

Dhaka; cycling city of the future

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ওয়ার্ক ফর এ বেটার বাংলাদেশ ট্রাস্ট

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UNIVERSITY OF APPLIED SCIENCES

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PROLOGUE

Dhaka (Bangladesh)

10 February 2017

Every student had to do a research internship. As a student Spatial Development-Mobility I did my internship in a wonderful and fantastic Bangladesh. For Work for a Better Bangladesh Trust I did a research about cycling in Dhaka, with supervision of Maruf Hossain and Rob Gallagher.

Motorized traffic sticks in populous cities, like Dhaka. The roads of Dhaka can't handle the intensities. Consequence: traffic jams, chaotic situations and busy roads. The amount of motorized vehicles makes the situation/roads worse.

Cycling could be a possible solution for the chaotic and busy roads of the city. The modality is growing in popularity especially among middle- and upper-class youth in Dhaka. Who are interested in this *new* way of transport?

PROJECT OBJECTIVES

Projects have objectives, «What do you want to achieve with your project? » Before I came to Bangladesh I started already with my methodology and project objectives. I came to this by thinking: «Who needs this report? And what will they do with it? »

There are some objectives to achieve with this report and this project. Formulated like:

1. develop a better understanding of cycle users in Dhaka and dispel myths about cycling in Dhaka, for example why people do not cycle?
2. to advocacy better infrastructure for cycle users in Dhaka;
3. assist cycling stakeholders to promote cycling.

RESEARCH QUESTIONS

I translated the project objectives to research questions. This report will give an answer on the following research question:

1. Who is cycling in Dhaka, and why?
2. How to encourage more people to cycle in Dhaka?

These questions were the main factor for activities and events during my internship.

In conclusion of this document I will use the research questions and the project objectives. I will try to answer the questions and objectives. In this report I use quotes of locals. A short message what *they* want to say to the Bangladesh Government. These quotes are used in every chapter.

WHY BANGLADESH?

In October 2015 I met Debra Efrogmson on an international conference in Vienna (Austria), Walk21. Without realising it, we met on the first day, during the first session (about Active and Safe Routes to Schools (ASRTS)) and both of us were joining in a mail group. I wanted to go abroad and mailed the group. Debra replied and we started with preparing.

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SUMMARY



It is one of the biggest cities on earth, with 17 million people: Dhaka Metropolitan Area (Dhaka MA). Even it is one of the fastest growing cities. Prognoses for 2025 is more than 25 million inhabitants. Dhaka's population is always moving. Certainly everyone has the right to move, going to school, going to work or doing grocery shopping. But to reach your work or school you need space and possibilities to move. Most of the time are people stuck in traffic.

It is difficult to imagine if you see the current traffic situation, not even one tenth of trips is made by car. However, the car is a huge problem for Dhaka MA. With other motorized vehicles and rickshaws the traffic is congested 24/7. This city is not built for this population density, in relation with the needed transportation (either car, public transport or rickshaw). Difference between the amount of cars and the amount of bicycle trips is small. Just 1 of the 50 trips is made by bicycle (only 2%).

Unlike the car has a bicycle much more advantages. Okay, obvious are arguments like: it is healthier, it is environment-friendlier, it is cheaper. There are more advantages: often is cycling shorter (in terms of distance and time), it is improving social cohesion. In the other hand is also resolving poverty and it gives boys and girls the same chances for education. Just for cities like Dhaka it is important to promote cycling and to get more people to participate in the movement.

As we thought before is the car for the rich people. Cars give them a social and economic status. Which is not given when you drive on a bicycle.

With this report it is proven that mainly young males use the bicycle for transportation, they use it also regularly, for example to reach their education or their work. And women use bicycles rarely for transportation. Interviewees are from poor and rich neighbourhoods, to make the research representative to Dhaka's population.

Among current roads in Dhaka University is Dhaka City Cooperation (DCC) building cycle lanes, to launch a network of cycling infrastructure. Despite the need of cycle lanes is little, it is a step in the right direction of a cycle-friendly Dhaka.

The need of cycling-friendly infrastructure is growing. Separate cycle paths or cycle lanes should insure safety of the users. But alas is this approach unrealistic and too big for this moment, while just 2% is using it. To build this kind of infrastructure is too expensive for this small target group. Therefore multiplying the target group should be the first step. After that policy makers can resolve problems with cycle-friendly infrastructure and engineering treatments. Even it is 'to educate', many people do not know advantages of cycling. Furthermore their behaviour against cyclists is quite rude. In terms of education and behaviour is also chances to improve.

Simplified: we have to wait for the ending of the elevated expressway and metro rapid transit (MRT). Then it is our time to shine. But we can start with the promotion right now, and we should do it. The first step is made, policy makers have to set a lot of other steps and there is a lot of work to do, to make Dhaka cycle-friendly.

SAMENVATTING



Met ruim 17 miljoen inwoners in de metropoolregio is Dhaka één van 's werelds grootste steden. Tevens is Dhaka één van de snelst groeiende steden. Met als verwachting voor 2025 meer dan 25 miljoen inwoners. Iedere inwoner heeft het recht om zich te kunnen reizen, waaronder het bezoeken van school of werk en het doen van boodschappen. De bevolking is altijd in beweging. Maar dan moet er wel ruimte en mogelijkheden zijn om te kunnen bewegen. Het grootste gedeelte van de tijd staat Dhaka stil in de file.

Wat in groot contrast staat met het verkeersbeeld, nog geen tiende van alle trips wordt per auto gemaakt. Toch vormt de auto een groot probleem voor Dhaka. Samen met het andere gemotoriseerd verkeer staat het de hele dag vast in het verkeer. De stad is niet gemaakt voor deze bevolkingsdichtheid met het daarbij behorende transport (hetzij per auto, openbaar vervoer of riksja). Maar het verschil tussen het autogebruik en het fietsgebruik is niet schrikbarend groot. Slechts 1 op de 50 ritten worden per fiets gemaakt (2%).

In tegenstelling tot de auto heeft de fiets veel meer voordelen. Hiervoor gelden de voor de handliggende argumenten als: het is gezonder, het is groener, het is goedkoper. Maar zijn veel meer voordelen aan de fiets: routes zijn vaak korter (qua afstand en qua tijd), het bevordert de sociale cohesie. Het kan ook armoede bestrijden, het geeft gelijke kansen aan jongens en meisjes. Voor steden als Dhaka is het dan ook belangrijk dat de fiets wordt gepromoot. Dat meer mensen gebruik maken van de fiets.

Zoals vooraf al werd gedacht, wordt de auto veelal gebruikt voor de elite in de stad. De auto geeft mensen een bepaalde sociale en economische status. Waar de fiets die juist niet heeft. In de laatste jaren maakt de fiets een groei in Zuid-Aziatische steden, vooral bij de middenklasse.

Uit het onderzoek blijkt dat vooral jonge mannen fietsen en dat vrouwen zelden gebruik maken van de fiets. Ook kan geconcludeerd worden dat bijna velen van de geïnterviewden vaak fiets, bijvoorbeeld naar het werk. Om het onderzoek representatief te maken is zowel in de arme als in de rijke wijken onderzoek gedaan.

Dhaka City Cooperation (DCC) gaat binnenkort in het universiteitscomplex een fietsnetwerk openen van verschillende fietsstroken, die langs bestaande infrastructuur wordt aangelegd. Ondanks dat de vraag naar een fietsnetwerk binnen het universiteitscomplex gering is, is het een stap in de juiste richting.

De vraag naar fietsvriendelijke infrastructuur groeit. De aanleg van vrijliggende fietspaden of fietsstroken moeten vooral de veiligheid tijdens het fietsen gaan bevorderen. Met slechts 2% van alle trips op de fiets is een fietsvriendelijke infrastructuur niet haalbaar. De infrastructuur is te duur voor deze schaarse doelgroep. In eerste instantie kan gezocht worden in het vergroten van de doelgroep. Daarna kunnen oplossingen worden gezocht in fietsvriendelijke infrastructuur. Tevens is het een kwestie van 'onderwijzen', veel mensen weten niet de voordelen van de fietsen en gedragen zich onfatsoenlijk tegenover fietsers. Ook op het gebied van gedrag en onderwijs kan nog veel worden veranderd.

Kort gezegd: de komende jaren is er nog weinig geld en aandacht voor een fietsvriendelijk Dhaka. Maar een eerste stap is gezet in de juiste richting. Overigens zijn er nog veel stappen nodig en is er nog veel werk dat verricht moet worden.

