ECONOMIC AND SOCIAL IMPACTS OF TRANSPORT INFRASTRUCTURES: AN OVERVIEW OF OIC MEMBER COUNTRIES

Country Practices and Policy Recommendations

19th Meeting of Transport and Communication Working Group

Dr. Volkan Recai ÇETİN, UMAY Consulting

October 11, 2022

ANKARA

OUTLINE

1. Survey Structure
2. Country Practices/Highlights from the Survey Results
3. Policy Recommendations

The General Structure of the Survey

Specific Objective:

To observe the current procedures in the OIC Member countries with regard to the evaluation of transportation projects and the assessment of the economic and social effects of the construction of transportation.

General Facts from the Survey

- Number of potential participants communicated for online questionnaire: 1,122
- Participants are from:
  - Government agencies (ministry of transport and its affiliated bodies such as civil aviation authority, state highways administration)
  - Focal points of the OIC Working Group Meeting
  - Public and private transport service providers (railways, airlines, shipping companies, road transport operators)
  - Sector organizations and associations, NGOs regarding transportation and logistics
  - Trade and industry unions
  - Academicians working on transportation and logistics
- Response Rate: 4.3 % (48/1,122)
- 35.1% (20/57) of OIC member countries were covered
- 45.5% (20/44) of OIC member countries registered with the COMCEC Transport and Communications Working Group were covered
- Countries with the highest number of responses include Türkiye (11 responses), Uganda (5 responses), Afghanistan (4 responses), Jordan (4 responses), Nigeria (4 responses).

