INDONESIAN WATER CORPORATION
PERUM JASA TIRTA II

Water for Wellness
Air untuk Menghidupi Negeri

Thematic WS 3:

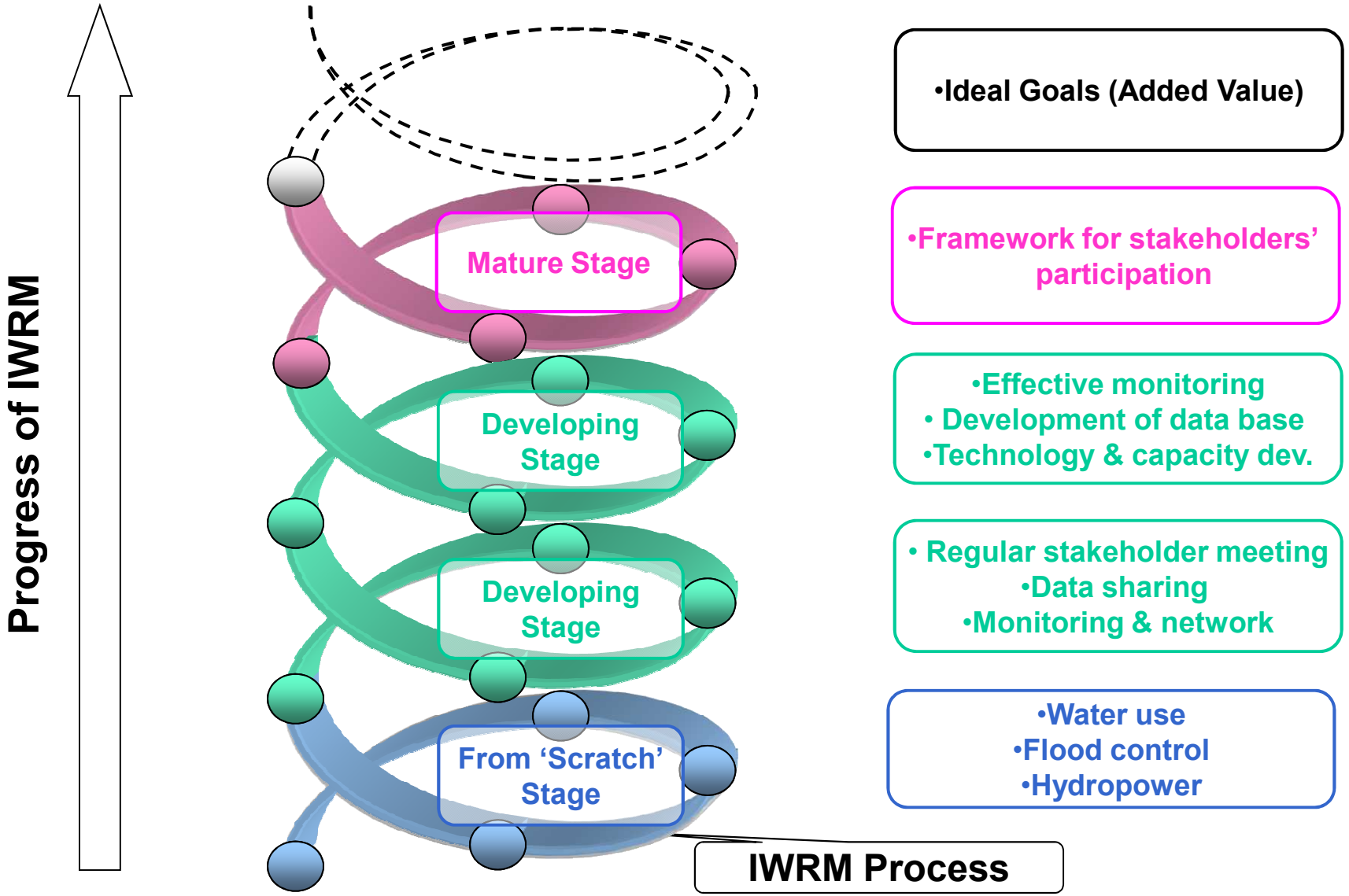
Water-Food-Energy Nexus

"The Role of PJT II to Ascertain the National Food & Energy Resilience Through the Adoption of IWRM"

