

# PERUSAHAAN UMUM (PERUM) JASA TIRTA II



# Final Report On

THE THEMATIC WORKSHOPS of NARBO ACTIVITIES.

# Prepared By

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Perum Jasa Tirta II (Citarum River Basin Organization) INDONESIA

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#### 1. Citarum River Basin Developement

Citarum River Basin is located in West Java Province while the service area covering two provincial administrative, i.e. West Java and DKI Jakarta. Annual precipitation depth is 3,000 mm per year in the mountainous range and 2,500 in the lowland. Relative humidity is 80% and daily temperature of 25°C in the lowland and of 18°C in the mountainous area.

In 1956 Ir. H. Djuanda, the Prime Minister of Indonesia declared the commencement of Jatiluhur Multipurpose Project. The main aim of the project is to enhance the rice production to achieved self-supporting national staple food. The project comprised with two major activities. The first one is to construct rock-fill type dam across Citarum River and reservoir behind the dam with impounding capacity of 3.0 billion m3, besides hydroelectric power plant with the install capacity of 150 MW as well. The second is to develop technically irrigation system over the area of 240,000 ha of paddy field in the north plain of West Java Province connected to Walahar and Salamdarma irrigation systems for two crops per year as an integrated technically irrigation area. The project has been finished in 1967, since then the dam, the reservoir and the power plant were named Ir. H. Djuanda dedicated to the Prime Minister who declared the commencement of the project while the irrigation system were named Jatiluhur Irrigation System.

There are nine rivers traversing the area from mountainous range in the south to the north and terminated in Java Sea. Citarum River is the biggest one connected with four rivers to the West namely Cibeet, Cikarang, Bekasi, and Ciliwung, and four rivers to the East namely Ciherang, Cilamaya, Ciasem, and Cipunegara by manmade canals namely West Tarum Canal (WTC) and East Tarum Canal (ETC) respectively formed a unit hydrological boundary of Citarum integrated basin of 12,000 sq-km. Average annual flow of water in the basin is 12.95 billions m3 and using the existing water resources infrastructures water that could be regulated is about 7.65 billions m3 annually. Up to present the potential of water is still enough to cope with

demands in the basin. However other measures should be taken into consideration to fulfill the demand beyond 2025.

The benefits reveal upon the completion of the project, among other: (1) flood occurs during rainy season that inundated 20,000 ha of fertile land in the plain could be minimized, (2) people have the opportunity to cultivate paddy in technically irrigated area of 240,000 ha two crops per year, (3) raw water available for domestics, municipalities and industries especially for Jakarta the Capital City of Indonesia, (4) hydropower plant with the installed capacity of 150 MW, (5) fresh water as well as brackish water fisheries development in coastal area, and (6) beautiful scenery surrounding the reservoir for tourism and water sport.

In 1970 the Government established Jatiluhur Authority Public Corporation with task and responsibility to maintain sustainability of water resources in the basin and extends operation and maintenance of water resources infrastructures and the hydroelectric power plant. Besides, the entity has to collect contribution from the beneficiaries of water services for running the operation and maintenance of the system. The Jatiluhur "Authority" in fact just a call name, but since the entity's working area is mostly within West Java Province some local people feel there is another "Government" in the Province. There for in 1999 the name of the entity was changed to Jasa Tirta II Public Corporation.

Latter, two other dams were built in Citarum River upstream of Ir. H. Djuanda dam namely Saguling (1984) and Cirata (1988). The main aim of the dams is for power generation with the install capacity of Saguling and Cirata are 700 MW and 1,000 MW respectively. The impounding capacity of Saguling and Cirata reservoirs are 900 million m3 and 1,200 million m3 successively. The dams were constructed by The State Electric Company and recently operation and maintenance extended to Indonesia Power Company and PJB Company respectively, they are the subsidiary of the State Electricity Company.

#### 2. Jasa Tirta II Public Corporation

#### A. Status and General Framework

The Integrated development of water resources in northern West Java has become the hydrology unit with Citarum river as the main resource. The management form of dam/reservoir. Hydro Electric Power Plant and Jatiluhur irrigation since the establishment in 1957 until now is as follow:

#### • Jatiluhur Multipurpose Project (1957 – 1967)

The development of Jatiluhur Multipurpose Project which comprises of Main Dam and Hydro Power Plant as well as its irrigation system was declared to be completed 1967.

