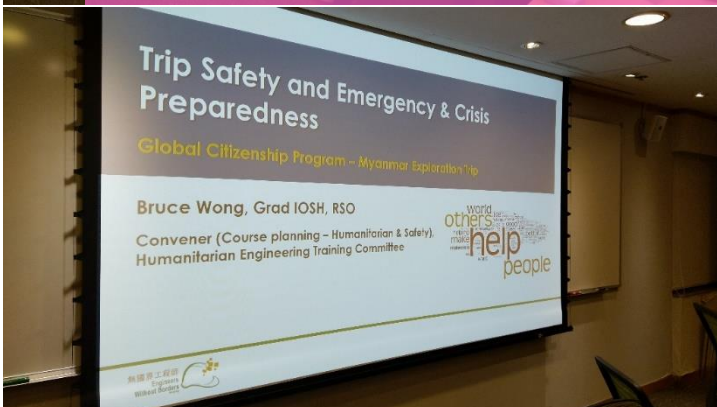
### Training Supports to EWB's Committees



Team Building . Service Skill



Trip Safety . Emergency & Crisis Preparedness



Trip Safety and Emergency & Crisis Preparedness

Global Citizenship Program - Myanmar Exploration Trip

Bruce Wong, Grad IOSH, RSO

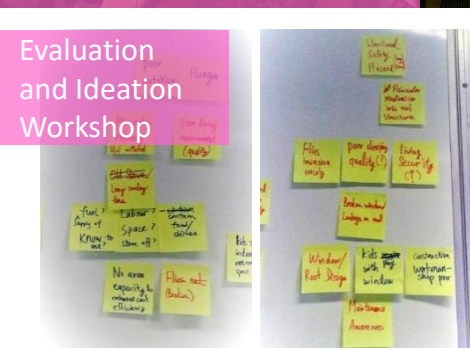
Convener (Course planning - Humanitarian & Safety), Humanitarian Engineering Training Committee



Global Challenges . UN SDGs

Rehearsal of Community Survey

Site & Community Investigation



Evaluation and Ideation Workshop

Findings in Full Moon Visit (2/2)

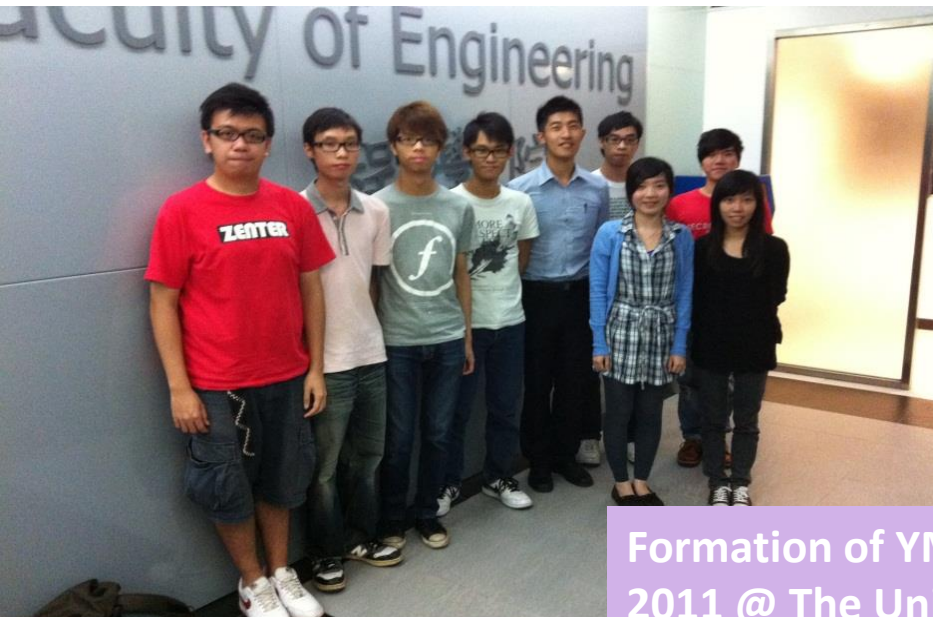


# Young Members Group

## YMG



## Young Members Group (YMG) 青獻社



### Formation of YMG 2011 @ The University of Hong Kong

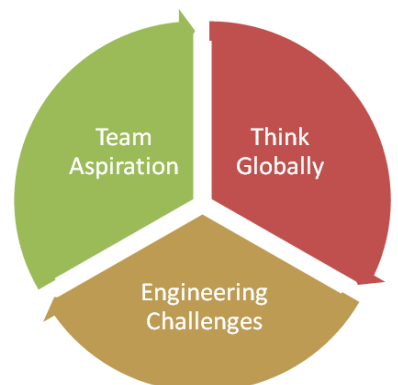
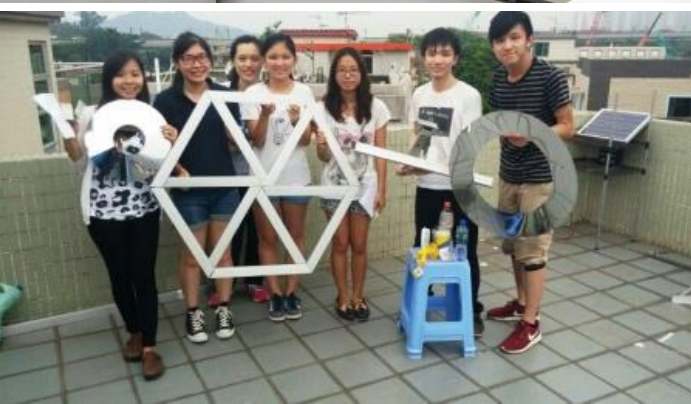


#### Missions:

- Create a sense of excitement and enthusiasm about solving technical development problems within cultural and social context.
- Work with EWB-HK to transfer appropriate technologies to the community.
- Encourage young generation to put the missions of EWB-HK into practice.

