

Cycling for healthier and more inclusive communities

Case stories from around the world showing how cycling is being made more accessible to vulnerable groups in cities



**cities
changing
diabetes**

 **ECF**
EUROPEAN CYCLISTS' FEDERATION


novo nordisk®

Contents

| | |
|-----------------------|----|
| Introduction | 2 |
| Active transport | 3 |
| Cases | 5 |
| Addis Ababa, Ethiopia | 06 |
| Brussels, Belgium | 08 |
| Freiburg, Germany | 11 |
| Karachi, Pakistan | 13 |
| Lagos, Nigeria | 16 |
| Ljubljana, Slovenia | 18 |
| Maputo, Mozambique | 20 |
| Utrecht, Netherlands | 22 |
| Utrecht, Netherlands | 25 |
| About us | 28 |

Foreword

Communities that enable and promote safe cycling can improve overall public health and foster more equitable communities. This is especially true when cycling is accessible and more inclusive to people of all ages, abilities, and socioeconomic backgrounds.

The Cities Changing Diabetes (CCD) programme and the European Cyclists' Federation (ECF) have partnered to create this report, which comprises a variety of inspiring case studies showing how cycling has been made available to people in cities around the world. In doing so, we have chosen to focus on how cycling has been brought to some of the most vulnerable groups in society as well as communities from the Global South. The diverse cases that follow include those with a special focus on children with disabilities, older people, migrants and refugees, and many more.

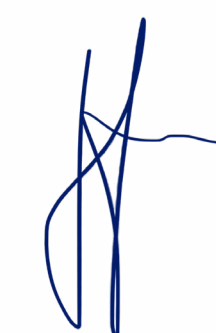
We identified several cross-cutting learnings and insights by researching the case studies and speaking with the people behind the initiatives. Firstly, people are very receptive and open to cycling, and are willing to do a lot more of it when it is safe and accessible. Secondly, communities can and should do much more to make cycling safer and more inclusive for vulnerable or marginalised groups. Thirdly, initiatives such as those described in this report are low-cost and high-impact, often relying on volunteer support.

With more structured, institutional support from governments and philanthropic activity, many more initiatives could likely flourish – participant enthusiasm is not the hurdle we need to clear. As you can see on the following pages, it is apparent that cycling brings pure joy to the people involved.

With this report, we hope that more cities, communities and organisations will find inspiration on how to bring cycling to vulnerable groups to foster healthier and more equitable communities. This report is the first collaboration from the partnership between the European Cyclist's Federation and Cities Changing Diabetes. Together, we applaud everyone involved in these initiatives and thank them for allowing us to include them in this report. We look forward to further cooperation as we advance the case for wider access to cycling worldwide and create healthier and more inclusive cities everywhere through cycling.



Jill Warren
CEO, European Cyclists' Federation



Jo Jewell
Director, Cities Changing Diabetes, Novo Nordisk

Active travel: benefitting people and the planet

Examining the evidence for championing active travel as a key lever to improve both public and planetary health.

Public and planetary health benefits of cycling and active commuting

Today, one-third of the world's adult population and 4 in 5 children do not engage in sufficient physical activity, causing over 5 million preventable deaths annually. This pandemic of inactivity and sedentary behaviour will only worsen in the foreseeable future, largely due to our increasing reliance on cars and other inactive travel forms. This will also significantly affect the planet's health – inactive travel accounts for approximately one-fifth of global CO₂ emissions, with nearly half of that coming from cars. Air pollution and other climate impacts from inactive transport further contribute to negative health outcomes.

Physical inactivity and climate change should be considered synergistic epidemics, or *syndemics*, as they share similar drivers and outcomes. Addressing the root causes of air pollution and physical inactivity through systems approaches can reduce the negative health effects of both problems.¹



Why work with cycling and active travel?

It is well-documented that regular physical activity improves physical and mental health. Creating an enabling environment for active transport like cycling can help integrate physical activity into people's daily routines while decreasing CO₂ emissions from other types of transport. Cycling is a low-impact exercise, making it suitable for most people. Further, when supported by infrastructure and incentives, cycling can be a widely accessible and low-cost transport option. Working to make cycling an attractive form of transportation is therefore an efficient, sustainable, and equitable way for cities and communities to broadly improve the health and well-being of their populations.