Jatiluhur Multipurpose Project as the first stage of the development of water Resources in Citarum area with the main goal of increasing the production of national staple food, rice. The Dam and Jatiluhur Hydro Electric Power Plant is officially named Ir. H. Djuanda, in memoriam one of the best nation son.

## • State Company / Jatiluhur State Company (1967 – 1970)

In order to optimize the potency of Jatiluhur hydro Electric Power Plant, the State Company named Jatiluhur State Company was established in line with the Government Regulation No. 8/1967 dated 24 July 1967.

#### • "Jatiluhur Authority" Public Corporation (1970 – 1998)

As a Corporation, at that time Jatiluhur State Company, in all its business, is aimed to gain profit. Water supplied socially for the agriculture is carried out commercially, so the management of water resources become unharmonious and the aim of the development is not achieved. The potencies used and develop must be implemented effectively and efficient, for the reason it is implemented based on the economic principles reliable. Based on the above reason, the government establish a public corporation named: "Otorita Jatiluhur" (Jatiluhur Authority). Institutions / Project and officials that are under POJ development area and whose task and obligation relate to the goal, task, business of POJ, are merged in POJ. Those institutions are Jatiluhur Irrigation project (Ministry of Public Work); Jatiluhur Tertiary Irrigation Project (Ministry of Home Affair),

Jatiluhur State Company (Ministry of Industry), West java Public Work Official for Purwakarta Region (West Java Province).

Jasa Tirta II Public Corporation (1998 – present)
Jatiluhur Authority Corporation (POJ) was established in line with the Government Regulation Number 20 year 1970 which the it was adapted with the Government regulation No. 35/1980 and Government Regulation No. 42/1990. With the issue of Government Regulation No. 13/1998 regarding with Public Corporation, the POJ was renamed as Jasa Tirta II Public Corporation (PJT II) in line with Government Regulation No. 94/1999. PJT II provides public services and simultaneously gains profit based on the corporation management principles.

# B. Mission and Organization

Jasa Tirta II Public Corporation Vision is to realize a well known and high quality company in water management and water resources for wide service in water supply to the various requirement and contributions to national food sufficiency.

Mission to realize the Corporation Vision, the company has Missions as follows (1) Raw water supply for drinking water, electric generation, agriculture, industry, harbor, flushing and other need (2) Electric power generation and supply the electric power (3) To develop Tourism and land use, (4) To maintain the food sufficiency by mean supplying of agriculture water and flood control with effort of preservation environment protection by mean information, recommendation and guidance (5) To maximize the profit and to foster the benefit based on business principle in assuring government asset continuance and service continuity to public.

In line, with the Government Regulation of The Republic No. 94 year 1999 dated 13 October 1999 and the Decree of Minister of Resettlement & Regional Infrastructures No. 18/KPTSM/M/2000 dated 15 December 2000, about the guidelines of Operational activities of Jasa Tirta II Public Corporation.

Organization Structure of Jasa Tirta II Public Corporation has a 4 (four) director, are: (1) President Director (2) Administration and Finance Director, (3) Technical Director (4), Operation and Maintenance Director.

The corporation organization structure is made up of 3 (three) Directorates, each led by a director. Each director direct a number of Division / Bureaus heads.

The number of employees of Jasa Tirta II Public Corporation as per June 1, 2004 is 1,914 people. (Figure 2. Organization Chart of Jasa Tirta II Public Corporation).

#### Institutional Establishment

Upon the completion of the project the Government considered that an institution should be established with the task of operation and maintenance all the output of the project as national assets especially water resources infrastructures. The institution should also capable to collect the fund from the beneficiaries of the existence of water. In 1970 Jatiluhur Authority Public Corporation was established through the Government Regulation Number 20 of the year 1970. Since then in 1999 the name was changed to Jasa Tirta II Public Corporation (PJT II), Jasa Tirta means water service.

#### Scope of Works (Government Regulation No. 94/1999)

Scope of Works Jasa Tirta II Public Corporation are (1) Exploit ate and maintain water resources infrastructure and hydro-electric power generation.(2) Water resources and hydro-electric power Utilization (3) Watershed management, such as: control, develop and utilize water resources in Citarum River Basin.(4) Rehabilitate water resources infrastructures and hydro-electric power plant as well.

