

# EMPOWERING YOUTH LEADERSHIP

in Promoting **Bosai Culture**  
in the Asia-Pacific Region



# TABLE OF CONTENTS

03

*Overview*

04

*Objectives*

05

*Stage 1*

*DISASTER PREVENTION AT HOME*

06

*Stage 1*

*EVACUATING TO SHELTERS*

07

*Stage 1*

*PREPARATION OF EVACUATION GOODS*

08

*Stage 1*

*PREPARATION OF EVACUATION GOODS*

*How much supplies are necessary  
for disaster preparation?*

09

*Stage 1*

*PREPARATION OF EVACUATION GOODS*

*Preparation of camping equipment*

10

*Stage 1*

*PREPARATION OF EVACUATION GOODS*

*Examples of essential and useful items*

11

*Stage 2*

*JAPAN*

12

*Stage 3*

*JAPAN TO NEPAL*

13

*Stage 3*

*JAPAN TO THAILAND*

15

*Stage 3*

*Games & Tools:*

*PET Bottle Life Jacket*

*Garbage Bag Boots*

*Street Game*

16

*Stage 3*

*Games & Tools:*

*Memory Game*

*Disaster Lifecycle Game*

*Shuffle Cards*

17

*Stage 3*

*Games & Tools:*

*Speed Game*

*CONCLUSION*



## Overview

CityNet has been engaged in disaster education since 2012 in various cities throughout Asia. They have supported the capacity building of teachers and the awareness-raising of students through the introduction of disaster prevention or 'bosai' culture from Japan. To further disseminate the practice among youths (high school and university level), this project trained youth leaders from various countries to jointly develop outreach programs that empower youth leadership and enhance awareness-raising of disaster risks and its proper understanding within schools and the community.

Selected youths from Japan, Nepal and Thailand participated in virtual training through specifically-designed modules on disaster education, preparedness and response. The sessions were

based on the Japanese 'bosai' practice of self-help and mutual-help and the developed activities were localized to address current concerns in the target city. The youth participants utilized adapted technology and social media as a common platform for continuous exchange upon completion of the project. This project connects with and follows the previously completed projects through Toshiba International Foundation (TIF) grant:

- The Mitra Disaster Risk Reduction Learning Center established in 2019 in Nepal.
- The 2021 virtual exchange on bosai culture education amongst schools in Japan, Nepal and Thailand.



## OBJECTIVES

To build the capacity of youth leaders and train them as bosai specialists. The youth leaders will be able to disseminate their gained knowledge from Japan to their cities and communities through blended learning schemes.

The activities under this project have enhanced the participants' understanding of Japan through training modules on bosai culture in three stages:

### Stage 1:

Select youth leaders in Japan and train them on the specifics of bosai education culture.

### Stage 2:

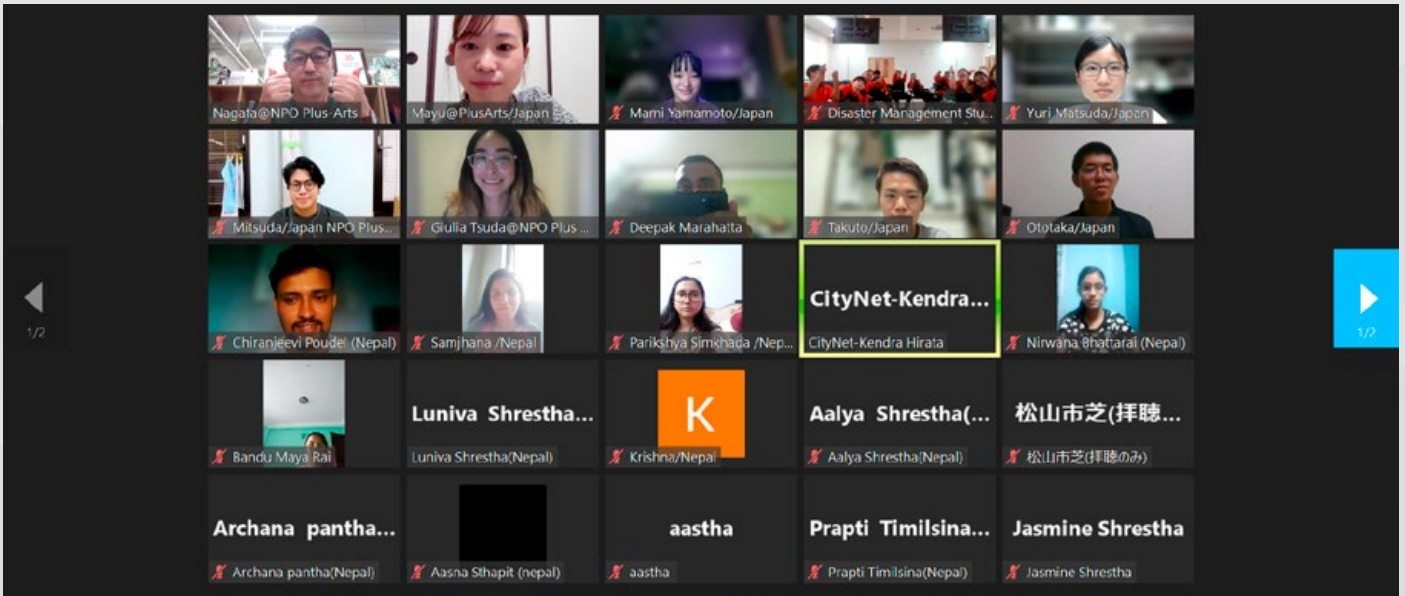
Select youth leaders in Asian cities, connect them with Japanese youth leaders and conduct cross-training on bosai education.