সংক্ষিপ্ত



ঢাকা মেট্রোপলিটন এরিয়া বিশ্বের সবচেয়ে বড় শহরগুলোর মধ্যে একটি। এমন কি এটি দ্রুত বর্ধনশীল শহরগুলোর মধ্যে অন্যতম। উপরন্তু, পূর্বাভাসমতে ২০২৫ সালের মধ্যে এই শহরের বাসিন্দা ২৫০ লাখে পৌঁছাবে। চলাচল করা মানুষের অধিকার বিধায় ঢাকার জনসংখ্যা সর্বদাই সচল এবং সেখানকার লোকজন বিদ্যালয়ে, কর্মক্ষেত্রে এমনকি বাজারগুলোতেও চলাচল করে। কিন্তু বিদ্যালয় কিংবা কর্মক্ষেত্রে পৌঁছাতে হলে কিছু জায়গা এবং সুযোগের দরকার চলাচলের জন্য। আর সেই সুযোগের অভাবে অধিকাংশ মানুষ ট্রাফিক জ্যামে আটকে থাকে।

যদি ট্রাফিকের বর্তমান পরিস্থিতি পর্যবেক্ষণ করা হয়, এটিই পরিলক্ষিত হবে যে দশ ভাগের এক ভাগ যাত্রাও ব্যক্তিগত গাড়ি দ্বারা হয় না, যা কল্পনাতীত। কিন্তু এই ব্যক্তিগত গাড়িই ঢাকা মেট্রোপলিটন এরিয়ার জন্য একটি বিশাল সমস্যা। আবার মটরচালিত অন্যান্য যানবাহনও ট্রাফিক জ্যামে আটকে থাকে ২৪/৭ সময় ধরে। জনসংখ্যার ঘনত্বের সাথে যানবাহন (ব্যক্তিগত গাড়ি, গনপরিবহন, ও রিক্সা) ব্যবহারের ধয়োজনীয়তা বৃদ্ধির দরুন এ শহর স্থপিত হয়নি। অপরদিকে ব্যক্তিগত গাড়ি ও বাইসাইকেলের যাত্রার পরিমাণ খুবই কম। কেননা শুধু ৫০ ভাগের ১ ভাগ যাত্রা হয় সাইকেল দ্বারা যা ২% এর সমতুল্য।

আবার, ব্যক্তিগত গাড়ির তুলনায় সাইকেল চালানোয় আছে অনেক বেশি সুবিধা। যুক্তিগতভাবে, সাইকেল চালানো স্বাস্থ্যের জন্য ভালো, এটি পরিবেশবান্ধব এবং তুলনামূলক সস্তা। অন্যান্য সুবিধার মধ্যে রয়েছে, সাইকেল সময় ও দূরত্বকেও কমিয়ে আনে এবং সামাজিক যোগাযোগকে উন্নত করে। আবার, এটি দারিদ্রতা দূর করতে এবং ছেলে-মেয়ে উভয়কে শিক্ষালাভে সমান সুযোগ পেতে সাহায্য করে। তাই, ঢাকার মত শহরগুলোতে সাইকেল চালানোর উপর জোর দেয়া এবং আরো বেশি মানুষকে সাইকেল চালাতে উদ্বুদ্ধ করাটা খুবই গুরুত্বপূর্ণ।

বহুকাল ধরে এ ধারণাই প্রচলিত ছিল যে, ব্যক্তিগত গাড়ি শুধু বড়লোকদের জন্যই প্রযোজ্য কেননা ব্যক্তিগত গাড়ি সামাজিক এবং অর্থনৈতিক অবস্থার উন্নতির বহিঃপ্রকাশ ঘটায়। আর এ ধরণের বহিঃপ্রকাশ সাইকেল চালানোতে হয় না। তবে গতবছর থেকে মধ্যবিত্ত পরিবারগুলোতে সাইকেল চালানোর প্রবণতা বেড়ে গেছে, বিশেষ করে দক্ষিণ এশিয়ার শহরগুলোতে।

এই প্রতিবেদন থেকে এটি প্রমাণিত হয় যে, ছেলেরা তাদের লেখাপড়া ও কাজের ক্ষেত্রে যানবাহন হিসেবে সাইকেল বেশি ব্যবহার করে থাকে। যেখানে নারীরা যানবাহন হিসেবে সাইকেল কদাচিত ব্যবহার করে। এই গবেষণায় ঢাকার জনসংখ্যাকে প্রতিনিধিত্ব করে ধনী এবং দরিদ্র এলাকাগুলোর সাক্ষাতকারীরা।

সাইকেলবান্ধব অবকাঠামো গড়ে তুলার ধয়োজনীয়তা দিন দিন বাড়ছে। ভিনু ভিনু সাইকেল পথ বা সাইকেল লেনগুলোতে সাইকেল ব্যবহারকারীর নিরাপত্তা নিশ্চিত করা জরুরী। কিন্তু হায়, এই মুহূর্তে এ ধরণের প্রকাশভঙ্গি অবাস্তবিক এবং বৃহত কেননা সাইকেল ব্যবহারকারীর পরিমাণ মাত্র ২%। আর তাই এই ক্ষুদ্র জনগোষ্ঠীর জন্য এ ধরণের অবকাঠামো তৈরি করা ব্যয়বহুল। সেজন্য এই জনগোষ্ঠীকে বৃহত করাই প্রথম লক্ষ্য হওয়া উচিত। পাশাপাশি সাইকেল বান্ধব অবকাঠামো এবং প্রকৌশলগত দক্ষতা দ্বারা নীতি নির্ধারণেরা এ সমস্যাগুলোর সমাধান করতে পারেন। এমনকি এটি শিক্ষণেরও বিষয়, কেননা অনেক মানুষ সাইকেল চালানোর সুবিধাগুলো সম্পর্কে জানেনা। অধিকন্তু, তাদের ব্যবহার সাইকেল চালকদের ক্ষেত্রে পুরোপুরি অশিষ্ট। সেক্ষেত্রে শিক্ষণের এবং ব্যবহারের উন্নয়ন ধয়োজন।

সহজীকরণ: আমাদের অপেক্ষা করতে হবে উন্নত রাজপথ এবং দ্রুত মেট্রো পরিবহনের জন্য। তাহলেই আমরা উদ্ভাসিত হতে পারব। যেহেতু প্রথম পদক্ষেপ তৈরি হয়ে গেছে তাই নীতি নির্ধারকদের অন্যান্য পদক্ষেপগুলোকে স্থির করতে হবে এবং সাইকেলবান্ধব ঢাকা গড়ে তুলতে হলে আরও অনেক কাজ করতে হবে।

CONTEST

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DESK RESEARCH

Dhaka is one of the biggest cities (within top 30) of the world and the city is growing. Before concentrating on traffic and transportation issues, it is important to know the basics of Dhaka Metropolitan Area.

1.1 DHAKA METROPOLITAN AREA

The Metropolitan Area of Dhaka has a population of 17 million, in 2016. The city is the economic heart of Bangladesh, but also on health and education is Dhaka the place to be.

The Government of Bangladesh and Rajdhani Unnayan Karttripakkha (RAJUK) made the Dhaka Structure Plan. To pretend Dhaka during his grow to 2025. In this time the population will grow up to 26 million people, almost 13 million jobs in the entire Metropolitan Area and a surface of almost 8,7 km².

Goal and objectives to achieve by Bangladesh Government

Safe, affordable, sustainable and connected communities made by the Bangladesh Government and mentioned in Dhaka Structure Plan 2016-2035:

1. to prepare long term transport network plan;
2. to make the use of public transport efficient and sustainable;
3. to ensure effective traffic management

1.2 TRANSPORT IN GENERAL

This paragraph is an autobiographic, my own experience of traffic and transport in Bangladesh and especially in Dhaka. Statistics mentioned below are from official documents like Dhaka Structure Plan.

Dhaka has serious traffic problems. Traffic circulation is in a dire situation. 5% of all trips in Dhaka are made by private car. Yet it is apparent as the major contributor of traffic jams. Traffic jams on main roads have big influences on local and small roads in living neighbourhoods. Everywhere I hear the noise of horns from cars, buses and motorbikes. It annoys me, especially because I am not used to it.

When I see roads in Dhaka, I see they are dominated by cars, buses and rickshaws and a minority of motorbikes, CNG's and bicycles. I see a chaotic and hectic situation. Vehicles do not give any signs when they change lanes. Wrong-way driving happens a lot by cars and rickshaws, which is seriously dangerous.