#### Corporation Aim And Objective (GR No. 94 of 1999, Pasal 6)

Corporation Aim, to operate water for public utilization and its qualifying water sources which sufficient to fulfill the necessity of all the people and to carry out certain tasks given by the government in managing the river basin and/or its sources including to give information, recommendation, consultation and guidance.

Objective in corporation, to develop the national economy by participating in the program of national development in water management, water source and electric power.

#### **Relation with Other Bodies**

For several decades, the basin managements tasks in Citarum River Basin focused on the management of the large Jatiluhur irrigation system and reservoir. This tasks has been carried out by Jasa Tirta II Public Corporation (PJT II). In 1999, the tasks PJT II has been extended to include management for the entire basin. The latest change, following the above mentioned general concept, comprised the transfer of the management of the irrigation scheme, the largest water user in the basin, under the direct control of the province, with the ultimate aim to have and independent /privatized irrigation water user. In view of the importance of the main canal system in the total water supply for the basin and adjacent Jabotabek region, the management of this system will remain under the Basin Technical Management Unit.

It is further intended to institutionalize and underscore the functional role of the Basin Water Management Unit by establishing a basin Balai Pengelola Sumber Daya Air (Balai PSDA) which will replace the present Satgas units. At the present stage, the roles and responsibilities (policy setting, standards, permits, regulation, enforcement, O&M, monitoring, etc) of the various levels of Government appear to a large extent identified and allocated. However, a further clarification and integration is needed regarding the various management tasks, which at present are scattered among different government agencies. **Important** aspects comprise groundwater management (Ministry of Mining), water quantity (Ministry of Regional Home and Infrastructure) and quality management (Ministry of Environment), Flood Control (Ministry of Regional Home and Infrastructure), catchments preservation (ministry of Forestry) and hydro energy generation (Electrical Company).

#### WATER ALLOCATION MANAGEMENT

#### 1. General

Citarum river basin have average annual flow of water in the basin is 12.95 billions m3 including the local sources from the integrated rivers along the system, and it could be managed and regulated is about 7.65 billions m3 annually which is equal to 59,07% of available water.

Dealing with the tasks of the company, PJT II supplies the regulated water to 2 (two) main sectors of users:

- a. Non-commercial Sector
  - This sector belongs to the Irrigation only and utilizes the amount of water equal to 87% used by the farmers freely.
- b. Commercial Sector, this sector could be divided into several users such as:
  - Municipal Water for the Capital Special Province (PAM-DKI): 5,9%.
  - Municipal Water for the Districts (PDAM-Kabupaten): 0.83%
  - Industries: 2.78%

In line with the government regulation preparation, the annual allocation of water utilizations in the Citarum River Basin is provided by the consensus among the stakeholders through coordination held by Provincial basin water management committee for provincial and district levels (PTPA), and Citarum River Basin Water management executive committee (PPTPA). The Governor decides the annual allocations to non-commercial (irrigation) users in his decree, based on PPTPA recommendations. The first priority is for drinking water, the second to cultivation, the third to industry and the last to hydropower. The Committee represents the stakeholders such as water administrator, users and other stakeholders.

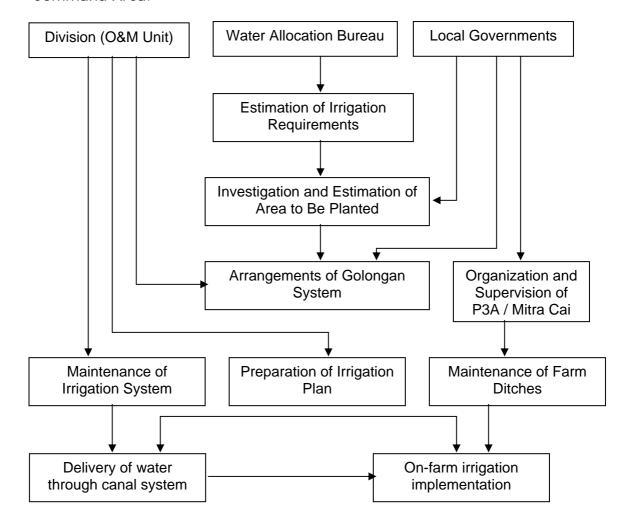
Should be noticed, the commercial sectors only utilize 10% of potential water availability of Citarum River. It is very slight comparing with the 80% water for the irrigation. If we reduce the water supply up to 50% for irrigation, it is not significant and no effect for the crop production. On the other hand, in

order to keep the revenue based on the cost recovery concept of corporate, it is complicated to reduce that '10%' of commercial water during the dry season or occurrence of shortage of water availability because it will reduce the corporate production.

