‘Luctor et Emergo – But With My Bike’

Two essays on the importance of cycling for poverty alleviation February 2011

Cycling policies, cycling and poverty reduction

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Cycling at the Crossroads of Poverty Alleviation and Sustainable Transport

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1 Cycling policies, cycling and poverty reduction

by Irene Frieling

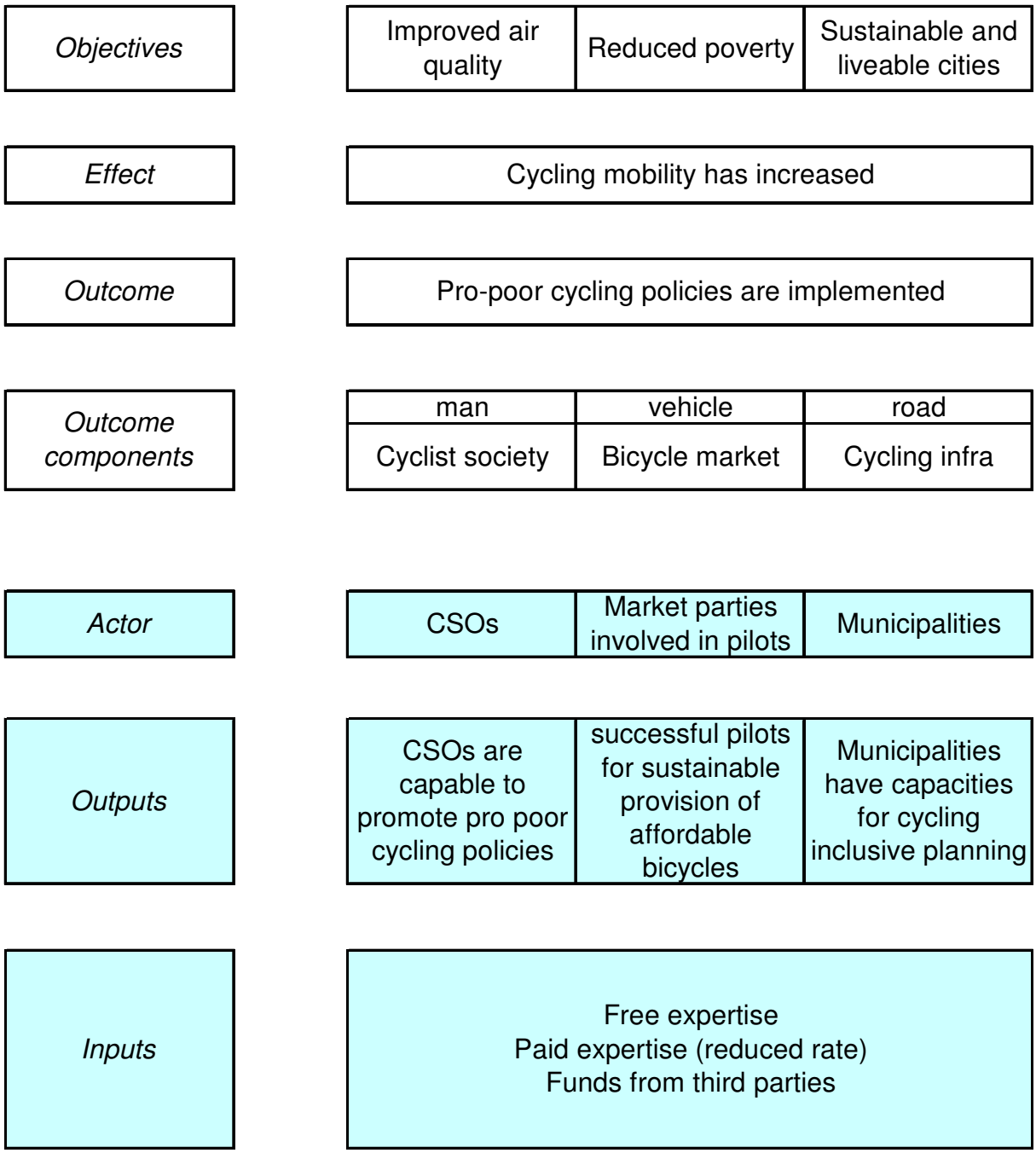
1.1 Introduction

The Bicycle Partnership Program is working in the fields of cycling mobility and poverty reduction in urban areas in Africa, Asia and Latin America. The Program is structured on the basis of:

1 The notion that cycling mobility consists of three related components, namely cyclists, bicycles and cycling infrastructure. The most effective way to further develop cycling mobility is to address all three components simultaneously.
2 The integrated approach. The notion that cycling mobility is part and parcel of the whole traffic system. Therefore, the focus is on cycling-inclusive planning and policy.
3 The partnership approach.
The Program focuses on strengthening the capacities of key actors in the field of cycling mobility in connexion to poverty reduction. Therefore, outputs are defined in terms of developments at actor level.

