

Development of Adaptation Model for Water Resources Management Tackling the Glacier Retreat, GRANDE

Prof. TANAKA Hitoshi
Graduate School of Engineering
TOHOKU University



東京工業大学
Tokyo Institute of Technology



国立大学法人
福島大学
Fukushima University



2nd GRANDE Workshop, November 22, 2010

Signing minutes at JCC in La Paz (Sept. 22, 2010)

JCC: Joint Coordination Committee

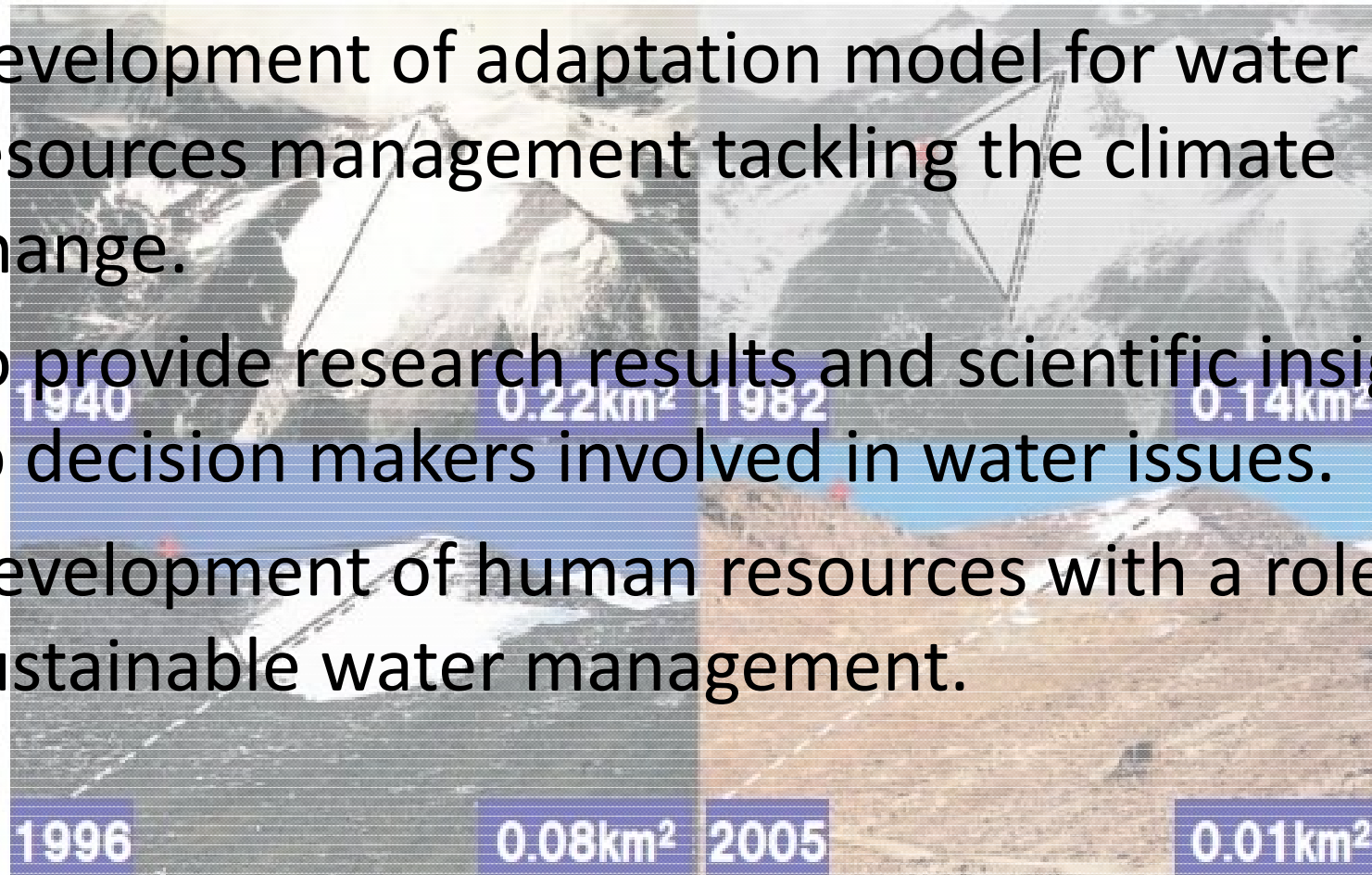


- The project will be conducted by Tohoku Univ and UMSA supported by JICA, JST and Bolivian Government. Research plan for 5years has been accepted.
- Project policy and management were discussed.