### Stage 3:

In-person visits by Japanese students to Nepal and Thailand to exchange ideas on disaster prevention and risk reduction

# STAGE 1

July 20, 2022



Youths interested in 'bosai' education (disaster prevention education) were selected in three countries, Japan, Nepal and Thailand to form a core group of international youths. In order to meet the first objective of training Japanese youths on disaster prevention education, a series of online exchanges exposed them to the practices of bosai education in Japan. Plus Arts, a non-profit organization based in

Kobe specializing in disaster education programs lead this process.

A total of 21 registrants from Japan were divided into two groups: Nepal or Thailand, depending on their interest to connect with youths from these cultures. Ten Japanese youths joined the Nepal group while the remaining 11 youths joined the Thailand group

## Stage 1 Training Module

1. Disaster prevention at home
2. Evacuating to shelters
3. Preparation of evacuation goods

Information on disaster preparedness and how to use emergency food and water, toilets, cooking utensils and other items were also covered.

## DISASTER PREVENTION AT HOME

Three basic steps are necessary to prevent disasters at home:

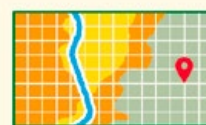
### 在宅避難をするための3つの条件

- 1 **水害** 自分の住んでいる場所が安全  
・洪水ハザードマップ ・土砂災害ハザードマップ で確認
- 2 **地震** 家の耐震性が高く倒壊の恐れがない
- 3 **地震** 生活する部屋の家具転倒防止対策が  
できている

### 条件1：自分の住んでいる場所が安全

ハザードマップで以下を確認

ハザードマップポータルサイト



洪水ハザードマップ  
「洪水浸水想定区域」に色が塗られている



土砂災害ハザードマップ  
「土砂災害警戒区域・特別警戒区域」に色が塗られている

家がある場所に色が塗られていなければ在宅避難できる可能性大

※ 色のない場所でも河川と比べて低い土壌や崖のそばなどに住んでいる場合は避難が必要



1. Check the hazard map for the location of your home and review the risk for flood, landslides, earthquakes, etc.

2. Ensure that your house is resistant and retrofitted against earthquakes.

**条件1：自分の住んでいる場所が安全**

色が塗られていても下記の条件に当てはまっていれば在宅避難できる可能性大

- **家屋倒壊等氾濫想定区域の外側にいる**  
※ 洪水により家屋が倒壊・崩落する恐れの高い区域
- **浸水する深さより高いところに住んでいる**  
※ 洪水ハザードマップで「浸水深」を確認
- **備えが十分あり水が引くまで我慢できる**  
※ 洪水ハザードマップで「浸水継続時間」を確認



