Supporting Fukushima - The Nuclear accident's Consequences on the Region

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- ► 1990-2008: Working for Reuters as journalist, editor, and translator in London, Tokyo and Osaka

Presentation points

- 1) What happened in Fukushima in 2011
- 2) What happened in town of Kawamata in Fukushima after nuclear accident
- 3) How "All Kindai" team supported Kawamata
- 4) Lessons from what happened in Kawamata
- 5) Concluding message

M9.0 Earthquake and Tsunami Tidal Wave on March 11, 2011 Caused...

Total of 15,898 Deaths and 2,531 Missing

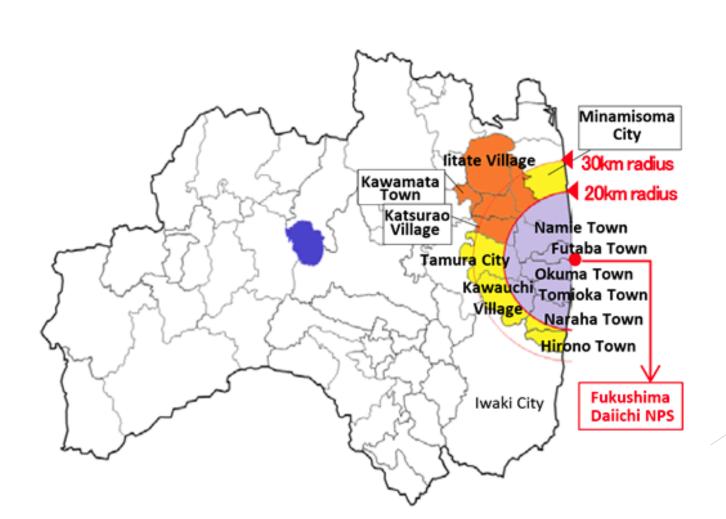
Miyagi: 9,542 deaths

Iwate: 4,675

Fukushima: 1,614

(as of September, 2019)

Evacuation Order for Fukushima after 3.11 Nuclear Accident



What I Saw in Fukushima and Miyagi One Year after Earthquake/Accident

- Gravestones scattered everywhere in cemetery in Miyagi which tsunami smashed
- ► Buddhist monks praying in front of elementary school in Miyagi where 74 students were killed by tsunami

What I saw in Fukushima and Miyagi One Year after Earthquake/Accident

Stark contrast at gates separating one town in Fukushima, into one area where people could continue to live and the other area that people had to evacuate

Some Evacuation Order was Removed, But...

There are still areas within Fukushima designated as

"Difficult-to-Return zone"

Instead of Giving Full Picture of Impact of Nuclear Accident on Fukushima...

Today's presentation will focus on small town of Kawamata in Fukushima

Town of Kawamata in Fukushima

- Supported by Kindai University since 2011
- > Over 30 km away from nuclear accident
- > No evacuation order soon after accident
- Evacuation order for Yamakiya district in Kawamata issued on April 22, 2011
 (One month given for actual evacuation until May 22)

Evacuation Order for Yamakiya District in Kawamata

- ► Removed six years later on March, 2017
- ► Elderly people returned, not young ones

Why Younger People Did Not Go Back to Yamakiya District

- Worried about possible influence of radiation on young children??????
- They settled into new life which was supposed to be temporary
- Moving from countryside to convenient urban areas made evacuees reluctant to go back to somewhere secluded and inconvenient

Senior Citizens who Went Back to Yamakiya

- ► Happy about going home again
- ► Miss their younger family members
- Worried about living without enough support from younger people in shopping, medical care, or nursing as they get older

Kawamata Built Well-Equipped School in Yamakiya



Hoping to attract children and parents back to Yamakiya

But, Very Few Young Kids Now Back in Yamakiya

High possibility that school will be closed shortly



Money Also Caused Division among People

Compensation money by Tokyo Electric Power Company and Japanese government

- →Bigger amount for evacuees
- →Smaller amount for residents who could stay

Kindai University (Osaka, Japan)

- 36,615 undergraduate students
- 48 departments
- 14 Faculties (Medicine, Engineering, Economics, Business, Art and Literature, Sociology, and many more...)

Kindai University

One of only two Japanese universities



Operating a small nuclear reactor on campus for experimental and research purposes

"All Kindai" team for Kawamata Consisting of Professionals in...

Nuclear Power, Radiation, Medicine, Nursing, Agriculture, Cooking, Micro-biology, Pharmacology, Mental Health, Psychology, Art, Journalism...etc.

