

A large suspension bridge with a white steel truss structure spans across a body of water. The bridge has two tall towers and numerous vertical hangers. In the foreground, the water is turbulent, showing a prominent whirlpool with white foam. The background features a clear blue sky and a green, hilly coastline with some buildings.

# The Challenge of the Leading-Edge Problem-Solving Prefecture, Tokushima

Turning crisis into opportunity!

Kamon Iizumi,  
Governor of Tokushima Prefecture

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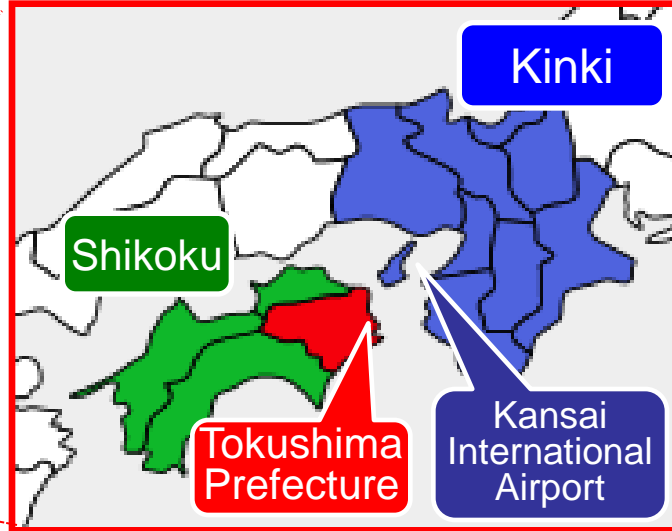
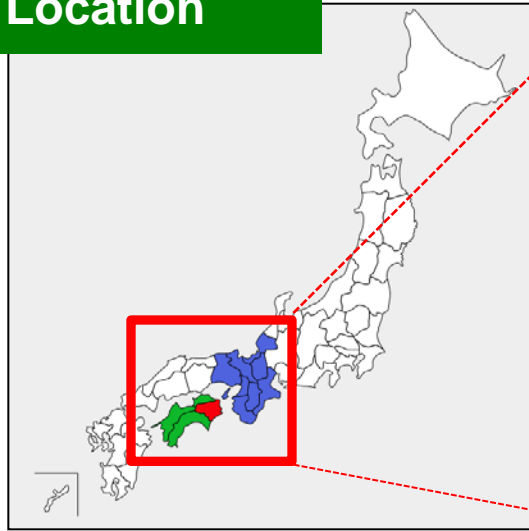
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# Overview of Tokushima Prefecture

## 1 Location



- Area 4,147 km<sup>2</sup>  
(approx. 6 x Singapore)
- Population: approx. 800,000
- Gross production: ¥ 2.8 trillion

◆ 2:45 hours from Kansai International Airport by express bus

## 2 Tourism and traditional culture

### 4 major attractions



#### Beethoven's 9th

Location of first performance in Asia of Beethoven's 9th



#### Awa Puppet Theater

Traditional puppet shows with recitation & shamisen



#### Awa Indigo Dye

Beautiful color, also known as "Japan blue"



#### Awa Dance

Typical Japanese cultural dance

# II Promoting “Hikari Broadband Okoku – Tokushima”

Digitalization of terrestrial TV broadcasting

July 2011

Signals from other regions became unavailable!  
Channels reduced from 10 to 3

Turned crisis into opportunity!

CATV network in whole prefecture completed!

## CATV producing “four treasures”

① Digital terrestrial broadcasting

Signals also available from other prefectures

② Broadband

High speed, high capacity (10x faster than Tokyo)

③ IP phones

Free phone calls within region

④ Local information transmission

Shares local information including disaster information, etc.

88.9% penetration rate of CATV in households, highest in Japan  
(as of end of March 2013; national average = 51.8%)

### What's more...

### Development in population decline and population aging

◆ Population trend (1960→2010)

-7.3% (Nationwide +35.8%)

◆ Population aged 65 or more (in 2010)

27% (nationwide 23%)

◆ Rate of marginal villages (in 2010)

35.5% (nationwide 15.5%)

Hilly and mountainous regions → Sharp increase in empty homes & unused facilities!

Utilize the best fiber-optic network in Japan to attract businesses and regenerate villages in hilly and mountainous regions!

# ◆ Prescriptions for problem solving

## ◆ Accumulating ICT related industry

- Attracting call centers, data centers, etc.

In 2003  
Zero sites

Businesses in region:  
10 companies, 13 offices  
created over 1,000 jobs



Call center



Data center

- Development of new operation test

July 2013~ Operation test of small-scale call center

Attracts people to depopulated areas

## ◆ Satellite office project

- Fully unfurled for Tokyo-based ICT companies from 2012

Help from prefecture

Facility rental, earthquake proofing work, etc.

18 related companies moved into 4 municipalities in prefecture!