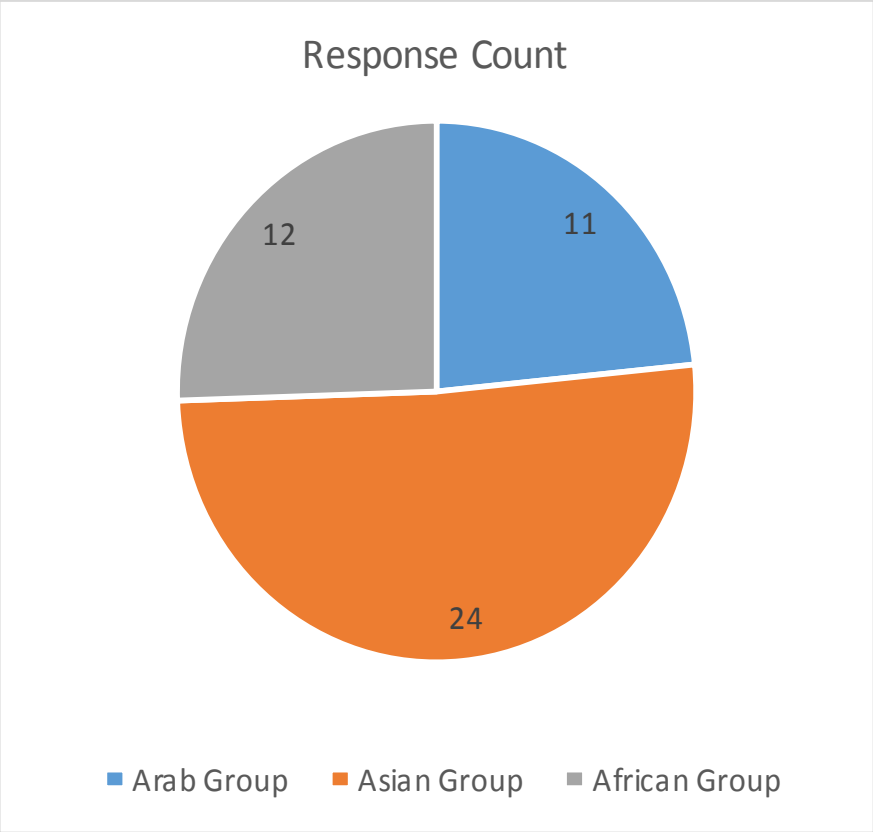
The General Structure of the Survey

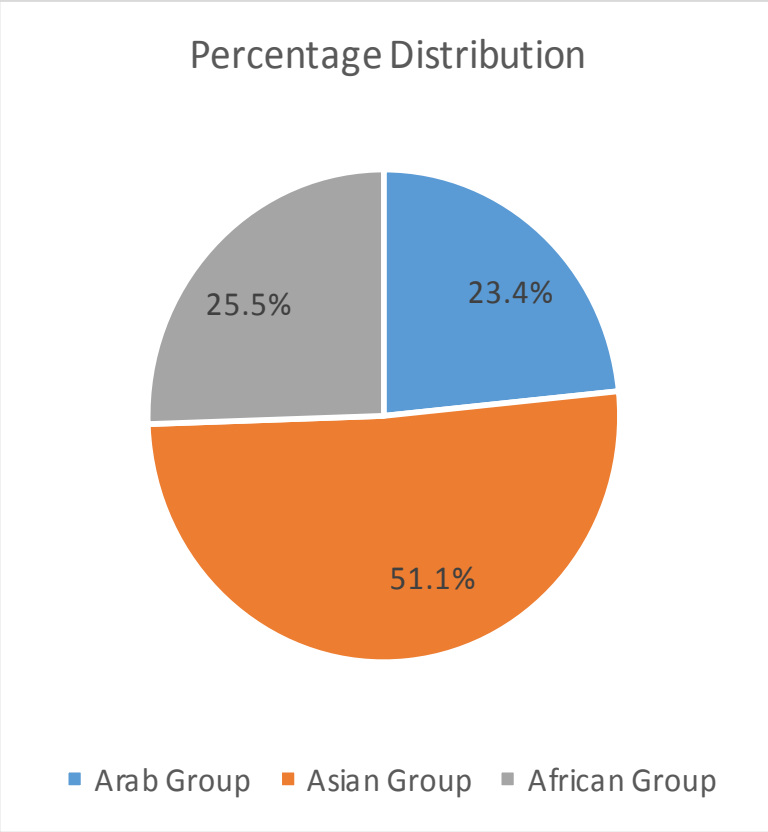
OIC Member States Covered in the Questionnaire

Afghanistan	Iraq	Suriname
Albania	Jordan	The Gambia
Azerbaijan	Mauritania	Togo
Bangladesh	Nigeria	Turkmenistan
Bahrain	Pakistan	Türkiye
Egypt	Qatar	Uganda
Iran	Sudan	

Highlights from the Survey Results

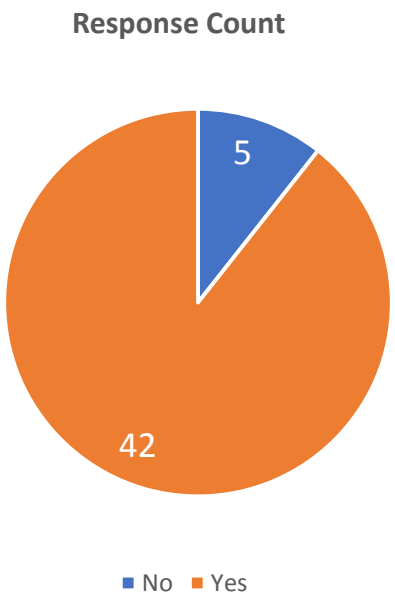
Distribution of The Questionnaire Participants in Terms of OIC Regions

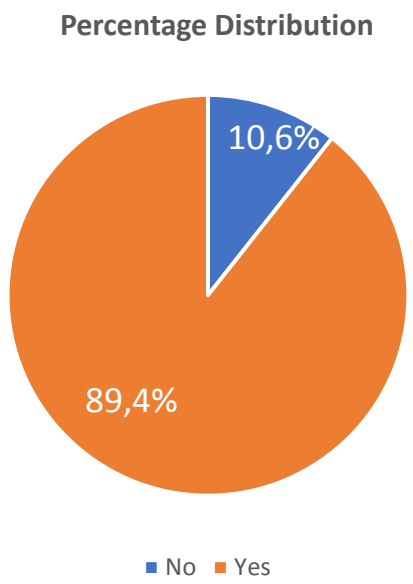




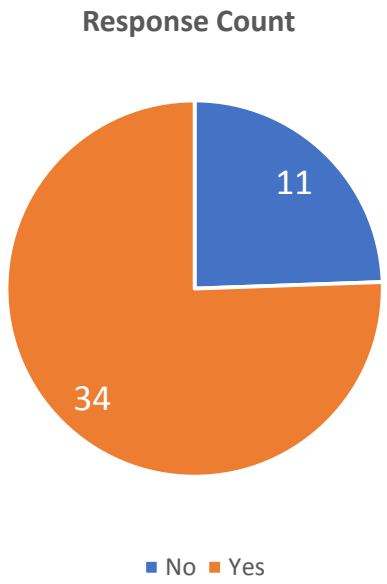
Highlights from the Survey Results/ Appraisal Procedures