# 2. Water Allocation Procedure in Jatiluhur Irrigation Command Area.

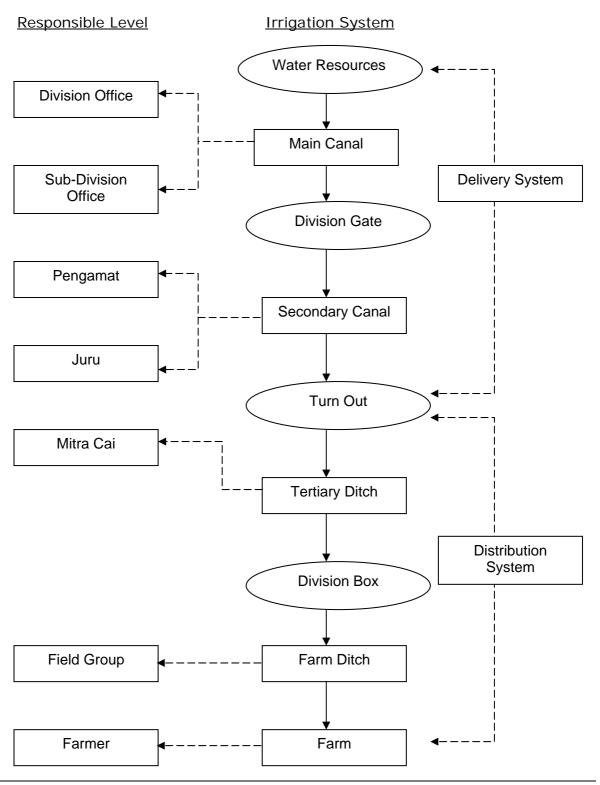
Water management work in the PJT II irrigated command area is carried out in two parts in presents. The first part, covering the facilities from water source to within 50 meters of the offtake gate tertiary canal is palnned and performed by the PJT II unit concerned. The second part deals with the onfarm system beyond the intake gate of tertiary and is undertaken by each water user (farmers) through the community named P3A Mitra Cai in charge under the guidance and supervision of institutes concerned.

Chart below shows the water management procedures in the PJT II Irrigated Command Area.



According to the irrigation system, the water source and main system are managed by the divisions and sub-division, while the secondary system and its offtake gates are controlled by the Pengamat and Juru. The distribution system should be operated by the P3A Mitra Cai themselves.

Chart below shows the Management System of Jatiluhur Irrigation Project



Practically, the procedure of *Water Allocation* in Jatiluhur irrigation Command Area is obtained as follow (flowchart shown below):

a. Provision of 'Golongan' system.

'Golongan' means the planting schedule of crop/paddy that is provided by considering several factors such as area to be planted, water availability, canal capacity, and some hydrological parameters.

This provision is governed and prepared through Irrigation Committee of Stakeholders, including PJT II and The State Governments on Citarum River Basin.

To be remained, the consideration of water availability is obtained from 80% of potential water availability of Citarum River. It means that 80% water of Citarum River is managed for the non-commercial sector i.e. required water for irrigation command area.