Delivered by:
Djoko Saputro
President Director

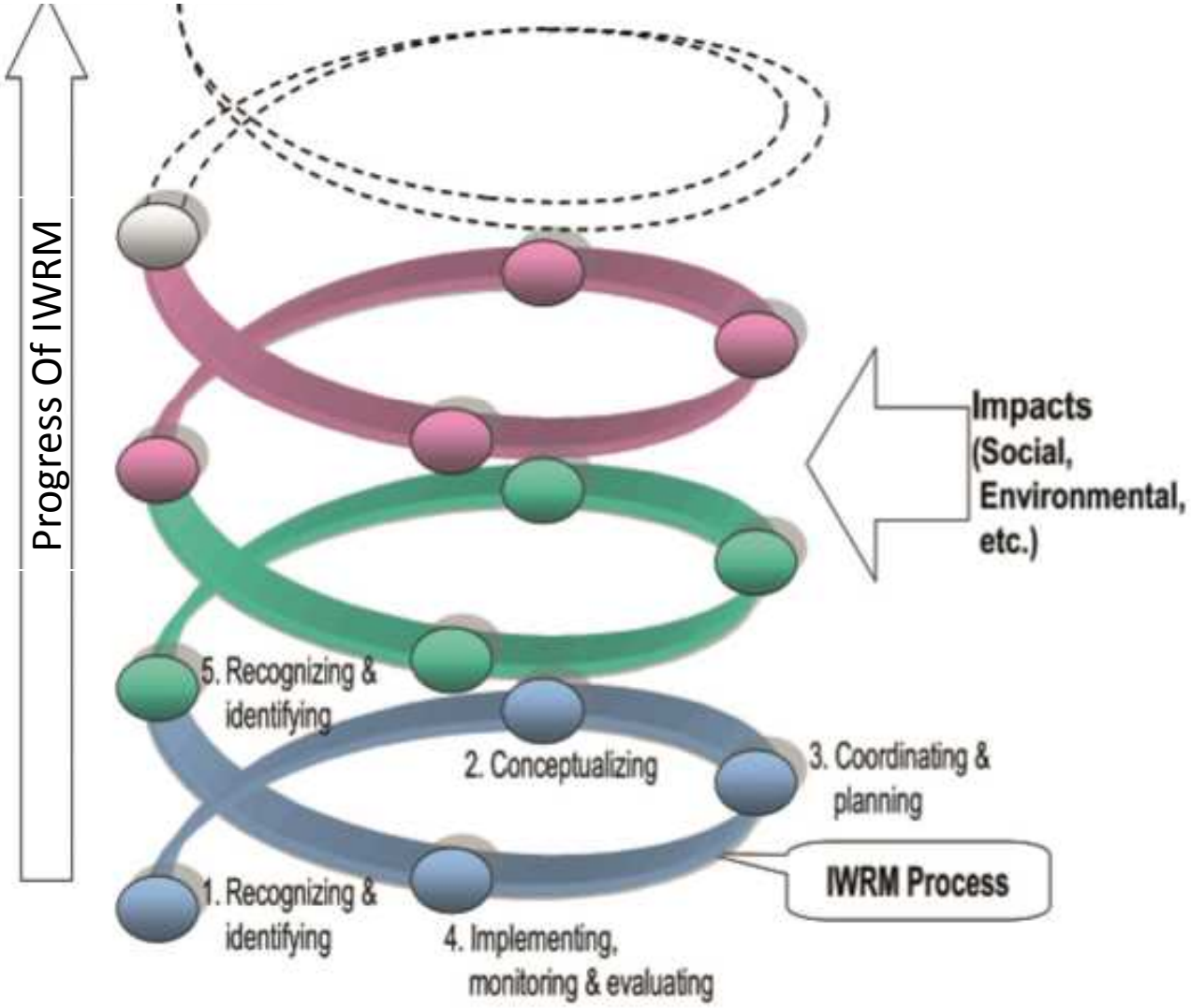
Jakarta, February 23rd, 2017

Stages Of IWRM Development For Citarum River Basin



General Concept of IWRM

- IWRM is a step by step process and takes time
- Response to a social, economic and environmental needs or impacts
- By means of progressive water resources development, integrated institutional framework, improving environmental sustainability
- To achieve better and sustainable water resources management



Implementation of IWRM for Irrigation Management

First step

Recognition and identification of irrigation areas at the down stream of Jatiluhur Dam, in particular the total areas and the volume of irrigation water required, at certain period of planting season

Second step

Survey and calculation of the areas and water demand for those irrigation areas need to be watered

Third step

Coordination with involved Stakeholders (local Government, farmers, PJT II) to establish plan of water supply and estimate the cropping plan

Fourth step

Implementation of the plan and simultaneously perform bi-weekly monitoring and evaluation program

Implementation of IWRM for Electrical Energy Production

First step

Recognition and identification of downsteram water demand to decide the amount of water released through the turbine, which will simultaneously produce electrical energy.