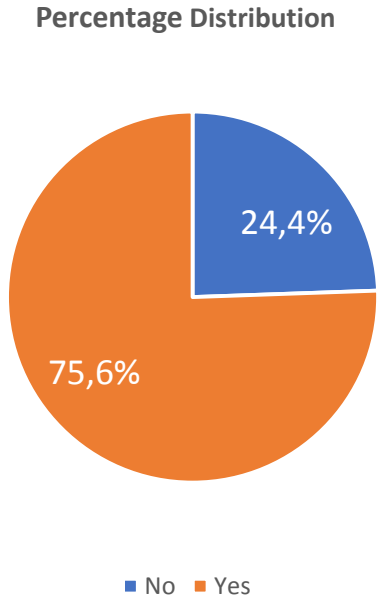
Mandatory Project Appraisal Procedures





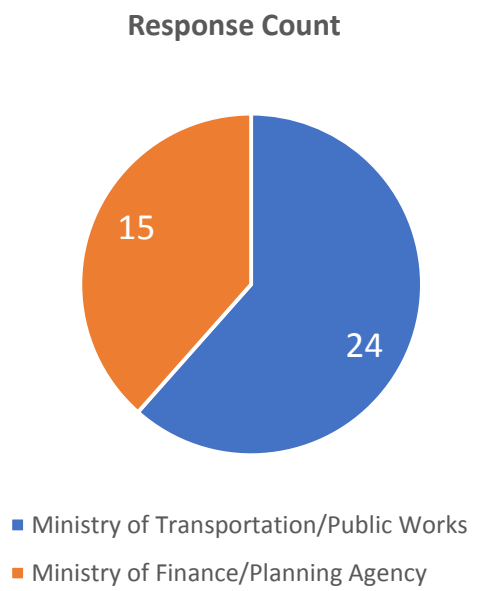
Threshold to be Subject to a Feasibility Study

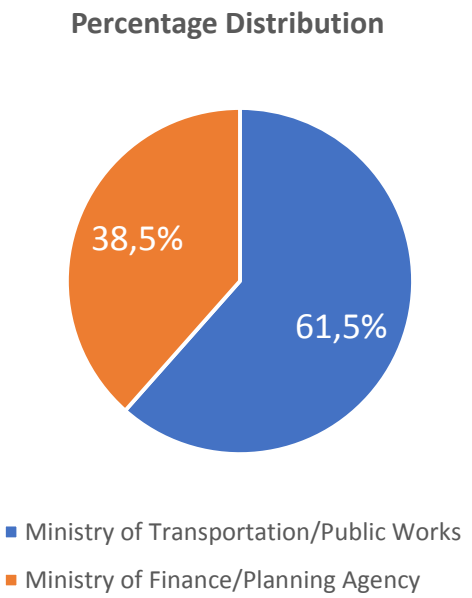




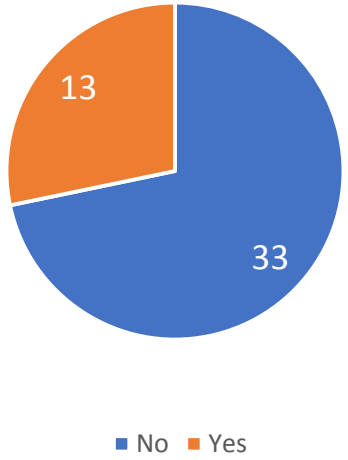
Highlights from the Survey Results/ Appraisal Procedures

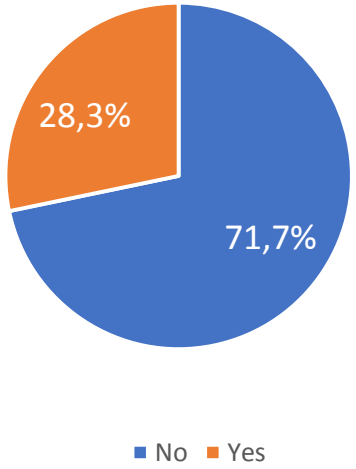
Institution Responsible for the Evaluation of the Project Appraisals