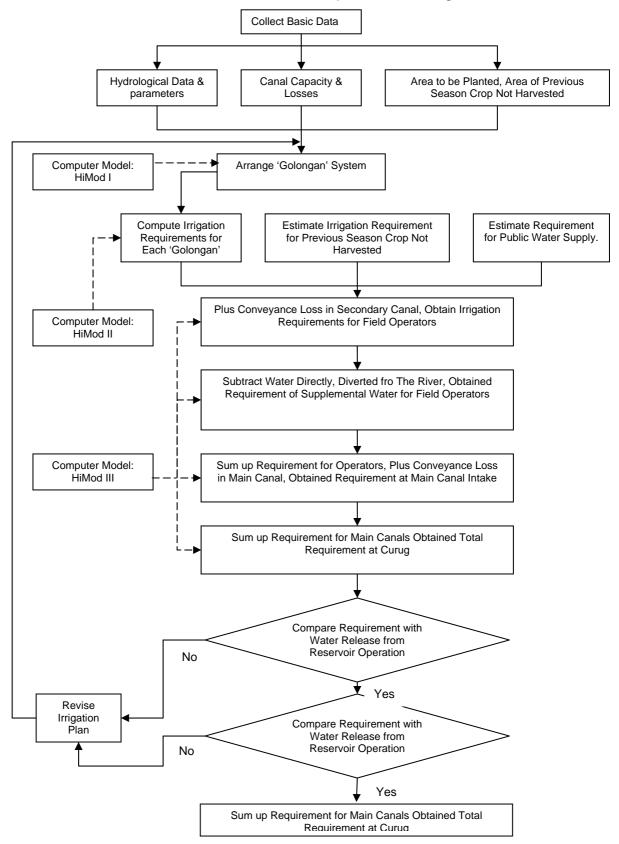
- b. Establishment of 'Golongan' System through the Governor Decree by the Governor of West Java Province.
- c. Implementation of Water Allocation based on 'Golongan' System by The Water Allocation Operators including PJT II.

Regarding to this activity, PJT II establish the guideline through the Director Decree on Water Allocation.

The Instruction clearly accommodates permission to reduce the water supply up to 50% (30% remaining i.e. minimum water supply) for the irrigation, based on the analyzed and technical justification of its causes. This condition occasionally creates the anxiety of the farmers and other non-commercial water users.

- d. Evaluation of The System Implementation through:
  - The weekly coordination meeting of internal committee named: PJT2
    Team for Evaluation of Water & Water Resources Management
    (TEPASA).
  - The monthly coordination meeting of Water Management Secretariat of Citarum River Basin (SPKTPA-Citarum).

# Flowchart of Procedures for Preparation of Irrigation Plan



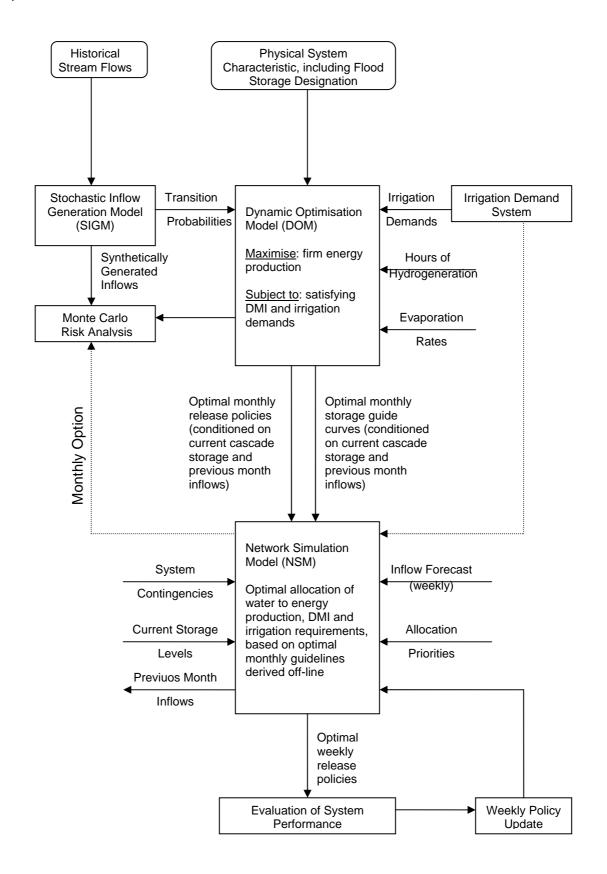
# 3. Water Allocation Procedure Through The Reservoir (Cascade Reservoir Operation)

As mentioned before, there are 3 (three) reservoir constructed in Citarum River; Saguling, Cirata and Juanda Reservoir. The guideline of cascade operation is agreed by the operators and forms the basis of the reservoir operation. It results in a recommended rule curve for the year under consideration actual operation is adjusted during monthly consultative meetings of SPKTPA-Citarum. Ad hoc adjustments are made during emergency situation on a daily or even shorter basis. In this plan the upper two reservoirs are operated for power production, while the bottom reservoir, Ir.H.Djuanda, has to meet the water supply requirements. The system as a whole has to be operated such that flood control is maximal. The guideline is named POLA.