#### Slogan of YMG:

生命工程，貢獻社稷  
Enlightened with Engineering,  
Serve the Community





# 情繫川藏深處 康巴藏族農村建設計劃



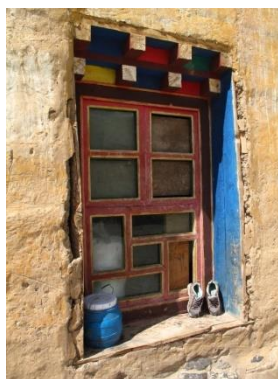
實踐「與民共建」，希望可以教育當地居民可以利用當地的資源，改善當地學習環境及居民的生活。教導當地居民使用簡單的工具，自行為一些設施進行維修。



雖然當地鄉中心亦有辦學，但條件及資源都非常有限，所以村內兒童以前都是輟學在家。為了不讓小孩成為新的藏文盲，當地的活佛先後為這個偏遠落後的小村建設大橋、禪印寺小學及藏醫療站，改善村民的生活環境，提供教學及簡單的醫療護理。



**學校方面：**  
改善學校的學習環境（如照明、桌椅、窗戶、學校外牆等）。運送教學物資（圖書館教員、文具、學習用品等）。



**社區生活方面：**  
教育當地居民基本的地震知識和震後求生方法。



## 行前工程訓練

**工程方面：**  
簡單的桌椅、窗戶維修等。

整個團隊都會為學校進行一些簡單的修葺工程。為使大家在安全的情況下更有效率進行，所以本會特意舉辦兩次行前訓練課程，讓所有參加者都對工作有基本認識。





# 情繫川藏深處 康巴藏族農村建設計劃



A15 二〇一〇年十一月二十一日 星期日  
星島日報 SINGTAO DAILY 每日雜誌 Daily Magazine 維港會

## 港義教天使 為藏民籌款修校

鄧寶儀辭去高薪標準的言語治療師工作，遠走海拔三千七百多米的偏遠藏村義務教學，去年更逐家逐戶游說家長讓孩子上學接受教育。她言辭懇切的探訪，改變了多名孩子的一生。剛返港的她，希望本港的善心人可以支持無國界工程師明年帶隊往該校維修的計畫，同心改善這所偏遠貧困村校的教學環境。  
記者 梅思彤

是前村長的女兒，老師家中有一年老的母親和剛滿一歲的孩子，還要照顧她留下來照顧下的孫子，生活很艱苦，但她對學生很好，生下後一週已馬「回校讀書」。

鄧寶儀坦言，言語治療的技巧在當地也能派上用場，「因為初時小孩都不大懂普通話，我們溝通有一定困難，要用很多肢體動作去溝通，在教學上也要很活動化，例如會透過圖卡教他們自然科學，我也曾用google map和世界地圖，教他們簡單的地理。」

### 逐家游說 讓孩子上學

另一個問題是當地並不重視教育，○五年級校只得二十多名學生，現時也只有百十多名，「當地極度缺乏勞動力，我們仍有大約八成的家庭，看其中一名孩子預覓收工而不能來上學。」鄧寶儀去年逐家逐戶游說這些孩子，游說父母讓他們來上學，結果成功收七、八個小孩子有機會接受教育，「但記得她有一個十二、三歲的小女孩，她的三個兄弟都有來上學，唯獨她沒收不能來，沒想到家訪後兩、三天，她就在學校出現，令我驚喜。」小女孩的學習能力很高，在短短半年時間，已完成了學前班和一年級的課程，現時就讀二年級，成績相當不錯，令鄧寶儀欣慰。

雖然一個女孩子孤身在寒苦之地教書，但鄧寶儀心理上並不孤單，因為有文太的支持，她丈夫是北京人，在志願服務工作，二人婚後一直聚少離多，節節的出口，她與勳身志志於年職普通話的教師，除了能與丈夫相聚外，她更希望能在進修中仍能在進步階段的言語治療工作，雖然被別了當村校，但她仍不避艱難地尋找有心人和志願團體，支援該校的維修工程。

○去年底，在香港任言語治療師的鄧寶儀去了四川省甘孜藏族自治州她鄉旅行，就上了在當地村裡印寺小學任教的一名杭州老師，談到該村的淳樸民風和獨特文化，令她倍感神往，翌年鄧寶儀便到該校探訪，一住便捨不得走，往後每年她都抽空去該校義教，去年更親工在當地任教了三個半月，今年則任教了五個月，八月才返港。

### 淳樸民風 悠然神往

回想起初到該校的情況，鄧寶儀嘴角泛著笑容，「那裏的小朋友很可愛，他們家裏都是種青稞或養牦牛，很多人一輩子都住在這區域，他們大多只講藏文，但會很熱情地拉著你，爭著看你從行李，笑得很甜美。」除了孩子純真的笑容令她難忘外，該校貧乏的物資，顯得維修的校舍，還有那些想上學但沒有機會的孩子，都常常令她牽掛。

「這所學校是 位居於○三年所建，本來只有一名老師，



當地生活艱苦，校舍又破舊，冬天小朋友要在戶外上課，凍著太陽取暖。

## 無國界工程師 助建自來水系統

鄧寶儀的善行也吸引了其他有心人來資助這所學校，無國界工程師今年七月聯同香港遊樂場協會，帶領三十多名本地青少年到該村小學進行簡易維修工程，但短短一週能做的只是初步，故無國界工程師計畫明年向青少年服務委員會申請撥款，再次組織本地青少年於明年七月前往該校進行維修。不過，由於有關撥款只資助本地青少年的旅費及交通費用，隨即守小學的維修費仍需要廣度市民的捐助。

### 須籌22萬

今年七月自費帶隊的無國界工程師土木工程師陳明波坦言，該校有好幾方面都需要維修，「該校的圍牆地基受到破壞，而天花牆紙已剝落，牆身亦不穩定，另外該校電線系統老化小不合標準，希望可重鋪，而且，該校操場亦因破損而凹凸不平。」他指出，由於當地交通不便，運送建築材料的費用較高昂，故完成整個維修工程約需要二十萬元。陳明波說，組織本地青少年去當地修葺，不只可幫到村校，也可香港的青少年得到不少管理、修葺維修資源和幫助別人的有意義。

**捐款帳戶**  
「無國界工程師」捐款帳戶：滙豐銀行 813-225885-001 (Engineers Without Borders)  
請將銀行帳號及回國姓名地址傳真列(852)26330821，以便寄回條，捐款連帶一百元以上可申請扣稅項。  
「援助四川甘孜州雅江縣村『摩印寺小學』校舍維修工作」查詢電話：94887589(謝小姐) 90341083(楊先生)



任言語治療師的鄧寶儀(左)很想改善該校環境，可幸得無國界工程師的幫助，其中陳明波(右)七月曾帶隊前往維修校舍。(當日拜攝)

香港無國界工程師 (EWB-HK) 聯同香港遊樂場協會、西藏自治區青年聯合會及四川省青年聯合會合辦「情繫川藏深處 康巴藏族農村建設計劃」，進入路途遙遠的川藏深處，為當地生活簡樸的藏族兒童服務，義助修葺校園和建設社區。

城市脈搏





## 情繫甘肅

Service Trip in Gansu

## 農村工程服務及絲路文化交流計劃

Engineering Services & Cultural Exchange on the Silk Road

### Project Purposes and expectations

- To build with locals 「與民共建」
- To serve school and students in remote areas
- To facilitate service learning for tertiary students

Location : Gansu Province, China

27 participants; 3 social workers

3 technical tutors

### Experiential Learning

- 1.School Repairing 修葺學校
- 2.Environmental Education 環境教育
- 3.Rural village experience 農村體驗
- 4.Cultural Exchange 文化交流





PROJECT SCOPE FOR COMMUNITY DEVELOPMENT IN CAMBODIA 2015 - 2017

無國界工程師  
Engineers  
Without Borders  
hongkong



Vision

A World of disadvantaged communities empowered by engineering solutions to achieve sustainable development.