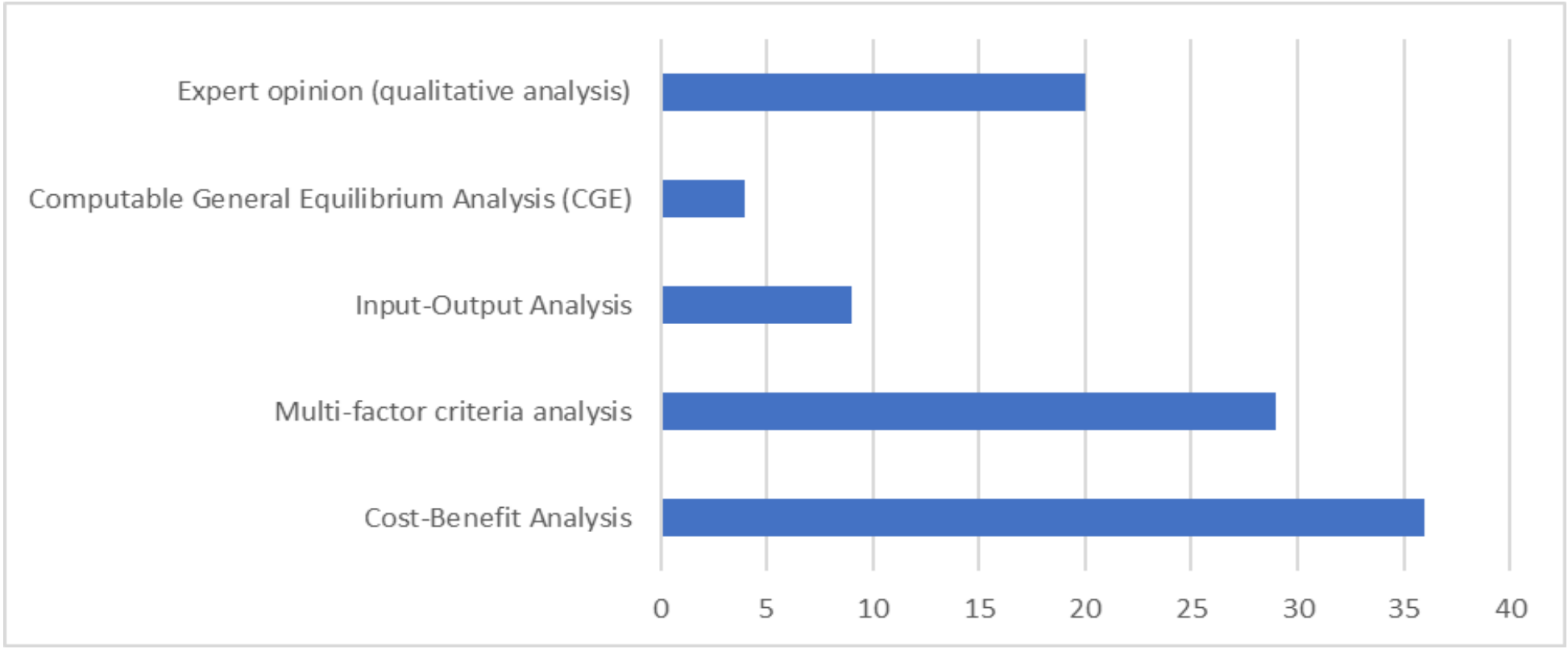
Publicly Accessibility of the Project Appraisal Reports





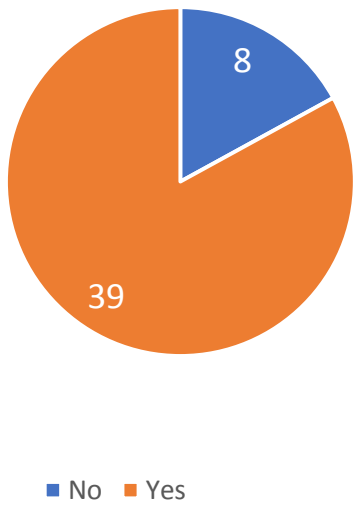
Highlights from the Survey Results/ Feasibility Study