The relations between output, outcome, effect and objectives belong to the sphere of influence of the Bicycle Partnership Program (see table 1.1). As will be explained below, we expect that the implementation of pro-poor cycling policies leads to an increase in cycling mobility. In turn, we expect that more cycling one of the factors is that contributes to poverty reduction, improved air quality and to cities that are more sustainable and liveable. Finally, we expect that the Bicycle Partnership Program contributes to these developments through realising its outputs, which belong to its sphere of control.

Figure 1.1. The basic structure of the Bicycle Partnership Program.



1.2 The rationale for the Bicycle Partnership Program

1.2.1 The problem statement

Lack of mobility as obstacle to development

In developing countries and emerging economies lack of mobility is widely mentioned as a major obstacle to development. The movement of people and goods is time-consuming, arduous and expensive. Residents in remote urban areas cannot reach centres of employment such as town centres, business districts, industrial areas, or tourist resorts. Clients spend much time, energy and money to travel to and from facilities such as schools, health centres, shops and markets. Similarly, health workers and other service workers have major problems visiting their (potential) customers. For many people lack of transport is an obstacle to visit relatives or patients in hospital and to take part in leisure activities.

As the large majority of the rapidly growing urban population belongs to the poor living in huge low cost housing areas, the mobility problem is an increasingly severe barrier to development.

Biased urban transport planning

Characteristic for the transport demand and mobility patterns of urban poor households is their invisibility and informal character. They largely remain outside the realm of statistics. Town planners overlook them. They are not taken into account when authorities decide on investments in the mobility sector. The planners and decision makers focus almost exclusively on highways, main roads, private cars, and public transport on a limited route network.

The position of cycling in urban transport is marginal or being threatened. Motorisation has been considered as the (only) way of modernizing the transport system, and for decades transport planners and governments in developing countries have paid no attention at all to human powered transport.

This focus often implies an anti-poor policy. The benefits are for those who can afford to own a car or to pay for bus and train tickets. The detrimental effects are most severe among the urban poor. A major road often is built through low-cost housing areas. In many cases housing in the way of the new route is demolished. At local level, such a road is a barrier, it cannot be crossed and it de-links the local routes and communities at each side of it. People living in its direct vicinity are exposed to noise and air pollution. Thus, the whole livelihood deteriorates. A sidewalk along a main road, if any, is extremely dangerous for cyclists and pedestrians. The majority of victims of road accidents are poor people.

2.1 Possible solutions

2.1.1. Cycling as efficient mode of transport

For residents in low-cost housing areas motorised vehicles are too expensive, public transport, if any, is expensive too and often unpractical as routing and time schedule do not fit to the actual demand. Walking is often considered the only option available.

