

Country Report II

EVENTS OR CASES OF TROUBLE RELATED TO WATER ALLOCATION IN CITARUM RIVER BASIN – INDONESIA

1. The legal and institutional framework of water allocation in Citarum River Basin. i.e. water related law, government organizations responsible for water resources planning development or management.

A. Government Policy

The government of Indonesia formulated the New Water Resources Law, Law No. 7/2004, in 2004. The Law reflects the Government's policy on water resources management.

The first issue of the policy is the missions of water resources management. The Government defined the following missions :

- Conservation of water;
- Utilization of water
- Disaster mitigation
- Community empowerment, and
- Development of information technology.

In order to achieve the missions, the government focuses on the following actions:

- To implement capacity building of agencies
- To secure fund and to pursuit cost effectiveness
- To establish water right and duty
- To define the role of public
- To coordinate stakeholders, and

To establish a board to appeal, to investigate and to arbitrate conflict.

The main targets of the policy include:

- To facilities efficient and environmentally and socially sustainable water resources development and management, by establishing national and provincial policies, institutional, regulatory and decision support frameworks.
- To strengthen the institutional and regulatory frameworks for integrated and equitable river basin management.
- To establish effective regulatory institutions and implementation arrangements for water pollution abatement and regional water quality management, and ;
- To improve the performance and sustainability of irrigation systems by establishing an institutional framework for the transparent and accountable delivery of irrigation services, and participatory fiscal support

to democratic farmer organizations, empowered with governance and financial authority to manage irrigation networks under their control.

B. Institutional Frameworks

Water resources Law 7/2004 provides for the classification of rivers, and the responsibility for management thereof by reflecting decentralization policy. The provisions thereof specify that a river be categorized as provincial if its entire drainage area is within the territory of a province. However, it provides the category of the National Strategic River Basin at the same time in case that : (1) the number of beneficiaries, which depend on the water resource of a river, is large and ; (2) The influence of the water resources in a river to the national economy is significant. The provided criteria imply that the Citarum area is one of the National Strategic River Basins, although several procedures for the official definition are yet to be cleared as described below.

The law provides for the establishment of water Resources Councils (Dewan Sumber Daya Air) for national, provincial (PTPA) and district level (PTPA), and a River Basin Level institution (PPTPA) to coordinate water administrators, users and other stakeholders. The category of the Citarum River Basin is one of the issues to be referred to by National Water Resources Council, which is to be established under the office of President. After the establishment, the Council will submit their recommendations on river categories to the president for approval, and a Presidential Decree will define the category of the rivers.

Various laws and regulations specified the roles of agencies related to the water resources management. The defined roles from the institutional frameworks for national and regional levels as follows :

- Roles related to water and watershed conservations
 - Forest reservations : Ministry of forest, provincial and district forestry department.
 - Spatial planning : Ministry of public works and provincial land agency
 - Land use : Ministry of interior, national land agency and regional planning board.
 - Urban Drainage : Ministry of human settlement and provincial spatial planning
 - Environment : State ministry of environment, provincial environmental management agency and district environmental control agency

- Roles related to water uses

- Agriculture : Ministry of agriculture and agricultural departments of province and district.
- Water supply : Ministry of settlement (Cipta Karya), Ministry of health, Ministry of industry and regional infrastructure agency.
- Hydropower generation : Ministry of energy and natural resources
- Roles related to disaster prevention
 - Flood : Ministry of public works and National coordination body for disaster mitigation and refugees management.
 - Mud Flow : Ministry of public works and National coordination body for disaster mitigation and refugees management.
- Roles related to land acquisition
 - Land acquisition : National land agency and regional committee for land acquisition.
- Resettlement
 - Resettlement plan : National land agency and the Provincial Governor and head of the district

The presidential Decree No. 83/2002 specifies the coordinating bodies of agencies for water resources management. The Decree stipulates that the Directorate General of water resources of Ministry of Public Works is responsible to plan, implement and manage with regard to in-stream management at the national level. The decree mandates the coordination among the water resources directorates of West Java Province, Water Resources Management of Provincial (PSDA) and district level, Jasa Tirta II Public Corporation, the Citarum River area, the Indonesia Power Corporation, and the Java Bali Power Corporation, for effective in-stream water resource management.