**条件2：家の耐震性が高く倒壊の恐れがない**

市町村に問い合わせ耐震チェックをし必要であれば耐震化しておきましょう

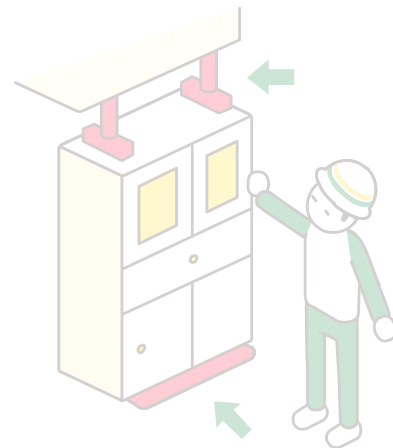


※ 助成金制度が活用できる市町村もあるので相談してみましょう

3. Ensure that furniture and other essentials are secured in case of an earthquake.

**3. 生活する部屋の家具転倒防止対策ができています**

家具が倒れると生活は相当不便になります  
在宅避難のためには家具の対策は欠かせません



**EVACUATING TO SHELTERS**

**自宅以外の避難先**

複数の避難先を想定しておきましょう



**親戚・知人の家**  
長期滞在が可能なら親戚・知人宅に滞在する

**車**  
安全な場所に車を停め車中生活を送る

**テント**  
安全な場所にテントを張りテント生活を送る

In advance, consider your options for possible evacuation locations, for example:

1. Homes of relatives and friends
2. Vehicles
3. Tents



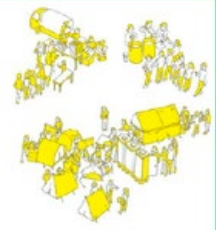
For more resilient buildings such as common housing units, evacuating in your own apartment could be an option.



### 防災対策（避難）の潮流

#### 在宅避難生活を想定

マンションなど耐震性が高い家屋の場合、災害発生後、自宅で暮らすという選択肢がありうる。  
 住み慣れた自宅は安心にもつながる。  
 避難所の利用者に優先順位を付ける「避難所トリアージ」という概念もあり、自宅が倒壊していなければ避難所に入れない可能性もある。



在宅避難生活を送るための備えが重要。

## PREPARATION OF EVACUATION GOODS

Review what your family's necessities might be during a disaster.

- Take a quiz in order to remember essential items

＜ワークショップ＞  
**在宅快適避難グッズ  
 暗記クイズ**  
 制限時間：60秒

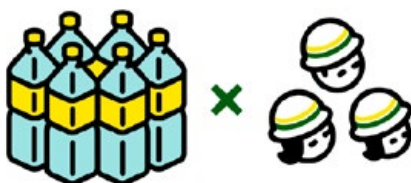
#### 【自宅快適避難グッズ12選】



- Calculate your family's water needs

- Bring paper plates

水



1人1日2L × 家族の7日分の準備を



Know how to make an emergency toilet using newspapers and a plastic bag.



## How much supplies are necessary for disaster preparation?

In order to prepare sufficient necessities, it is essential to understand the assessment of potential damages that may occur in a given area due to a disaster.

In Japan, it was standard to prepare three days' worth of essential items. However in 2013, this standard was reviewed and currently the government is proposing that a 7-day supply of necessities be prepared by households.

Therefore, food supplies need to be carefully planned depending on the size of the family, ensuring proper nutritious intake for everyone over a period of seven days.



## 非常食



レトルト・フリーズドライ食品

缶詰

家族 **7** 日分以上の用意を。

好みに合った**美味しい**非常食を！

### 1 普段、買い置きしている様々な食品を食べます



**乾麺**  
(ラーメン・パスタ等)  
ゆで時間の短いものを。



**お菓子・菓子パン**  
開けるとすぐ食べられます。  
糖分補給にも最適です。



**インスタントヌードル**  
好みのものを多めに  
流しの下などにストック。



**ホットケーキミックス**  
盛りやすい牛乳と卵と合わせて。  
お子さんのいる家庭には必需品。



## ◎「ローリングストック法」のコツ!

For a normal family of four, this may already be a significant burden, not only on finances but also in terms of storage space, expiration of food and planning the details.

Therefore, the recommended method is to consider a rolling stock of supplies so that food is re-stocked regularly, replenishing the item before it is used.



システムキッチンの引出しの中



電子レンジラックの下の棚

## Preparation of camping equipment:

- Tents
- Lanterns
- Stove and cooking fuel
- Storage containers
- Sleeping and insulation material



## ◎ 電池の備蓄量の目安 (4人家族の場合)

※今の電池の使用期限は10年間なので気にせず多めの備蓄を。



- LEDランタン※3部屋分  
アルカリ単1電池3本×3台×3回交換  
=27本≒**30本**備蓄!



- LEDヘッドライト※4人分  
アルカリ単4電池3本×4人×3回交換  
=**36本**備蓄!



- 電池式充電器用 ※4人分  
アルカリ単3電池4本×4人×3回交換  
=**48本**備蓄!

## ◎ 口腔ケア用ウェットティッシュ

3通りの使い方ができるのでおすすめです!