Strategy

Develop a comprehensive community improvement plan with support from Professional and NGO in both HK and Cambodia



Overall target

Achieve self-sustainable village from the disadvantaged communities in Cambodia.



Key Actions



Engineering & Support

1 Engineering Support

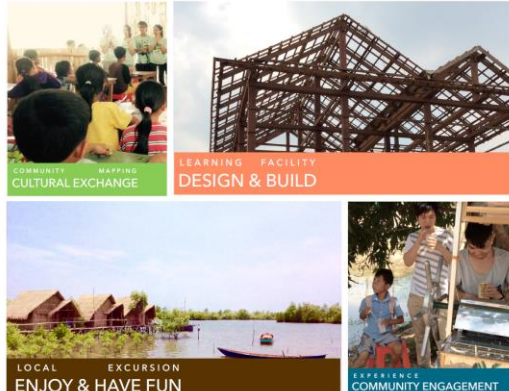


2 Skill Transfer





### Services Trip Engineering x Cultural Exchange Community development in Cambodia 21 - 30 June 2015




**COMMUNITY MAPPING CULTURAL EXCHANGE**  
**LEARNING FACILITY DESIGN & BUILD**  
**LOCAL EXCURSION ENJOY & HAVE FUN**  
**EXPERIENCE COMMUNITY ENGAGEMENT**

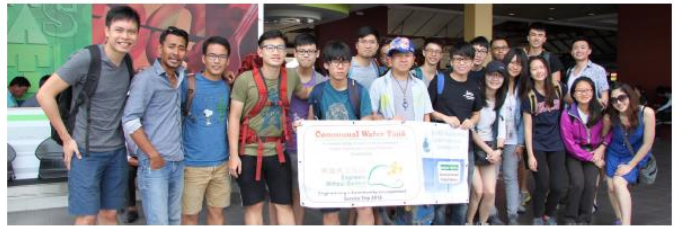
Students of any disciplines, with global vision, apply what you learnt and share DREAMS.

Application: Fill in the form at <http://go2.gd/jrm1x> or scan the QR code

Quota: 20 Students  
Deadline: 30th April 2015  
Fee: \$7500 (\$1800 reimbursed HKUST Student Enrichment Fund)  
Info session: Tuesday 28th April 2015  
Enquiry: [ymg@ewb.hk](mailto:ymg@ewb.hk)  
9802 2892 (Sushi) 5500 2572 (Kenneth)



### Engineer Without Borders Engineering Service Trip 2016 Community Development in Cambodia 東義工程 23/06/2016 - 02/07/2016



Organiser: 無國界工程師 Engineers Without Borders  
Partnering Organisation: 義遊 VOLTRA  
Supporting Organisation: cedars, 香港遊樂場協會 優才發展及交流中心, 香港大學學生服務及發展中心, Hong Kong Playground Association



The water tank and rainwater collection system in 2016



The library bookshelves, tables and chairs in 2015





### Execution Phase

#### Site Formation

- Open Cut for Final Formation level of Water Tank with local construction workers



### Community Works in Cambodia 2016

#### Construction of Blinding Layer

- The rock blocks were placed on the final formation profile
- Concrete was poured to form blinding layer



#### Setting-Out of Water Tank

- The setting-out of water tank and water pipe was indicated and marked-up on the blinding layer



#### Material Stockpile & Preparation



- Construction materials was transferred to the site area
- Cement Paste was mixed



### Execution Phase

#### Construction of Brick Wall



- Construction of Brick Wall
- Canvas Sheet was provided to shelter the brick wall from the heavy rain



#### Construction of Shelter

- Structural Column, Bolting



Before



at the end of the trip, the team constructed water tank with shelter



After



YMG  
Team Building . Learning . Training



**LEADERSHIP TRAINING CAMP**  
Self-understanding Confidence Team-building  
Problem-solving Indoor + Outdoor Camping

8-9/10 (Sat-Sun) Tuen Chung Outdoor Recreation Camp (Indoor camping)  
9-10/10 (Sun-Mon) Pui O Campsite (Outdoor camping)

**\$220** Include: Accommodation, Dinner (Day1+2), Breakfast (Day2+3), Cook sets, Tables, Ex-Ceats, Transportation, Lunch (Day1+2)

Application Link:  
<https://go.sjforms.zj.edu/GU1819aM2>

61438331 (Enquiry EMail) 67012800 (Two Zhou)  
61438331 (Enquiry EMail) 67012800 (Two Zhou)

重新長大  
秋天約定你





# Engineers Without Borders (Hong Kong)

## Young Persons

# 2015~2017

### EWB-HK @ HKUST



### EWB-HK @ PolyU



### EWB-HK @ HKU



### EWB-HK @ CityU



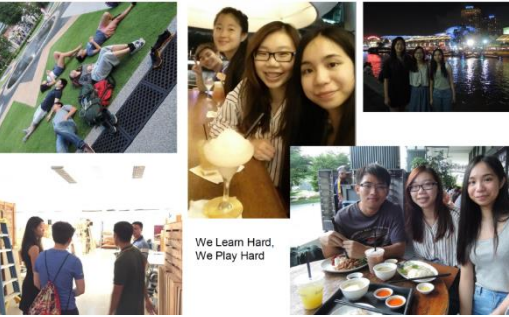
Engineers Without Borders (HK) HKUST Student Chapter



