

Research No.:** E-5 **ODA Loan Joint Research** Date:16/Oct/2020

1	General Title	To study potential mitigation strategies to eliminate impacts of natural disasters on agriculture, aquaculture and water supply (including both urban & industry sections)
2	Core Members	CTU: Le Anh Tuan (Project Leader), Nguyen Thi Hong Diep, Luong Vinh Quoc Danh, Pham Thanh Vu (secretary)
		Japanese Universities: Taku NISHIMURA (Tokyo University), Masaru MIZOGUCHI (Tokyo University), Hamasaki HIRONORI (Nagasaki University)
3	Duration	<i>1 October 2018 to 31 December 2019</i>
4	Main Objectives	<p>Theme 1: Study and propose farming systems coping with environmental changes and climate changes for sustainable development of agriculture, aquaculture in the coastal of Mekong Delta (case study in four (4) provinces in the river mouth of the Mekong Delta, including Soc Trang, Tra Vinh, Ben Tre and Tien Giang).</p> <p>Theme 2: Application of telecommunication and smart water management technologies in rice production to adapt with climate change in the Mekong Delta, Vietnam (case study in Soc Trang province).</p>

5	Focal Points	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; background-color: #e0f0e0;"> <p style="text-align: center; margin: 0;">THEME 1</p> </div> <div style="border: 1px solid black; padding: 5px; background-color: #ffe0b2;"> <p style="text-align: center; margin: 0;">THEME 2</p> </div> </div>
		<div style="width: 48%; border: 1px solid red; padding: 5px; background-color: #e0f0e0;"> <p>ACTIVITY Study and propose farming systems coping with environmental changes and climate changes for sustainable development of agriculture, aquaculture in the Mekong delta.</p> </div> <div style="width: 48%; border: 1px solid red; padding: 5px; background-color: #ffe0b2;"> <p>ACTIVITY Application of telecommunication and smart water management technologies in rice production to adapt with climate change in the Mekong Delta, Vietnam</p> </div>
		<div style="width: 48%; border: 1px solid purple; padding: 5px; background-color: #e0f0e0;"> <p>OUTPUTS</p> <ul style="list-style-type: none"> - Reviewing climate data base on weather forecast (temperature, wind speed, humidity, abnormal precipitation, saline intrusion) on coastal area - Creating soil salinity maps and finding out salinity impacts on coastal area. - Estimation vulnerability by salinity intrusion on coastal area. - Evaluation Hot pot and impact factors on land use - Recommendation in long term and short term of climate change response for sustainable agriculture farming systems in the coastal areas </div> <div style="width: 48%; border: 1px solid purple; padding: 5px; background-color: #e0f0e0;"> <p>OUTPUTS</p> <ul style="list-style-type: none"> - Design Nitrite sensors for shrimp farms. - Deploy the instruments at shrimp farms. - Collecting experimental data. - Analyzing the measured data gathered for rice fields and shrimp farms. </div>
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="font-size: 2em; margin: 0 10px;">➔</div> </div> <div style="text-align: right; margin-top: 20px;"> </div>

Currently, there are 6 articles have been submitted to journals for publication (including 3 national journals and 3 Scopus journals) as outputs from project E5.