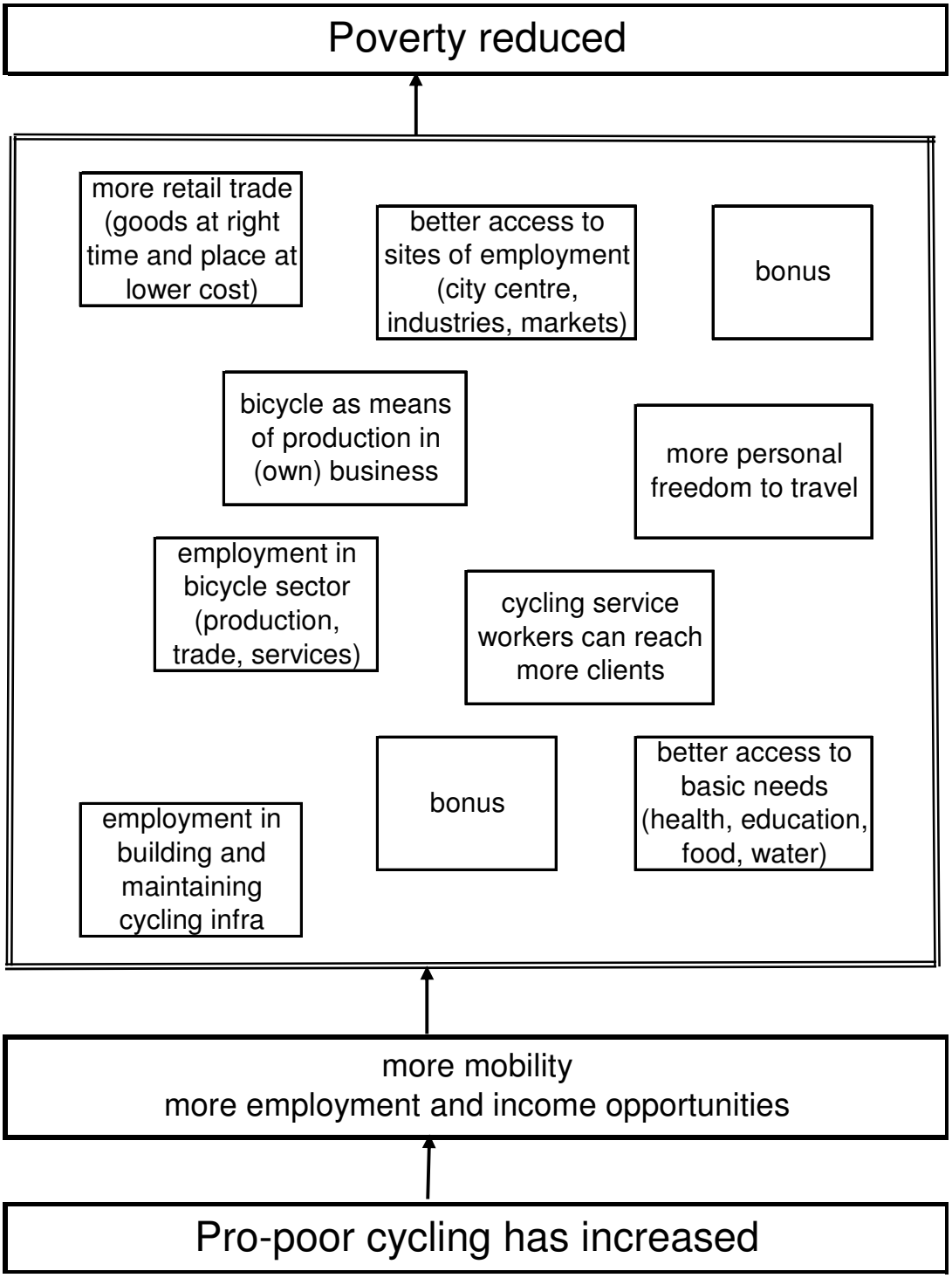
In many cities bicycles are very suitable to fill the gap between walking and motorised transport. A bicycle is relatively cheap and easy to ride. It gives the user freedom to move independent from others. As travel patterns of urban households are to a large extent within the vicinity, not beyond some 10 kilometres from home, cycling fits very well to the existing travel patterns. Moreover, it creates the option for reaching destinations much further away, and to combine trips. Cycling is about three times as fast as walking. In addition, a bicycle is multipurpose (transporting one or more persons and goods, means of production, asset).

In the low cost housing areas, roads are generally poorly designed, not maintained and unsuitable for car transport. In the rainy season, they often function as drainage canals which cause further damage. In urban areas cycling is a mode of transport in addition to rather than replacing the other transport modes (cars, buses) in the city. Bicycle transport functions in areas where other systems do not penetrate. Cycling often acts as feeder transport system to mass public transport such as buses and trains. In many areas, it is the most efficient mode of transport. Thus, more cycling is likely to raise the demand for other longer distance modes of travelling, resulting in more employment and income in bus and railways sectors.

2.1.2 The impact of cycling on poverty reduction

Cycling has a dual impact on poverty reduction, namely through better access to key destinations due to increased mobility, and through higher income due to increased employment (see table 1.2). Here, poverty reduction is taken at micro-level. It applies to persons or households. Only at that level, the direct relation between cycling and poverty level occurs. In case cycling becomes a mass phenomenon, poverty reduction may appear as income growth or fall in unemployment rates in municipal statistics, but at this intermediate level the direct link to cycling is difficult to prove.

Figure 1.2. Expected linkages between cycling mobility and poverty reduction.



Cycling improves access to basic needs

Reducing poverty means in the first instance that people meet their basic needs, such as housing, food, water, health, education and social activities (visits to friends and relatives, leisure). As services are scattered and could be relatively far from home, the need for transport is a derived need, a necessary requirement for enabling people to fulfil these needs, and thus to reduce their poverty. Access to basic facilities requires access to suitable transport systems that fit to the transport demand. Cycling is the obvious choice.

Cycling creates opportunities for employment and income generation

To enable people to search for and to find work, they need to be able to travel to and from the work site. Income generation through employment remains the major route out of poverty.

In addition, access to transport enables people to create work, to become self-employed. They can use a bicycle for trading goods, for visiting clients or to hire it out, or to use it as a taxi service.

Furthermore, the transport sector is potentially an important source for employment and income. In the bicycle sector for example, employment generation can be created in manufacturing and assembling bicycles, repair services, and trade in new and second hand bicycles and spare parts.

In addition, building cycling infrastructure provides work. Constructing and maintaining cycling infrastructure is more labour-intensive than other construction works such as highways.

Linkages between cycling and development

We assume that cycling has indirect effects too. Development of the bicycle sector is also likely to stimulate employment and income generation in related sectors (re-use of old bicycle parts and tyres, metal works, welding). Perhaps even more important, development of cycling as mode of transport enhances development in other sectors where lack of (personal) mobility is a traditional bottleneck (education, health, retail trade).