## Young Persons

# 2015~2017

Singapore Delegation Sustainable City in Singapore". Jan 2016

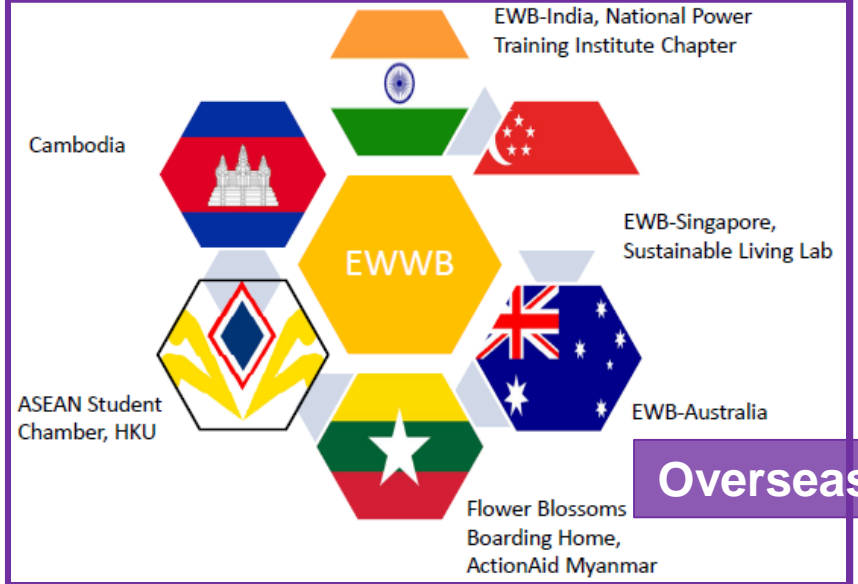


We Learn Hard,  
We Play Hard

Sharing Session Myanmar/Thailand border Community Visit . Dec 2016



Engineering Works Without Borders (EWWB) Team  
無國界工程隊



Joint Sharing Session for Overseas Social Services Project .  
December 2017



Maynmar Delegation "Community Engagement" .  
February 2016



**Young Members**

**Humanitarian Engineering  
Challenge**



## Humanitarian Engineering Challenge 人道工程挑戰

### Survival Tool Contest & Exhibition 2012



1st Briefing session to participants



2nd Briefing session to participants



1st Interim presentation by contest teams



1st Briefing session to participants



Workshops



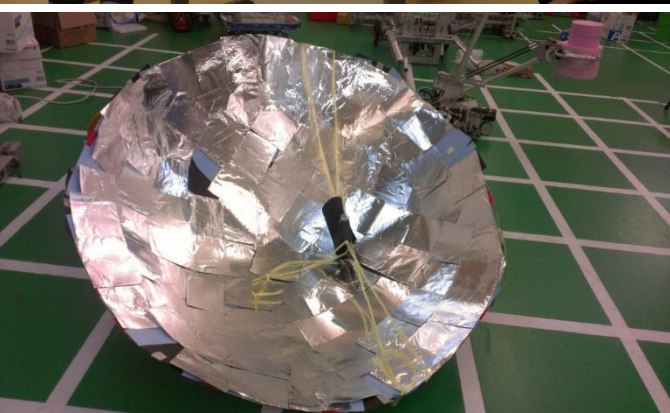
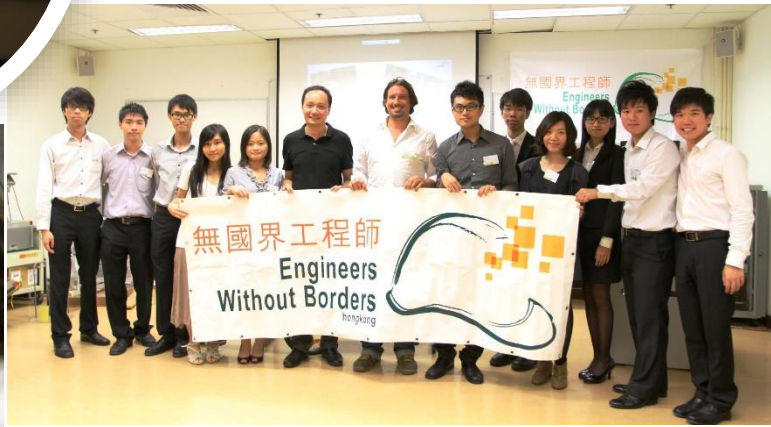
2nd Interim presentation by contest teams



# Humanitarian Engineering Challenge

## 人道工程挑戰

### Survival Tool Contest & Exhibition 2012





## Humanitarian Engineering Challenge 人道工程挑戰



由參賽同學向和富社會企業代表講解參賽作品設計理念

由參賽同學向香港大學土木工程系系主任黃仕進教授講解參賽作品設計理念

由莫理事向香港大學何耀棣體驗學習中心總監高永賢博士講解參賽作品設計理念





## Humanitarian Engineering Challenge 人道工程挑戰

### "The humanitarian engineering challenge"

Almost 3 billion people are still using polluting solid fuel stoves, causing over 4 million deaths a year. A severe issue of such huge scale need effective solutions that enable massive deployment and avoid duplication of effort with a cooperative sharing approach.

### "Open Source Cookstoves Library"

Our response : To build the Open Source Cookstoves Library (OSoCool), an engineer's bookshelf and learning platform that can quickly equip large number of people in the knowledge and skills of designing, adapting, and building clean cookstoves and cookware.



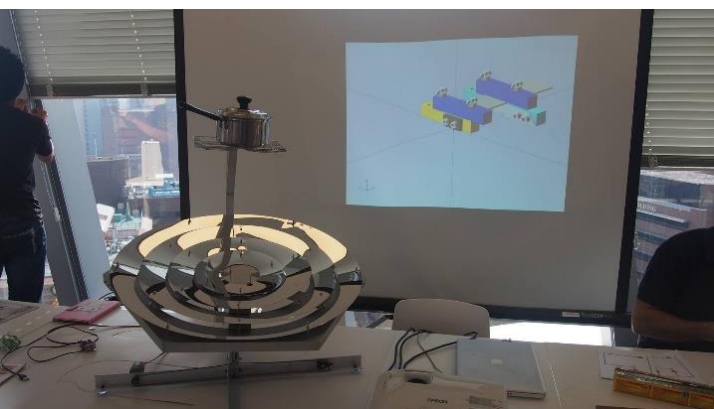
### About HEC

A campaign by EWB-HK to promote clean cookstoves and building an Open Source Cookstoves Library (OSoCool) to achieve massive DIY deployment.

