

# The Reconstruction of the Mosul dam

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## Broad content of presentation

- 1. Basic facts about the Mosul dam
- 2. A few background facts on the economy of Iraq
- 3. Financing reconstruction by using a PPP-model
- 4. Financing reconstruction through a loan from a development bank

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# 1. Basic facts about the Mosul dam

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## Aerial view of the Mosul dam



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## Basic data about Mosul dam

- Constructed in 1984
- 45 miles upstream of Mosul on the River Tigris
- Built on Water soluble gypsum
- Middle East's fourth largest dam and Iraq's largest
- Key component in Iraq's national power grid
- 4 200 megawatt turbines generating 320 MW of electricity a day

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## What a reconstruction aims to achieve

- Warnings have been issued that the dam risks internal erosion
- Currently efforts are being made to pump grouting into the dam's foundation and reduce water in the reservoir
- A need for total reconstruction cannot be ruled out

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## 2. A few background facts on the economy of Iraq

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### Iraq's economy 1979, before Saddam Hussein assumed power

- State-owned company accounted for 80 % of production
- Banks, insurance companies and the energy sector were nationalized
- Agriculture and retail were public sector monopolies
- The state controlled 90% of foreign trade
- Incoming private FDI-flows were in principle prohibited

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## On the oil sector

- Iraq estimated to have the worlds' third largest oil reserves
- Revenues from the oil sector account for 90% of export revenues and 90% of the revenues of the central government budget

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## 3. PPP

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## Recapitulation of a key principles

- Do not view PPP as simply a method to raise private capital
- Main argument for the PPP-model is that it makes use of private sector skills
- PPPs result in efficiency gains when the quality of services is contractible, there is adequate risk sharing and incentive-based legislation

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## Some data that Iraqi authorities will be asked to provide from the start

- Outline what the reconstruction is supposed to reconstruct
- Outline what is expected of a provider
- Specification of the expected time duration of the contract period
- Analysing what total sums are likely to be involved
- Clarify which party in Iraq has the legal right to sign such a ppp-contract
- Please note that the above question is not trivial in a country with a new and very decentralised constitution

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## Some key issues at national level

- Is an appropriate legal framework available?
- Often traditional laws on public work do not have sufficient flexibility to design PPPs
- Specify the Iraqi channels of responsibility and accountability
- Outline the process for competitive procurement

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## Basic technical data on the Mosul dam to be included from the beginning

- A detailed and technical presentation of the history of the dam and its current capacity
- Any private provider contemplating entering the project will have its own technical expertise on board
- What are the most recent results regarding risk analysis of the dam?

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## On competitive procurement

- What is the time frame for potential providers?
- What trade-offs between price and quality will guide Iraq when it selects a provider?
- Will Iraq use shadow price bid?
- Are there any national security considerations that need to be factored in?

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## Key financial aspects

- What is the total projected sum involved?
- Will the Iraqi partner contribute to the financing?
- What is the estimated present value of future revenue streams?
- How are such revenues calculated?
- Design an output-based contract
- How are payments to providers linked to performance over the contract life?
- How will Iraq earmark resources for its future payments ?

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## On risk-sharing

- Specify how the provider has responsibility for construction risks, performance risk and demand risks
- Specify how the procuring authority has responsibility for risks associated with mis-specification of output as well as project-specific political risks
- Specify when the provider and the procurer might share risks

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## Some important legal aspect at project level

- Specify project managers independence and authority
- Establish effective mechanism for regular benchmarking of the project as well as conflict resolutions
- Establish policy how to divide benefits resulting from a refinancing of the project
- Which laws will apply in case of arbitrage?
- How will ownership be transferred at the end of the contract period?

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## A possible option

- The appropriate Iraqi entity signs a contract with a provider to reconstruct and manage the dam for 30 years
- At the end of the contract period ownership is transferred to the relevant Iraqi entity
- The provider secures all financing
- The provider and the Iraqi entity negotiate how the provider will be compensated over the life-time of the project
- The contract should contain a clause for regular meetings between purchaser and provider as well as regular benchmarking of the project
- The provider assumes all risk associated with delays of construction and fulfilment of agreed quality
- The Iraqi entity assumes risks related to changes in political attitudes in Iraq towards the contract

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## 4. Loan from a development bank

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## Write a cover letter

- This is likely the first part of the proposal that the bank will see , and it should grab attention
- The letter should include name of the company, its seeking and what purpose

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## Complete the remainder of proposal

- Arrangement of the company
- Proposed cost- and revenue projections
- Who will be the Iraqi principals?
- Make a case for the management team
- What are their previous experience in running such an operation?

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## Financial analysis

- Provide a complete analysis of financial data
- Break down the investment costs
- How is the loan supposed to be repaid?

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