Activities Offered for Kawamata by "All Kindai" Researchers

- Decontamination of radioactive materials
- Measurement of radioactive levels in food, soil, and well water
- ► Delivery of glass dosimeters to children in kindergarten, elementary and junior high school
- Mental care services
- ► Lectures on radiation and nuclear power

Measurement of Radioactive Levels by Glass Dosimeters of 1600 Children in Kawamata

between June 23 and September 30, 2011 average dose of 0.39 mSv

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between April 1 and June 30, 2013 average dose of 0.10 mSv

Support by "All Kindai" team

- ► Not only directly related to nuclear accident and radiation
- ▶ But also a bid to help create new industry, new source of income for Kawamata

Agriculture in Kawamata

- Very active industry before nuclear accident in 2011
- In Yamakiya, people used to raise tobacco leaves along with other vegetables

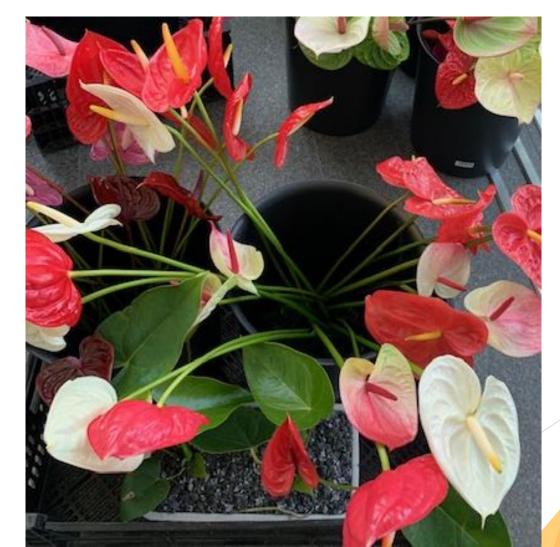
However, after Nuclear Accident...

- ► Food produced in Fukushima including vegetables became very unpopular in Japan after 2011
- ► Consumers worried about contamination even though products pass radiation tests

Advice for Kawamata from "All Kindai" Experts on Agriculture

- ► To raise something not for internal consumption
- ► To raise something not grown in soil

Raising 48 Kinds of Anthurium in Kawamata



Using "Culture Medium" Made of Polyester Instead of Soil



Growing Anthurium in Kawamata Not Ideal

- ► Anthurium originally from tropical areas
- ► Temperature in Kawamata could drop to as low as 15 degrees below freezing in winter

Dr. Naomichi Tanaka of "All Kindai" Advised Kawamata Farmers to Choose Anthurium



- Very few farmers raising anthurium in Japan
- Over 90% of anthurium consumed in Japan imported from Taiwan

Efforts to Keep Anthurium Warm by Farmer Goki Taniguchi



- ► 11 families in Kawamata growing anthurium
- In August, 2019, they started to ship anthurium all over Japan

Farmers Hoping Now...

"Kawamata Anthurium" to gain attention by being used as "victory bouquets" for medalists in 2020 Olympics in Tokyo

In a Bid to Let People Know More about "Kawamata Anthurium"



- Kindai artists created glass and porcelain vases for exhibition of anthurium in August, 2019
- Posters designed by Kindai students added beautiful colors

Success in Agricultural Products such as Anthurium could be...

Huge encouragement for farmers not only in Kawamata, but also for whole prefecture of Fukushima

Lessons from Research/Interviews in Kawamata

- 1) Share important information with residents quickly in major accidents
- 2) Take immediate actions when people face lifethreatening risks
- 3) Keep evacuation short and close to their original life
- 4) Return affected industries to what they used to be and also add something new, suitable, and more competitive to those industries

I Wondered What I can Do for Kawamata

- Listening to what people in Kawamata want to do and say
- Letting other people know what they have in their minds

Another Nuclear Accident like Fukushima

- ► Something I hope never ever occurs again
- ► But IF it happens, everyone should utilize lessons from tragic accident in 2011

Concluding Message as Member of "All Kindai" Team

- ► Radiation in Fukushima reduced to level in which scientifically there is no influence on human, except "Difficult-to-Return zone"
- Reputation of high radiation in Fukushima damaged Japan's society and economy
- Fukushima residents under severe pressure

Concluding Message as Member of "All Kindai" Team

- ► Japan needs to have correct knowledge about radiation, needs to erase discrimination against Fukushima, and needs to support people of Fukushima financially and mentally
- Children need sincere care at various life events for a long time to come

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Thank you very much...