

Regional Fish Institute, Ltd.



- ❑ Address: Kyoto-shi, Kyoto
- ❑ Employees: 30
- ❑ Established in 2019
- ❑ Business: (1) Genome editing breed improvement on aquatic species (2) production and sales of aquatic products

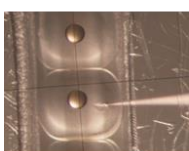
<https://regional.fish/en/>

Outline of the demonstration project

- Project of Introducing Genome Editing Breed Improvement on Aquaculture Scene in Indonesia

Cooperation with local companies/governments

- Local Partner: Pt Aruna Jaya Nuswantara
- Details of cooperation and collaboration:
 - (1) Farming and hatchery activities
 - (2) Test sales/marketing to consumers
 - (3) Communication with governmental regulatory bodies



Targeted economic/social issues

- In order to cope with the coming protein shortage problem, super-efficient protein production is needed.
- Although the Indonesian government aims to strengthen aquaculture industry, the production in 2020 was only 75% of the target volume. Development of strong breeds is an urgent task.

Details of demonstration

- Introduce and validate genome editing breed improvement method which can complete breeding in only a few years, instead of traditional method that takes about 30 years.
- Develop “fast growth tilapia” and “large filet red snapper” as pilot cases by applying our experience of commercialization of genome edited fish, which is the world’s only successful case.

Expected outcome of beneficiary effects

- By applying both “fast growth” and “large filet” traits, aquaculture cost can be reduced to only 2/3 of current levels.
- By extending the breed improvement to other traits and species, it can contribute to solving protein shortages, creating employment, and enhancing export.
- In the long term, a “breed improvement platform” is expected to be established to develop breeding based on the needs of consumers/producers.