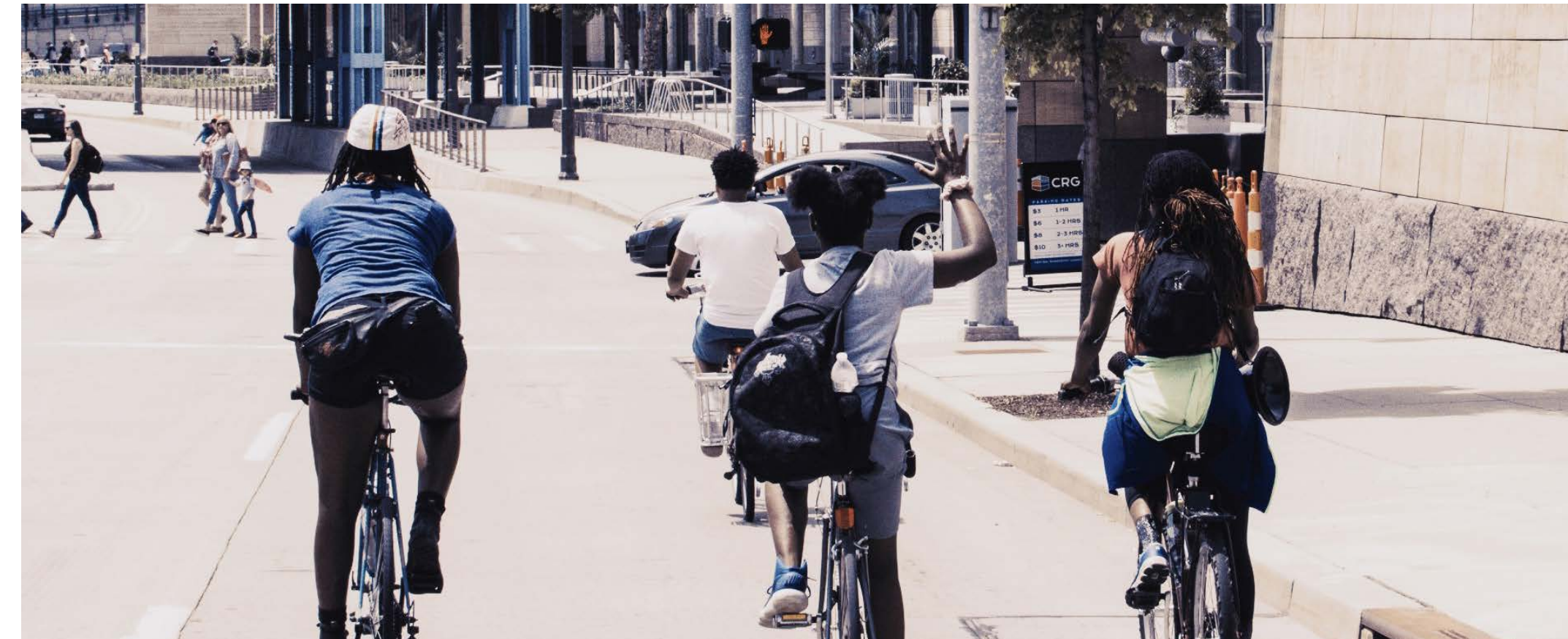
Cycling and active commutes decrease mortality, improve health

Nearly 25 years ago, it was first reported that cycling to work could decrease mortality risk by up to 40%.² Since then, studies have found more specific health benefits – having an active commute is associated with a 10% decrease in risk of cardiovascular disease and a 30% decrease in risk of type 2 diabetes, and cancer-related mortality is 30% lower among bike commuters.³⁻⁵ These findings have significant implications for urban health due to the high feasibility and reach potential of scaling up active transport in cities.

