

Development of Adaptation Model for Water Resources Management Tackling the Glacier Retreat (SATREPS, JST-JICA)

“GRANDE”

(Glacier **R**etreat **A**daptation for **N**ational policy **D**evelopment)

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1st GRANDE Workshop, January 27, 2010

Past activities in GRANDE project

- **Apr, 2009:** Acceptance of the project by JST-JICA
- **Sep, 2009:** Meeting and field trip in Bolivia by Prof. Tanaka and Prof. Mano
- **Dec, 2009:** Meeting and preliminary field observations in Bolivia by Dr. Umeda and Dr. Asaoka
- **Jan, 2010:** Workshop in Sendai, Japan

Signing of R/D (Record of Discussion)

La Razón

Edición Digital - Domingo , Enero 24 de 2010

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Columnistas

El Evento

Sociedad

Cultura

Al Cierre

Entrevista

Mundo

Social

Farándula

Entretenimiento

Seguridad

La Paz

¿Quiénes Somos?

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Economía

Japón financiará estudios sobre el cambio climático

El enviado especial del Emperador del Japón, Shuji Kira, se reunió ayer con el Presidente. Dijo que las relaciones son "excelentes" entre ambos países. Reiteró el apoyo en educación, salud, infraestructura y otros.

El presidente Evo Morales se reunió ayer con el enviado especial del Emperador de Japón, Shuji Kira, quien reiteró que seguirán apoyando a Bolivia. Después, su agencia de desarrollo JICA anunció que financiarán un proyecto sobre el cambio climático en los nevados andinos.

Según el comunicado de la Agencia de Cooperación Internacional de Japón (JICA, por su sigla en inglés), difundido por la agencia de noticias EFE, señala que esa organización y la Universidad Mayor de San Andrés firmaron un acuerdo para desarrollar el proyecto que estudiará el "retroceso de glaciares".

"Los resultados obtenidos permitirán el diseño de políticas y proyectos tendientes a la formulación de medidas estratégicas de adaptación y reducción de la vulnerabilidad



• EN LA VISITA • Shuji Kira, enviado especial del Emperador del Japón, y el presidente Evo Morales sonríen. El traductor (centro) se encargó de

[+] Economía

► CEDLA organiza seminario internacional de energía



Ediciones Anteriores

Elija el día

Encuesta del día

¿Cree usted que Bolivia será un Estado socialista como anunció el Vicepresidente?

http://www.la-razon.com/versiones/20100123_006981/nota_257_942573.htm

Collaborative research between Tohoku University and UMSA-IHH will start on April 1st, 2010.