In addition, higher incomes generated through cycling increases the demand for goods and services in other sectors. This raises the expectations of entrepreneurs, inducing them to invest more in their business. Higher income also may result in higher tax incomes, which in turn could be invested in the cycling sector.

It is also interesting that reduced poverty is likely to induce more cycling. When income increases, it is easier to afford the cost of cycling. A household owning one bicycle, may decide to buy a second one.

The figure shows that the impact of cycling on poverty reduction can be achieved in numerous ways. It depends on time and place (local circumstances and culture) which cause-effect relation or combination of relations applies, and how strong the total impact is. Given the high number of possible linkages the argument that cycling results in poverty reduction is robust, it is highly unlikely that none of the linkages work.

2.1.3. The impact of pro-poor cycling policies on cycling mobility

Conditions, expectations and behaviour

Figure 2.3 shows that cycling policies address one or more of the components of the cycling system: man, vehicle and road. It is likely that the impact of a policy increases in case it comprises more than one component as a way to stimulate balanced bicycle growth. The use of cycling routes assumes that people want to cycle, and that they can afford to use a bicycle. It also assumes that the demand for bicycles is satisfied, either through purchase or hire. Thus, policies may influence the behaviour of people (more people want to cycle), the development of the bicycle sector (bicycles are available and can be repaired), and the conditions for cycling (providing the cycling infrastructure).

In addition, and most importantly, as the target group consists of the residents in low-cost housing areas, to make cycling policies effective, they need to be pro-poor orientated. This has far-reaching consequences for policy design, planning and implementation.

1. The location of cycling routes should fit to the travel demand patters of the potential users. For example, routes may connect low cost housing areas to city centres or market places, or a route network may be built within such a suburb.
2. The logistic planning in the bicycle sector should be done in such a way that the supply of bicycles matches the demand of the target group. This requires for example the supply of utilitarian bicycles suitable to carry passengers or loads. It also may imply that bicycle and repair shops are within reach of the (potential) clients, and that there are options to hire a bicycle, or to buy one on credit.
3. The demand for cycling depends of the attitudes, preferences, travel demand patterns and purchasing power of households belonging to the target group. Perhaps the most important factor to influence the demand is to provide information on the advantages of cycling, the route network, the supply of bicycles and the cost of cycling.

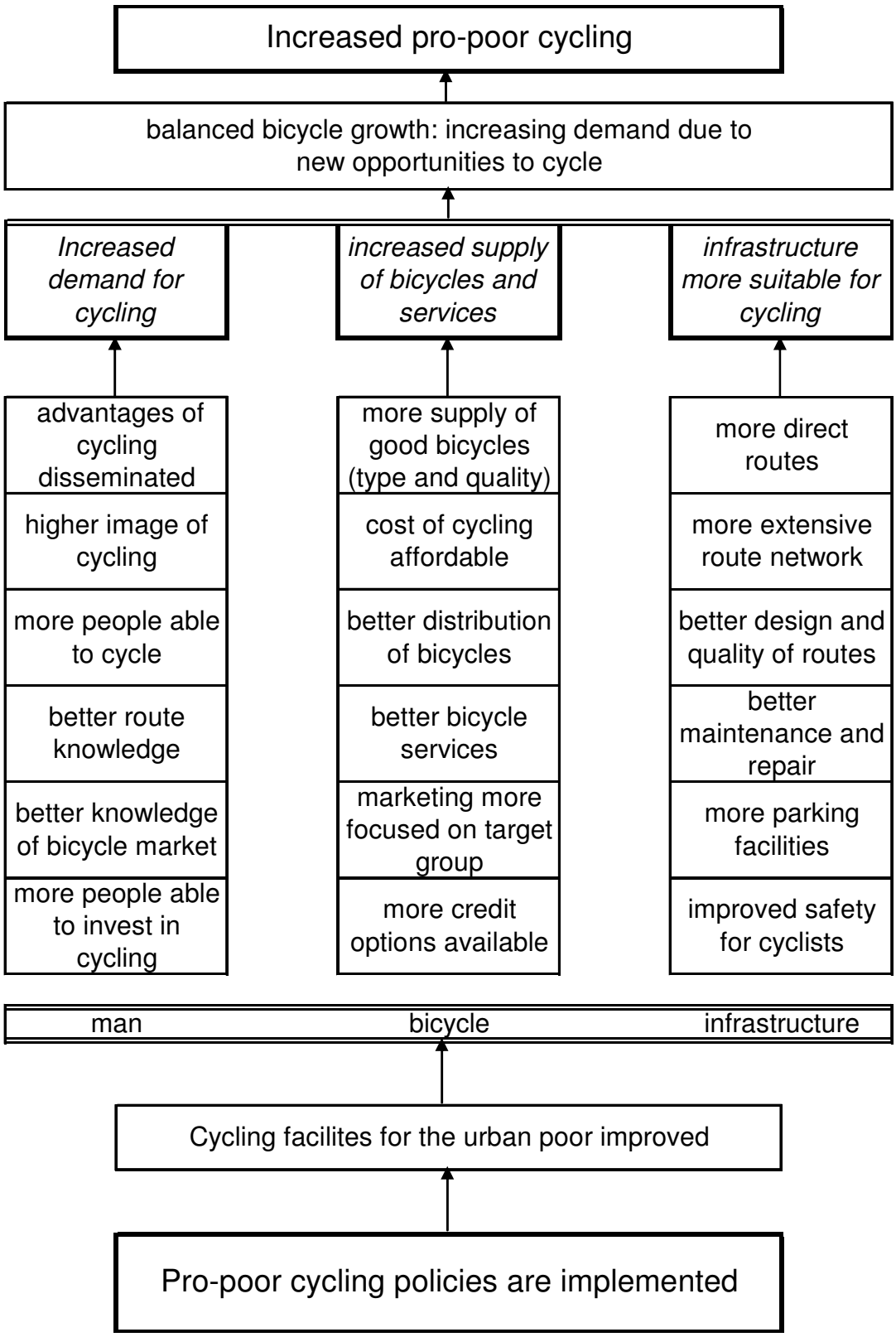
The actual package of policies and its effectiveness depends of course on the specific case at hand. In the process of development, the policy package can be adjusted. On the one hand, lessons are learned, and it becomes clearer what policies are most effective at what time and place. On the other hand, circumstances change and new options and barriers occur which have to be taken on board.

