

Comments on “Water and Climate Change Adaptation”

**Takashi Hongo
Senior Fellow
Mitsui Global Strategic Studies Institute**

Private Sector Involvement

1 PPP and private finance (general)

- ✓ Enormous funds is needed for infrastructure, however resources, such as finance, technology, operation and management know-how, at public sector, who has responsibility for providing public services, are limited. Private sector is needed to be involved for financing and construction/operation/management. (demand side)
- ✓ Financial market is changing and varieties of funding sources become available if risk and return is fair. Particularly in the emerging economic countries, domestic finance is growing and may provide long term financing too. In addition to local finance, international finance including funds managed by institutional investors look at projects at emerging economic countries as attractive investment fields (supply side)

2 Partnership as risk sharing scheme

- ✓ “Partnership” which is needed at the real business is the risk sharing scheme. Responsibility of the public and private at the project should be defined clearly and legal issues on contacts is very crucial.
- ✓ Infrastructure, particularly adapted to climate change, has externality and the externality is unlikely to be paid by tariff or other service fee. (private investor’s view points)

3 Resource mobilization

- ✓ A key language for the adaptation is resource mobilization through market mechanism

National Policy as a crucial risk mitigation

1 Necessity of National Plan/Strategy for water use

- ✓ Water resources are limited. Therefore it is necessary to have comprehensive National Plan/Strategy to use water resources efficiently.
- ✓ Uncertainty of the policy is a very critical risk for private investment. Policy commitment is needed to invite private investment.
- ✓ Water-related infrastructure is a key infrastructure for economic growth and linked with other infrastructure. It is crucial to know the comprehensive national strategy for investors.

2 Requirements for infrastructure (project base)

- ✓ Several options for PPP, such as concession and BOT, are available but all approaches require commitment to conditions including water use by host government and/or local authority. However, these conditions may be breached due to unexpected climate change. That should be avoided, but it is better to include the risk and the framework for avoiding dispute between host parties and investment companies should be prepared.

Role of Insurance

1 Magnitude of disaster caused by extreme weather

- ✓ Magnitude of the disasters is bigger than before and cost of infrastructure preparing for all disaster is too expensive. It is better to combine “hard infrastructure” and “soft infrastructure”. For instance, for the flood risk control, combination of hard infrastructure and evacuation system is practical option

2 Role of insurance

- ✓ Economic loss caused by the extreme weather is increasing and insurance could be an economical and practical option.
- ✓ Agriculture is vulnerable for climate change, particularly change of the precipitation pattern is critical. Weather Index Insurance for Agriculture (WIIA) is an option for reducing the economic loss. Commercial base pilot project is operating in Thailand by Sompo Japan under the cooperation with JBIC and BAAC. It covers draught risk and 2012 is the 3rd year.
- ✓ Mega city is fragile for the extreme weather. Life should be protected by the infrastructure but insurance is effective to support the recovery from the economic loss. A good case is flood insurance in Jakarta by GIZ of Germany.
- ✓ Both case take index insurance approach, not conventional one-by-one evaluation approach. Theoretically index insurance can cover the case which large number of people are affected by the extreme weather and may reduce transaction cost and avoid unfair valuation too.

Incentive scheme – Green Climate Fund

1 Additional cost

- ✓ Adaptation is additional cost for water infrastructure. It is necessary to have a scheme to full fill the gap of service price and cost.
- ✓ Additional investment for IWRM including micro investment is needed. This can be combined with local job creation model (BOP business)

2 Green Climate Fund

- ✓ Green Climate Fund is expected to provide fund to accelerate the mitigation and adaption investment. But it should be efficient because the budget deficit of developed countries as conventional donors is serious. Therefore innovative approach mobilize private resources is required.
- ✓ WIIA seems to be eligible for GCF private window. An idea is that insurance premium would be subsidized by GCF private window, for instances, subsidized up to 50% of premium. Another possible support by GCF is capacity building support including improving weather observation system and construction of data base for development of insurance products.
- ✓ Incremental cost of water related infra for adaptation could be supported by GCF but it is difficulty to identify the incremental cost. Water infrastructure adapted climate change may be supported by GCF through Viability Gap Funds(VGF). VGF would be designed to subsidize the gap between investment recovery tariff and payable tariff for recipients of services.
- ✓ A key of BOP is initial cost and GCF is expected to provide incentives.

Summary of comments on Water and Climate Change Adaptation

1 PPP is possible and recommended.

- ✓ PPP is risk sharing scheme by the public and the private. Public should take some part of the risk.
- ✓ Private finance both local and international finance can play important role

2 National Policy

- ✓ Long term national strategy reduce the political risk for the investors

3 Role of insurance

- ✓ Combination of Hard and Soft infra is reasonable and practical. Weather Index Insurance for Agriculture (WIIA) is an example

4 Green Climate Fund

- ✓ GCF will play important role for mitigation and adaptation. Incentive for WIIA, water BOP business or other water related approach are expected.
- ✓ It is recommended to prepare proposal of effective use of funds at GCF.