## Humanitarian Engineering Challenge



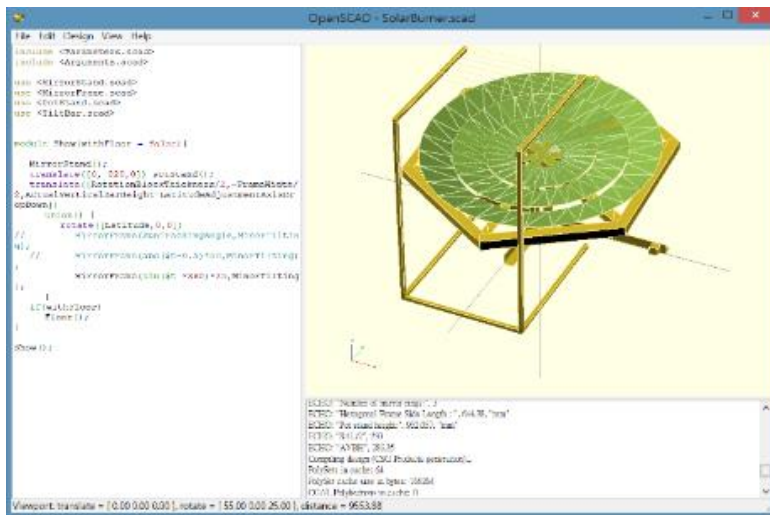
## Open Source Cookstoves Library A Voluntary Commitment to UN



Mini Maker Faire  
October 2014



## Humanitarian Engineering Challenge 人道工程挑戰



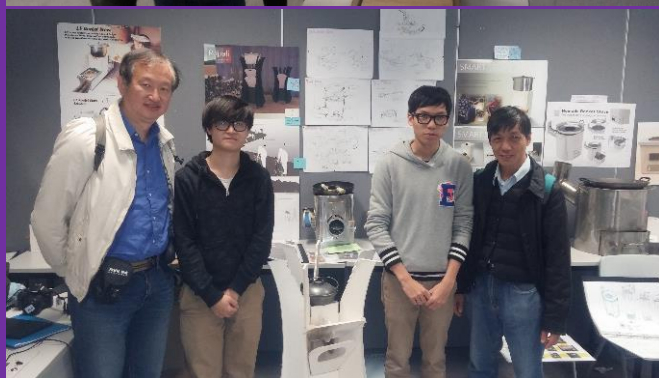
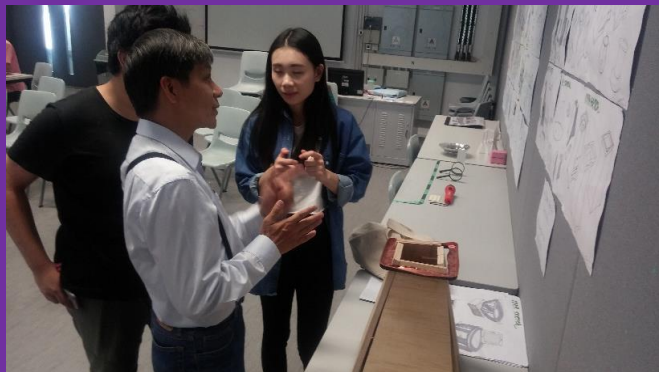
Developed tutorial materials for DIY construction and OpenSCAD 3D design. Team members have acquired relevant skills and gained familiarity with relevant tools and material which can be used in future design and construction projects.

### Goals:

- Introduce the public to the worldwide household air pollution issue.
- Familiarize with and develop tutorial materials for free 3D CAD design tools and 3D printing.
- Promote DIY approach to achieve massive deployment in humanitarian works.
- Develop Open Source Cookstoves Library (OSoCool) to share HEC designs and to build a culture of collaborative design improvement.
- Run workshops to check the feasibility and fine tune design information to prepare for future deployment.

## HKDI Design Project

Conducted lecture for about 90 students in Hong Kong Design Institute (HKDI) on how clean cook stove design could combat the issue of household air pollution for disadvantaged communities as a theme project for their 3-week design exercise. In conjunction with guidance from HKDI lecturers, over 30 stoves have been designed.



## Hackathon

Organized a Hackathon for secondary school students in InnoCarnival 2015. The competition showed that with clear guidelines, students could explore online open source design, make refinements, and document their designs.





**Young Members**

**EWB Global Citizenship  
Programme**

BE A  
**CHANGE MAKER**  
TACKLE THE  
**GLOBAL CHALLENGES**



## EWB GLOBAL CITIZENSHIP PROGRAMME 2018-19



### Programme Goal:

To provide a platform for future engineering leaders to explore the global challenges, to serve the society proactively with global vision, and hence to contribute to the sustainable development goals as global citizens.

Information Package: [LINK](#) or scan the QR Code

Application: [LINK](#) or scan the QR Code

Enquiry: [gcp@ewb.hk](mailto:gcp@ewb.hk)

Application Deadline: 25 November 2018



Information  
Package



Application

### EWB Global Citizenship Programme

is a programme organized by the Engineers Without Borders (Hong Kong) with the supports by the programme partners and supporters



# EWB Global Citizenship Programme

a programme for young persons and organized by the Engineers Without Borders (Hong Kong)



Programme  
Leaflet

## GLOBAL ENGINEER



**Engineers**, who possess technological solutions to global development problems and challenges, play an important role in promoting sustainable development and implementing innovative solutions.

Embed United Nations SDGs in engineering and science education, and strengthen socio-economic-environmental mindset in engineering **to prepare our future engineers to face Global Challenges.**



Engineering and science students graduating today will work locally and globally. It is important to prepare students graduating today for global engagement and the mindset of **Global Engineer**, ready to new challenges in the 21<sup>st</sup> Century.





**Engineers**, who possess technological solutions to global development problems and challenges, play an important role in promoting sustainable development and implementing innovative solutions.

Embed United Nations SDGs in engineering and science education, and strengthen socio-economic-environmental mindset in engineering **to prepare our future engineers to face Global Challenges.**



Engineering and science students graduating today will work locally and globally. It is important to prepare students graduating today for global engagement and the mindset of **Global Engineer**, ready to new challenges in the 21<sup>st</sup> Century.



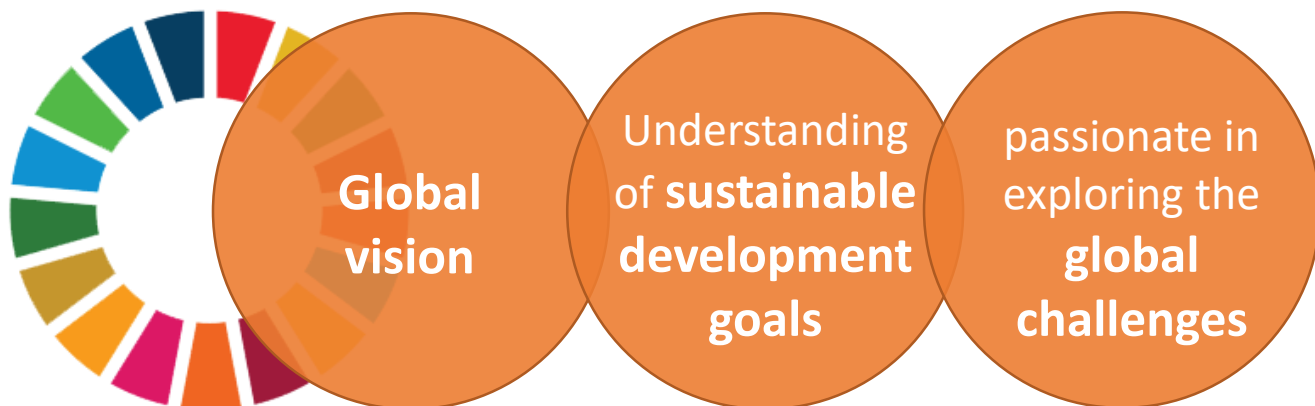
## PROGRAMME TIMELINE 2018-19

Oct 2018	Nov 2018	Dec 2018
<ul style="list-style-type: none"> <li>• Launch of GCP 2018-19</li> <li>• Programme Promotion</li> </ul>	<ul style="list-style-type: none"> <li>• Recruitment</li> <li>• Briefing &amp; Interview</li> </ul>	<ul style="list-style-type: none"> <li>• Orientation</li> <li>• Meeting with Mentors</li> </ul>