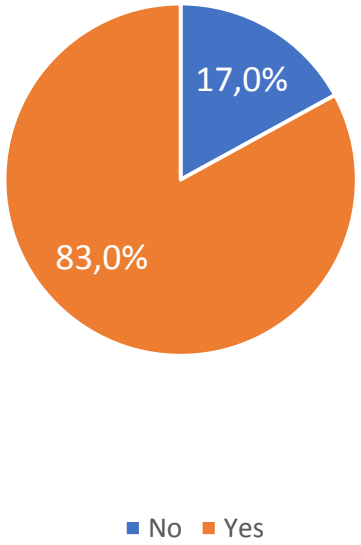
The Methodologies Adopted in the Feasibility Studies



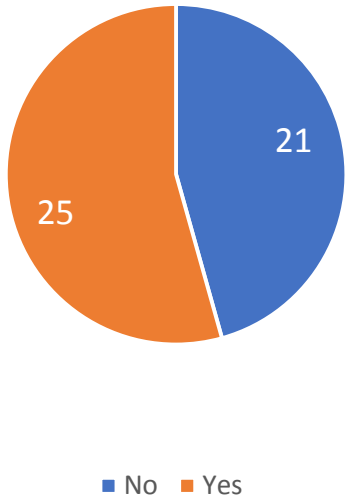
Highlights from the Survey Results/ Feasibility Studies

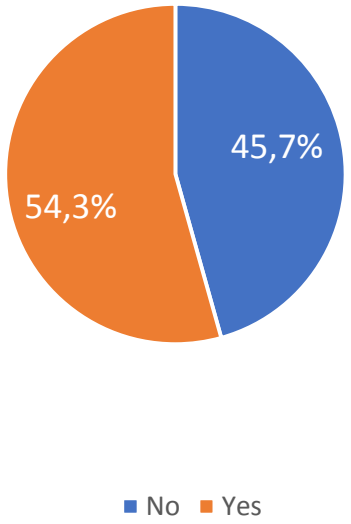
Inclusion of the Greater Social Impacts





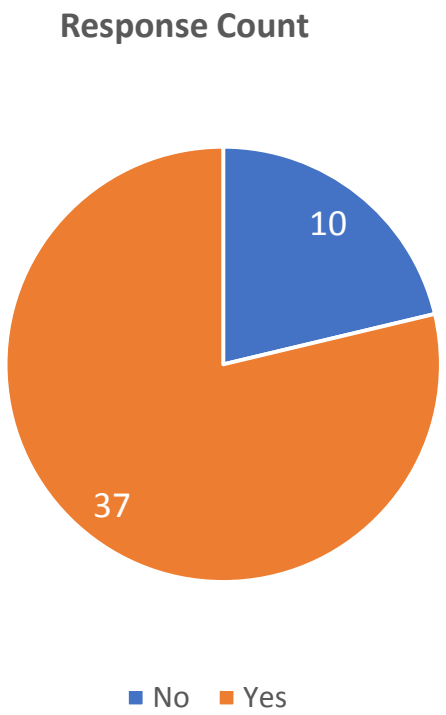
Inclusion of Negative Externalities (emissions, noise, congestion etc.)