A recent study estimated that hundreds of deaths could be avoided annually if all adults in London walked or cycled for transport.⁶ Several longitudinal studies have found that obesity prevalence decreases as the physical intensity of people's mode of transportation increases (from car to bus, to walking, to cycling).⁷⁻⁹ Furthermore, experimental data show that adults living with mild to moderate levels of obesity lost 4.5 kg of body fat and improved cardiovascular fitness and metabolic health, solely by incorporating active cycling transportation into their everyday routines over a six month period.^{10,11}

Active travel to school has health benefits for children

Creating a culture of cycling to school is an effective way to promote sufficient levels of physical activity, improve health for all children, and instil healthier long-term behaviour. Among students aged 5 to 15 in England, only 22% of those who took inactive transport to school met the WHO recommendation for weekly physical activity, compared with 36% of those who biked to school.¹² Evidence also suggests that cycling to school is associated with healthier body composition, better cardiorespiratory fitness, and higher cognitive performance.^{13,14}



Climate implications of shifting towards active travel

Curbing the climate and air pollution crises requires reducing emissions from motorised transport, particularly private cars, as quickly as possible. Emerging evidence shows the importance of active mobility in mitigating climate change. Shifting from cars to active travel can be practical for trips of up to 16 km long, which are responsible for 40% of vehicle carbon emissions. Even if not all car trips could be substituted by cycling and walking, the decarbonisation effects of shifting the mobility mode for just a portion of trips is considerable – if 1 in 5 people switch out their car for a bike once a week, carbon emissions from cars would be reduced by 8%.¹⁵



How cities can create an enabling environment for active travel

Cities can work via a combination of transportation and urban planning strategies, such as improving public and active transportation infrastructure, reducing inequalities in access to public recreational spaces and disincentivising driving. This would co-benefit both public health problems and the climate crisis by reducing air pollution, increasing physical activity, reducing the carbon footprint of transportation, and reducing traffic congestion. Therefore, promoting active commuting is an effective strategy for addressing health and environmental issues.

Despite the potential for cycling to be a widely accessible and low-cost resource to drive increased public and planetary health, much of the scientific literature is collected in bike-friendly countries with already available infrastructure. Disparities in access to adequate bike-friendly infrastructure, affordability related to cycling and social acceptance of cycling as a utility are present in vulnerable and marginalised communities and differ across genders.¹⁶ This is exacerbated in low- to middle-income countries. The case studies presented in this report are feasible initiatives to demonstrate how cycling can act to address and mitigate health and social inequity and how to create a culture for cycling.

Case index

Addis Ababa, Ethiopia

Egre Menged Impact →

Advocating for a more bike friendly Addis Ababa with community bicycle rides, childhood cycling education and free women's cycle training initiatives.

Karachi, Pakistan

Critical Mass Karachi →

Weekly rides en masse to create a safe, enjoyable and accessible way to cycle through a city with severe traffic congestion.

Maputo, Mozambique

Mozambique →

A social enterprise that improves access to bicycles for people living in rural Mozambique.

Brussels, Belgium

MolemBIKE →

Strengthening local communities with a special focus on women in the Brussels district of Molenbeek.

Lagos, Nigeria

Schools Cycling Challenge →

Inspiring young people to cycle, exhibit their cycling skills and learn about the benefits of cycling.

Utrecht, Netherlands

CycleOn →

Activating local social networks to promote safe cycling among the elderly in the Netherlands.

Freiburg, Germany

Bike Bridge →

The power of the bicycle for empowerment and integration in Germany.

Ljubljana, Slovenia

BICIVrtec →

Providing preschool children with a positive cycling experience to promote active mobility in Ljubljana.

Utrecht, Netherlands

Pedalling towards independence →

Providing children in special education in Utrecht the opportunity to develop their cycling skills, gain independence and cycle to school.





Addis Ababa // Egre Menged Impact

Shaping cities, empowering lives: sustainable urban development and gender equality in Addis Ababa

Egre Menged Impact is a social enterprise organization with community-based approach which advocates for sustainable cities, active transport, gender equality, road safety, public health, and environmental protection. Egre Menged literally means “along the way,” and the organisation focuses both on behavioural change, community building and influencing policy.