Similarly, it depends on time and place and on the scope of the policy, what actors are involved in policy design, planning and implementation, and in measuring its actual impact. Generally speaking, the municipal government is responsible for the overall cycling policy, but governments at local (suburb) level on the one side, and at regional and national level on the other side, may be important actors too. Typical for developing countries and emerging economies is the poor functioning of the private (bicycle) market, the poor dissemination of information, and the relatively weak position of civil society organisations. Therefore, effective government policies do not only focus on infrastructure.

Depending on the case at hand, active government intervention in the market may be required:

1 Stimulating the supply of bicycles with price measures (lower import duties on new and second hand bicycles, parts for assembly and spare parts, lower VAT on bicycles, bicycle parts (such as pumps and tyres) and bicycle repair services.
2 Investment and employment policies (creating manufacturing and assembling industries, creating opportunities for small and medium scaled businesses (bicycle shop, repair services, bicycles purchase or hire schemes for employees, bicycles as means of transport for workers in the distribution sector such as health workers).
3 Financial policies (credit, not only micro-credit, for further developing the sector).
4 Public campaigns (bicycle lessons, traffic education, school projects, cycling and health).

Figure 1.3. The impact of cycling policies on cycling mobility.


Increased pro-poor cycling
balanced bicycle growth: increasing demand due to new opportunities to cycle
Increased demand for cycling
increased supply of bicycles and services
infrastructure more suitable for cycling
advantages of cycling disseminated
higher image of cycling
more people able to cycle
better route knowledge
better knowledge of bicycle market
more people able to invest in cycling
more supply of good bicycles (type and quality)
cost of cycling affordable
better distribution of bicycles
better bicycle services
marketing more focused on target group
more credit options available
more direct routes
more extensive route network
better design and quality of routes
better maintenance and repair
more parking facilities
improved safety for cyclists
man
bicycle
infrastructure
Cycling facilites for the urban poor improved
Pro-poor cycling policies are implemented

Cycling as development opportunity

So far, we have illustrated that pro-poor cycling policies are expected to result in increased cycling among residents of low-cost housing areas, which in turn is likely to lead to poverty reduction.

At the next level, we look at the cycling policies in more detail. We have assumed that such policies are implemented, and thus that they exist. Precisely this is an unrealistic assumption. In many developing countries and emerging economies cycling policies, if any, tend to be of limited scope and influence, and they lack a pro-poor orientation.

To improve the position of cycling substantially is a long term process requiring determination and endurance.

The isolated nature of cycling policies

Investments in route networks suitable for cyclists are much more effective in case complementary investments are made in the bicycle sector. Especially in developing countries and emerging economies markets function poorly. The private sector is not automatically providing the most suitable incentives. The result is an unbalanced bicycle growth. Cycling infrastructure is perhaps not much used because bicycles are not widely available, potential users cannot afford to buy a bicycle, or they have no safe parking place at home. The usual focus on infrastructure investments without taking the developments in the bicycle sector and the demand of potential cyclists into account is likely to make cycling policies less effective than foreseen.

In addition, cycling policies are often developed in isolation. They are not seen as an integrated part of urban transport planning. Therefore, obvious solutions for improving cycling through relative minor adjustments made in the existing transport network tend to be overlooked. In new urban areas, cycling as mode of transport is left out of the overall transport plan.