Pedestrian-friendly and accessible sidewalks are scarce. You face a lot of obstacles when you use the sidewalk (like trees, damaged sidewalk, high and inaccessible steps and hawkers). Which I see as not accessible and not comfortable.

I cannot imagine how worst traffic situation is in 2025, if Dhaka does not change. I read in Dhaka Structure Plan the average speed is 8 km/h during peak hours, on this moment. In 2025 it will reduce to 4 km/h. Unimaginable! I hope plans of the Government increase the availability and liveability in Dhaka. Especially when cars are dropped out of the city, into new build ring roads.

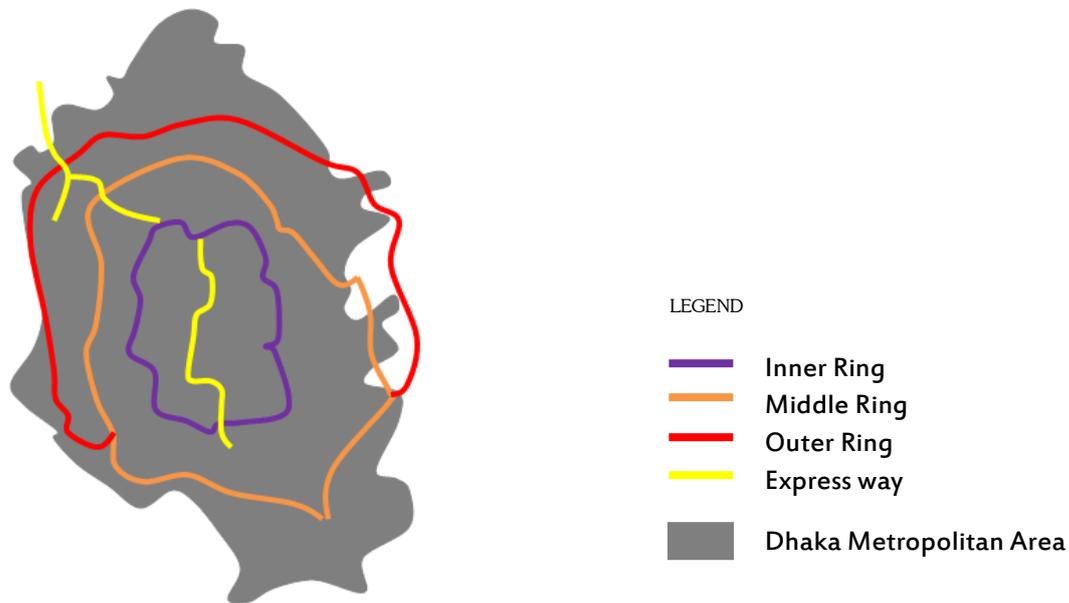


Figure 1 Ring structure for Dhaka – plan of the Bengali Government

Resource: Dhaka Structure Plan 2016-2035 – own edits

As shown in figure 1, the Bangladesh Government building a lot of new roads and infrastructure in the coming decade. I hope it is enough to resolve traffic issues in and around Dhaka, but I do not think so.

If you plan for cars and traffic, you get cars and traffic.

If you plan for people and places, you get people and places.

William H. Whyte (1917-1999), American urbanist and journalist

Rather than building infrastructure the Government should invest in other modalities, like public transport, cycling and walking.

Personally I believe more in a widely network of buses, boats and tubes (short term: public transport). For short distances people can use cycle, rickshaw and walking, longer distances people can make by bus, tube or CNG. My opinion is: cities can only operate in good conditions when liveability, safety and availability are co-operating with each other. But when I walk or cycle on the roads in Dhaka I feel danger from vehicles (especially buses and trucks). The jams are negative for Dhaka's availability. Many playgrounds are rebuilt to stadiums and high-rise buildings. Trees and grass changed into concrete. All are insufficient for living quality, needed by cities of this size (approximately 17 million inhabitants). Quality (availability, liveability and safety) can be improved by decreasing car-use and increasing use of other modalities.

At last but not least the modal share of Dhaka. Every report give different figures, therefore giving straight and clear figures is difficult. These figures are approximately and an average of main transport documents. Between 40 and 50% of all trips is made by walking. Around 20% is by rickshaw made and just only 2% is made by cycling. 30% to 40% is made by other modalities, mainly public transport, car and motorbike.

Personal observation

1.3 CYCLING IN DHAKA

After transport in general, the report will zoom in on cycling. This paragraph will present the data and statistics about the bike and cycling.

Current situation, 2016

The current situation for cycling is ridiculous in Dhaka. Cycling is a mode of transport, which is under-used in Dhaka. Roads are overloaded by buses, cars, CNG's and rickshaws. The motorized vehicles make the roads dangerous and *uncyclable*. 11% of Dhaka's population has a bike, but only 2% of them use the bike. Almost 40% has experiences with cycling in urban or rural areas. According to an article from Mr Mannan and Mr Karim (called: *Current State of Mobility of the Urban Dwellers in Greater Dhaka, 2001*)

Combination of...

On the road are a lot of different vehicles. Motorized (cars, buses, trucks, CNG's, motorbikes) and non-motorized (rickshaws, bikes and pedestrians). The roads of Dhaka are heterogeneous, a combination of slow and first move and a combination of motorized and non-motorized vehicles.

Cycling for women is hard. Like the quote below:

Since my childhood I am interested in cycling (first as getting fun, later as a way of transport). I saved a lot of money to buy a bicycle. I did. When I came home and told it to my mum, she said to me: «Tak the bicycle bike back to the shop! Cycling is not for girls and women!» It hurts me. I took the bicycle back. Many years later I bought another one, consequence was the same scene. But this time I did not take the bicycle back.

Quote - female activist *Cyclists of Bangladesh*

Approximately 2% of Dhaka's modal share is cyclist. But of all cyclists maybe only 1 of 20 or 1 of 25 are female, I guess. Also on this there is no clear information available. For women cycling is not usual, by tradition.

Yet Dhaka is one of the world's least motorized cities, which reflect in its modal share, see figure 2. Cars are only available for the rich categories; another assumption is that 66% of all the cars are driving by rich people (income more than 30.000 taka).

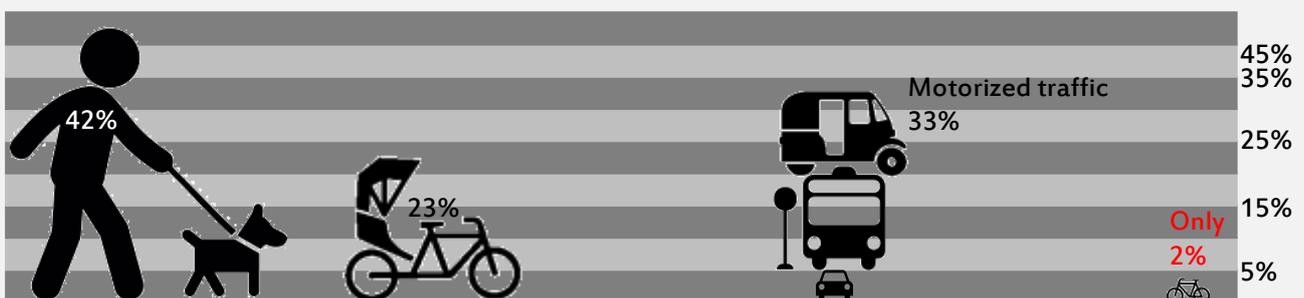


Figure 2 Modal share
Resource: average of several transportation documents

In the previous questionnaire almost 90%¹ of Dhaka's inhabitants has desire to ride bike if the necessary infrastructure and facilities are provided. Success for cycling is integration of walking and cycling with quality public transportation. According to the same source: many inhabitants are used to and prefer to use the rickshaw. Rickshaw is also part of the Bengali economy. Approximately 330,000 rickshaws are riding around Dhaka, imagine how important this kind of transportation is for the city.

In many countries cars are a status symbol. Advocacy in Germany (mainly from the world's biggest car producers) makes it possible to driving unlimited speed on highways. In American countries and cities you are a stranger and the only one who is walking or cycling. People's attitude to cars is; cars give you a status of your prosperity. Status issue is a struggling part of middle income in Bangladesh. They can afford themselves a bicycle. But alas they feel embarrassed to use the bicycle. While middle-income can afford a bicycle but do not use it, low-income would use it more but they cannot afford a bicycle. Low-income people would like to have a kind of transportation.

