

### 1 Introduction

#### Used Cooking Oil, Transformed into a Candle

Our daily lives are **closely connected** to the natural environment. By turning used cooking oil into candles, we reduce negative environmental impacts by promoting sustainable household practices.

### 2 Background

#### The Current Situation of Fisheries in Japan

Japan's fish catch peaked at 12.82 million tons in 1984, but declined to 3.83 million tons in 2023, representing a dramatic decrease to approximately one-third of its former level (See Figure 1).

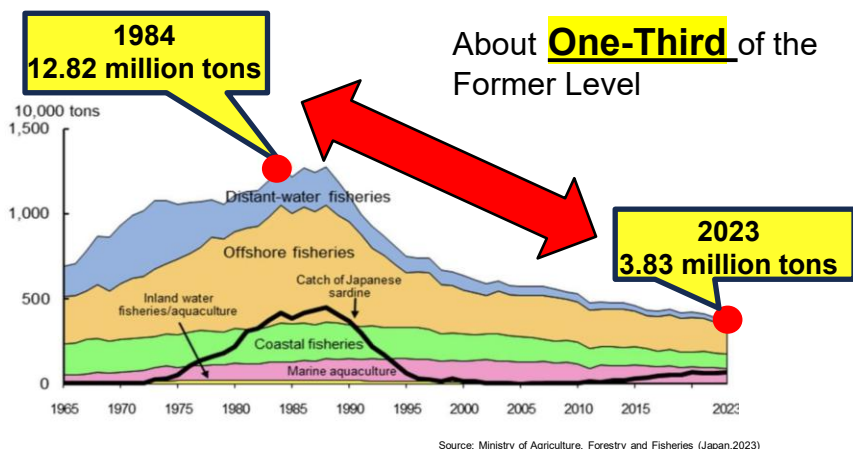


Figure 1 Trends in the Production Volume of Fisheries

Focused on

#### Disposal of Used Cooking Oil

All results came from the questionnaire below.

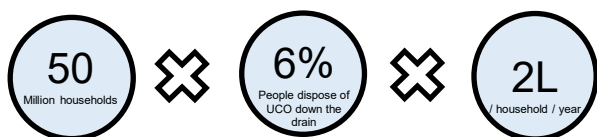
#### How much used cooking oil is improperly disposed of in Japan?

6% of people do not dispose of used cooking oil properly (See Table 1). However, this is not a small percentage.

Table 1 Results from Questionnaire about Cooking Oil Disposal Method

Disposal Method of Used Cooking Oil (UCO)	Percentage (%)
Absorb used oil with paper or cloth	65.0
Use a solidifying agent to harden used oil	53.4
Take used oil to a waste cooking oil collection point	15.0
<b>Pour used oil into the kitchen drain</b>	<b>6.0</b>

\*Total percentage may exceed 100% due to multiple responses.  
Source: J-Oil Mills "Home Cooking Oil Usage & Disposal Survey" (2024)

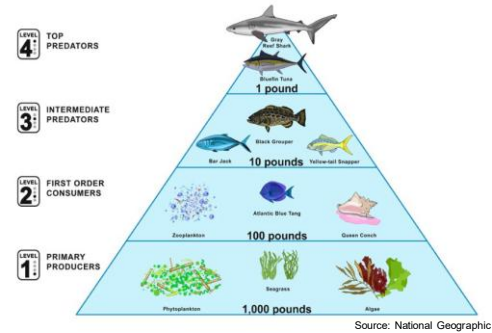
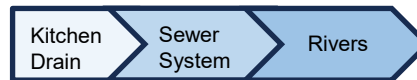


**6 million L / year**

#### Impact of Improper Disposal of Used Cooking Oil

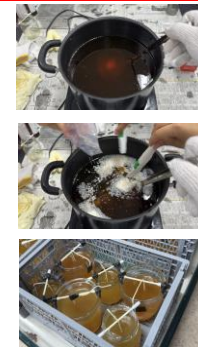
Oil film seen on the ocean surface **inhibit phytoplankton photosynthesis**, leading to disruption of the marine ecosystem. (Mudge, 1995)

#### Used Cooking Oil



### 3 Our Solution

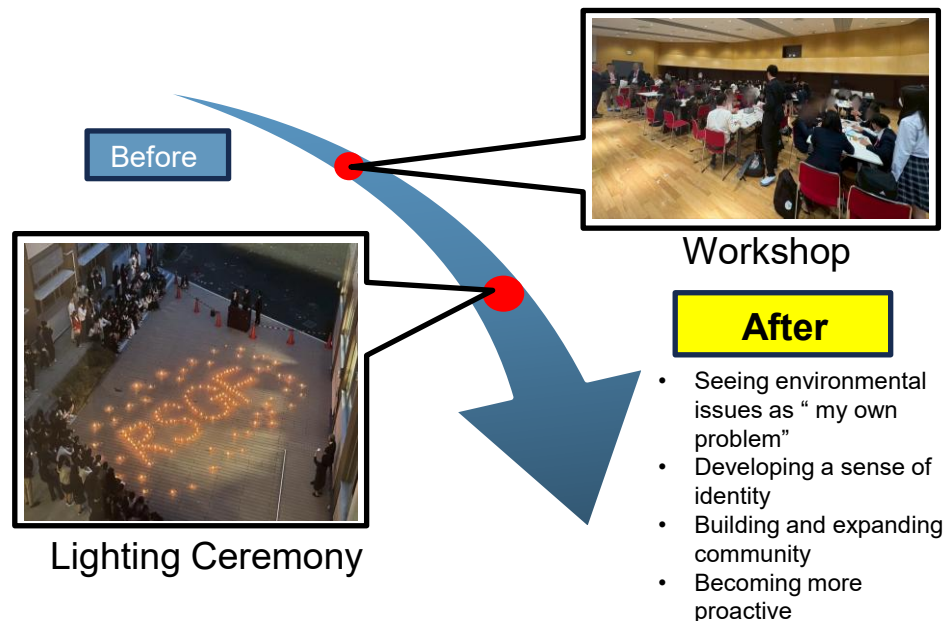
#### Upcycled Candle with Used Cooking Oil



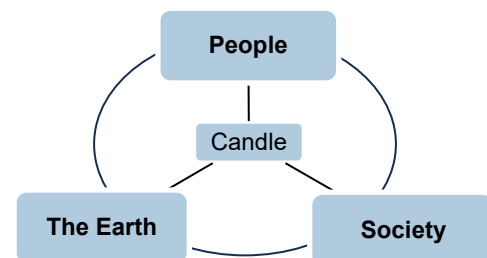
### 4 Real Action

#### Rits Super Global Forum

RSGF- 160 students from 10 different countries or areas



#### A First Step to a Society Where We Coexist



### 5 Future Outlook

- Raising awareness among more people
- Responding to a broader range of needs (**Disaster Preparedness**)

**Collaboration with the Local Community**