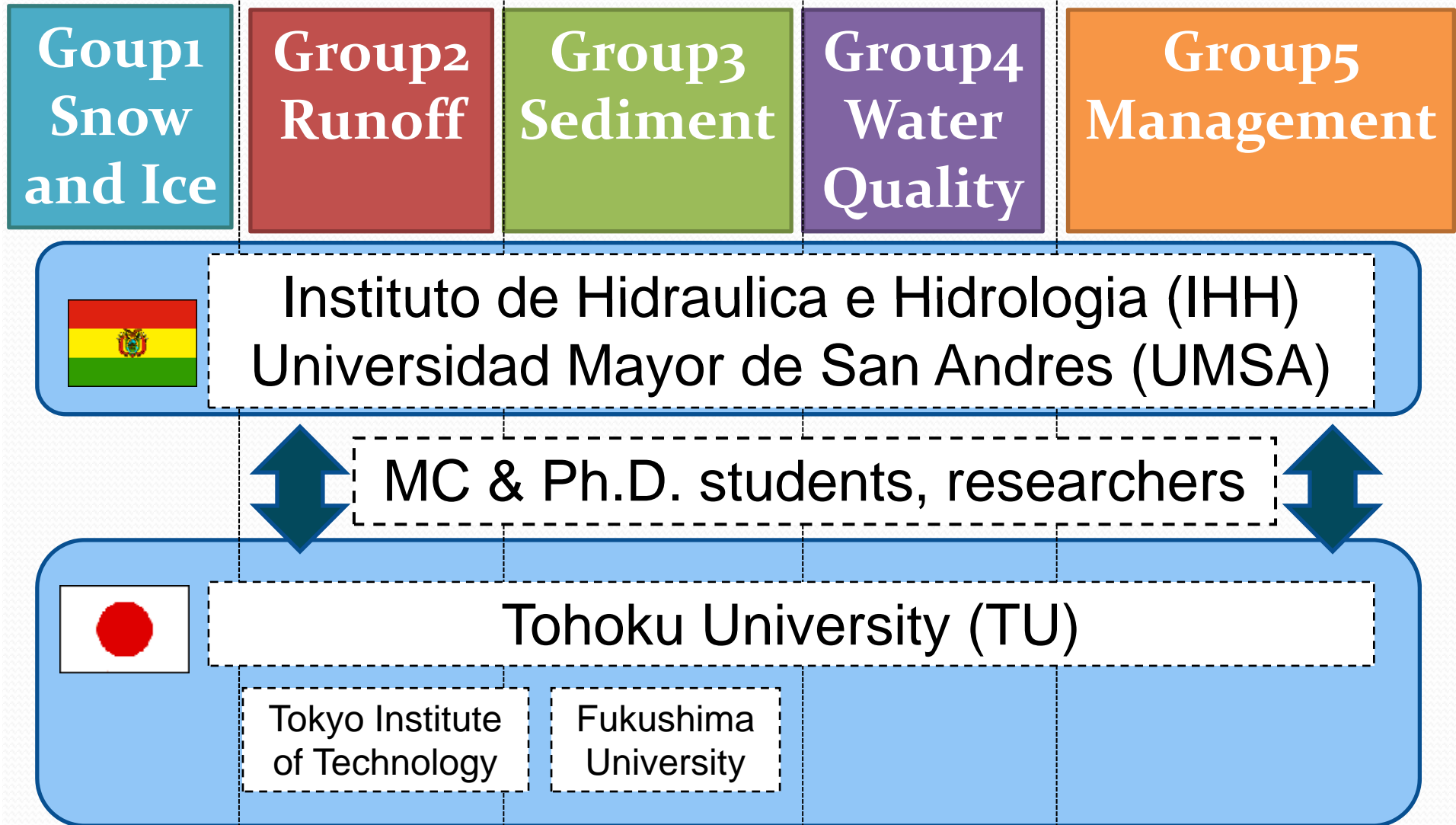
2nd GRANDE Workshop, November 22, 2010

Target of GRANDE

- Development of adaptation model for water resources management tackling the climate change.
- To provide research results and scientific insight to decision makers involved in water issues.
- Development of human resources with a role in sustainable water management.



