

SERIES 6

AGRICULTURAL ENGINEERING RESEARCH STATION

Established : 1943 Yawata, Hiratsuka City, Kanagawa Prefecture, 254 Japan.

Location : 1943 Yawata, Hiratsuka City, Kanagawa Prefecture, 254 Japan.

Director : Katsumi Deguchi

Total Number of Employees : 124 (Research personnel: 78)

Outline of Work :

This station carries out research and experiment on agricultural engineering for effective use of land and water for agriculture, hydraulic and construction technology, and the development and improvement of fishing grounds. The station gives training courses for agricultural engineers.

Recent Principal Research Findings :

Erosion control in volcanic ash regions; extended use of radioisotopes; improvement of irrigation and drainage in paddy field and upland; development and consolidation of farmland for large scale management and mechanization; hydraulics of dikes for tidal wave prevention; design of headworks and sluice gates; characteristics of breaker zone; sand drift due to wave and flow; development of coastal farmland by improvement of river mouth; asphalt revetment criteria in hydraulic engineering; earthquake-resistible rock-fill dams; improved shear testing apparatuses; survey of rock-load on steel support in tunnels; method of landslide survey; design of artificial fish banks; wave damping effects of submerged and offshore breakwaters; wave transformation in fishing ports; development of floating breakwaters; reclamation researches of agricultural farms; improvement of bearing capacity in reclaimed paddy field; stress distribution around underdrains; and the features of flood in hinterlands of sea reclamation area.

Publications :

Bulletin of the Agricultural Engineering Research Station. (In Japanese with English summary, annual, free exchange.)

Technical Report of the Agricultural Engineering Research Station, Series A—F. (In Japanese, irregular, free exchange.)

Annual Report of the Agricultural Engineering Research Station. (In Japanese, annual, free exchange.)

Organization and Main Research Themes :

- Research Planning and Coordination Division (2 sections)
- General Affairs Division (3 sections)
- Land Improvement Division (5 laboratories)—Hydrology of water source and land conservation; Application of radioisotopes; Improvement of irrigation and drainage in paddy and upland fields; Development and consolidation of arable land.
- Hydraulics Division (4 laboratories)—Hydraulics of dams and headworks; Wave-resistant coastal structures.
- Director—Construction Engineering Division (4 laboratories)—Structures and materials of agricultural engineering works; Soil engineering; Engineering geology.
- Fisheries Engineering Division (3 laboratories)—Structures, materials and hydraulics of fisheries engineering work and fishing ports; Meteorological and hydraulic investigation of agricultural environments.
- Saga Branch (3 laboratories) (Saga City, Saga Prefecture)—Soil foundation, construction technology and hydraulics for sea reclamation works.