In recent years cycling has been increasing. With the increased cycle organizations is also the amount of cyclists increased. Especially in high- and middle-income groups, they feel embarrassed to use the bicycle, but less so if they buy a good quality bicycle with gears. And many of the new cyclists have several bicycles. Despite the increased amount of cyclists the Government is still not focussed on cycling. Less research papers are available about cycling. And important documents like 'Dhaka Structure Plan', do not speak about cycling, cyclists or cycle infrastructure. Just now the Government is focussed on the new build MRT, which should change the city. Actually we should start promoting cycling now.

Comparison with Indian subcontinent

Later in the document I will describe more about India. This is a small comparison with the Indian subcontinent. The daily trips made by bike are much higher in other countries of the Indian subcontinent (India, Nepal, Pakistan and Sri Lanka). Because of fewer rickshaws, women are more likely to cycle and these cities are less crowded as Dhaka. Hence more space to keep a bicycle at home. Lower bicycle price (and higher income levels) may be further factor. According an article from Mr Mannan and Mr Karim¹. is cycling in Bangladesh more expensive than in India or Sri Lanka. The high price reflects on the amount of bikes. With the following consequence: overloaded roads in Dhaka and congestion in every road.

The fact of low cycling in Dhaka is strange, because millions of bikes are now produced in Bangladesh., and exporting bikes to Western countries or to other countries in the Indian subcontinent is bringing more money for the national economy.

Dhaka's mentality in traffic

A lot of signs missed in the current situation. That is not wonderful, because most of the drivers follow the sign of. The main rule in Dhaka's traffic is: *I am bigger/heavier/faster, so I have priority.*

Cycle organisations

Bangladesh has several cycle organizations. Mainly focused on how to inspire people and give them the opportunity to cycle. More in chapter 5.

¹ Resource: *Current State of Mobility of the Urban Dwellers in Greater Dhaka*, written by S. Mannan and M. Karim, 2001.

Wished-for situation

The wished-for situation depends on your own ideology. But a good situation could be with less motorized traffic and more non-motorized traffic.

Inside Dhaka MA is cycling the cheapest and the fastest way of transport (short distances). Cycling is from door-to-door, without any transfers. Other advantages are cycling is much healthier than using the car or public transport. Even it is healthier for our planet. But, as mentioned earlier, cycling has other advantages too. Cycling gives the poor access to more job opportunities, visit schools and markets, participate in communities. In addition, according to the World Cycling Alliance (WCA), «The potential for economic growth through cycling-related job creation is high. Investments in cycling offer good opportunities for sound national, regional and international poverty-reduction strategies.» Cycling can achieve gender equality. «Cycling provides access for women and girls to water, schools, markets and jobs that are otherwise inaccessible through available transportation means or walking.» «The higher the modal share of walking, cycling and public transport the more sustainable the transport system is»². See also appendix 1.

An interesting concept for each city could be *having an ambition for cycling*. According to statistics from the European Cycling Federation, the ambition of Groningen (the Netherlands) is for a 65% cycling modal share in 2020 (which is an increase of 1.3% per annum over current levels). The ambition of Lima (Peru) is for a 2% cycling modal share in 2018, which is an increase of 66.7%! London (United Kingdom) wants to grow to a target modal share of 5% in 2026, which means cycling will increase with 2.5%. When you don't achieve your target it feels like a city is failing in their policy. Unfortunately Dhaka has no target and currently no official ambition for cycling. I would recommend it to the policy makers.

² Resource: *Cycling delivers on the global goals*, written by the World Cycling Alliance and the European Cycling Federation, 2016

FACT SHEET, DESK RESEARCH

Factsheet about cycling in Dhaka³⁴

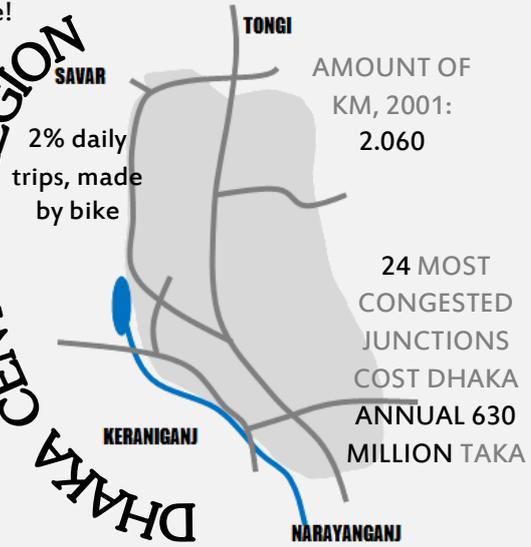
Dhaka is a less motorized city, but there is still a lot to change!

PASSPORT

Resource: Wikipedia (2016)

	Dhaka MA	Bangladesh
Inhabitants	17.160.000	171.700.000
Area	2.161 km ²	138.125 km ²
Density	7.936/km ²	1.319/km ²
	Bangladesh	the Netherlands
GNP	US\$3,6	US\$49,8
Big Mac Index	-32%	+7%
	regarding price of a Big Mac in the USA	

DHAKA CENTRAL REGION

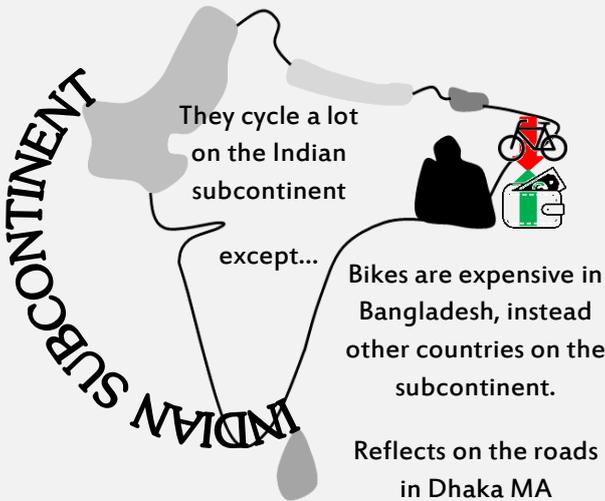


inhabitants	vehicles	non-motorized
100.000 →	2.630 →	2.195
inhabitants	seats in public transportation	
100.000 →	11.000	

11% of the households have a bike
Average household exist of 5,8 persons

ASSUMPTION:

2/3 (66%) of the motorized vehicle owners, earn more than 30.000 tk.



But in reality...

- Cycling is the most cheapest way of transportation;
- Cycling is from door to door;
- Cycling is speedy (faster than cars in cities).

Motorized vehicles (mv)
Non-motorized vehicles (nmv)

Averages use in Dhaka MA

entire population	poor	rich
60% walk	84% walk	40% walk
20% rickshaw	16% others	60% others
20% others		

Comparisons with other cities

European Union/Japan	USA
80-50% mv	95% mv
20-50% nmv	5% nmv

³ Resource: *Current State of Mobility of the Urban Dwellers in Greater Dhaka*, written by S. Mannan and M. Karim, 2001.

⁴ Resource: *Wikipedia.org* for statistics about the countries, both countries information .

INTERNATIONAL COMPARISONS

This chapter is about the comparisons between Bangladesh and other countries.

There are comparisons made between main cities. Why should Bangladesh spend a lot of energy in discovering and researching for innovating and extraordinary in inventions if the world have so many good and bad examples. Like a Dutch expression: «het wiel opnieuw uitvinden», meaning: «inventing the wheel again». Why should we try to invent the wheel again?

As an undeveloped country China was a big cycling nation, thirty years ago. People did not have enough money for the western trends. There came industry, people were richer and richer, it was time for the next step: the motorbike. It was faster than the bicycle and it has a status. Modern technologies were too expensive to build in Western countries, the manufactories came to China. People were richer and richer; it was time for the next step: the car. Right now, everyone has one goal... reach the car, which gives you a status.

Quote - Joseph Kwan, architect from Hong Kong

A lot of authorities are focussed on motorized traffic and public transport. So Dhaka and Bangladesh are not an exception, in the way of thinking. Figure 5.1 shows the world map, with the cities which will be comparing with Dhaka.