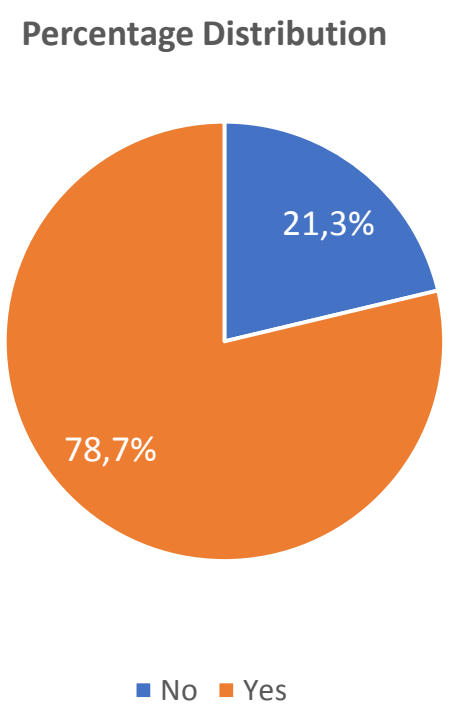




Highlights from the Survey Results/ Feasibility Studies

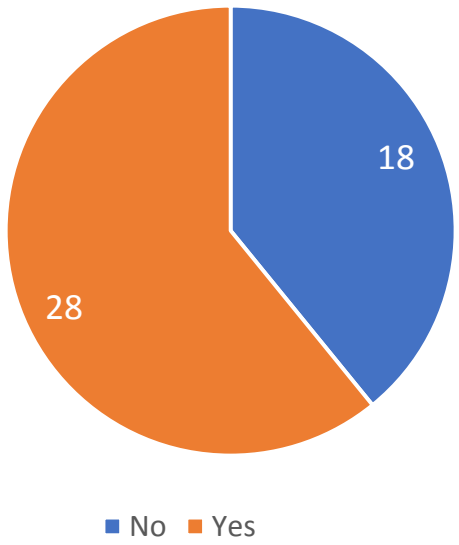
Inclusion of the Risks Analysis (such as sensitivity analysis and Monte-Carlo Simulations) into Studies

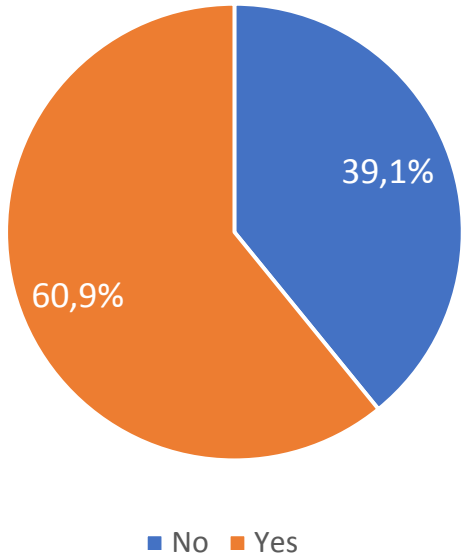




Highlights from the Survey Results/ Ex-post Evaluation

Adoption of the Ex-post Evaluations After Project Completion





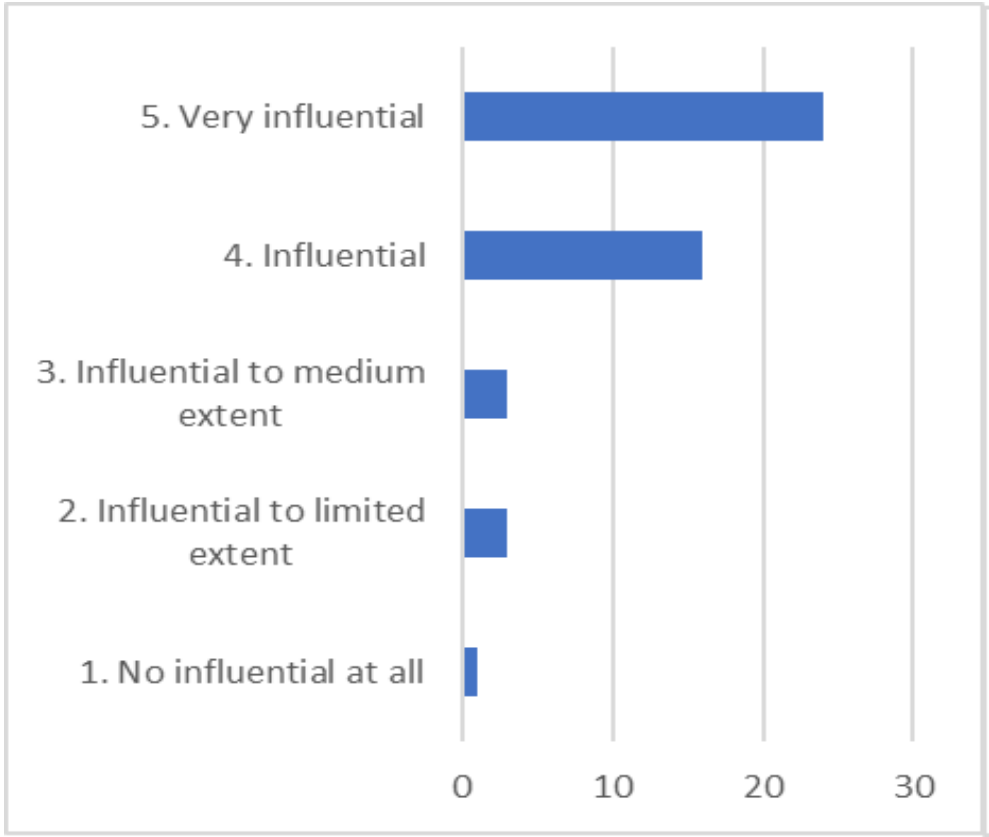
Highlights from the Survey Results/ Economic Impacts