Bringing a love of cycling to a new city
Both co-founders of Egre Menged Impact come from cities known for cycling, one in Germany and one in Ethiopia. Both living in Addis Ababa, they noticed how public transport became uncomfortable during the Covid-19 pandemic. They started to cycle together on Sundays when the roads were quieter. They soon noticed that some other cyclists were doing the same thing and they invited them to join, quickly creating a community cycling group. As there are only five maintained and disconnected bike lanes in Addis Ababa and the traffic conditions make cycling difficult, the co-founders soon realised that greater advocacy and awareness-raising was needed.

Partners

Egre Menged Impact

A community-based organisation with a social enterprise model

Egre Menged Impact was founded in 2021. It uses bicycles as a tool to create new jobs, protect the environment, promote road safety and non-motorised transport and empower communities. It considers itself as a community-based organisation with a social enterprise model. This makes them different from other cycling groups in Addis Ababa which are more focused on sports and entertainment only. Egre Menged Impact, on the other hand, does more community work, promoting cycling as a tool for every aspect of life.

The group was recently registered as a Civil Society Organisation (CSO) in Ethiopia. They have three main projects: bi-weekly community bicycle rides, cycling training for women, and Critical Mass Addis Ababa.

Three projects, one aim: to get people cycling

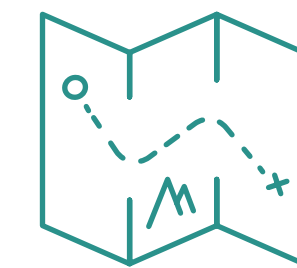
Community bicycle rides happen on Wednesdays and Sundays and generally attract 20-40 participants. Egre Menged Impact uses these rides to advocate for a more bicycle-friendly city. They promote sustainable transport and road safety, share information with participants on how to get repairs and spare parts and visit local enterprises and organisations, such as the local mental health centre or new environmentally sustainable projects. The rides are usually about 15-50 kilometres in length. Some participants may choose to extend their rides after, but they are usually designed to be easy and within the city to be accessible for everyone.

In October 2022, the project “Cycle Techyalesh – Cycle ትጥራሳ” was launched. This is now the group’s largest training project. It is a free women’s cycling training. It aims to empower women through cycling and to bring gender equity out onto the streets. The organisation bought 10 bicycles using funding from GoFundMe. Egre Menged Impact cooperates with a local NGO, Lem Ketema, which provides training for trainers and helped develop the curriculum for the project. Trainings take place on Sundays for three hours. The government closes the road to cars on the days of the training. The first course took place over six weeks and the second over four. The courses cover the basic skills of cycling, safety and maintenance and progress happens quickly, with most people being able to cycle after two or three weeks. Sometimes participants from the Sunday community rides come along and help with maintenance of the bicycles. At the end of the course, participants are taken out onto the streets to get used to cycling in traffic. Afterwards, they are assisted with purchasing their own bikes. The second cohort of trainings has just recently been completed and without any mass media or social media promotion for registration, more than 80 people are currently registered and on a waitlist for the project. Demand is high, but greater funding and more bicycles are needed to expand its reach.

A Critical Mass has been co-founded between Egre Menged and other cycling groups in Addis Ababa. The event usually has around 50 participants of all ages. It is the first event of its kind in the city and is now six months old. Egre Menged is, however,

very aware of road safety as they have had reports of accidents from other Critical Mass groups in neighbouring east Africa region. Therefore, there is a focus on road safety during these rides, with helmets and high-vis jackets being provided. Egre Menged also uses this event to promote safe cycling for participants.

Currently, all the work of Egre Menged Impact is free and cost-efficient. The organisation faces many challenges, such as a recent short-lived law which banned the importation of bicycles into Ethiopia, making bikes and related components expensive, and increasing the organisation’s running costs. However, they remain determined to continue their growth and advocate for cycling as a tool to achieve public health, sustainability and greater equality.



Next steps

Egre Menged Impact would like to expand the topics it works on to include early childhood education, assembling bicycles, job creation, awareness and advocacy, safety training and tourism. For example, they have plans to promote the use of cargo bikes among street vendors who currently must push the heavy goods they sell. They would also like to start giving bicycle tours to tourists.

Key learnings

Community is everything. As Egre Menged Impact has no core funding and is a completely non-profit social-impact organisation, it relies on the strong network of volunteers and members it has built up.

