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SOCIALLY SUSTAINABLE TRANSPORT IN LOW INCOME COUNTRIES¹

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ABSTRACT

The analysis presented aims to assist in understanding of ways that transport can contribute to sustainable social development in developing countries. Hence, the approaches that can lead towards the transformation of socially unsustainable transport at the moment are given. The implications of social dimension in transport sustainability are analyzed in correlation with affordable options and reliable checklist for sustainable social development. Undertaking them is of emerging importance for providing a framework that can be used in developing countries towards the social sustainability in transport. These recommendations will help to build the technical capacity of transport planners and decision makers to make a needed change in low-income countries regarding this issue.

KEY WORDS: transport, social sustainability.

INTRODUCTION

Transport plays substantial role in the development of the society, and its priorities and goals change as the needs of society change.¹ It enables access to basic social services, such as healthcare, education, employment, recreation. Transport links individuals, connects local communities, builds markets and

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facilitates trade making regions more competitive.² In turn, sustainable transport drives sustainable development leading to advanced social development and economic growth.³

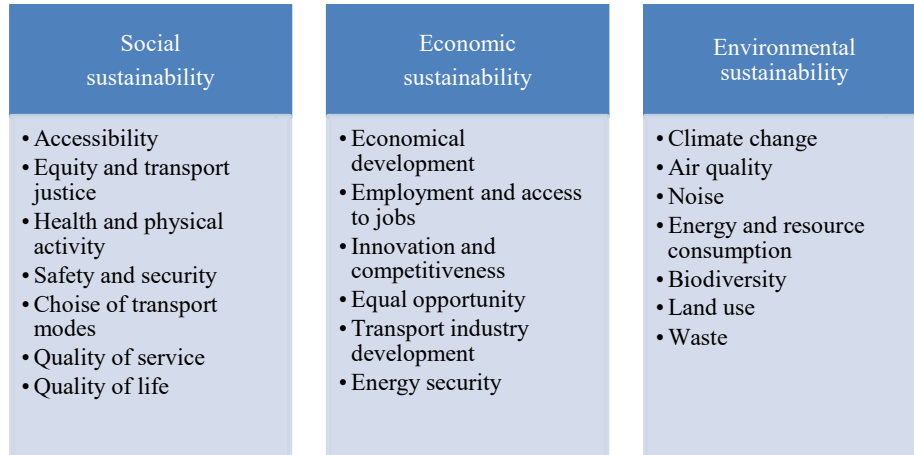
Sustainability in transport is based on social, economic and environmental sustainability. Social sustainability means that social needs are met by ensuring a fair distributed transport services and equity in public participation in creation of transport policies. Developing countries are lacking behind meeting the needs of socially deprived categories in the society, failing to provide quality of services and quality of life. This must be changed. Social dimension in transport sustainability is one of the three equally important dimensions, besides economy and environment. Neglecting the social dimension, the transport in general will fail to achieve sustainability.

Therefore, the structural concept of this paper is conceptualized to give a complete overview addressing the social sustainability issues in transport, considering the linkages with economic and environmental policies at the same time.

This analysis is adapted to the specific needs of low-income countries for the so much needed development of socially sustainable transport. Analysis starts with the presentation of dimensions of sustainability in transport. Then, social un-sustainability of transport especially in developing countries is analyzed in order to give options and recommendations for socially sustainable transport. At the end of the paper, a detailed checklist of social development in transport is given, which can serve as a base for creation of transport interventions, plans and programs. This concept is expected to fulfill its purpose and to comply with the need to provide socially sustainable transport in low-income countries.

TRANSPORT FOR SUSTAINABLE DEVELOPMENT

Sustainable transport is important for social, economic and environmental sustainability (picture 1). Working towards sustainable transport requires that all these dimensions of sustainable development are taken into account. With policies targeting only one aspect there is a risk, that other dimensions of sustainable development may be neglected or even negatively affected.⁴



Picture 1: The main dimensions of transport sustainability

For each measure implemented in sustainability dimension, its possible impacts on other two dimensions of sustainability should be considered as well.⁴ Therefore, the table 1 presents an overview of main social aspects of transport in a context with economic and environmental dimensions.

Table 1: Social aspects of transport considering impacts at economy and environment

Social aspects of transport	Needed characteristics
Quality of urban transport services	Minimization of: <ul style="list-style-type: none"> - congestion - air and noise pollution, - traffic accidents - environmental impacts. Improvement of: <ul style="list-style-type: none"> - public transport, walking and cycling - stakeholder's support - coordination between institutions for local/regional development.
Mobility for disadvantaged groups (poor, women, elderly, disabled people and	Improvement of: <ul style="list-style-type: none"> - access to transport services - access to public transport (pricing

children)	strategies and subsidized fares) <ul style="list-style-type: none"> - security (safe and secure bus stops) - vulnerability - dependency.
Health (reduced stress and better quality of life)	<ul style="list-style-type: none"> - decreased traffic density - reduced environmental impacts
Development of economy at national level	<ul style="list-style-type: none"> - national transport networks in good condition - developed internal and transit networks for landlocked countries - improved transport networks in rural and isolated regions
Climate change & Environment	<ul style="list-style-type: none"> - reduction of greenhouse gas emissions - adoption of low-carbon policies - better design, operation and maintenance of transport infrastructure

Hence, all main activities in transport, like transport planning, policy and decision making should be based on the three sustainable development dimensions - social development, environmental impacts and economic growth.