Research Framework



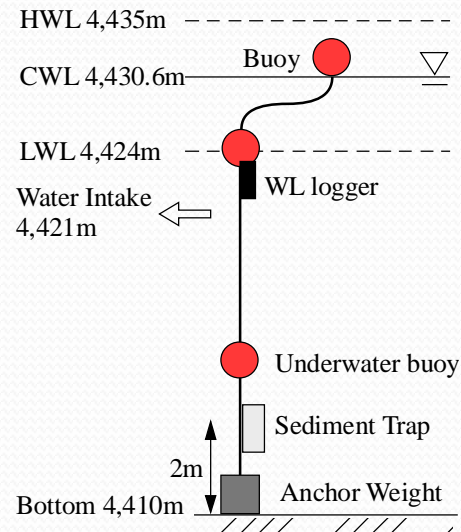
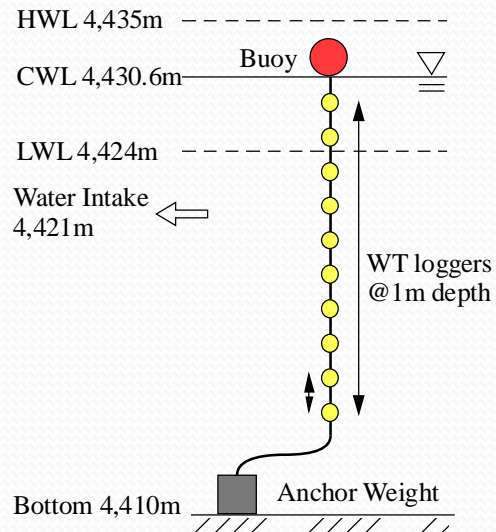
Collaborative Activities in GRANDE

- **Jan., 2010:** Workshop in Sendai, Japan.
- **May, 2010:** Technical seminar and field observations in La Paz, Bolivia.
- **Aug., 2010:** Training course in Sendai, Japan.
- **Sept., 2010:** JCC meeting, Technical seminar, and field observation in La Paz, Bolivia.



2nd GRANDE Workshop, November 22, 2010

Monitoring Devices in Lake Tuni



Two Bolivians have started research in Japan.

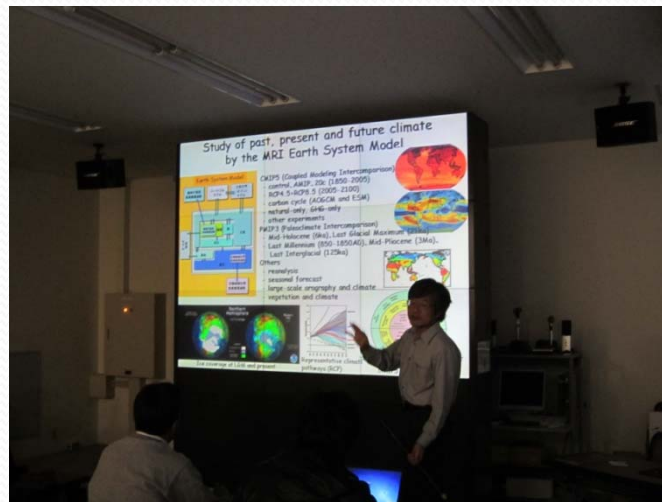
- Marcelo Gorritty
 - Tohoku Univ., Ph.D. course
 - Water quality modeling
- Faviola Ledezma
 - TIT, Master course
 - Runoff modeling



Several Bolivian researchers are going to participate in Japanese research group after April, 2011.

Training course in Nov. 18th, 19th.

- Climate change Impact assessment
 - Central Research Institute of Electric Power Industry, Meteorological Research Institute, National Institute for Environmental Studies.
 - Utilization of climate data derived from Global climate model.

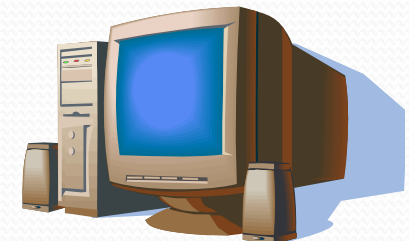


2nd GRANDE Workshop, November 22, 2010

Concept of Human Development

- Development of human resources with role in sustainable water resources and environmental issue.
- Understanding the physical process of hydrological and hydraulics, and model techniques for assessment of climate change.
- GRANDE researchers will expand and promote the assessment models after the project.

2nd GRANDE Workshop, November 22, 2010



Targets of 2nd GRANDE Workshop

- **Glacier group:**

Discussion on monitoring techniques and apply to the snow and ice field for the catchment scales.

- **Sediment group:**

Discussion on sediment transport modeling for the climate change assessment.

- **Overall discussions:**

Future plan, maintenance of monitoring devices, data management

Thank you for your attention, Glacias!

 1st GRANDE Workshop, SATREPS, JST/JICA
 January 27, 2010, Tohoku University  



2nd GRANDE Workshop, November 22, 2010