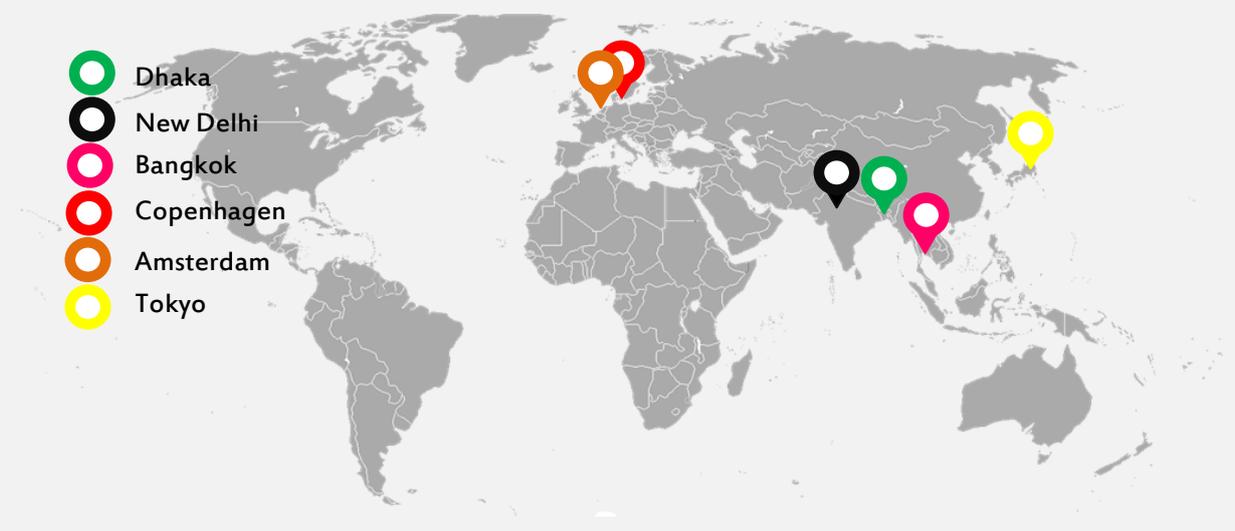


Figure 3 World Map
Resource: Freepik Images

2.1 LESSONS FROM ASIA

South- and Southeast-Asian countries (India Nepal and many more) are countries with a lot of cycling. Why are they cycling and Bangladesh not?

New Delhi

New Delhi is the capital of India. In New Delhi parking takes 10% of the total amount of road spaces. In New Delhi 49% of all the vehicles on the road are cars. The ring road around the city has 2016 6 lanes, even 8 lanes at some places in both directions, for daily 110.000 vehicles. Prognosis is the amount of vehicles will increase with 150.000 to 400.000 passenger car equivalent each day. Means: the ring road needs 18 to 24 lanes in both directions⁵. That is not possible, shortly: New Delhi has to search for other opportunities. But leading documents, like master plans for cycling are not available or not made. Most Indian cities do not plan for the bike; rather they sometimes ban them from main corridors, as in Kolkata.

In the rich areas the city has some sidewalks and cycle lanes in good condition. But in these areas nobody is using it, because of the worst condition. In the busier places are sidewalks and cycle paths in worst condition but everyone is using it. The Government has to change their focus to serve busier areas instead of richer, for a good maintained foot- and cycle path network.

Bangkok

Weather is not the only reason for low cycling levels in Bangkok. The infrastructure in the city is in no-way supporting. The Dutch Cycling Embassy and Thailand Cycling Club have worked together on a policy for better cycling infrastructure in residential areas. In the coming years they will focus on increasing the network all over the city.

The Bangkok Cycling Club raises awareness in the Thai capital's population. During a speech the Thai Minister of Natural Resources and the Environment said: «Planners of public thoroughfares are still mostly unaware of the benefits of bicycle lanes. It will take time, but they could start by including them whenever new roads are built (...)»⁶. This shows a change in the political mind! And Bangkok has started already with the first bicycle lanes!



Figure 4 Bike lane in Bangkok (Thailand)

Resource: Google Images

⁵ Resource: *International Workshop on "Our Right Of Way: Walking and Cycling"* made by Centre for Science and Environment, 2012

⁶ Resource: Institute for Transportation and Development Policy.

2.2 LESSONS FROM WESTERN COUNTRIES

Also in some Western countries cycling is an important component of urban transport, especially Denmark and the Netherlands. This part gives a quick view on their cycling infrastructure and policy.

Copenhagen and Amsterdam

Denmark and the Netherlands are real cycling countries. They integrate the bicycle in their culture and also in their entire life. Both countries have their own Cycling Embassy, to promote cycling as a means of transportation and their country as cycling nation.

The invention of the car was in 1885 in Germany by Carl Benz (later: owner of Mercedes-Benz). After the World Wars the car was increasing in all West-European countries, even Denmark and the Netherlands. Cars are driven on petrol, made of oil. The Middle East crisis of the 1960's brought Europe in a oil-crisis, with less petrol. Danish and Dutch Governments declared car-free Sundays. It is one reason why cycling increased in the 1960's and 1970's.

As second reason was the complexity of the cities. Copenhagen, Amsterdam and other cities were made centuries before the car's invention, and were less suitable for the space required by car travel. Governments protect these cities since the increased amount of cyclists in the 1960's and 1970's.

Both cities now have separate cycle lanes among the main roads and a separate cycling network through the entire city. They invest in infrastructure for public transport and bicycles. Denmark and the Netherlands are both flat countries, so cycling is very easy. All the socio-economic classes use the bicycle for their transport. In Copenhagen and Amsterdam are many roads one-way or closed for motorized traffic. Therefore the bicycle is much faster than the car.

Furthermore, the parking fees are extremely high in the city centres. They use another system. People from outside park their car in a Park+Ride (P+R), located out of the city and take public transport or the bicycle in to the city.

Both countries have good policy for cycling, by law. For example in the Netherlands car drivers are always considered responsible for any accidents with cyclists or pedestrians, if there is no evidence that the cyclist or pedestrian broke the law.

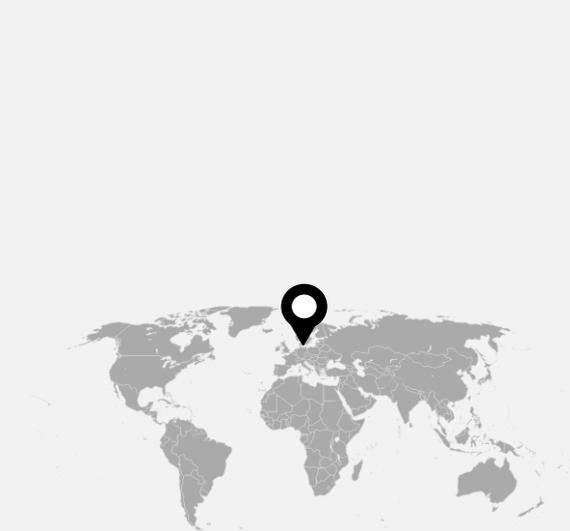


Figure 5 Cykelslangen, a cycle path/bridge in Copenhagen (Denmark)
Resource: Wikipedia

Copenhagenization

Focus on making cities accessible for cycling and walking, and less on car driving. That is Copenhagenization. The term was introduced by Jan Gehl, an influential Danish urban designer.



Figure 6 Separate cycle path in Amsterdam (the Netherlands)
Resource: Google Images

2.3 CONCLUSION

The conclusion is quite clear. Denmark and the Netherlands have so many experiences with cycling, and show that cycling can be a major part of a modern city's transport system. Bangladesh cannot achieve this overnight, it needs to be introduced pro-cycling policies suitable for the Bangladesh situation. Lessons from Asia could be more useful for Bangladesh and Dhaka. Especially India is very interesting, because India has a similar culture and behaviour in traffic. To use good ideas from New Delhi or other Indian cities could help to make Dhaka a more cycle-friendly city.

PROJECT METHODOLOGY

CHAPTER 3

In this chapter is given a description of the project methodology. Started with the project objectives, research questions and the steps to make.

3.1 PROJECT OBJECTIVES

Projects have objectives, «What do you want to achieve with your project? » Before I came to Bangladesh I started already with my methodology and project objectives. I came to this by thinking: «Who need this report? And what do they have to do with it? »

There are some objectives to achieve with this report and this project. Formulated like:

1. develop a better understanding of cycle users in Dhaka and dispel myths about cycling in Dhaka, for example why people do not cycle?
2. to advocacy better infrastructure for cycle users in Dhaka;
3. assist cycling stakeholders to promote cycling.