THE IMPORTANCE OF TRANSPORT FOR SOCIAL DEVELOPMENT

There are three main reasons for social un-sustainability of transport especially in low-income countries:⁵

- **Reduced access to transport services:** when large part of population cannot afford a car, don't want a car, or have limited public transport availability. Then, access to employment; education/training; health; and social, cultural and sporting activities are reduced.
- **Over-privileged private car:** transport planners assume that daily mobility needs are met mainly using a private car. As a result, those who would prefer to use other transport ways of accessing services, or who have no choice, are put in a very difficult situation. Shopping centers, sports complexes and even new schools and other facilities are typically developed prioritizing the private car.
- **Increased social exclusion:** especially of the already-marginalized groups (poor, disabled, elderly and children), considering the impacts of air and

noise pollution on human health; fragmenting of communities through their physical division; road deaths and injuries.

Social sustainability in transport incorporates a wide range of long-term social measures:

- transport services and access for all social groups
- transportation priority for socially disadvantaged groups
- changes in transport policies adapted to the socially disadvantaged groups
- prioritized solutions of transport problems for socially disadvantaged groups
- equity in participation in the process of decision-making in transport.

These measures should be included in a sustainable transport strategy 6, for higher balance and comprehensiveness with other sustainability dimensions. According to previous, table 2 gives options towards social sustainability in transport in low-income countries.

Table 2: Options for socially sustainable transport for developing countries

Option	Activity for realization
Integration	<ul style="list-style-type: none"> - social dimension of transport integrated into transport decisions - vertical integration (levels of government) and horizontal integration (modes, territories and sectors) - integration of all sustainable transport planning policies for balanced development of transport modes
Public awareness and behavior	<ul style="list-style-type: none"> - privileges for all social groups in transport - under-privileged private cars - transport demand management
Indicators	<ul style="list-style-type: none"> - development of social indicators in transport
Definition of targets	<ul style="list-style-type: none"> - more privileges for disadvantaged social groups
Fair pricing of transport social effects	<ul style="list-style-type: none"> - removing unfair subsidies - internalization of external costs for all modes of transport

Revenue	<ul style="list-style-type: none"> - transparent usage - usage for direct compensation of most affected users
Total impact assessment	<ul style="list-style-type: none"> - development of tool for sustainability assessment - integrated assessment of potential economic, environment and societal impacts
Institutional support	<ul style="list-style-type: none"> - creation of regulatory bodies as a supportive network for promotion of socially sustainable transport
Public participation	<ul style="list-style-type: none"> - public information and active engagement for advancement in sustainable transport solutions

Source: according to 5, 2

In all these options for social sustainability, public awareness and active participation is crucial, even though this may not have immediate positive effects for themselves.

TOWARDS SOCIALLY SUSTAINABLE TRANSPORT

Addressing the social dimensions of transport infrastructure and transport services requires consideration of the following issues given in a framework of social development checklist:

Table 3: Issues to be considered during design of transport interventions, plans and programs

The potential beneficiaries	especially considering poor and vulnerable groups (women, children, unemployed youth, older people, people with disabilities, ethnic minorities)
Gender distributional impacts	implications for gender sensitive policy and programs
Generation of evidence gaps	monitoring and evaluation of programs for evidence generation on gender and other social dimensions of transport

Multiple objectives	economic growth, socio-cultural and economic concerns
Capacity and expertise	needed for social and poverty analysis
Data disaggregation	by sex, age group and income groups
Participation of current and potential users and stakeholders	regulators, roads authorities, development agencies etc. in research design, management, monitoring and evaluation
Mitigation of social risks	effects on road safety and mitigation policies for climate change
State-of-the-art technologies	ensuring social inclusion in transport

Source: according to 7

This checklist is needed in order to comply with the following main characteristics of socially sustainable transport:5

- **Maximization and fair distribution of the benefits.** Transport policies are oriented towards walking, cycling and public transport as sustainable options for access to every daily activity (employment, education, health and recreational services).
- **Minimization and fair sharing-out of the disadvantages.** When society pays for the costs caused by pollution from individuals, the costs are unfair. The society can benefit when the revenue gained from pricing is used in socially beneficial ways.
- **Long-term planning of transport policies.** Then, the socially disadvantaged groups are free from the burden of the unpredicted side-effects which are distributed on a fair basis.
- **The privileges of private car are reduced.** Sustainable transport raises the public awareness of the social consequences of every individual transport actions and encourages taking individual responsibility.

Apart of this, creative decisions, cross-border agreements and knowledge sharing are also needed to ensure social development of transport.

CONCLUSION

Transport is important for sustainable development in the society. Following the directions given in this paper, transport can improve social sustainability by

ensuring equal social inclusion in transport services and mitigating social risks. Informed public support and participation in the planning and decision making process will additionally support the social sustainability. Hence, this analysis gives a framework for achieving socially sustainable transport, by offering options and recommendations that should be followed in developing countries. Opportunities arising from socially sustainable transport will raise quality of transport services and quality of life by improving social inclusion, protecting environment and supporting economical development.

However, the analysis has shown that there are many remaining challenges that need to be addressed. The current situation in developing countries is focused mainly on economic sustainability. These countries should continue to work to improve social sustainability in transport, strengthening their cooperation by sharing results and experiences. This is of crucial importance considering that sustainable development (not only in transport) is a global issue.

Although the paper gives options available and detailed analysis of the issues during transport planning, still there is a long way to the social sustainable transport in low income countries. The most likely obstacles for fostering the development of socially sustainable transport system are costs of sustainable transport policies and implementation of innovation and new technologies. Overcoming them will transform transport towards sustainability and thus transport will become a driver for sustainable development.

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