Bringing about behavioural change – which is the organisation’s main aim – takes a very long time. Therefore, one needs to be consistent with presence and availability.

Bicycles are tools for everything: community work, health (both personal and public), gender equality, job creation and education. Communities and governments must make use of their potential.



Brussels // MolemBIKE

Strengthening community and women's empowerment through cycling

MolemBIKE is an association in the Brussels commune of Molenbeek dedicated to strengthening local communities through cycling, with a special focus on including women.

Open to anyone of all ages and abilities, MolemBIKE provides courses on cycling in the city and how to do basic bike maintenance. Hundreds participate each year. Many participants feel a strong sense of emancipation at being able to ride their bike confidently and enjoyably for their daily transport and leisure.

Partners

MolemBIKE was formed in 2021 by the Centre Communautaire Maritime de Molenbeek, the local community action centre. A project associated with MolemBIKE is Les Hirond'Elles, which teaches women how to cycle in traffic and incorporate active mobility in their daily lives.

Inspiring local integration through cycling

Molenbeek is a commune with one of the highest percentages of low-income earning residents in Belgium. It is the fourth most densely populated commune in Brussels, with a population of 97,697. Though only about 28% of Molenbeek's population is of foreign origin, slightly lower than the regional average, most of the commune's foreign-born population lives in the eastern part of the commune, in the area where MolemBIKE is based.

Many families with young children live in Molenbeek, and many of its inhabitants are from North Africa, especially Morocco. There is also a sizable population of inhabitants from Romania. Unlike other parts of the Brussels, the bike is not often used in Molenbeek. Though it is a commune with a lower percentage of household car ownership when compared to other communes in the Brussels Region, its neighbourhoods are heavily congested with car traffic.

There is very little cycling infrastructure, especially in the part of Molenbeek where MolemBIKE is situated.

Therefore, cycling is not widely taken up by Molenbeek's residents. This is especially true of its female population, particularly among Moroccan women. This is where MolemBIKE comes in. Knowing that the bicycle is a powerful tool for building community and social cohesion, as well as reinforcing independent mobility, MolemBIKE invites all residents in the neighbourhood, especially women with a migration background, to come out of their homes to meet their neighbours, talk about important issues in the communities, and share in the joy of riding bikes together.

The bicycle as a facilitator of diversity and inclusion

MolemBIKE is a non-profit association located in the maritime district of the Brussels commune of Molenbeek, situated alongside the canal in the western part of the city. It brings together dozens of enthusiasts, volunteers, activist and professionals around the bicycle. It implements cycling courses for novice adult riders, with a special focus on women, as well as bike repair workshops and bicycle-focused family activities.

MolemBIKE promotes social encounters and conviviality by valuing diversity and equal opportunities. It fosters a cycling culture by supporting goals on local inclusive mobility for everyone, which includes the concept of 'motility,' which is the ability of people to regularly access and use different modes of transport available to them. MolemBIKE also promotes good individual and community health by linking cycling and active mobility to well-being.

Using the bicycle as a bond for social connection

MolemBIKE is run by volunteers, people living in the neighbourhood who are enthusiastic about cycling and inclusive community building, as well as by paid staff of the community action centre.

MolemBIKE implements a range of activities that bring community inhabitants together around the bicycle. All of these are carried out at its location situated at Tours & Taxis, a large building complex in the maritime neighbourhood of Molenbeek that is a Brussels landmark with cultural, architectural and historical significance. One of these is bicycle riding lessons, targeted particularly at women living in the area to realise the goal of getting more women to cycle and become more independent with their mobility.

MolemBIKE's courses that are offered to adult women are carried out in a programme called "Les Hirond'Elles," which began in 2017. It teaches women to cycle and ride in traffic, and how to incorporate cycling and active mobility into their daily lives. The association has a stock of bicycles that it provides to participants. Courses are held twice each week and are done depending on the needs of the participants. For example, if participants are unaccustomed to cycling or need to learn, MolemBIKE volunteers provide them with a general initiation to cycling and the bicycle. After a basic initiation, women are guided on short cycle tours around the Tours & Taxis complex, merely to become acquainted with the motions of handling and riding a bicycle. This might be done by simply walking with the bicycle or moving it with their feet. After this initiation, women are encouraged to cycle their bikes on the paths of the nearby park. Once





participants feel more comfortable riding their bicycles, they are taught how to cycle in traffic. This includes an initiation on traffic rules and how to cycle safely with road traffic, knowing where to cycle and how to use existing cycle infrastructure. Les Hirond’Elles offers guided tours in the city for participants, which help them feel more comfortable cycling in traffic and unlocks the joy of cycling. These rides are crucial for building a social fabric between participants that can endure once the courses are finished.