The Decree provides the responsibilities of agencies for off-stream management as well. The responsible agencies from the central government are National Development Planning Board (BAPENAS), the Ministry of forestry, the Ministry of Agriculture, the state Ministry of environment, the Ministry of Interior, the National Land Agency, the Ministry of Energy and Natural Resources, the Ministry of Health, and the Ministry of Industry. The responsible agencies at site level are the Departments of Forestry, Agriculture, Industries, Social, Sanitary, Energy and Environment from the Provincial Governments, and Drinking Water Regional Enterprise (PDAM) and the Planning Sections of District and City Government.

Provincial Basin Water Resources Council (PTPA) and River Basin Water Resources Council (PPTPA) are provincial and basin coordination councils

respectively. An agency of Province Water Resources Management (Dinas PSDA), is the secretariat of the councils. Coordination among district is vital for the activity of the Project Preparation Technical Assistance (PPTA). Water Resources Management Provincial Technical Office (Dinas PSDA) should provide incentives for the mutual coordination.

Jasa Tirta II Public Corporation, a state-owned company, is managed to manage the Citarum River Basin. Its jurisdiction covers the whole Citarum River Basin area from the watershed of the Citarum River down to the estuary including the main canals. The assigned tasks are watershed management, water utilization, water quality management and disaster mitigation. However the actual responsibility is limited to operation, maintenance and repair of the facilities excluding the reservoirs of Saguling and Cirata. The development of a facility is the responsibility of the central government. And the developed facility is the property of the government. The establishment of holistic management organization is necessary.

The Governor of the Province has the authority to approve applications for the right of water use in the tributaries in the Citarum river basin. In this respect, Jasa Tirta II Public Corporation (PJT II) is responsible for examining new applications for the effects on water availability through demand and supply balance simulation, and to submit recommendation to Governor.

The annual allocation of water in the main rivers and canals is subject to the results of coordination by River Basin Water Resources Council (PPTPA). The Governor decides the annual allocations to various users in this decree, based on the recommendations of River Basin Water Resources Council (PPTPA). In this respect, the first priority is to drinking water, the second to cultivation, the third to industry and the last to hydropower generation.

2. Cases of troubles related to water allocation

Due to its location and its available resources, the Citarum River Basin and Regional Water District (extended river basin) can play a major role in the development of the rapidly growing West Java region, in which Jabotabek (Jakarta, Bogor, Tangerang and Bekasi) and Bandung are major centers of economic activity. Considerable investments in infrastructure have already been made to support irrigation development, hydropower production, flood control and domestic, municipal and industrial water supply.

However, the expected socio-economic development of the region forms a considerable challenge for the water management.

- Watershed degradation is affected by natural phenomenon as well as human interference alternating the hydrograph and enhances sedimentation due to erosion that shortens economic life of dams and reduces river capacity.
To overcome the constraints, some measures should be considered both structurally and non-structurally, with regard to pursue:
 - Optimal soil stability and productivity
 - Sustainable and optimal forest resources management in accordance with their natural, social and economic functions
 - Sustainable and environmentally considered land use
- Limited water availability in most basins due to infrastructure degradation, limited of water resources infrastructure development, while rapid increase of water demand that cause imbalance between supply and demand lead to conflict of interest among beneficiaries.
Some measures should be considered to avoid conflict of interest:
 - Improve of water demand management, i.e., increasing irrigation efficiency as the biggest water user.
 - Conducting rehabilitation and development of water resources infrastructure to improve supply capacity of water.
 - Conjunctive use of groundwater and surface-water.
- Water quality degradation occurs due to erosion in the upstream area besides pollution from domestic, industrial, and agricultural waste. Those affect reduce water resources usability and reveal water-born disease.
To improve water quality in appropriate level measures should be taken:
 - Converging industrial activity in industrial estate to make it easier for controlling and monitoring of industrial waste
 - Introducing centralized waste water treatment plant in scattered industrial zone
 - Applying tariff of waste water discharge (polluter's pays principle)
- Flood hazard is occurred due to decreasing of conserve capacity in the upstream area besides inconsistency of spatial planning implementation, slack

