T. KATO LAB.

Establishing Social Safety System

Department of Human and Social System

Social Safety System
Department of Urban Engineering, Graduate School of Engineering

http://kato-sss.iis.u-tokyo.ac.jp/

The local community can exist because the people live there. Community is part of life. Safety, amenity and affluence is necessary in our life. Safety is one of the most fundamental necessities of human beings. What has urbanization and modernization given us, and what have they removed from us? We need to ask ourselves whether we take safety for granted. Today's post-urbanization era is the right time to re-consider what the safety of a community means. The continuous re-thinking and improvement is the only way we can ensure safety in our communities. Urban Planning and Engineering for Social Safety System, we consider the aggregation of urban stocks as an community entity, and consider the safety of the social systems which would enable the safety of everyone.

Assessment

プロジェクト

A Evaluating vulnerability in urban areas

Estimation of Earthquake Damage   **Urban Disaster Prevention Plan**

If a fire breaks out in a group of buildings of the same color during an earthquake, all of the buildings will be destroyed by fire.

Spread Cluster (Community of Fire Destiny)

Simulation of flood evacuation

TIME 01:24:20

Reflecting the characteristics of human behavior

Evacuation Simulation in the event of an earthquake fire

Implementation

プロジェクト

I Considering countermeasures with community

Safety Ensuring Plan   **Learn from The Depopulated Areas**

「Waterfront Renaissance Initiative」
(KATO Lab.+IMAI Lab.)

Below Low-water : 31.5km²
Below High-water : 124.3km²
Below level of storm surges : 254.6km²

Sharing risks

Community Planning to cope with flooding

Review of countermeasures by workshop

(To continue disaster prevention while having fun)

A Workshop with Residents

Community Planning for Disaster prevention

Considering Social Safety System

Kamaishi City, Iwate Pref.

Overseas Project
● Myanmar : Estimation of Earthquake Damage, Local Disaster Prevention Plan, etc.

Ōtemachi / Marunouchi / Yūrakuchō
Saitama Pref. / Soka City
Shin-Koiwa Area, Katsushika Ward, Tokyo
Tokyo Metropolis
Nagoya City / Aichi Pref. / Ayase City / Chigasaki City
Nagoya Station
Chiba City
Sumida Ward, Tokyo
Daimaryu district
Izu Pref.
Kawasaki City
Shizuoka City
Shibuya Station

Itari, Minami Town, Tokushima Pref.

● Recovery Image Training
● Estimation of Earthquake Damage, Local Disaster Prevention Plan
● Urban Disaster Prevention Plan
● Learn from The Depopulated Areas
● Safety Ensuring Plan
Disaster Planning Support: Comprehensive Approach Based on Community
● Estimation of Tsunami Damage, Local Disaster Prevention Plan
● Nankai Trough

preparation

プロジェクト

R Preparing for disasters from the position of planner

Recovery Image Training

Development of Reconstruction Image Training Methodology

Being the main character, he thinks about options for rebuilding his life from an individual standpoint.

Description of life reconstruction scenarios

From a planner's point of view, I think about the way urban reconstruction should be.

Description of urban reconstruction scenarios

Try to balance personal life reconstruction and planner's perspective.

Verify Consistency

Description of assumed model of reconstruction status and optimization of reconstruction

A Study on Urban and Regional Recovery from Disasters

Technology

プロジェクト

T Technically supporting to achieve safety society

Disaster Planning Support

AR Disaster Prevention Application "Tensai Manabu Gun"

CHIGASAKI

Tools based on AR technology

Visualization of Disaster Information by Google Earth

Administrative Organization
The power of the region connects vertically.

Support Request   Not required   Support

outside

① Inspiration Stimulus

Community

② Correct Understanding of Natural Disaster Risks

③ Multi-Layered

④ Expansion of interest groups

Establishment of Regional Disaster Prevention Technology Package (Building a New Social System)

Institute of Industrial Science, The University of Tokyo