Another main activity, open to anyone but also to women participating in the Les Hirond’Elles programme, is teaching how to conduct basic bicycle maintenance, implemented by a programme called, “FietsAtelier Social MolemBIKE,” run since 2019. Courses are held a few times each week and women are taught how to assess the

condition of their bicycle, how to conduct basic repairs such as fixing flat tyres and how to keep their bikes in a good condition.

In addition to these two principal activities, MolemBIKE offers activities for entire families and larger groups. It supports the yearly “kidical mass,” which is a festive bike ride across the city adapted for families and children. It is a way for local residents to express their political support for more active mobility in their city.

MolemBIKE’s priority is to ensure that its courses are available to as many people as possible. To this end, the association asks participants to pay an annual fee of €20 to cover the association’s costs and to encourage their commitment to doing the courses. On average, participants do three to five courses.

Next steps



Hundreds of women continue to participate in MolemBIKE’s cycling courses and bike maintenance workshops each year. MolemBIKE will continue fostering good active mobility values and encourage participants to make cycling a habit of their daily lives, not just how to ride a bike. The association will also focus on improving local bike infrastructure, especially for bike parking, as the lack of it remains a major barrier for people to continue cycling. To help build confidence, MolemBIKE will also focus on teaching participants how to securely store their bikes.

Top tip

Among those who participate in cycling and bike maintenance courses, recruit people who are interested in doing advocacy with local authorities to improve cycle infrastructure, and engage them in local action to boost a broad-based cycling culture.

Key learnings

Community actions that promote cycling should be open to anyone, even if there is a special focus on certain categories such as women or children.

Courses on cycling and bike maintenance should be backed by initiatives that advocate for better cycling in the community.

It is important to capture data on participation and whether people continue cycling, to demonstrate the impact of community engagement.



Photo credit: RadKultur Initiative of the Ministry of Transport of Baden-Württemberg [Initiative RadKULTUR des Ministeriums für Verkehr Baden-Württemberg], Lukas Breusch & Ben Buerkle.



Photo credit: Initiative RadKULTUR des Ministeriums für Verkehr Baden-Württemberg, Lukas Breusch & Ben Buerkle.

Freiburg // Bike Bridge

Riding, connecting, belonging: the power of the bicycle for empowerment and integration in Germany

The organisation **Bike Bridge** works with women of migrant and refugee backgrounds in Freiburg, Germany, helping them to gain cycling skills and experience.

Bringing people together through the joy of cycling

Bike Bridge is a non-governmental community recreation foundation based in Freiburg, Germany. Their mission is to build bridges between people, projects and organisations. They aim to create places of meeting, movement and exchange within the community. Riding a bicycle is a powerful tool to move, connect and empower communities, especially women. Bike Bridge’s activities promote social interaction, spatial and social mobility, as well as volunteering.

Partners

Bike Bridge Freiburg, municipalities, bike sharing providers, various local, regional and national foundations and programmes in different cities.

Bike Bridge aims to counteract social isolation among different social groups. This happens, among other things, through the creation

of intercultural and intergenerational contacts and networks as well as by promoting social inclusion and a feeling of belonging.

The project also provides opportunities for spatial and social mobility which positively affect the physical and psychosocial health of individuals and communities. The goal is to draw attention to the problems of inequitable mobility and to find sustainable solutions which are accessible to all urban residents.

When it comes to bike sharing schemes, Bike Bridge noticed that the schemes are mostly used by certain groups of people: young, white people, students, often men - but hardly any by groups such as women immigrants and refugees. They often have no or very limited knowledge of such urban mobility options and the way they can use them. Additionally, there are also often language barriers, because bike sharing apps and information provided on bike sharing websites is often only in English or German.