The POLA arranged by SPKTPA-Citarum by considering the several factors such as the water balance, water supply requirements including the DMI and irrigations demands, water released, power generations, existing reservoir level, etc.

A hierarchical scheme for meeting the objectives is shown in chart below. A temporal decomposition approach is selected which begins with the development of optimal feedback decision policies for each calendar month for the reservoir cascade that maximize a selected primary objective, subject to satisfying irrigation and other project requirements as closely as possible. Other objectives priorities may be selected.

Chart of Hierarchical approach for developing optimal normal operation policies of Reservoir



# CRITICAL ISSUES ON WATER ALLOCATION AND WATER RIGHT

**As resumed in 1<sup>st</sup> and 2<sup>nd</sup> Thematic Workshop**, PJT II exposed the several issues related with the Water Allocation and Water Right Activities and the responses as follows:

## 1. Legal Frame Work

Implementation regulation according to the new law of water resources still under preparation, and, PJT II still keep the previous role on river basin managements and more enthusiastic to carry well-organized coordination among the stakeholders.

# 2. Policy and Plan

Concept of "Integrated Water Resources Management" is agreed by the audiences, however, the implementations is not simple.

### 3. Organization

Lack of basic knowledge could be replaced / recovered by the great attitude of the staffs to increase and achieve maximal experiences in order to execute or create proper decisions and tasks. Meanwhile, program for skill improvements of PJT II staffs still required. At least, in-house training guided by more experienced staffs could be held for middle-low level. Capable and qualified lectures and trainers from related institute is the first priority.

#### 4. Financial

The well-implemented concept of recovery cost by increase the water tariff and hydropower is still difficult to be achieved. Public services activities needs supported fund immediately, Central Government contribution is totally required. Sharing of cost between public services and business still in process and become a first priority.

#### 5. Participation

Participation and awareness from the entire users on public services sector still significantly required, especially during dry season, to obtain proper and effective water allocation and distribution.

#### 6. Technical

Watershed degradation due to erosion (stream flow) is remarkably increased during wet season and followed by inadequate water quantity availability during dry season. Therefore, advance technology and method are required to be implemented in order to solve the current problems.

Those issues already disseminated and discussed among the PJT II employees through several events such as the weekly coordination meeting of internal committee named: PJT2 Team for Evaluation of Water & Water Resources Management (TEPASA), and the monthly coordination meeting of Water Management Secretariat of Citarum River Basin (SPKTPA-Citarum). It results the critical-selected issues, the troubles derived, and the causes as follows:

#### 1. Water guarantee on sustainable water availability.

No guarantee from government or agencies on sustainable water required by the users (especially in commercial sector), including no compensation on losses/damages due to unsustainable water supplies.

Troubles derived from the issue:

No guarantee from government or agencies on sustainable water required by the users (especially in commercial sector), including no compensation on losses/damages due to unsustainable water supplies.

Causes of the issue:

- Implementation regulation of water allocation and utilization as mentioned in Water Law is not readyimplemented yet.
- Overlapping Citarum River Basin Organization on Policy and Plan and lack of consensus built among stake holder
- 3. Problems due to water quantity degradation, hence, no adequate water quantity to be supplied.

### 2. Water Conflict.

Conflict between commercial and non-commercial sectors on water allocation and its utilization and usage.

Troubles derived from the issue:

Conflict between commercial and non-commercial sectors on water allocation and its utilization and usage.

Causes of the issue:

- Implementation regulation of water allocation and utilization between commercial and non-commercial sectors as mentioned in Water Law is not readyimplemented yet.
- 2. Inadequate water quantity availability especially during dry season.
- Luck of budget to recover required cost of water resources development and management, which affected the water allocation policy on each sector priority.
- Increment of the municipal water demand due to increment of urban population, otherwise, land use of irrigation command area already changed reducibly.
- Insufficient personnel on field to carry out the tasks regarding the water allocation operation and management.

#### 3. Water technology application and development.

Implementation of water technology on field by the staffs is not proper yet. Hence, water allocation pattern and related policies could not be applied properly.

Troubles derived from the issue:

Implementation of water technology on field by the staffs is not proper yet. Hence, water allocation pattern and related policies could not be applied properly.