3.2 RESEARCH QUESTIONS

I translated the project objectives to research questions. This report will give an answer on the following research question:

1. Who is cycling in Dhaka, and why?
2. How to encourage more people to cycle in Dhaka?

3.3 STEPS

The project is finished by taking the steps, shown below (figure 7). For each step we had a deadline.



Figure 7 Process from idea to final report

Prepare: think about approach for project and how to do questionnaires & interviews (which questions).

Broad view: doing desk research, searching in known data and received data.

Interview: doing interviews and questionnaires.

Outcomes: mainly process the outcomes of the interviews and questionnaires.

Promote: doing promotion for cycling.

(Re)design: doing a suggestion for redesign a road.

Writing: write the final report (since first step).

Finalize: finalize and finish report.

These steps are made before starting the research. During research the steps and the order of steps are changed. These steps are in chronologic order in this report. Desk research is written in chapter 1 and chapter 2 are the international comparisons written. In next chapters are the outcomes (chapter 4), campaign (chapter 7).

3.4 QUESTIONNAIRE

Sample size

We did 100 questionnaires, a statistically accurate sample would need a lot of interviews but I didn't have the time or resources; I was unsure about the safety factor of doing on-street interviews. Secondly therefore sample size was limited – it was intended to give a 'snap shot' of exiting cyclists in Dhaka. Third, the questionnaire survey was supplemented by in-depth interviews with stakeholders, to get a more detailed information and people's 'stories'. Therefore not a statistical sample, but large enough to learn lessons and draw some conclusions about cycling in Dhaka. Target groups were male yups (young urban professionals) and female (all ages). We only define age, till 25 sounds like a big target group but all students are in one group.

1. Younger than 25 years. *We did not ask younger than 15 years.*
2. 25 to 39 years.
3. 40 to 55 years.
4. Older than 55 years.

It is not representative for Dhaka's population, but fairly typical of cyclists of Dhaka. There are much more younger people who cycle. In the analysis are categories 3 and 4 so small, so I combined them.

Questionnaires

In this case a questionnaire is better than an interview. We asked everyone the same questions with the same multiple choice options. With an interview this was not possible. We asked them the questions like a interview to build a band. In appendix B is a copy of the questionnaire.

Women

First of all to interview female cyclists is difficult, there are not so many. But if we saw one, we tried to interview her. That is why I went with a female Bengali colleague from office. She did the interviews with the women, and we interviewed 5 women in total.

Locations

The questionnaires were held at four different locations in Dhaka. Below is a description on each location.

1. Rayerbazar: *Slum area in West-Dhaka. Around the playground we spoke with repair-shop owners, children and cyclists.*
2. Dhanmondi Lake: *Dhanmondi Lake is a park in Dhanmondi (high-class residential area). Around the lake are a lot of people, both male and female cyclists.*
3. Baily Road: *Baily Road is a busy road in the eastern part of Dhaka. It is a shopping road. Through the crowd it was difficult to catch people for the questionnaire. Especially female cyclists were not available on Baily Road.*
4. Dhaka University: *some students use the bicycle for daily transport. We asked them also if they use the bicycle outside Dhaka University Area.*

Locations are chosen by on suggestions of local people, in office. On road (Baily Road) it was difficult to catch cyclists, they are busy. In parks are a person more calm down, which is the reason why we went to Dhanmondi Lake.

Survey local cycling groups and activists

I did around 20 interviews with cycling groups and activists. I collect their feelings, their experiences and their personal stories. It is difficult to analyse. Therefore, you will find some text boxes with quotes.

List of interviewed organizations:

1. BDCyclists
2. Cyclists of Bangladesh
3. Female Cyclists of Bangladesh
4. Holiday Riders
5. Mirpur Riders
6. WBB Trust

Attached in the appendices is a check-list, which is used for the interviews.



Figure 8 Current situation at Satmasjid Road (near to Dhanmondi Road №15)

Resource: gallery of Work for a Better Bangladesh Trust

ANALYSIS OF THE QUESTIONNAIRES

This chapter will discuss the analysis of the questionnaires. Questionnaires were holding on four different places in Dhaka. These are the outcomes of the questionnaire. Later in this chapter: the cycling stakeholders in Bangladesh and Dhaka. Communication was difficult, many do not speak English. Therefore I did the questionnaire with a Bangali. She translated everything from English to Bangla and vice versa.

Interviewees were not selected. Everyone is asked, if they cycle and if they want to participate we took a questionnaire. Approximately 2 on 5 were not cycling or not interested in the project. Most of the respondents are regular cyclists.

It is difficult to say if the respondents are representative to Dhaka's population. As a quick scan on road it seems representative. Majority of cyclists are youth (student or yup) and male. Other occupations are unknown. Also income level is unknown. We do not know the exact data but the majority was going to work, home or school.

4.1 SUMMARY OF DEMOGRAPHIC DETAILS



Figure 9 Summary of demographic details

4.2 OUTCOMES – QUESTIONS

All the questions will be discussed in this part. For each question will be given an answer on: 'What does it teach us?'

Question 1: What is the number 1 problem for cycling?

The majority (71%) says it is the dangerous traffic, traffic jams and other things related to traffic. Secondly (16%) is the weather and followed by others (10%) third. Others means: people do not face any problem or they face a lack in cycling parking facilities. Other options were clothes (wearing Sari (0%)), social security (2%) or gender inequality (1%).

The majority feels unsafe traffic is the reason why people are not cycling or, why they do not cycle every day.

I would ask the Government to do something against the dangerous situation. It is not on one place where is danger. No, it is everywhere. Here, in Dhanmondi, in Gulshan. I went to Australia and I saw a totally other scenario. Which is also possible in Bangladesh. If we want.

Quote - questionnaire

Question 2: Which picture gives you the opportunity to cycle *safe* along the motorized traffic? ⁷



Los Angeles (United States)
Separate cycle path, physical barrier



Madrid (Spain)
Separate cycle lane, sidewalk marking as barrier

87% of respondents felt a physical barrier was safer than just road markings, for cycling alongside motorized traffic.

Question 3: Which picture gives you the opportunity to *teach* your children drive a bicycle? ⁷



Dhaka (Bangladesh)
Roads with a lot of motorized traffic



Exhibition Road, London (United Kingdom)
Roads with less cars and more slow traffic

Only 5% said the situation with a lot of motorized traffic is good to teach my children cycling. The reason: *this is daily Dhaka. This is where my children have to cycle, because there is no other way.* With this reason, there could be concluded: everyone want roads with less cars and more slow traffic. But they are realistic and say: this is not achievable for Bangladesh.

⁷ On the questionnaire was not shown in which city the pictures were made. Resource for the picture Los Angeles: Wikipedia.org, picture Madrid is mine. Picture from Dhaka is from WBB Trust's gallery and London is from a PowerPoint presentation of the NHL University of Applied Sciences.

Question 4: What kind of other facilities do you need?

Open question ended question. We asked them to say what other cycling facility they needed the most.

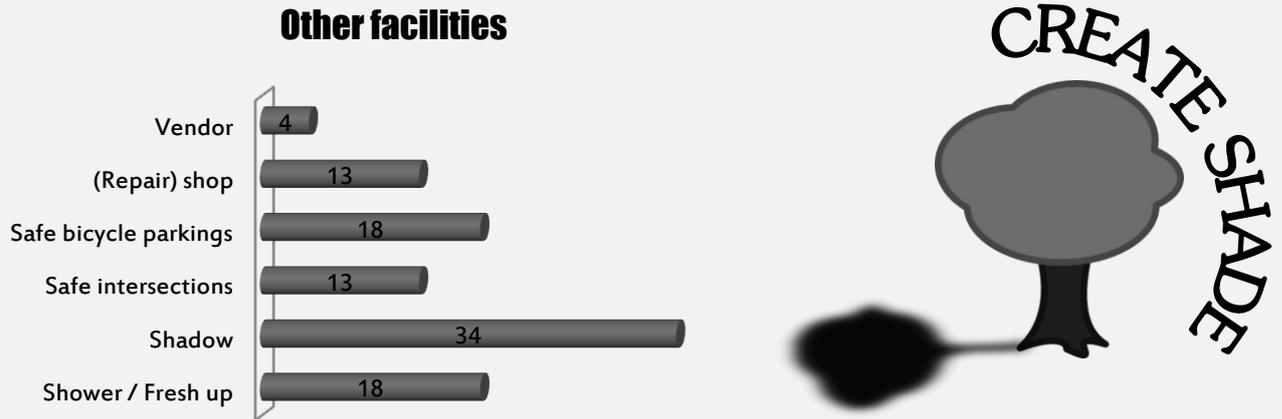


Figure 10 Graph of facilities people need

Most of the people want more shade (34%). With 18% is both safe bicycle parking and shower or other fresh up facilities. Shops and safe junctions are both with 13% the third. Last is (more) vendors along the road. It sounds strange: people say they feel traffic is the number 1 problem, but they need shades for the weather.