災害後、水道が止まってしまった時に…

1. **歯**が拭けます!  
※長期閉口の中が不安定な状態になると高齢者や子どもは肺炎になる可能性があります。
2. **箸**や**スプーン**が拭けます!
3. **手**や**体**も拭けます!

ある家庭での実際のカセットボンベの備蓄状況です!



Examples of essential and useful items:

LEDヘッドライトもおすすめ！

エナジャイザー  
ヘッドライト 4 LED  
HD4L33AEJ



- ①点灯時間が長い  
(夜間モード(赤色)：58時間、Lowモード：40時間、Highモード：8.5時間)
- ②明るさは標準レベルでOK (照射距離2.5m)  
足元照射が必要なため、照射距離が一定あるものを
- ③軽い (53グラム！)
- ④電池の調達が容易 (単4電池3本使用)
- ⑤価格の安さ (ネット販売だと1,800円前後)

からだふきウェットタオル



乳児・介護用の大判ウェットタオル  
お風呂に入れない時に。

1 普段、買い置きしている様々な食品を食べます



乾麺  
(ラーメン・パスタ等)  
ゆで時間の短いものを。

お菓子・菓子パン  
開けるとすぐ食べられます。  
納め補給にも最適です。

インスタントヌードル  
好きなものを多めに  
出しの下などにストック。

ホットケーキミックス  
腐りやすい牛乳と卵と合わせて、  
お子さんのいる家庭には必需品。

携帯トイレの特徴



- ・洋式便器等に設置して使用します。
- ・吸水凝固シート (おむつ素材・抗菌ポリマー) が内蔵されたタイプと、凝固剤を入れるタイプがあります。
- ・尿を吸収し、凝固又は分解させ、消臭してくれます。

災害用トイレを使うコツ



- 便器にポリ袋をかぶせる
- その上に災害用トイレを設置。
- 用を足した後災害用トイレのみ取り出し、空気を抜いて口をしぼる
- 密閉できる容器で収集まで保管。



## STAGE 2

September 13, 2022

This stage consisted of selecting international youths interested in knowledge-exchanges with Japanese youths. University-level students from Nepal and Thailand joined online events and shared their local

practices, ideas and innovations in disaster prevention activities. Participating students took part in two online exchanges.

### Japan

Students from Japan shared simple, everyday items that can be useful during emergencies:

- Making portable toilets from cardboard boxes

**【ダンボールで簡易トイレを作ろう / Let's make a portable toilet out of cardboard】**

**ダンボールトイレの作り方**

同じ銘柄の2L/6本入りペットボトルケースを2個用意

1つのケースを逆さまに(内側)にはめ込みます

内側のケースの角を少しまらかした方がはめ込みやすい

外側のケースが破損しないように慎重に慎重に!

ガムテープで補強する

ガムテープで補強すれば丈夫

カッターで切り取る

完成!

中に黒のゴミ袋を巻き湿度対策があれば最高!

小さな人間はここを折り曲げると楽になる

木の枠で「便座」を作っておくと長持ちします

引用：蒲郡市防災課

Mami Yamamoto/Japan

- Making slippers from newspapers

- Universally-designed emergency survival kits

**簡易型**  
フリーサイズ  
子供も作りやすい  
脱げやすい

**厚底型**  
自分の足のサイズに調整  
靴の上からでも可能  
安定感がある

**UD emergency survival kits ② UD food**

容易にかめる	箸くきでつぶせる	舌でつぶせる	かまなくてよい

お好みで

## STAGE 3

Stage three involved two separate in-person visits by Japanese students to Nepal and Thailand where they exchanged ideas on developing practical items

that may be useful for disaster prevention and during disasters.

### *Japan to Nepal*

Four students from Ehime University, Okayama University and the University of Victoria traveled to Kathmandu, Nepal where they had an exchange session with local college students.

The main objective of this activity was to introduce practical goods made by Japanese and Nepalese

university students to elementary school students. The university students demonstrated how dishes can be made from leaves, which saves precious water during disasters (no dishwashing necessary), and is biodegradable. Students also shared various emergency items which can be prepared in a bag.



Prior to this activity, the Japanese students visited the local college in Kathmandu to introduce Japan and the culture behind disaster prevention (bosai).

During the exchange youths from both Japan and Nepal introduced their culture through presentations and demonstrations.



## Japan to Thailand

During this final field activity two students from Okayama University and one from Fukuyama City University visited Navamindradhiraj University in Bangkok to exchange knowledge about disaster prevention activities.