Causes of the issue:

1. Lack of qualified staff on the field to execute the tasks properly.

2. Lack of technology transfers among technical staff due to lack of coordination in corporation organizations.

These critical issues exposed also during the  $3^{rd}$  Thematic Workshop in Bangkok, Thailand,  $27^{th}$  Nov –  $1^{st}$  Dec 2006, and already reviewed by the Members of Core Working Group during the  $4^{th}$  Thematic Workshop in Japan,  $22^{nd}$  –  $27^{th}$  Jan 2007. It resulted the revised *Proposed Proposal* and *Action Plan* of the Proposals as mentioned in the next Chapter.

# Chapter IV.

# PROPOSED PROPOSAL ON THE ISSUES and ITS ACTION PLAN

The *Proposed Proposals* and *The Action Plan* of each Critical Issues mentioned as follows:

- 1. Proposed Proposals dealing with the issue of *Water guarantee on* sustainable water availability are follows:
  - a. Regulation on Implementation of Water Law should be prepared soon regarding management concept on IWRM and water use right.

#### The Action Plan:

Item in processes to realize the proposal	2004/	2006/	2008/	2010
item in processes to realize the proposal	05	07	09	
a. Identifying related aspects.	<b>√</b>			
b. Information and Report preparations.	✓			
c. Contributing in meeting and discussion.	✓			
d. Implementation of the regulations.		✓		
e. Monitoring and evaluations.		✓	✓	✓

b. Ensure water allocation through river basin development and management planning with the agreement of stakeholder by conducting public consultation meetings (as stipulated by water law 7 – 2004).

#### The Action Plan:

Item in processes to realize the proposal	2004- 07	2008	2009	2010
a. Identification of guidelines as stipulated by water law 7 – 2004.	<b>✓</b>			
b. Technical review on related aspects.	✓			
c. Planning and action, including the intensive coordination.		<b>√</b>	<b>√</b>	<b>√</b>
d. Monitoring and evaluation.		<b>V</b>	<b>&gt;</b>	•

2. Proposed Proposals dealing with the issue of *Water Conflict* are follows:

a. Regulation on Implementation of Water Law should be prepared soon regarding to management concept on IWRM.

#### The Action Plan:

Item in processes to realize the proposal	2004/ 05/06	2007	2008/ 09	2010
<ul><li>a. Identifying related aspects.</li><li>b. Information and Report preparations.</li></ul>	✓ ✓			
c. Contributing in meeting and discussion.		✓		
d. Implementation of the regulations.		✓	✓ ✓	<b>√</b>
e. Monitoring and evaluations.				•

b. National Water Resources Committee (NWRC) as a national coordinationorganization among all stakeholder as mentioned in newest Water Law should be prepared soon, to handle the responsibilities on water allocation and water right policies.

#### The Action Plan:

Item in processes to realize the proposal	2004	2005	2006	2007
a. Proactive in NWRC preparation and preliminary coordination meeting, as a focal stakeholder.	<b>√</b>	<b>√</b>	<b>√</b>	
b. NWRC published and Implementation activities of the regulations.				<b>V</b>
c. Monitoring and evaluations by each stakeholder.		✓	✓	<b>√</b>

c. Concept of cost recovery should be implemented soon regarding beneficiaries-pay principle (for commercial utilization) and government obligation and services (for non-commercial utilization) as well, in order to improve operation and maintenance of infrastructure.

#### The Action Plan:

Item in processes	2006/ 07	2008	2009	
a. Identification of both utilizations and followed by separation of the cost.	<b>√</b>			

b. Updating of formulation of cost recovery concept.	✓			
c. Introduction & discussion the proposal.		✓		
d. Concept approved + Implementation / action and monitoring + evaluation.		✓	✓	✓

 d. Reviewing on Water Allocation Priority regarding the Water Balance analysis (demand – availability – supply relationship), including its implementation regulation.

# The Action Plan:

Item in processes	2006	2007	2008	
a. Identification of command area changed and increment of municipal water demand.	<b>√</b>			
b. Water Law and its regulations consideration.	✓			
c. Water balance analysis and reviewing water allocation priority.	✓			
d. Introduction the review results and followed by the discussion in regulators level.		✓	✓	✓
e. Action and monitoring + evaluation.		✓		

e. Reviewing applied human resources concept dealing with IWRM on Citarum River Basin, especially for on-field personnel and staff.