Glacier retreat and water management

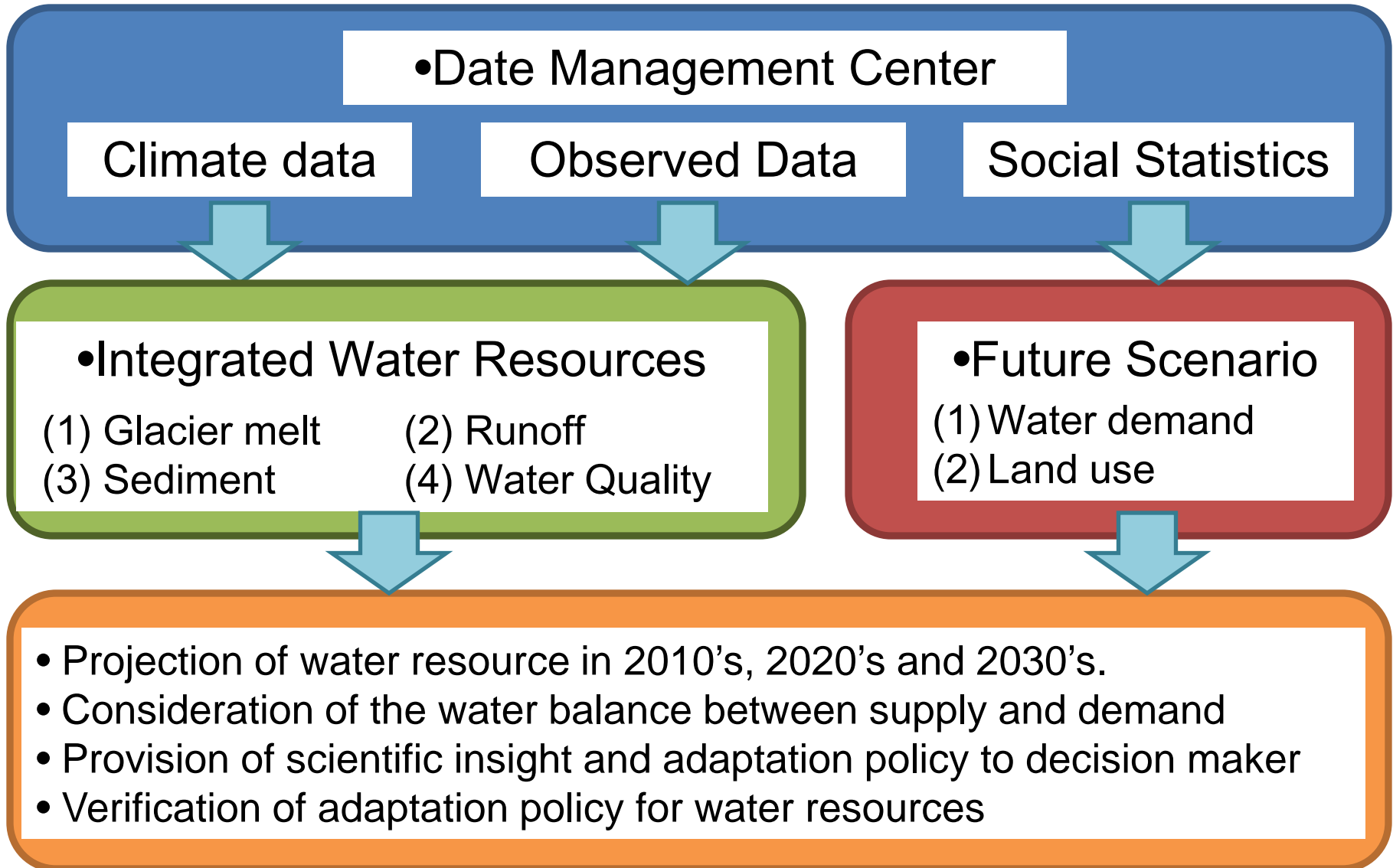
- Mass balance loss of glacier in Andes is rapidly increasing since 1990's (IPCC AR4 WG1).
- Many basins in the tropical Andes have experienced an increase in runoff in recent decades (IPCC AR4 WG2) , but there will be a reduction in water supply as the glaciers shrink beyond a critical limit in the long term.
- In Bolivia, glacier melting water has crucial role on water resources and water demand is increasing with national development.
- Adaptation policy for water resources tackling the glacier retreat is crucial issue in Bolivia.



Target of GRANDE

- Development of adaptation model for water resources management tackling the climate change.
- Development of human resources with a role in sustainable water management.
- Prediction of the water resources in La Paz and El Alto city in 2010's, 2020's and 2030's.
- To provide research results and scientific insight to decision makers involved in water issues.
- To discuss the adaptation policy for water resources management to climate change with decision makers.

Adaptation Model for Water Resources Management



Research Framework

Group1
Snow
and Ice

Group2
Runoff

Group3
Sediment

Group4
Water
Quality

Group5
Management



Instituto de Hidraulica e Hidrologia (IHH)
Universidad Mayor de San Andres (UMSA)

MC & Ph.D. students, researchers



Tohoku University

Tokyo Institute
of Technology

Fukushima
University

Target of This Workshop

- (1) From Bolivian research group: To introduce the climate, glaciers, water resources and water environment in Bolivia.
- (2) From Japanese research group: To introduce fundamental snow, runoff and water quality models, which will be combined to be an integrated water resources model.
- (3) To discuss and define the concept of GRANDE among Bolivian and Japanese researchers.

