

## R02

### Review of Three Leading Program + Texas State University Joint Fieldwork on 2015 at Okinoshima Island

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#### Abstract

Three Leading Program and Texas State University Joint Fieldwork has been carried out on 2015 as same as last year. It was held on Okinoshima Island, Shimane prefecture and key issue is renewable energy technology. Island contain total system and it is suitable for leading program to summarize issue. Lectures from local government officer, University of Texas State, WWF and Chubu Electric Power are comprehensive, visiting site was all new for students and impressive. We will summarize this experience for next year joint fieldwork.

Keywords: Okinoshima Island, Renewable Energy, Green Asia, Doshisya University, Hiroshima University

#### 1. Overview of Fieldwork

Field trip has done from 16-22<sup>nd</sup> August 2015 with three leading program (Doshisya University: Global Resource Management, Kyushu University: Green Asia, Hiroshima University: Taoyaka Program) and Texas State University Austin School (world ranking 27<sup>th</sup>). This year field trip was organized by Hiroshima University as joint field work with Texas State University which is close relationship. Field work was held on Okinoshima island in Shimane prefecture and theme is determined as "Renewable Energy Technology (RET) development on remote island". Attendances are from 11 countries and total 33 students (Kyushu University 4, Doshisya University 4, Hiroshima University 15, Texas State University 10) and total 11 faculty staff (Kyushu University 1, Doshisya University 1, Hiroshima University 7, Texas State University 1, Finland Professor 1).

#### 2. Schedule and Activity

Detailed schedule is shown in Table 1 and visited places are shown in Fig. 1, Okinoshima island map.

**Day1:** went to Sakaiminato Port with bus followed by went to Okinoshima island with ferry. In Okinoshima Island, Opening ceremony was held then member was grouped then theme was checked. Lecture was held by Dr. Okamoto, Hiroshima University about energy situation in

Japan.



**Figure 1.** Visited site map of Okinoshima Island

- ① Recycling center / Final Landfill
- ② Saigo Fire Power Plant
- ③ Wind Power Plant Ama Town
- ④ Hybrid Lithium Battery Large Storage Plant
- ⑤ Kuniga Coast / Cliff

**Day2:** lecture was held by office person in Okinoshima town about situation of Okinoshima island, RET plan in Okinoshima by Chugoku Electroc, Energy situation in remote island by Dr. Kaneko, Hiroshima University. These lectures were consistent theme. On afternoon Saigo fire power plant and biomass beneficiation R&D plant was visited.

**Day3:** visit another island with ferry, Ama

town in Nakanoshima island to see wind power plant plan and visit Nishinoshima town in Nishinoshima island to see hybrid battery plant.

**Day4:** lecture was held about RET plan in Naruto city by WWF then RET with tourism by Professor Pedersen from Finland. On afternoon group work was held with notice from Professor Norton in Texas State University.

**Day5:** group work and presentation (20 min x 8)

### 3. Outcomes

Okinoshima Island is typical remote island, isolated from inland and population became half in this 5 decades. All system need to be independent and small scale, it needs to be organized compared from inland. Investment from inland is important factor. Since big project such as airport modification to jet plane and dam

construction was finished, next project is renewable energy development such as wind generator and hybrid battery. It is important to be independent and future plan around half of electricity will be covered by renewable energy.

### 4. Conclusion

It was second time for us to have Joint fieldtrip with three universities. This year we also have Texas State University. Discussion with other background with social and humanity department seems good experience for Green Asia students. This year we were in Okinoshima Island, it is special opportunity. Joint fieldwork in remote island seems very good experience since all system is in small area and all were related, issue of this kind of situation seems match green asia philosophy.

**Table 1.** Schedule of three leading program joint fieldwork

Date	Time	Events	Lecturer(s)	Venue
17-Aug	14:30	Opening Session Overview of the course	Prof. Akinasa Fujiwara (Hiroshima Uni) Dr. Takashi Okamoto (Hiroshima Uni)	Cultural Hall
18-Aug	9:00-10:30	Remote Islands Development Plan in Shimane Prefecture	Mr. Jun Sato (Oki Branch Shimane Pref.)	Cultural Hall
		Outline of Hybrid Storage Battery System Verification Experiment in Oki Island	Mr. Hirotsuka Shono (CEPCO)	Cultural Hall
	10:45-12:15	Energy Policy in Remote Island in Japan	Prof. Shinji Kaneko (Hiroshima Uni)	Cultural Hall
	13:45-17:00	Excursion: Saigo Electricity Power Plant Woody Biomass Facility	Okinoshima Municipal Government Staff Mr. Hirotsuka Shono	Okinoshima
	17:00-18:30	group work		Cottage
19-Aug	AM	Excursion2 Ama Town Wind Power Generator	Ama Municipal Staff	Ama Town
	12:15-13:45	leave for Nishinoshima		
	PM	Nishinoshima town Storage facility	Mr. Hirotsuka Shono (CEPCO)	Nishinoshima
20-Aug	9:00-10:30	Renewable energy development and tourism	Prof. Art Pedersen (Brandenburg University of Technology Cottbus, Germany)	Cultural Hall
	10:45-12:15	Introduction of renewable energy projects by Naruto city, Tokushima	Mr. Daigo Ichikawa (WWF Japan)	Cultural Hall
	PM	group work		Cultural Hall
		Memorandum of Agreement	Prof. David J. Eaton (LBJ School, UTA)	Cultural Hall
21-Aug	9:00-10:30	Discussion		Cultural Hall
	10:45-12:15	group work		Cultural Hall
	13:45-15:15	group work		Cultural Hall
	15:30-17:00	Presentation		Cultural Hall



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**Figure 2.** Group photo in Kuniga Coast