Personal note: we gave them only the choice safe intersections and not bicycle lanes or other traffic related options.



For Dhaka we need a scenario of the rural areas, like the villages. Use trees to create shades. Furthermore we need also more green, for example in the barriers or on the sidewalks.

Quote - questionnaire

Question 5: What are the advantages for cycling?

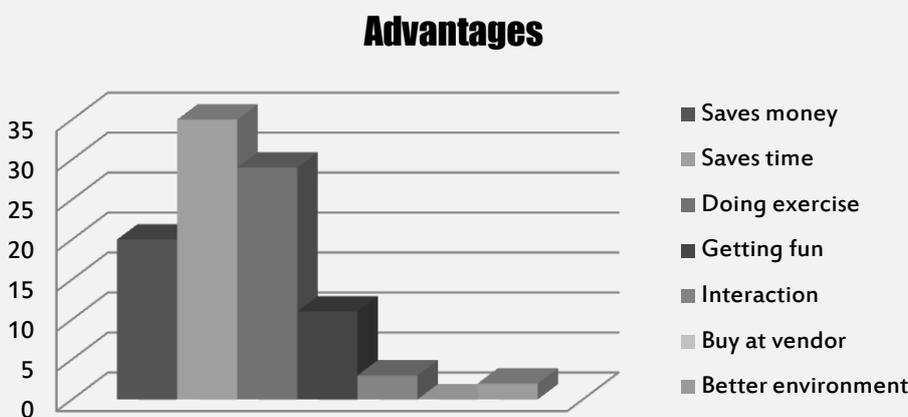


Figure 11 Graph of the advantages of cycling.

The most important advantages of cycling are: saves time (35%), doing exercise (29%) and saves money (20%). Getting fun is fourth with 11%. Almost nobody said the advantage of cycling is interaction, buy something at the vendor or cycling is better for our environment.

Question 6: Would you cycle more, when Dhaka has a better cycling infrastructure?

No need to explain – the great majority said ‘yes’.

However, it is not guaranteed; *when the Government is building infrastructure, that everyone will use it!*



Figure 12 Graph shows: would you cycle more?

It should be noted that the 12% who said ‘no’ were all regular cyclists, and everyone (except 1) was younger than 25 years. At this moment they are already cycling a lot, so, why would they cycle if more infrastructure is build? Of course, they do not feel totally safe, but safe enough to cycle every day.

Question 7: What would you say/express to the Government?

This is a difficult question to analyse. 37% of the responders said something with ‘separate cycle lane’ or path. Other subjects were safe cycle parking and safety/security. Some expressions are use in the report as quote.

Main conclusions: people are cycling but the traffic situation is very dangerous. Saving time is the main reason for cycling, and most cyclists would cycle more if there better cycling infrastructure was provided. People particularly more shade facilities, like trees. The facts may seem obvious but were clearly demonstrated through the survey.



Doing questionnaire by myself.



Doing questionnaire by Bengali translator

Figure 13 Picture of us, doing on-road questionnaires
Resource: Gallery of Work for a Better Bangladesh

CYCLING ORGANIZATIONS

CHAPTER 5

There are many cycling organizations,, which promote cycling at local and national level. This chapter will examine on how to encourage people to cycle and how to assist cycling stakeholders in their promotion and advocacy work.

International organizations, like the Cycling Embassies of Denmark and the Netherlands, have the main focus on advocacy and make policy makers aware about cycling and cycling infrastructure. While Bengali organizations just focus on inspiring and encouraging people.

In Bangladesh are many different groups. Mainly they are doing the same: organizing cycle rides and making people enthusiastic about cycling. At a national level Bangladesh has Bangladeshi Cyclists (BD Cyclists). The organization is not comparable with the Danish or Dutch Cycling Embassy. These organizations do also advocacy at Governments. BD Cyclists has another approach. They make it possible to cycle for everyone. BD Cyclists is the biggest cycling organization of Bangladesh. In addition at the local level in many neighbourhoods or cities there are local cycle organizations. Examples of local groups are Dhanmondi Riders, Holiday Riders or Mirpur Riders.

BD Cyclists organizes every week three events, with a lot of followers (www.facebook.com/bdcyclists). On holidays they organize special events, for example on Victory Day, Independence Day and during Bengali New Year. Membership of BD Cyclists is free and you can always participate in a cycling event for free. BD Cyclists has on the Facebookpage (non-public page) more than 60k follower (November 2016) and all the messages counts a lot of likes and reactions. Also the public Facebookpage of BD Cyclists has almost 50k followers (November 2016). Local groups organize once a week or once a two weeks a ride. Their size is smaller and less professional than BD Cyclists.

Membership is totally different in Bangladesh as in Europe. In Europe we are member of the organization (and pay monthly/annually contribution). In Bangladesh we it is more about followership. You follow a group on social media and participate free in rides. There is not a task you have to do.

BD Cyclists

Bangladeshi Cyclists

বাংলাদেশী সাইক্লিস্টস

Based	Dhaka (Bangladesh)
Launched	May 2011
Motto	Riding for recreation, health and sheer fun
Purpose	Promote cycling as a mode of transport to reduce traffic congestion and carbon footprint
Followers	~60k followers on Facebook



Figure 14 Passport of BDCyclists

Resource: Wikipedia (information and image) & Facebookpage of BD Cyclists

All of the cycling organizations are launched by the motivation for inspiring people. Give them the chance to cycle. Give them the experience what is better for them and for Dhaka. There are no big differences between the cycle organizations. I did interviews with some followers and cyclists of BD Cyclists and other organizations. I also talked with the organizers of each ride.

Same to BDCyclists are other local cycling organizations mainly focussed on promoting cycling by inspiring people and organizing cycle events. Work for a Better Bangladesh Trust (WBB Trust) is a NGO working on advocacy for better cycling infrastructure. In the last ten years they did some work for a cycling-friendly environment in Dhaka, e.g. organizing cycling lessons. So people can learn how to cycle.



Figure 15 Cyclists of BDCyclists during a cycling trips around Dhaka
Resource: Facebookpage of BDCyclists

Important points are presenting in these quotes. I did 20 interviews, within 1 women. Everyone is older than 20 and younger than 50.

Interesting to see or to hear that almost every said cycle organizations exist to inspire people instead of doing advocacy or changing policies. The majority said it would be helpful when the Government gives us cycle lanes, it would be helpful in our promotion. It is difficult to find out what would be helpful to promote cycling, interviewees do not feel responsible for it and do not think about it.

By the way, many of them had one or more accidents in traffic. Caused by stones or holes in the road, what could be resolve by engineering treatment. Sometimes it is also caused by buses, cars, rickshaws. They had big accidents as well, broken or bruised arms and legs. But still they have the discipline to cycle again. A few of them told, they lost a bicycle or it is stolen. For regular cyclists this is one of the biggest incidents.

Short summary of a interview

We met during evening time in a cafe. He was really excited to participate and to meet me. He had been to Europe, and knows how 'we' work on cycling issues and traffic in general. He was so amazed by the traffic situation in Europe. According to him is the traffic over here a mess, and traffic engineers should resolve it as soon as possible. He said to me how much BD Cyclists means for him. BD Cyclists inspired him, gave him the chance to learn cycling. Gave him the chance to enjoy, outside his house. As a protester for better cycling-infrastructure, he tries to join all protests.

CONCLUSIONS

In this chapter are presented the most important conclusions of all previous chapters.

Desk research

chapter 1

Documents about cycling nor traffic & transportation are rarely available to use.

Furthermore, many facts are unknown or are not realistic. Main conclusion of desk research was: Dhaka is one of the most non-motorized cities in the world. But also one of the most increasing cities. Only 2% of Dhaka's modal share is cycle. Dhaka's ambition could be (much) more.

International comparisons

chapter 2

A lot of countries are struggling with cyclists and pedestrians. How do you give them their space, they need? How to make cycling and walking popular and more usual as modality? Denmark and the Netherlands are leaders in cycling policy, infrastructure and mentality of the population. But also nearby are great steps into a cycling and walking-friendly city. Bangkok and India are started with building cycling infrastructure.