The students from both countries had previously conducted an online exchange where they shared local practices on disaster risk reduction (DRR) as well as demonstrated some useful activities during disasters using locally available tools.



The students from Navamindradhiraj University belong to the Disaster Management Department where they learn about DRR and also perform live search and rescue operations and support local firefighters. The students are properly trained through the Bangkok Fire and Rescue Department where they take part in trainings using fire-fighting equipment .

The students also participate in marine rescue activities.



The students from the two countries shared some background and context along with local hazards to familiarize themselves about the risks present in their respective regions.



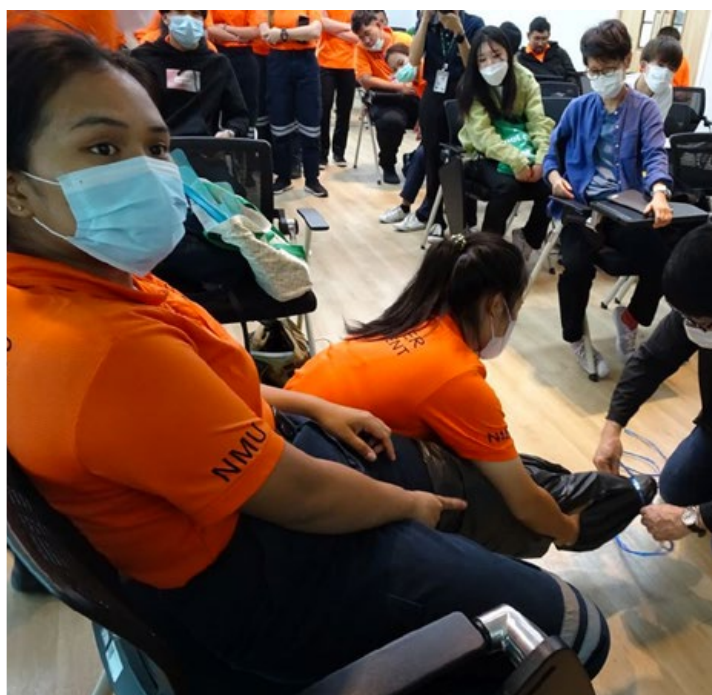
The students were introduced to a disaster education specialist and game designer from Japan and Thailand who shared insights on how difficult topics can be simplified through games and activities for children

and communities. The goal is for the community to better understand the risks as well as undertake simple response measures during disasters.



The students took part in a workshop and experienced some DRR games previously demonstrated in Japan and Thailand. Students were asked to improvise and summarize what they learned and develop a strategy to teach children to understand the content of the

games. The themes for the games were related to earthquakes, floods and fires which are common across Thailand.



The following day, the university students conducted a program where games and tools were introduced to students from grades 3-6 from a local elementary

school. The tools included using various cards, PET bottles and household items to teach children about simple disaster prevention and response measures.



## Games & Tools

### **PET Bottle Life Jacket**

Empty PET bottles are used to make a lifejacket. The bottles are placed under a shirt and the cap closed from above the shirt.



### **Garbage Bag Boots**

Students are taught how to use garbage bags to make boots and keep their feet dry during flooding. Students simply place their feet (with their shoes on) into a garbage bag and securely tie it with a string.



### **Street Game**

This game helps children learn about environmental clean-up and waste segregation to prevent drains from clogging and to protect marine life. Plastic bags and other garbage are common causes of clogged drains in Bangkok, causing inland flooding.



### Memory Game

Players must memorize 12 essential items to keep in an emergency bag. Students have one minute to remember the items after which the purpose of each item is explained.



### Disaster Lifecycle Game

This game helps players understand the situation before, during, and after disasters. The players identify situation cards in a given scenario and learn the essential action that can be taken.



### Shuffle Cards

A set of four cards show various disaster-related items and players need to put the cards in the correct order necessary to conduct that activity. The importance of the correct order is then explained to the players.





## **Speed Game**

Players are given a question or situation along with a set of cards that contain probable answers to the question. Once the facilitator reads out the question, the player can then choose the cards with the correct answers.

Following the introduction of the program, the participating students were asked about their impressions of the activity. The student representatives acknowledged that they enjoyed the games and that they were able to learn about various disasters and ways of prevention and response.



## **Conclusion**

This project focused on knowledge exchanges on disaster risk reduction amongst youths from Japan, Nepal and Thailand, both in-person and online. The exchanges enabled Nepali and Thai students

to understand Japanese disaster prevention and education practices. Japanese students were exposed to various new ideas during their field trips to Nepal and Thailand.

