

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).

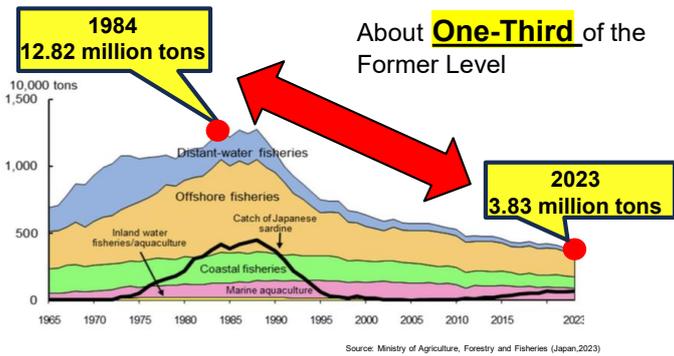


Figure 1 Trends in the Production Volume of Fisheries

Focused on

Disposal of Used Cooking Oil

All results came from the questionnaire below.

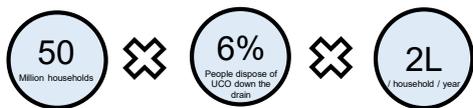
How much used cooking oil is improperly disposed of in Japan?

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
Pour used oil into the kitchen drain	6.0

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

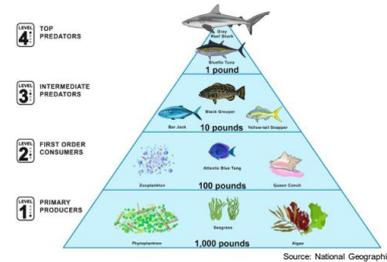
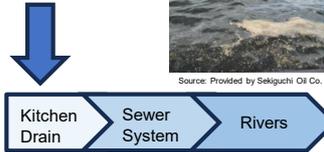


6 million L / year

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

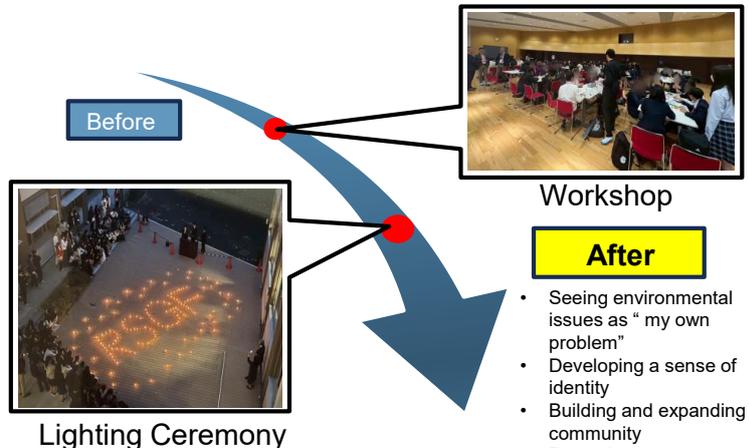
Upcycled Candle with Used Cooking Oil



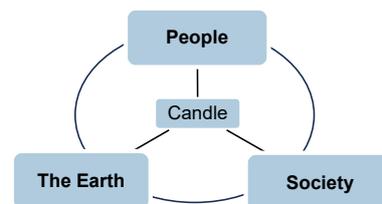
4 Real Action

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**