#### The Action Plan:

Item in processes	2007	2008	2009	2010
a. Identification of required personnel and staff on field, including their quantity and competency.	✓			
b. Training needs analysis.	✓			
c. Reviewing the existing human resources concept.	✓			
d. Introduction the review results and followed by the implementation.		✓	<b>√</b>	<b>√</b>
e. Action, monitoring and evaluation.				

- 3. Proposed Proposals dealing with the issue of *Water technology application and development* are follows:
  - a. Improvement of human resources based on required skill dealing with IWRM technologies and management concept through either in-house or external course or training (typical with 5th proposal of 2nd issue).

The Action Plan:

Item in processes	2006 / 07	2008	2009	2010
a. Identification of required personnel and staff on field, including their quantity and competency.	<b>√</b>			
b. Training (skill development) needs analysis and planning.	•			
c. Preparation of human resources development concept.	✓	<b>✓</b>	✓	✓
d. Introduction and followed by the implementation of the concept.		<b>√</b>	<b>√</b>	<b>√</b>
e. Monitoring + evaluation.				

b. Reviewing of applied IWRM technology on Citarum River Basin, including its upgrading and developments to ensure sustainable water availability.

The Action Plan:

Item in processes	2007	2008	2009	2010
a. Identification of existing applied technology.	✓			
b. Identification of existing personnel capability to apply the technology.	✓			
c. Reviewing the required technology in particular field.	✓			
d. Preparation of applicable technology.		✓		
e. Application, monitoring + evaluation.		✓	✓	✓

# Chapter V.

# **CLOSING REMARKS**

On behalf of PJT II as a RBO, I'd like to express my grateful appreciative to NARBO Secretariat, ADB, ADBI and Organizing Committee, in supporting this workshop and opportunity given to PJT II as Members of Core Working Group.

From the implementations of IWRM point of view, PJT II considers several important issues as follows:

- Water guarantee on sustainable water availability.
   No guarantee from government or agencies on sustainable water required by the users (especially in commercial sector), including no compensation on losses/damages due to unsustainable water supplies.
- Water Conflict.
   Conflict between commercial and non-commercial sectors on water allocation and its utilization and usage.
- Water technology application and development.
   Implementation of water technology on field by the staffs is not proper yet.
   Hence, water allocation pattern and related policies could not be applied properly.

Water resources management is one of the essential processes through which these factors are linked. It allows decision making at all levels within the framework of overall planning and coordination among all sectors of society. Regarding to the World Water Forum (The Second World Water Forum) at March 2000 in Den Haag, and followed by The Conference of International Freshwater in Bonn, Germany at December 2001 (Dublin +10), several agreements have been obtained in line with the Integrated Water Resources Management (IWRM) and its implementations review. Government of Indonesia already tried to accommodate these agreements in new Water Law i.e. Law number 7/2004.

Regarding to the Indonesian Water resources Law number 7/2004, it provides the classification of rivers and the responsibility for management that reflecting decentralization policy. The provided criteria imply that the Citarum River is one of

the National Strategic River Basin, although several procedures for the official definition are yet to be cleared. Also, the National Water Resources Consul Board (NWRCB) as a national coordination-organization among all stakeholder and mentioned in newest Water Law should be prepared soon, to handle the responsibilities on water allocation and water right policies. The effectiveness could be measured after NWRC established and release the policies to be accommodated by the government regulations. The implementation of the regulation (as indicators effectiveness) potentially reduces the trouble i.e. inadequate water quantity availability.

In line with the government regulation preparation, the annual allocation of water utilizations in the Citarum River Basin is provided by the consensus among the stakeholders through coordination held by Provincial basin water management committee for provincial and district levels (PTPA), and Citarum River Basin Water management executive committee (PPTPA). The Governor decides the annual allocations to various users in his decree, based on PPTPA recommendations. The first priority is for drinking water, the second to cultivation, the third to industry and the last to hydropower. The Committee represents the stakeholders such as water administrator, users and other stakeholders.

Finally, the right of every citizen to be able obtains a quantity of water sufficient to maintain life, health and productive activity should be respected in the Law. However, the proper Law could not be implemented well, if the is no consensus and agreement among the Stake holders do to water is every body business.

Thank you.