Jan 2019	Feb-Mar 19	Apr 2019	Jun 2019	Jul-Aug 2019	Sept 2019
<ul style="list-style-type: none"> <li>• Hong Kong Service Project</li> <li>• Networking Event</li> </ul>	<ul style="list-style-type: none"> <li>• Seminars &amp; Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Hong Kong Services Project</li> <li>• Meeting with Mentors</li> </ul>	<ul style="list-style-type: none"> <li>• Overseas Exploration &amp; Services Project Trip (Myanmar)</li> <li>• Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation &amp; Ideation Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Award Ceremony</li> </ul>

Vision of GCP is to build up the capacity of communities in response to the global challenges and contribute to sustainable development through innovative engineering.



## Implementation to the Real World for achieving SDGs

GCP envisages engineering and science students as well as young engineers would **commit themselves in building a sustainable world with engineering solutions**, and thereby becoming our **future global leaders in sustainable development**.

The GCP Programme offers a real and transformative experience for the GCP participants to plan and implement solutions to engineering-based projects for achieving the SDGs.



Programme Leaflet





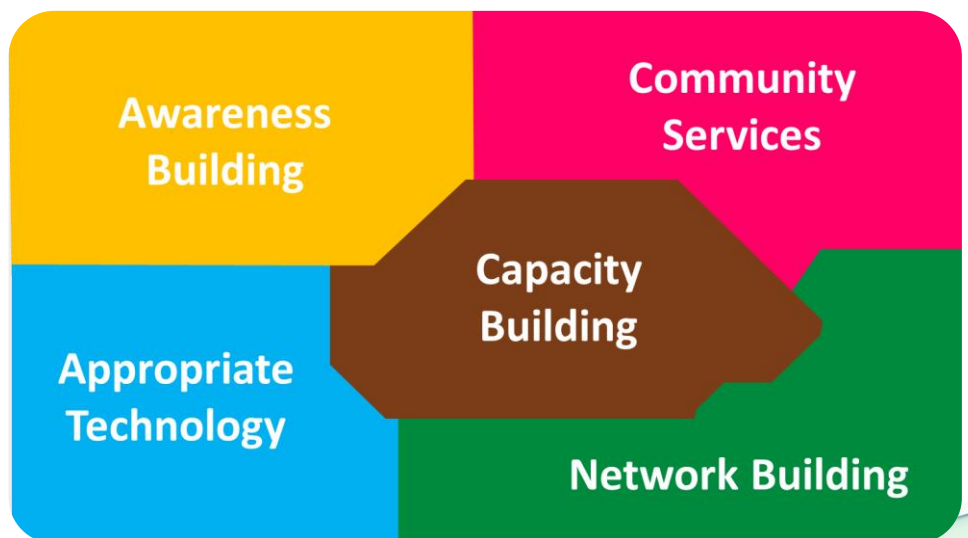
## Core Elements of the Programme

1. *Workshops and seminars in Hong Kong by practising professionals across various sectors*
2. *Participation into Service Projects in Hong Kong and Myanmar*
3. *Exploration to the social, cultural, engineering, public and private sectors in Myanmar*
4. *Post-trip evaluation, ideation and service project planning workshops*
5. *Meetings with mentors from engineering and social development sectors*
6. *Networking with the industry and young persons*

## GCP Programme Approaches



Programme Leaflet





## Highlights of the Programme

Participants from engineering & science students, young engineers

Involved in real and long-term engineering-based community development projects in Hong Kong and Overseas

Involved in cross-disciplines collaborations and build up networks

Find out the root cause from non-engineering aspects, in addition to seeking engineering solutions

Develop wider perspective in global and local issues

Connect with pro bono engineers from the real world

Connect with social services and social development professionals from the real world