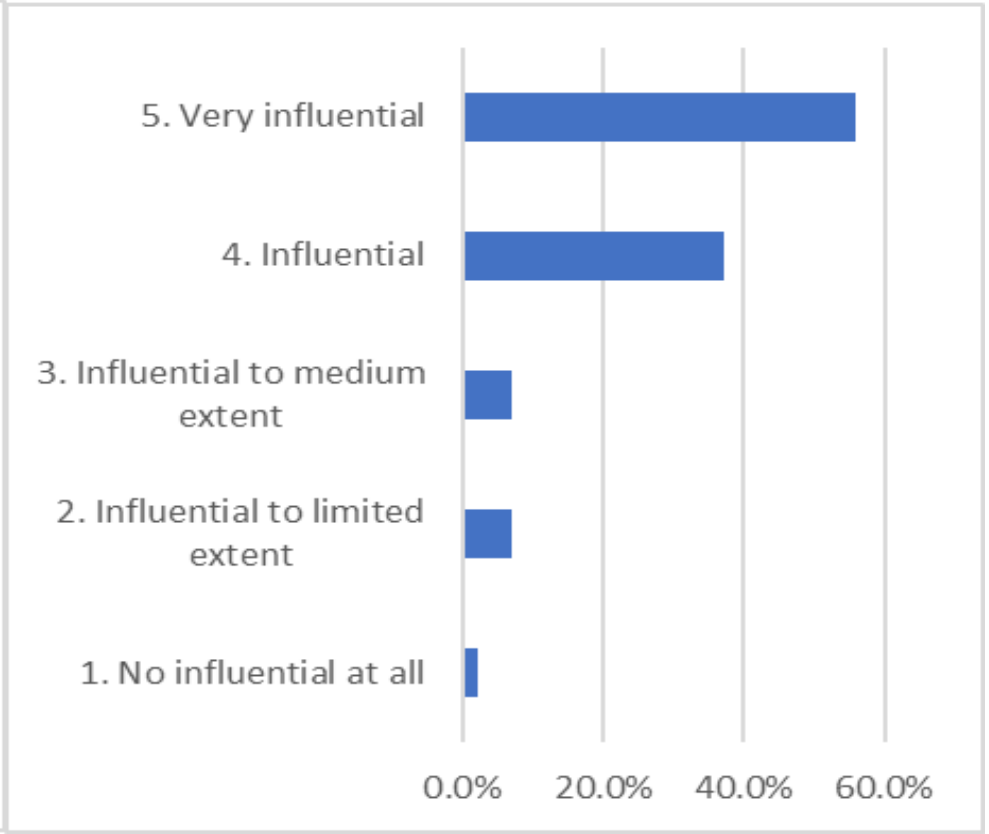
Economic Impacts of Transportation Industry Specified by the Respondents

i) improvement of the movement of goods from rural to urban areas	vii) contributing to the state budget
ii) facilitating freight transport	viii) increase of household income
iii) the positive impact of the rail transport system on the environment and economy	ix) improved access to health facilities
iv) stimulating the economy	x) contributing to trade and agriculture, empowering the women
v) increasing the exports	xi) improved social and economic life.
vi) job creation	

Highlights from the Survey Results/ Economic Impacts

To What Degree Do Transport Costs Influence the Prices, Productivity, Employment Generation, and Export Propensity of the Firms





Policy Recommendations

1. Strategy development, planning and programming capacity need to be improved

- ❑ Strategic medium-or long-term policy framework setting the macro, local and sectoral priorities.
- ❑ Robust systematic and institutional structure for:
  - planning,
  - project identification and preparation,
  - ex-ante evaluation,
  - procurement,
  - supervision and monitoring and
  - ex-post evaluation

Policy Recommendations

2. Integration of stakeholder requirements and contributions

- project-based public consultation and public participation meetings should be organised to account for citizen's opinions before a decision is made
- First "teach/train then feedback" approach should be utilized effectively to receive a more rational contribution from the public and to increase the public ownership of the projects.

