

IoT for Water Management in Paddy Fields

Rasika Dayarathna

University of Colombo
Sri Lanka



Pakistan

Nepal

Bhutan

Bangladesh

India

Sri Lanka

Maldives

Background

- 31.8% engages in agricultural activities.
- Rice cultivated area is 34% of total cultivated area
- 1.8 million farm families are engaged in paddy cultivation.
- The per capita consumption of rice is around 100 Kg per year.







dreamstime.com





Problem

Water management

Disputes between the authority and farmers

Disputes among farmers

Water quality

Pesticide

Fertilizer

Solution

- Providing data to the stakeholders to make informed decisions
- Individual farmers- Water level in the paddy field
- Farmers and authorities - Amount of water consumed by each farmer and as a whole
- Public- The purity of the water coming from paddy fields (passing to rivers)

Solution

- Sensors to measure water
 - inflows and outflows from each paddy land
 - Purity of water passing to rivers
- Internet
 - Publish data online

grazie

GRAZIE