Strategic and Economic Planning of Infrastructure Development

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• Basic human needs – environmental protection
• Long term thinking
• Public investment: social return
• Setting the tariffs: full costs recovery vs. affordability
• Financial sustainability
Cost-Benefit Analysis (CBA)

- Methodology for strategy and project elaboration
- Clear framework for strategic ranking – economic rate of return
- Analytical tool for
  - guiding individual project development
  - Appraising projects
Role of CBA in the project context

It helps project promoters to shape their projects
-- Elaboration

CBA results are part of evaluating project applications
-- Evaluation

CBA is an analytical framework which shows whether a project is „good project”
Role of CBA in the project context (2)

Elaboration:
Proper and consistent methodology must be used

Evaluation:
Assessment whether proper and consistent methodology is used
Assessment of the CBA result
Method – Process – Documents

Steps in infrastructure project preparation

- Needs assessment
- Defining objectives
- Legal and social framework
- Definition of option:
  - technical
  - lifecycle costs
  - impacts
- Option analysis:
  - technical
  - legal
  - economic, financial
- Design of selected option
- Getting necessary permits
- Institutional analysis
- Financial analysis of the selected option
- Economic analysis of the selected option

Output

FEASIBILITY STUDY:
- objectives
- needs/demand
- selection of the best option
- horizontal issues

CBA:
- financial analysis
- economic analysis

Environmental impact studies
Designs at different level
Permits
Timing of CBA

Should be used at early stage of the project preparation

VS.

Detailed technical content and costs estimates are available at later stage of design

CBA methodology is used in feasibility assessment
(option analysis and preliminary financial, economic analysis)

CBA document is preferably finalized after more detailed design
(financial, economic assessment of the selected option)
Key step in project development: option analysis

**Purpose:** select the „best”/”optimal”/”most efficient” option
- key to quality of the development action
- Economic/social viability of the selected option

**Experience:**
- Undue focus on investment costs – too little attention to „life cycle costs” that includes O&M costs – dynamic cost calculation method
- Difficulties in communication across different disciplines
Funding and financial sustainability

Purpose:
- Assessing the need for social funding: grant rate calculation
- Highlighting financial sustainability: tariff setting – covering costs of long term assets

Experience:
- Often collapsed into choosing the option with the lowest investment costs
- Tariff implications are not considered at the investment stage
- Financial sustainability is not always considered as important when project scope and technical content is defined
Financial analysis: special issues

- Full cost recovery: how to treat depreciation in tariff setting? and how to incorporate coverage for future replacement costs?
- Public grant – full cost recovery -- affordability
Thank you for your attention!

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