Proposal of “new working style” → Telework

Companies ⇒ Risk dispersion (using momentum of Tohoku earthquake)

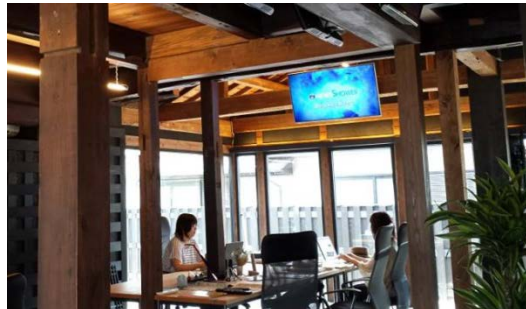
Employees ⇒ rise in work efficiency due to “comfort effect”

Local area ⇒ New business development, local jobs (34 people)

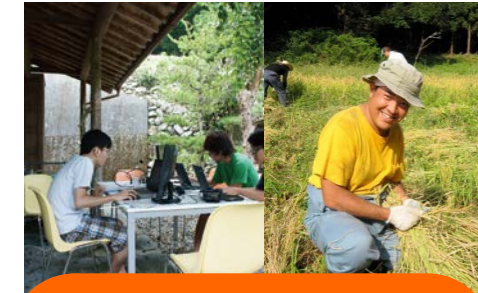
Kamiyama - First “population migration surplus” since 1970

“Engawa Office”  
Plat-Ease Co., Ltd.

Remodeling old folk houses and storehouses



Enable ways of working that transcend time and place



Achieve work-life balance



# Developing a System to Deal with a Major Nankai Trough Earthquake

## ◆ Simulation of major Nankai trough earthquake (assumed damage)

Extensive damage expected

60-70% probability of a magnitude 8 or more major Nankai trough earthquake occurring within 30 years

Assumed damage in Tokushima  
Maximum

Buildings destroyed: 116,400

approx. 40% of all buildings in prefecture

Deaths: 31,300

approx. 4% of population of prefecture

Lifeline damage: Over 90% (water/sewage, electricity, gas)

## ◆ Lessons of Tohoku earthquake

Unparalleled disaster

- Disruption to key roads → Ensure redundancy!
- Collapsed buildings due to quake/tsunami → Make homes more quakeproof!
- Isolated communities → Set up systems of self-help and mutual help!
- Power disruption, gasoline shortage → Secure new energies!

Need perspective of not only “disaster prevention” but also “disaster mitigation”!



Turned crisis into opportunity!

Aim for zero deaths, speed up “disaster prevention & mitigation measures”!

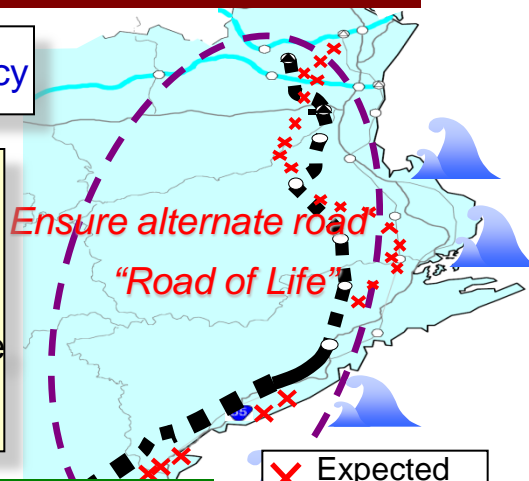
# ◆ Prescriptions for problem solving

## 1 Promote upgrade of road network

Ordinary times ⇒ Emergency

Disaster ⇒

- Giant tidal wave  
Land breakwater
- Emergency escape route  
Road of life



Speed up upgrade of road network!

✗ Expected road disruptions

## 2 Further promotion of quakeproofing of homes

(1) Establish tax system (national) for promoting quakeproof upgrades

Proposed by Tokushima  
Established in 2006

10% of renovation cost deducted from income taxes

Fixed asset tax reduced by certain amount

(2) Quakeproof wooden homes with simple construction + Eco-reform  
Barrier-free (eliminate differences in levels)  
Energy conservation (solar power, etc.)

Pref. aid

1/2

+ Municipal collaboration aid (¥100,000~500,000)

## 3 Promote self-help, mutual help

First time to be developed by prefectural government

(1) Implement first BCP in Japan

- Encourage BCP development in companies, etc.  
Set up BCP support center, conduct map training
- Develop agricultural BCP  
Tsunami/salt damage measures, soil salt-removal testing, etc.

(2) Create a volunteer disaster prevention organization

- Takes on big role of mutual help hub and damage mitigation

\*Organization rate 44% (2003) → 90% (2012)

Nationwide 77%

## 4. Introduce natural energy

● Introduce mega-solar power (18 operators, 21 locations)

Ordinary times ⇒ Power selling

Output: For about 16,200 homes

Disaster ⇒ Emergency power

Port facilities, evacuation shelters

2013 Operation test utilizing PHV and EV

Charging utilizing mega-solar power



Used for lighting, radios, etc. in evacuation shelters



Policy proposal

Enables power supply to evacuation shelters, etc.

# From “leading problem prefecture” to “leading-edge problem-solving prefecture”!

Wisdom lies  
in the local  
communities!



Turning  
crisis  
into  
opportunity!

“Honshu-Shikoku Expressway  
Nationwide Flat-rate Toll Introduction”  
action strategy logo

Thank you for your attention!