Second step

Optimization of reservoir operation by observing the reservoir water level and the water in flow to the reservoir. This optimization is necessary to balance the water in flow and the water released down stream so that the water level is maintained at optimized level to follow the reservoir operation pattern.

Third step

Coordination with involved Stakeholders to arrange Annual Citarum Cascade Reservoir Operation (Saguling, Cirata, Ir. H. Djuanda Dams)

Fourth step

Implementation of the plan, monthly monitoring and evaluation with Stakeholders

Scheme of Planning & Monitoring

SUPPLY	Dry S.	Wet S.
Local sources	30%	70%
Reservoirs	70%	30%

Note:
Using schematic water resources infrastructures with water demand in specific location, water requirement from Ir. H. Djuanda reservoir is computed

CITARUM CASCADE RESERVOIRS OPERATION
(Saguling, Cirata, and Ir. H. Djuanda Reservoirs)

DEMAND
- Domestic, Municipal, Industry (DMI)
- Irrigation

Bi-weekly (Internal)
Monthly (Coordination)
} Monitoring

Irrigation Water Demand
- Cropping Schedule
- Water Supply Program
- Cropping Pattern

Basin Water Resources Committee

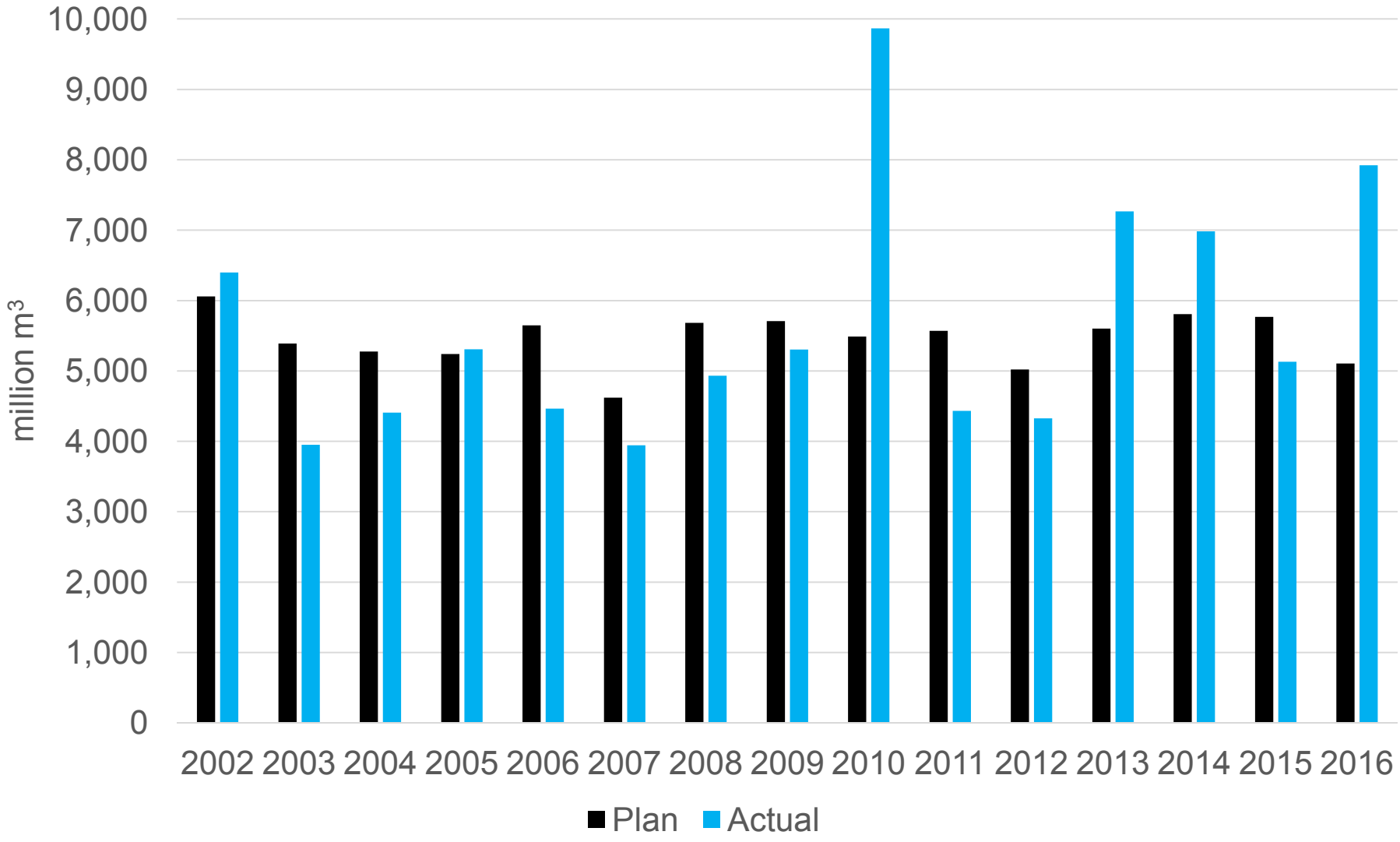
District Committee

Sub District Committee

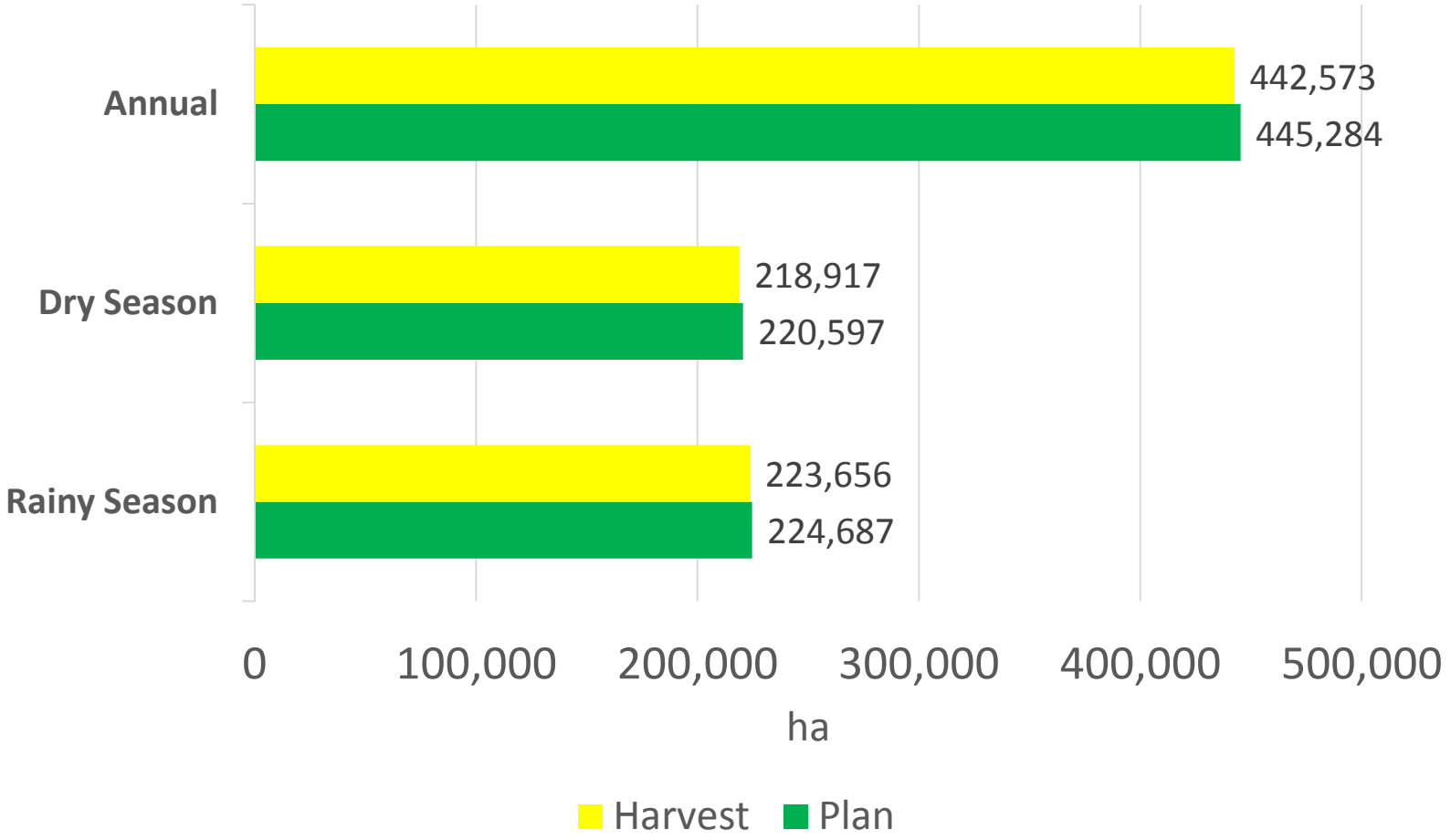
Integrated Entities

Local Entities

Water Released from Ir. H. Djuanda Dam

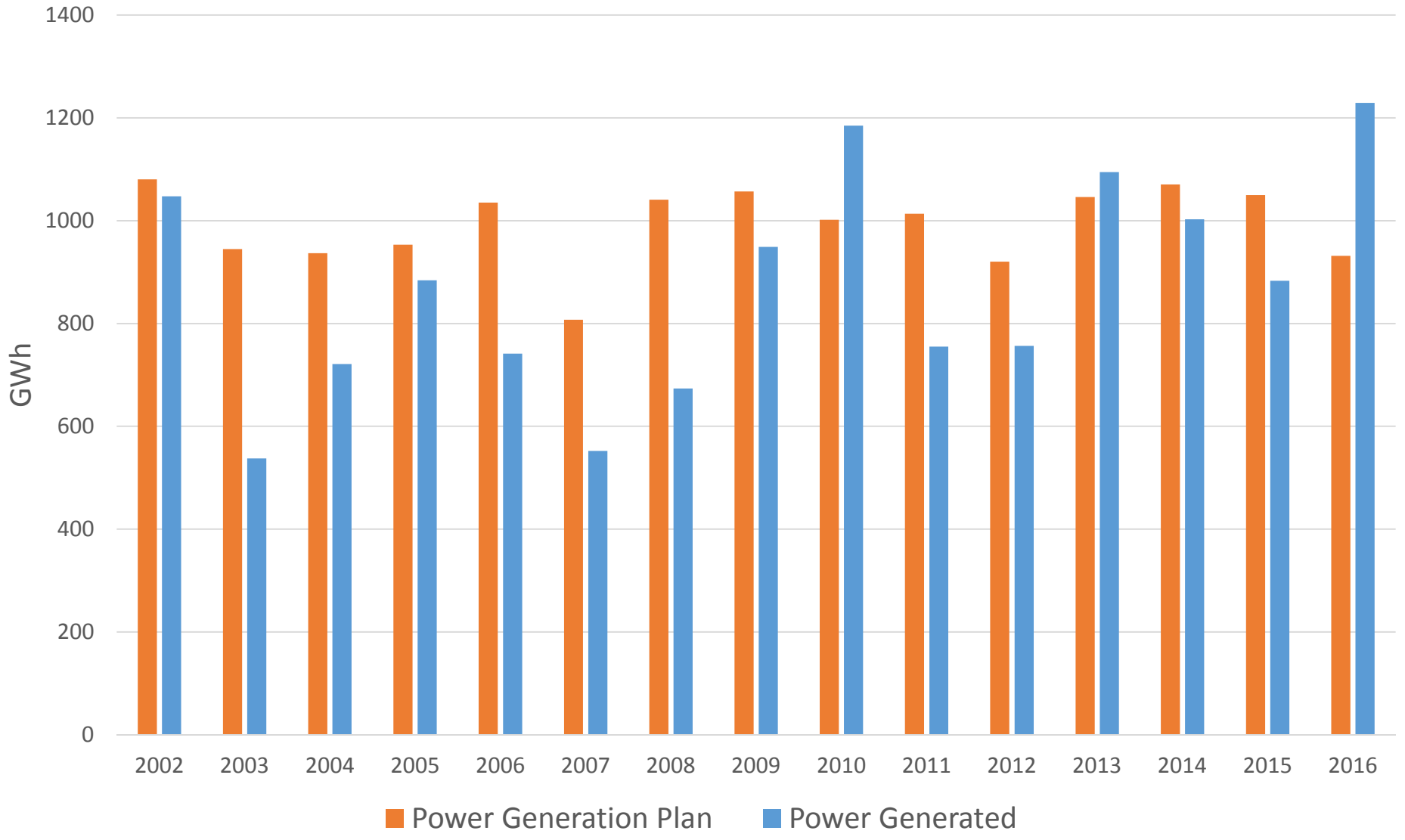


Cultivation Progress 2016
Jatiluhur Irrigation Area



Annual paddy production is approximately 2.7 million tons (1 ha is equal to 6 tons of paddy production). If 1kg of paddy is USD 0.3, the paddy production is worth USD 810 million per year

Power Production



Thank you very much ...