The Bicycle Partnership Program

In this field of pro-poor cycling planning, the Bicycle Partnership Program is designed to make valuable contributions related to:

1 Policy design and planning:
   (a) An integrated approach (cycling-inclusive planning)
   (b) A comprehensive approach (man-vehicle-route).
   (c) A pro-poor policy orientation.
2 Strategy:
   (a) Civil society building
   (b) Direct Poverty Reduction
   (c) Policy Influence.

3 Cooperation with key actors in cycling development:
   (a) Civil Society Organisations (CSOs)
   (b) Pilot partners in the bicycle sector
   (c) Municipalities

2 Cycling at the Crossroads of Poverty Alleviation and Sustainable Transport

by Mark Kirkels

"Cycling is to mobility what organic farming is to agriculture"
Vandana Shiva, international grassroots activist

2.1 Introduction

Poverty and development studies are concerned with access of the poor to social services and income opportunities. Transport studies also deal with access and accessibility, but the two hardly meet each other. While the former concentrate on equity in society and individual economic growth, the latter concentrate on how to manage collective economic growth in space. There are differences in ethics, in the understanding of access and accessibility, in scope, in assumptions on what is important for individuals and society, in approaching spatial manifestations. Do the two worlds apart have something in common?

Literature on the crossroads of the two disciplines is limited, notably for the urban context.[1] This short essay (in concept stage) highlights relevant theory and issues that help to understand the relation between poverty and transport, and that provides some direction for more research. On the way, the potential of cycling to enhance equity emerges loud and clear, not to mention the other benefits of cycling to society.

2.2 The poor and their livelihoods

What is poverty and who are the poor? There are many definitions of poverty but the common denominator is that it is related to equity in a population. Here, the poor are defined as belonging to the bottom quintile of a national population in socio-economic terms. They are assumed to be excluded socially and economically and deprived from access to the basic facilities to which they are entitled under international human rights treaties. The poor don't simply commute from home to work. Their lives are complex and they use complex and flexible strategies to survive. There is more to their livelihood than monetary income and access to social services. The Sustainable Livelihoods analytical framework and Approach (SLA)[2] distinguishes between five capitals or assets: physical capital (home, food stock, livestock, tools), natural capital (natural environment with its resources – land, water, wood, air etc.), financial capital (money, debts, debts owed), social capital (relatives and other contacts and networks) and human capital (level of education, labour capacity, health). Not only does this framework help to understand what sorts of assets the poor need to develop and maintain, it also recognizes the poor's context of vulnerability and environment of institutions, policies and processes with which the household interacts.

[1] John Howe and Deborah Bryson are known for their publications on rural poverty and transport in Africa; Anvita Arora published on the impact of transport planning on urban poverty in India and Alphonse Nkurunsiza applied behavioural change theory to mobility decisions.

[2] Developed by the Institute of Development Studies in Sussex in the 1980s and 1990s (Robert Chambers, Ian Scoones)

Few among the poor derive all their income from just one source, e.g. wage labour, or hold all their wealth in the form of just one single asset.[3] The poor tend to be among those that are most engaged in complex, multi-activity income strategies.[4] The poor increasingly show economic fragmentation in the form of multi-tasking and income diversification, which usually does not result in higher incomes. They experience more stress in their survival battle. The mobility needs of the poor are increasing. A multi-locality trend in income sources makes transport more and more crucial for survival and productivity.

Apparently globalisation has only boosted the *range* of livelihood opportunities. This holds truth for rural as well as urban poor. Nowadays many households have a foothold in both a rural and an urban location. Productive members and adolescents stay close to the job market and secondary school in town, whereas dependents benefit from the low cost of living and cheap facilities in the rural areas. This means that it has become difficult to distinguish between the urban poor and the rural poor. The family and socio-economic connection between the geographically separated urban and the rural base of one particular household or family implies physical movements of people and goods as significant results of their set of livelihood strategies. The poor's activity patterns that can be seen as survival webs.

2.3 The poor's decision making on transport

In poverty studies, intra-household decision-making is a well explored subject; from a human rights point of view in general and from a gender relations point of view in particular. Individuals and households constantly need to take decisions about felt needs and they have to do so under pressure. From a livelihood perspective, needs result from scarcity, in a vulnerability context and an environment of institutions, policies and processes. Such livelihood decisions underpin the decisions to access destinations that are important for survival. This is the point where poverty studies stop and transport studies take over. Poverty studies are concerned with scarcity and view distance only as a matter of cost to the poor in terms of time and money. The transport dimension of poverty is undervalued. Transport captivity, i.e. forced to walk as other means of transport are beyond reach, may be recognized as a barrier to poverty alleviation but it is only addressed through a focus on more income. Transport studies do not venture into underlying reasons for travel decisions, certainly not for specific population groups let alone individuals. Transport theory holds a conceptual three 'markets' model to help explaining travel behaviour: markets for travel, transport and traffic. The travel market is created by people travelling to participate in certain socio-economic activities. The spatial distribution of these activities and people's timeframes determine the travel needs. This can be considered a market as people have to decide whether the activity (or a similar alternative) is worth the effort of travelling. On the transport market people choose from the transport services that are available to them. Again individuals will weigh 'costs' and 'benefits' of each choice. On this market individuals choose their route and their road behaviour (speed, manoeuvres, etcetera).