of micro-drainage and diminishing of flood-plain. The aforementioned conditions lead to lost of life and property.

To treat flood hazard actions can be conducted are as follow:

- Implementing the designated spatial planning
- Dissemination of flood hazard mitigation and develop flood early warning system.
- Threatened river environment is an accumulation of riverbed degradation and improper in-stream river management converged with water quality degradation due to lack the authority to control off-stream sources of pollution, those threats the ecosystem, bio-diversity, and human welfare as well.

Some measures should be taken into consideration:

- Maintain stable and diverse riverbanks function in accordance with prevailing rules and regulation
- Preserve river functions, water resource infrastructures and river basin
- Water resource infrastructures degradation due to lack of proper operation and maintenance could hazard water resources management in the river basin.

Some measures should be taken into consideration:

- Improving operation and maintenance activities supported by professional management and adequate financial that contributes from water beneficiaries.

3. Reason of the trouble.

A. Lack of Institutional framework:

IWRM is a process which promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystem. PJT II were established by the Government for managing water resources limited in-stream of river acted as operator of water resources in the basin.

However various Central and Local Government organizations involved in WRM contributes to an institutional problem in sharing roles and responsibilities characterized by overlapping mandates. These mandates are based on a blend of structural, advisory, geographic and technical responsibilities, some of which are carry-overs from long-standing WRM units while others are newly established. Therefore integrated management between public sector, private sector and community has not been established yet. Meanwhile integration between management of land, water, and related resources has not been established as well.

Shift of paradigms are one of the impacts in the Southeast Asia post crisis condition economic advent. Social economic development has given path to shifts of paradigms on water resources. Water that has always been regarded as a social good has transformed into an economic good with social function. This has also affects the Government role, which shifts from being a provider towards enabler, from a centralized towards a more decentralized approach, from a single purpose towards multi-sector approach, from a less towards broader public-private-participation.

The GOI has launched Water Resources Sector Reformation Program since 1998 covering: (1) national institutional framework for water resources development and management, (2) improving organizational and administrative framework for river basin management, (3) improve regional water quality management regulatory, institution, and implementation, and (4) improve irrigation management policy, institution, and regulation.

B. Lack of Budget / Financial:

- Financial support for sustainable water resources management should be collected from beneficiaries.

Measures should be taken:

- Stakeholders' participation especially beneficiaries with appropriate tariff to use for operation and maintenance as well as capital cost recovery.
- Financial accountability
- Funding of water resources management for the people welfare safety and environment conservation is only possible whether the government is willingly to take part (contribute) its shares.

Measures should be taken:

- Improve of funding to achieve the RBOs strategy goals.
- Implementation of Government Obligation for Public Service
- Community awareness, education, and participation become important since people play significant role in utilization & conservation of water resources environment.

Measures should be considered:

- Improving community capability and willingness for being active and constructive participation in the conservation (in broad sense) of natural resources in the Citarum River Basin.

C. Decentralization in regard to this nation-wide policy, all natural resources are owned by the respective Local (Regencies / Municipal) Government.

Measures:

- An acceptance is needed from all stakeholders considering water is a flowing resource that encompasses both administrative and economic boundaries that could not be treated as the other natural resources. Role sharing and water resources prioritization (national, regional and local levels).

4. Questions and Need discussion

How to manage water resources with limited water quantity, decreasing of infrastructure function and How to implement the capacity building in water resources management ?