Policy Recommendations

3. Matching the transport projects with the policies to serve best the needs

Ex-ante Evaluations

- ❑ Well identification of the projects
- ❑ Technical feasibility
- ❑ Economic analysis of the projects
- ❑ Financial analysis of the projects
- ❑ Risk assessments

Policy Recommendations

4. Identification of the projects and technical evaluations

- The regional and/or sectoral needs should be assessed in accordance with the policy framework.
- The project objectives should be explicitly defined in relation to the needs.
- Projects should be properly presented together with their respective costs and benefits.
- For analysis of alternative options, a clear set of projects/strategies should be identified.
- Projects/strategies should be evaluated against qualitative criteria to identify the most suitable projects/strategies.
- Demand analysis is critical step and assesses the need for an investment by analyzing the current and future demand levels.
- Important parameters; cost estimates, technical design, time plan for implementation should be carefully considered.

Policy Recommendations

5. Prioritization, economic and financial analyses of the projects

- Projects should be appraised according to objective and comparable standards to develop a pool of prospective projects.
- Projects should be prioritized either within the sector or at a cross-sectoral basis, taking into account some crucial indicators such as the financing capabilities of the country, the marginal benefit of the project or the urgency of the needs that leads to the project.
- Alternative/option analysis, Cost-Benefit analysis, wider economic analysis methodologies, sustainability analysis, sensitivity and risk analysis play critical roles.
- Environment and climate change considerations should be integrated into the project design
- Climate change adaptation and/or mitigation measures should be considered
- Transportation infrastructure investments should be evaluated from a holistic perspective; multimodal approach should be developed to benefit from synergy effect and network advantages of the transport system.
- All considerations that have the potential to affect the society and economy should be regarded in a wider manner:
  - Input-Output analysis for output, income multipliers and sectoral forward/backward linkages
  - Computable general equilibrium methodologies

Policy Recommendations

6. Risk Assessment

- Critical as uncertainty is always existing in an investment project inherently.
- Sensitivity analysis; qualitative risk analysis; probabilistic risk analysis; and risk prevention and mitigation stages should be incorporated into the analyses.

Policy Recommendations

7. Project management system, defining processes, and capacity of the institutions need to be enhanced

- Good planning, effective scoping and resourcing, realistic expectations of outcomes and good institutional support is critical for a prudent and sound management system.
- Project preparation, tendering, contracting, operation, performance monitoring, ex-post evaluation, each of which requires an extensive body of experience and expertise to be conducted properly.
- Step-by-step, to-the-point, detailed guidelines and handbooks could help set standards and increase the overall quality of project management framework.
- A better public procurement system with a robust institutional setup would increase the success and performance of the projects, as well as increase the efficiency in resource allocation.

Policy Recommendations

8. Transparency in information disclosure including public procurement should be increased

- More predictable investment environment should be ensured.
- The project pipeline with its main characteristics should be publicized for better planning for all stakeholders, to attract private sector and also for better monitoring and public evaluation.
- Documents about project preparation and relevant processes should be shared with public.

Policy Recommendations

9. Quality of transportation statistics and information disclosure

- Statistics of transportation should be produced and published in more detail to make a concrete evaluation on how to improve the existing systems.
- Statistics about user satisfaction such as delays in transportation, travel times, and reliability would be beneficial to produce to see the bottlenecks and improve the current situation of transport systems.
- For a predictable investment environment, documents about project preparation and about relevant processes and else should be shared with public.

Policy Recommendations

10. Hard and soft transportation infrastructure need to be improved using alternative financing and procurement mechanisms including PPPs

- Alternative financing mechanisms can be mobilized including private sector to overcome bottlenecks in transportation and logistics.
- PPP can be introduced by a sound regulatory framework and capacity building to assure it brings value for money and is financially sustainable.
- For the PPPs to be implemented in the most effective way in transportation projects, related guidelines for preparing business case, bidding and contract management should be prepared.

Policy Recommendations

11. Ex-post Analysis

- The forecasts made for a project in the feasibility study could regularly be compared to the realized user volume after the project is put into operation to determine to what extent forecasts deviated from actual numbers.
- Economic and social impact of the projects should be analyzed and measured to determine if the projects have affected the country as a whole both in economic and social terms, as it was intended before realizing the project.

THANK YOU