[3] Haan, L. de and A. Zoomers, 'Development Geography at the Crossroads of Livelihood and Globalisation', in: Space and Place in Development Geography, G. Nijenhuis et al (Ed.), 2005, p.55.

[4] Idem, p.56.

These behavioural choices are made within the framework of the available infrastructure, regulations and the interaction with other road users.

Transport system improvements do not only impact on trip or modal decisions; they impact on the level of access decisions and even livelihood decisions as well. They change the range of options, the possible choices and therefore the key decisions made by individuals. But urban and transport planners, intended or not, predominantly serve the motorised transport needs of middle and upper-class population groups with planning for cars and arterial public transport systems. Investments can even aggravate the lack of accessibility of destinations that matter for the survival of the poor: relocation from inner city neighbourhoods to peripheral slums to make way for infrastructure and big arterial roads that become barriers for pedestrians.

Linking up poverty and transport studies sheds light on the poor's transport behaviour and helps to justify measures enhancing their equity in society at large and on the road in particular rather than aggravating it.

2.4 Strategies for enhancing the poor's accessibility

The international human rights treaties underpin a rights based approach in poverty alleviation and development. The rights based approach aims at a process of social, civic driven change that changes power structures related to common and individual interests of the poor. It establishes a more equitable process of development by strengthening the position of right holders vis-à-vis duty bearers. In the rights based approach 'access' has a wider connotation than just a spatial one. 'The right to have access to' may refer to social services, employment opportunities, markets, medicines but it also refers to participation in decision making processes about the right holder's own situation: all ingredients for a dignified life. Providing the poor with access to decision making processes is a matter of empowering rather than overcoming distances. From a rights based perspective, accessibility refers to the degree to which a service or opportunity is accessible by (socially and/or economically) excluded people. What matters most is to what extent the poor are empowered to determine their own lives.

In this essay, at the crossroads of development and transport objectives, accessibility is understood as: "the geographical dimension of access to all destinations that are relevant for the quality of life". It is therefore a function of proximity, transport systems and population characteristics. In order to improve accessibility in the sense of overcoming distances, governments usually apply one of the following development strategies:

1. reducing the distance by providing outreach or establishing facilities closer to the poor
2. reducing the distance by resettling and concentrating dispersed communities around facilities
3. increasing the common self-reliance of the poor (community based health care)

While these strategies pay respect to accessibility, the transport needs that are determined by a poor household's set of survival strategies are not explicitly targeted. There is thus a fourth strategy: improving access to transport and as

such, increasing the individual self-reliance among the poor. With access to transport, the accessibility of destinations that matter for the quality of life, and for survival in particular, increases. This strategy pays respect to the need of poor people to reach more destinations than just essential services. They need to be more and more mobile to sustain and improve their asset base. Destinations comprise income opportunities, natural resources, relatives, the school, shops and the clinic. Some trips are daily, others are less regular. Moreover, the fourth strategy responds well to the trend that the poor need to combine more sources of income (income diversification) at more locations (multi-locality) than ten, twenty years ago to earn the same income.

The fourth strategy targets primarily those that rely on walking for daily and less frequent destinations. In effect, improving access to transport means lifting the captivity of walking and creating a choice when decisions on trips have to be made.

2.5 Serving the transport needs in the informal economy

The challenge, right at the crossroads of poverty and transport, is thus to increase the accessibility of destinations that matter for the poor's capitals, their quality of life, their survival in particular. Looking at individual households is not a practical option, but assuming that the informal economy and the poorest quintile of any urban population go together reveals optional paths to explore. A possible way to shed light on the mobility needs of petty traders, petty producers, casual labourers or micro-service deliverers is to deal with them separately. They may share origins, destinations and routes and therefore share a transport pattern that can be viewed as a 'survival web'. They will be gender-specific. Making such webs visible reveals the 'petty transport' patterns in the overall transport system.

The actual webs are probably limited by poor access to transport (captive walking), poor capacity to carry goods and/or children and poor accessibility of destinations (lack of road safety, distance, barriers, expensive public transport). These survival webs should thus not only be revealed but also understood. Surveys to draw and understand the survival webs will point at bottlenecks in shared routes and at shared localities on the one hand, and in access to modes of transport on the other. Subsequently, planners can incorporate solutions to these bottlenecks in urban development and transport plans, and improvements in the access to modes of transport can be stimulated.