Work with volunteers from the real world from diversified backgrounds

Strengthen the leadership and service project planning skills

Fill up the gaps in the theoretical training and conventional service learning





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## 9 REASONS TO CHOOSE THE EWB GLOBAL CITIZENSHIP PROGRAMME

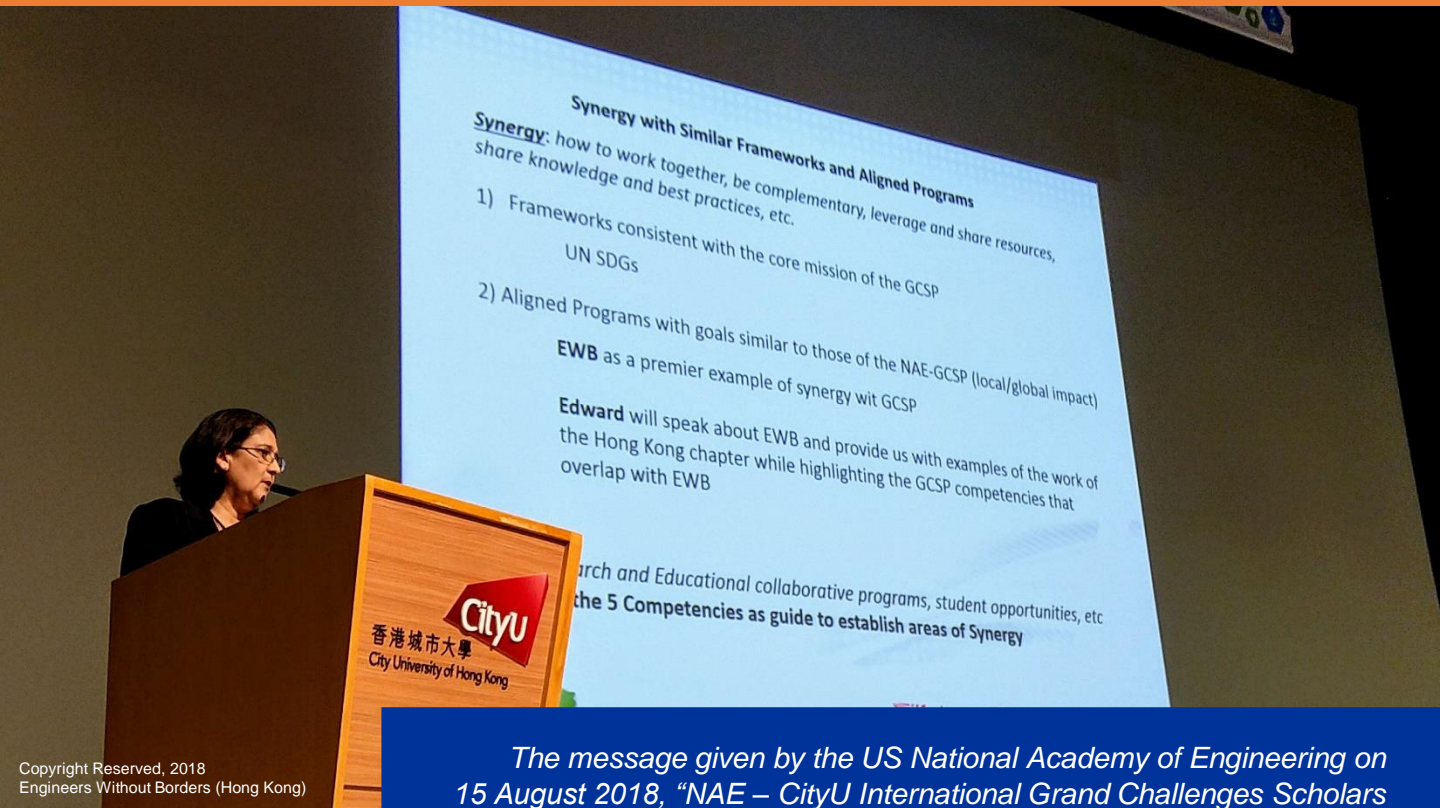
1. ALIGNMENT WITH UN SUSTAINABLE DEVELOPMENT GOALS
2. CAREER BUILDING
3. DIVERSIFIED TALENTS
4. EXTENDED EXPERIENTIAL LEARNING
5. GREAT LOCATIONS
6. GLOBAL CITIZENSHIP
7. GLOBAL DIMENSIONS
8. LEADERSHIP BUILDING
9. UNIQUENESS



Programme  
Leaflet

**EWB Global Citizenship Programme**

is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters



*The message given by the US National Academy of Engineering on 15 August 2018, "NAE – CityU International Grand Challenges Scholars Program Workshop 2018", Hong Kong*

***"..... EWB, as a premier example of synergy with the Grand Challenges Scholars Program (GCSP)"***



# SYNERGY WITH ALIGNED PROGRAMME FOR FUTURE ENGINEERING LEADERS



Programme  
Leaflet

**EWB Global Citizenship Programme**

is a programme organized by the Engineers Without Borders (Hong Kong) with the supports by the programme partners and supporters



## Awareness Building

**11 SUSTAINABLE CITIES AND COMMUNITIES**  
**10 REDUCED INEQUALITIES**  
**17 PARTNERSHIPS FOR THE GOALS**

Awareness Building is developed based on the United Nations Sustainable Development Goals as framework

**3 GOOD HEALTH AND WELL-BEING**  
**4 QUALITY EDUCATION**  
**6 CLEAN WATER AND SANITATION**  
**7 AFFORDABLE AND CLEAN ENERGY**  
**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**  
**13 CLIMATE ACTION**



## Community Services

Community Survey to disadvantaged communities  
Site safety and environmental investigation  
Front-line services, e.g. caring and visit to local community, construction and improvement works

## Appropriate Technology

Access to Energy and Clean Water .  
Resilience . Safety . Flood Mitigation .  
Green & Healthy Building . Living Hygiene .  
Geospatial System for Disaster Prevention .  
Construction and Infrastructure



## Network Building

NGO and enterprise with social mission  
Aided-organizations, public & private sectors  
Practising engineers and professionals  
Engineering and educational institutions  
New friends in Hong Kong and Overseas

## Capacity Building

Global challenges . Relationship between Engineering and Society . Social, economic & environmental factors affecting the world . Culture, History and Heritage of the developing world







Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# AWARENESS OF URBANIZATION AND THE GROWTH OF URBAN SLUM

## 11 SUSTAINABLE CITIES AND COMMUNITIES



MAKE CITIES AND HUMAN SETTLEMENTS  
INCLUSIVE, SAFE, RESILIENT AND  
SUSTAINABLE

MORE THAN HALF OF THE WORLD'S POPULATION IN 2014 LIVED IN CITIES, AND WILL GROW TO ABOUT TWO-THIRDS OF HUMANITY BY THE YEAR 2050.

WE HAVE TO TACKLE THE CHALLENGES OF ENERGY AND WATER ACCESSIBILITY, ENVIRONMENTAL HYGIENE AND RESILIENCE OF SLUM SETTLEMENTS, AND INVEST IN PUBLIC AWARENESS.

### EWB Global Citizenship Programme

is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters



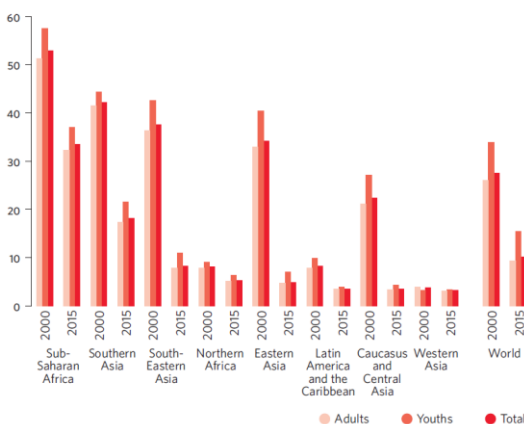


Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# AWARENESS OF URBANIZATION AND DWELLING DISPARITIES



Proportion of employed population living below 1.90 US dollars a day, total, youth and adults, 2000 and 2015 (percentage)



AMONGST THE  
WORKING POOR,  
YOUNG PEOPLE AND  
MINORITIES ARE  
MOST LIKELY TO LIVE  
IN EXTREME POVERTY.

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*

## BEHIND THE SCENES

Copyright Reserved, 2018, Engineers Without Borders (Hong Kong)

# AWARENESS OF BOTH EXTREME POVERTY AND WORKING POVERTY

## 11 SUSTAINABLE CITIES AND COMMUNITIES



MAKE CITIES AND HUMAN SETTLEMENTS  
INCLUSIVE, SAFE, RESILIENT AND  
SUSTAINABLE

HAVING AN APARTMENT DOESN'T  
MEAN YOU AREN'T LIVING IN  
POOR CIRCUMSTANCES.

