Safe Water Supply

Kotaro INOUE
Principal Fellow
CRDS, JST

独立行政法人科学技術振興機構 研究開発戦略センター
Center for Research and Development Strategy Japan Science and Technology Agency

Our Goals

- On a worldwide level, sufficient quantity of water with adequate qualities are available for life, agriculture, and industry by clarifying water allocation plan and with high performance water processing systems.
- Environment pollution is prevented by proper treatment of sewage and waste water.
- Diseases causing with water pollution are minimized.
- All people can live safe and healthy surrounded by clean lakes, rivers, greenery and coast.
- Disasters of flood and storm surge are minimized.

International Schemes

- “Ba” for sharing global vision and international collaboration scenarios
- “Ba” to build-up data bases, to promote advances in technologies for forecasting water cycles and to make standards of safe and pollution of water
- “Ba” for developing technologies and systems acceptable for each country or region based on joint research with such countries/regions and for the trials of the prototype systems
- “Ba” where universities, private companies, local governments, and public-service corporations possessing technologies of element and systems can work and consider overseas issues together.

Key Technologies 1/2

- Technologies that accommodate the supply-demand imbalance of water
  - Short and long-term prediction of precipitation, water storage and water retention
  - Water allocation plans based on International collaborations
  - More effective artificial rainfall technologies
- Water treatment technologies
  - High performance membrane and systems
  - Energy-saving seawater desalination systems
  - High-performance bacteria for water purify systems
  - Detectors for accurate water quality analysis

Key Technologies 2/2

- Technologies for flood control
  - High-accuracy weather forecasting systems
  - Compact water storage systems and permeable pavement against floods in mega-cities

Expected Achievements

- Safe water supply in the world
- Prevention of deceases caused by water pollution
- Preservation of forests, rivers, lakes, coasts and other water-related environments
- Minimizing disasters of floods and storm surge
- Evolution of water industries and technologies in Japan and contribution to the world water problems