2.6 The significance and potential of cycling

Since many of the poor rely on walking, cycling could potentially advance their access to destinations. The significance of cycling in the informal economy throughout the developing countries and emerging economies varies between continents, between countries, and between rural and urban areas. But some general observations can be made especially in relation to urban areas where distances are relatively short. As African cities grow, the tarring of roads for heavy traffic chases cyclists off the roads. The bigger the city, the less people cycle. The African urban informal economy is a walking economy. Up to 50% of

all people walk, constituting a big reservoir of potential cyclists. The cycling tradition in Asia is under threat, cycling shares are declining in many countries. Rickshaws and other non-motorised modes of transport in the informal economy are making way for motorised vehicles. In Latin America, there is a long tradition of modest cycling shares and recreational cycling is increasingly popular. Tricycles are a common phenomenon in cities across the continent.

In all continents large young generations are entering the job market for decades to come. Persistent economic growth with increasing purchasing power for large parts of the population will cause younger generations to start using private motorised vehicles at an earlier age than their parents did. They skip cycling as an option and rather indebt themselves straight away for their first private two-wheeler or car. But hundreds of millions of them will not escape from the informal economy and remain captured in walking.

Yet, the bicycle emerges as a promising vehicle for change. More than any other mode of transport, the bicycle in various designs responds best to livelihood complexity, within cycleable distances. Compared to walking, more, and more distant, destinations can be reached; cycling saves time. For instance, a woman could reach two places to carry out domestic work instead of only one and doubling her daily income.

Compared to any form of motorized transport, cycling saves on costs otherwise incurred through use of public transport. Apart from an up-front purchase cost, usage costs are very low. The design of the bicycle may vary so as to respond well to specific purposes. Livelihood strategies vary and determine the need to carry specific loads. The bicycle (or tricycle) enables the carriage of a wide range of goods. Cycling also empowers. It a much more flexible way than using public transport for reaching and combining locations of income opportunities. Bicycles may not only be a mode of transport but also a means of generating income. Higher income potentially contributes to the social and economic inclusion of his/her entire household. Cycling also empowers women in gender relations and society at large.

Cycling inclusive urban and transport planning is therefore not only an appropriate response to congestion but also to poverty.

2.7 Promoting cycling

Tapping the potential of cycling brings up the question of how promoting it. This brings us back to the decision-making by poor individuals and households. How to support and enable positive decisions on bicycle use among the poor?

Bicycle possession and use is hampered by the costs involved in purchase, repair and maintenance. In addition, people may not have learned how to cycle and the bicycles that are available are of low quality and not really fit for carrying goods, an important purpose in the informal economy. Measures to lift these barriers include: import duty exemptions for quality bikes, access to microfinance, access to training how to cycle, incentives for the development of the bicycle industry as a viable (micro-, small-) economic sector and the provision of utility bikes adapted to the use in the informal economy. These measures make up the fourth accessibility strategy mentioned above (increasing access to transport). They will improve the quality of the survival webs.

The three markets model offer a complementary framework for identifying measures that promote cycling. On the travel market, the challenge is to enable the poor reaching many destinations (activities, facilities) with a minimum of (long) trips, or at a distance as short as possible. This is mainly a matter of urban planning and tallies with the first and second strategy for governments (shortening distances). Enlarging the comparative advantages of cycling (making it a more attractive option) to overcome distances may reduce the need for the poor to use costly public transport (notably cumbersome for the carriage of goods) and the desire to shift to even more costly private motorised transport.

The transport market is the domain of the fourth accessibility strategy: measures increasing the access to comfortable, affordable, utilitarian bicycles and tricycles also increases the competitive position of cycling vis-a-vis other modes within reach of the poor, notably walking. Also creating attractive trip chains as an alternative to private car use belong to the measures on this market but it needs to be investigated to what extent this benefits the livelihood strategies and the informal economy at large (e.g. bicycle parking facilities at bus stations from where outbound buses depart).
On the traffic market, with all its economic, social and cultural influences, the traffic engineers and urban designers all need to adopt an accessibility oriented rather than a vehicle oriented paradigm in their work. A safe infrastructure for cycling in an attractive and secure environment is required as well as an infrastructural cycling network connecting origin and destination. Positive examples throughout the world show that if cyclists are taken serious in urban and transport planning, the public status will grow. This enhances equity on the road and in society at large.

The above shows that whereas a bicycle serves many individual interests, there are many common interests in all strategies and markets that need to be made explicit, discussed and decided upon. The voice of the actual and potential cyclists, the right holders, need to be heard much louder by the duty bearers, the decision-makers. Increasing the capacity of CSOs to represent cycling interests and demand cycling facilities belongs to the third development strategy (increasing community self-reliance).

Authorities can be inspired through exposure to best practices, the availability of technical support, pressure from cycling advocates and pro-cycling incentives accompanying funding facilities. Investing in cycling based on a good understanding of its significance for economic activities will enhance socio-economic inclusion and overall national productivity. Investing in cycling will thus enhance the ethics in transport planning.