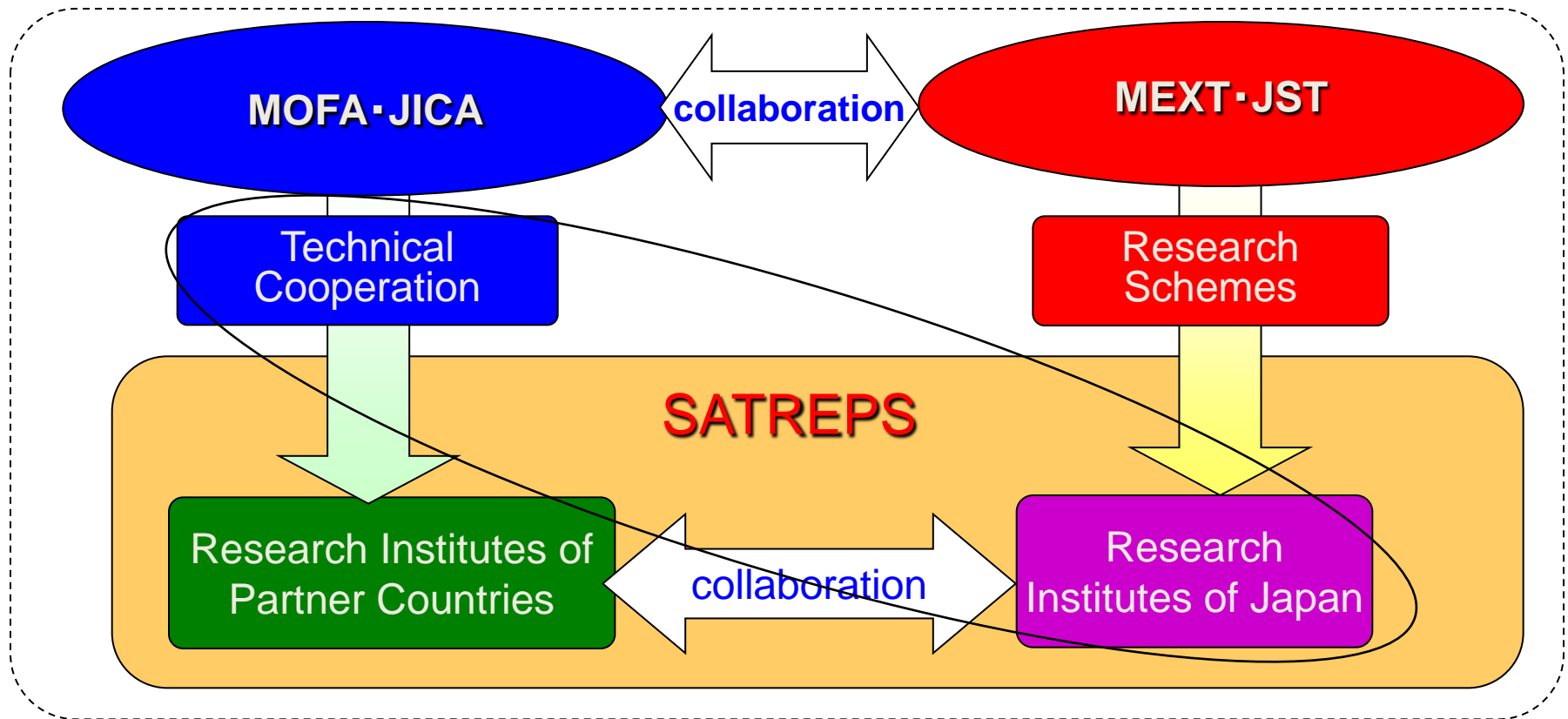
- Schedule -----
0. Opening remarks and introduction of GRANDE, by TANAKA Hitoshi, Tohoku University
 1. Climate change, glacier retreat and water resources availability in high mountain cities: case of Bolivia, by Edson Ramirez, Universidad Mayor de San Andres
 2. Water Supply System of La Paz and El Alto Cities by Andres Callizaya, Universidad Mayor de San Andres
 3. Studies of Water Quality in the Basin of La Paz city, Bolivia, by Marcelo Gorritty, Universidad Mayor de San Andres
 4. Snow models based on heat balance, by YAMAZAKI Takeshi, Tohoku University
 5. The Newest Technology on Short-Term Flood Forecast, by Do Nam Hoai, Tohoku University
 6. Environmental Hydrodynamics in Lakes and Reservoirs -Measurements and Computations-, by UMEDA Makoto Tohoku University
 7. Discussion, by KAZAMA So, Tohoku University
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Thank you for your attention!
Gracias!



Science and Technology Cooperation through ODA

SATREPS: Science and Technology Research Partnership for Sustainable Development



MEXT: Ministry of Education, Culture, Sports, Science, and Technology of Japan
MOFA: Ministry of Foreign Affairs in Japan