HAVING FULL-TIME JOB(S)  
MIGHT NOT BE ENOUGH FOR  
A FAMILY TO AFFORD A  
DECENT PLACE TO LIVE IN.

---

### EWB Global Citizenship Programme

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# FLOURISH FRIENDSHIP, UNDERSTANDING & NETWORKING FOR SERVING THE COMMUNITIES

PARTNERSHIP WITH ORGANIZATIONS WITH  
SOCIAL MISSIONS,  
TO SERVE THE DISADVANTAGED COMMUNITIES  
IN HONG KONG AND MYANMAR.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## ENGINEERING-BASED SERVICE PROJECT PLANNING - SITE, ENVIRONMENTAL & HOUSEHOLD SURVEY

UNDERSTANDING THE ROOT CAUSES OF PROBLEMS IN ENGINEERING AND NON-ENGINEERING (SOCIAL, ECONOMIC, POLITICAL) CONTEXTS, ACTUAL CONDITIONS AND REAL NEEDS OF THE COMMUNITIES IS ESSENTIAL BEFORE DEPLOYMENT OF FRONT-LINE SERVICES.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## HEALTHY LIVING AND ENVIRONMENTALLY FRIENDLY PLACE FOR CHILDREN & ELDERLY

EWB-HK IS DEDICATED TO PROVIDE ENGINEERING SUPPORTS TO THE COMMUNITY DEVELOPMENT ORGANIZATIONS FOR SERVING CHILDREN AND ELDERLY WHO ARE LIVING IN THE DISADVANTAGED COMMUNITIES, SO AS TO IMPROVE THE SAFETY, ENVIRONMENTAL HYGIENE, ACCESSIBILITY AND LIVING CONDITIONS.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# APPROPRIATE TECHNOLOGIES SERVING THE REAL NEEDS

THE TECHNOLOGIES PROVIDING TO THE COMMUNITIES SHALL CONSIDER THEIR ACTUAL SOCIAL & ECONOMIC CONDITIONS, AVAILABILITY OF NATURAL RESOURCES, MATERIALS, LOCAL SKILLS, AND ACCESSIBILITY.

PRACTICALITY, BUILDABILITY AND MAINTAINABILITY OF THE TECHNOLOGIES TRANSFERRED SHALL BE CONSIDERED.





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## GEOSPATIAL INFO FOR SITE, ENVIRONMENTAL & HOUSEHOLD SURVEY, AND DISASTER PREVENTION

WE ARE DEVELOPING THIS TECHNOLOGY FOR BUILDING UP THE DATABASE TO UNDERSTAND THE RISK AND CHALLENGES FACED BY THE DISADVANTAGED COMMUNITIES, HELPING TO MEASURE THE SDG, BUILDING UP RESILIENT AND SUSTAINABLE SOCIETIES.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# GREEN BUILDING AND HEALTHY LIVING ENVIRONMENT FOR CITIES AND VILLAGES

WE ARE DEVELOPING THIS TECHNOLOGY FOR BUILDING UP THE DATABASE TO UNDERSTAND THE RISK AND CHALLENGES FACED BY THE DISADVANTAGED COMMUNITIES, HELPING TO MEASURE THE SDGs, BUILDING UP A RESILIENT AND SUSTAINABLE SOCIETIES.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## EXPAND THE NETWORK & CAPACITY, GATHER RESOURCES, FOR SERVING COMMUNITIES

HAND-IN-HAND, WITH PRO BONO ENGINEERS  
AND PROFESSIONALS, VOLUNTEERS, STUDENTS  
TO SERVE THE DISADVANTAGED COMMUNITIES  
IN HONG KONG AND MYANMAR.

---

### EWB Global Citizenship Programme

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

SEEK FIRST TO UNDERSTAND,  
THEN TO BE UNDERSTOOD.  
**BUILD TRUST** WITH THE  
COMMUNITIES, THEN WORK OUT  
SOLUTIONS FOR COMMUNITIES

GCP PARTICIPANTS SHALL UNDERSTAND AND RESPECT THE CULTURE, HISTORY, SOCIAL AND POLITICAL CONDITIONS FOR THE COMMUNITIES IN NEED, BEFORE DEPLOYMENT OF ENGINEERING AND OTHER PEOPLE-ORIENTED SOLUTIONS.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## PARTNERSHIP WITH PRO BONO ENGINEERS AND VOLUNTEERS BETWEEN LOCAL COMMUNITIES & HONG KONG

ENGINEERING-BASED SERVICE PROJECTS CANNOT BE REALIZED WITHOUT THE PARTNERSHIP WITH THE PRO BONO ENGINEERS AND VOLUNTEERS FROM THE LOCAL COMMUNITIES, WHO ARE FAMILIAR WITH THE LOCAL CULTURE, LANGUAGE, AS WELL AS THE AVAILABILITY OF MATERIALS, SKILLS AND EQUIPMENT FOR SERVICE WORKS.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong) with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## CAPACITY BUILDING FOR YOUNG ENGINEERS AND STUDENTS IN HONG KONG WITH TRANSFORMATIVE & REAL EXPERIENCE

GCP ENVISAGES ENGINEERING AND SCIENCE STUDENTS AS WELL AS YOUNG ENGINEERS WOULD COMMIT THEMSELVES IN BUILDING A SUSTAINABLE WORLD WITH ENGINEERING SOLUTIONS, AND THEREBY BECOMING OUR FUTURE GLOBAL LEADERS IN SUSTAINABLE DEVELOPMENT.

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*





Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

# EMPOWERMENT OF WOMEN AND ETHNIC MINORITIES

INDIVIDUAL & COLLECTIVE AWARENESS RAISING  
TRANSFERS SKILL AND TECHNOLOGY

DEVELOPMENT OF ACTIONS TO STRENGTHEN  
THE COMPETENCIES AND SKILLS

IN RESPONSE TO THE DEMAND OF REDUCING  
INEQUALITIES AS STIPULATED IN THE UN SDG #10

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



Copyright Reserved, 2018  
Engineers Without Borders (Hong Kong)

## EMPOWERMENT OF YOUNG PEOPLE IN DISADVANTAGED COMMUNITIES WITH SKILLS AND KNOWLEDGE

REMOVAL OF OBSTACLES TO ACCESS LEARNING  
AND OPPORTUNITIES -

HIGH DEMAND OF VOCATIONAL TRAINING,  
HIGHER EDUCATION, EMPLOYMENT  
CONSULTING FOR YOUNG PEOPLE

---

**EWB Global Citizenship Programme**

*is a programme organized by the Engineers Without Borders (Hong Kong)  
with the supports by the programme partners and supporters*



**10<sup>th</sup> Anniversary  
Exhibition 2018**

**ENGINEERS  
WITHOUT  
BORDERS  
HONG KONG**