

# Kao Corporation



- ❑ Address: Chuo-ku Tokyo, Japan
- ❑ Employees: 8,505
- ❑ Established in 1887
- ❑ Business: Manufacturing Industry

<https://www.kao.com/global/en>

## Outline of the demonstration project

The Project to build the prediction model of mosquito-born virus spread by using AI technology and improve the forecast system as UX for preventing dengue fever cases in Thailand

## Cooperation with local companies/governments

### Local partners:

- DDC Department of disease control under Ministry of Public Health
- NECTEC National Electronics and Computer Technology Center

### Details of cooperation and collaboration:

Construction of a prediction system for dengue fever sources and provision of informing to consumers



## Targeted economic/social issues

- While facing COVID-19 pandemic, dealing with dengue virus in tropical regions is also an urgent issue. The number of people infected with dengue fever in Thailand is 50,000 to 150,000 every year. High-risk areas include densely populated Bangkok and its surrounding areas, and industrial areas. Also, school children between the ages of 4 and 15 are the most commonly infected. Avoiding health and physical risks of young people and in urban areas contributes not only to the foundation of stable economic growth, but also to the realization of a healthy and sustainable society. In addition, dengue fever is a common issue among ASEAN countries, and solving social issues has a great ripple effect.

## Details of demonstration

- Build an early and accurate prediction model of the spread of dengue fever via mosquitoes through the analysis of the dengue fever cases from DDC and the acquisition/AI analysis of monitoring information on dengue virus prevalence in mosquitoes.
- In order to inform consumers about the risk of dengue fever through communities such as hospitals and schools and encourage preventive actions, establish and install a high UI/UX forecast system in collaboration with NECTEC, which develops and operates an application that provides information on affected persons data to consumers.

## Expected outcome of beneficiary effects

- Reduction in the number of dengue fever cases by improving risk awareness and preventive behavior, reduction of Thai government's dengue fever countermeasure costs, and awareness-raising in ASEAN countries, etc.
- Contribution to the market expansion/creation with the increase of usage/frequency of repellents by raising awareness of preventive behavior (secondary effect).