Outcomes of the questionnaires

chapter 4

Obvious are all of the outcomes. Here the most important conclusions of questionnaire survey.

1. Most of respondents said roads in Dhaka are too dangerous for cycling;
2. «We need more shade!» said more than 30%, e.g. trees;
3. Most important reason for using the bicycle is *it saves time*;
4. Many respondents would express to Government something like: «Give us cycle lanes!»

Cycling organizations

chapter 4

In Dhaka are many different cycling organizations, on each level (international, national and local) Bangladesh/Dhaka has organizations. Mainly the purpose of them is to inspire people and give people the opportunity/experience to cycle. National and local organizations are not doing anything on advocacy of policy changing.

6.1 AND NOW?

Written in the next chapters:

DOING CAMPAIGN FOR
CYCLING

MAKING REDESIGN
(CYCLE-FRIENDLY)
Appendix B

Figure 16 Graph for the next chapters

CAMPAIGN

CHAPTER 7

This chapter is written with the comments of the interviews. I asked people: "How to promote cycling?".

7.1 ACCORDING TO THEM, "WHAT IS THE PROBLEM?"

The problems are similar to the problems from the questionnaires. Biggest problem is the traffic situation in Dhaka. A lack of proper infrastructure and clear rules make it more worst than traffic situations in other cities. Some people told they are pushed by buses or motorized traffic to the sides of the road. According to them is the unwelcoming pressure THE cause of less cyclists in Dhaka.

«If everyone cycles we have no pollution, better air and no traffic jams.»

Quote - interview

«We need proper rules & respect, people have to follow traffic signs.»

Quote - interview

«City is too big and has too much inhabitants.»

Quote - interview

Dhaka is extremely big, and everyone has the right to travel. That gives the consequence that Dhaka will stuck in traffic for hours a day.

This are problems they face, but what is according to them the reason why people do not cycle? The majority says it is because of the traffic situation in Dhaka. Second problem is the economic and social status of cars. People thing that cars give you a status, how powerful you are or how rich you are. This second problem is a global problem, especially in Asian countries.

7.2 ACCORDING TO THEM, "WHAT IS THE SOLUTION?"

Many of them believe in 'awareness' and 'respect'. Respect each other, is the key to resolve a lot of problems. Especially it resolves the problem of cycling safety. Currently car-drivers do not accept cyclists, they push them to the sides and carry problems. Interviewees say: 'change mindset of car-drivers', let them accept us. The mindset have to change, to accept cyclists. Give pedestrians priority on zebra crossings.

7.3 HOW TO REACH THE SOLUTION?

This is maybe the most difficult question. The cyclists are disagree with each other. Some people want more help of advocacy groups and others want involvement of the Government. One thing is clear, we have to unify to become a bigger group.

Certainly 100,000 people have more influence than 1,000 and lobbying for cycling-friendly infrastructure is easier with 100,000 people

7.4 CAMPAIGN

To convert car-friendly infrastructure to cycling-friendly infrastructure, more cyclists need. More cyclists have to join the movement before cycle infrastructure is achievable. Important for promotion is the involvement of cycling organizations, like BD Cyclists. They are known as inspiring organizations. It is easy to use platforms like BD Cyclists. The approach to improve cycling should be create a gathering or movement and secondly together we have to do advocacy on cycling-friendly infrastructure.

Create a gathering or movement

To get a movement you have to achieve people, one of the approaches could be:

1. Give people the chance to try. Organize bicycle events in neighbourhoods and playgrounds.
2. Inspire them, share your personal story about cycling (*only positive stories*).
3. Educate them, why should they go to cycle? Why is the car worst for Dhaka?
4. Let them follow you. Share pictures on social media, let them be part of your social media.
5. After a couple of times, show the movement to Government officials. This is also the start of your lobby for cycle-friendly infrastructure.

What BD Cyclists and WBB Trust are currently doing.

Lobby for cycle-friendly infrastructure

6. Show Government officials your results and outcomes.
7. Do lobbying by lobbyists. They have the right contacts at the Government, they have experience and they know to do and how to get what you want.



Every great movement must
experience three stages:
ridicule, discussion and adoption
John Stuart Mill (1806-1873)
British philosopher and economist

EPILOGUE & FINAL CONCLUSION

In the first part of this chapter is written a link between the research and the project objectives and research questions. Second part is an epilogue.

8.1 LINK WITH PROJECT OBJECTIVES AND RESEARCH QUESTIONS

These were the project objectives:

1. develop a better understanding of cycle users in Dhaka and dispel myths about cycling in Dhaka, for example why people do not cycle?
2. to advocacy better infrastructure for cycle users in Dhaka;
3. assist cycling stakeholders to promote cycling.

I translated the project objectives to research questions. This report will give an answer on the following research question:

1. Who is cycling in Dhaka, and why?
2. How to encourage more people to cycle in Dhaka?

Did the report fit the objectives and can it answering the questions?

Regarding to the project objectives. Yes, it is visible why people use the bicycle. They use it for mainly for exercise and transportation. It makes also clear that the common view about clothing discouraging cycling is wrong. However, people are discouraged from cycling because of the traffic situation.

Regarding how to encourage more people to cycle, there needs to be a plan for advocacy; it is difficult to build infrastructure for a group which has no priority by the Government and is so small. Therefore try to make a movement and make it more famous (inspire people). In this report are some advices written for stakeholders to promote cycling.

The survey answered the research questions. Right now is known who is cycling, mainly young male people. They use it for their transportation to school or to work. Slowly it is increasing in other target groups. Secondly is health and exercise a reason why people use the bicycle. They have not enough time to visit the sport school and want to be healthy. How to encourage more people to cycle. The movement is small. Only 2% is cycling. It is too small for building cycle lanes and other cycle infrastructure treatment. Majority of the interviewees says: cycle organizations inspire me to cycle. And this is the solution to make a big movement about cycling.

But there is still a long way to go, before Dhaka is cycle-friendly city.

8.2 EPILOGUE

I liked to do an internship in Bangladesh and this research. Which is, I think, useful for different advocacy groups and cycle organizations for their advocacy at the Government. More important for the first step into a cycle-friendly city!

While I did my research, I heard a heartbreaking story. That has always stayed with me. And which I want to share, to give the statements for doing something even more power.

«As child I played with friends. We did football or cricket on the nearest playground. But in the last decades the government is destroying playgrounds, to build high-rise and stadiums. I feel sorry for my children. I will give them the experience of cycling and 'freedom', that is why I cycle every Friday morning with my children a small track. That is quality time.

(...) Cycling in Dhaka is a disaster. Buses push you and there is a lot of crime. In the beginning of my career here, I came every day by public transport or by car. But it took me 1 to 1½ hour to reach office. I did not see my children for days. I went out, when they were still sleeping; I came back, when they went to sleep already. Nowadays I use the bicycle. I see my children during breakfast and in the evening. It takes 30 minutes to reach my office. Disadvantage? I had to bring all my stuff to office. Right now, I have a bathroom with a shower, soap and essentials, even my suits are here.»

Quote – questionnaires

In addition to this report, read also the Appendices. Especially Appendix C, this describes a potential design for cycle lanes in Dhaka.

8.3 THANKFUL

I will thank WBB Trust for this wonderful chance in Bangladesh. Thanks to the NHL University of Applied Sciences for supporting me. And the support from my family and friends. I got a great feeling from all messages from family, friends and teachers as: «How are you? Do you enjoy?» Special thanks to close colleagues in WBB Trust and my supervisors, Maruf Hossain and Rob Gallagher. I hope to come back soon in Bangladesh!

I hope to visit soon Bangladesh again. For doing some (new) work or for travelling.

Let's inspire people, to follow the movement.

অনেক ধন্যবাদ! Thank you!

Your sincerely,
Erik Berghuis

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Figure 5 and 7, used: Google Images

Figure 6, used: Wikipedia, cycling in Copenhagen

All other pictures are owned by myself or WBB Trust.

ABBREVIATIONS

BDC or BD Cyclists	Bengali Cyclists
BRT	bus rapid transport
Dhaka MA	Dhaka Metropolitan Area
DSCC	Dhaka South City Cooperation
ECF	European Cycling Federation
MRT	Metro Rapid Transport
NMT	non-motorized traffic
WCA	World Cycling Alliance
Yup	young urban professional