Gaining new skills and making new connections

The “Bike & Belong” cycle course is the main project of the foundation. The project focuses specifically on women with migration or refugee backgrounds. The women are invited to take part in cycling workshops and lessons. Participants learn to ride a range of bicycles and gain experience using bikes in their everyday lives.

Since 2016 these low-threshold and women-only courses have been offered, mainly but not exclusively, to female immigrants and refugees in Freiburg with the support of many volunteers. The Bike & Belong courses have

been extended to eight cities in Germany (including Stuttgart, Frankfurt, Berlin, Leipzig and Munich). Since the establishment of Bike Bridge, over 700 women have gained the skill of cycling.

Fostering Inclusion and Friendship

Bike & Belong cycle courses usually take between 6 and 8 weeks. Around 10 participants practice their cycling skills and traffic rules twice a week for two hours with the support of around 10 volunteers. Courses are available for beginners and advanced participants, as well as including many collective bike tours and picnics around the city. In order to reach the social objectives of the project, various collective recreational activities are organised, such as communal cooking events and multicultural festivals for locals, newcomers and their families. To ensure that the participants have their own bike and continue cycling, they are able to buy a second-hand bike, a helmet and a bike lock at a very cheap price at the end of each Bike & Belong course for beginners. Train-the Trainer workshops are also offered to volunteers where they learn how to teach cycling to adults.

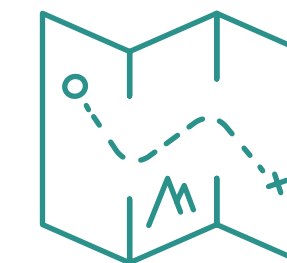
Introducing Vélomotility

The term motility comes from biology and is used to describe an organism that is able to move independently. When applied to mobility studies, motility includes a variety of factors such as skills and aptitudes that define a personal capacity for mobility.

The Cycling Motility (Vélomotility) project is a new project of Bike Bridge where newcomer women and their families learn in theory and practice how to use urban bike sharing systems in their city. The aim of this

project is to make these systems inclusive and more accessible for different social groups. In this project, they collaborate with the largest bike sharing provider in Germany (Nextbike by Tier) in different cities in order to reach their objectives.

In the Vélomotility project, Bike Bridge offers theoretical and practical workshops to participants and their families with the support of volunteer trainers, helping them to understand how local bike sharing systems work and gain experience using them. They also provide information brochures which explain the systems in various languages. Participants learn how to register, use the apps, borrow, return and pay. The name Vélomotility was deliberately chosen for the project. “Motility” refers to how an individual appropriates their mobility possibilities and puts this potential to use in their activities. A person’s motility is shaped by their access to mobility infrastructure, their competences and appropriation, i.e. how they use their competences to take advantage of the infrastructure around them. The aim of the project is to bring these factors together.



Next steps

Bike Bridge will continue to implement its projects to reach more women and encourage them to take up cycling as a means of daily transport.

Key learnings

Bike Bridge incorporates five main strategies when including new groups in cycling in Freiburg:

They acknowledge and accommodate the needs and wishes of their target group when deciding on a suitable choice of physical activity.

They structure their courses and communication strategies with the target group in mind, for example by making the courses free of charge, pairing participants with a local trainer and keeping in touch through social events.

They consider the geographic proximity of training venues to refugees’ accommodation, thus increasing the accessibility of the programme.

They initiate contact with refugee accommodation centres to ensure that information about the courses can reach potential participants.

Lastly, they collaborate with various local social projects and organisations to diversify the programme and enable resource sharing, thus empowering the community as a whole.



Pakistan // Critical Mass Karachi

Creating a new community through cycling

In 2009, a group of friends living in Karachi, Pakistan, saw that the city's severe traffic congestion made it unsafe for their families to cycle. Thus, **Critical Mass Karachi (CMK)** was born: a new community of people wanting to cycle safely and enjoyably in Karachi.

Weekly rides attract hundreds of cyclists and a large social media following. CMK became a community where people support each other, personally and professionally, all around the bicycle.

A growing city with little space to cycle

During the 1980s, Karachi witnessed a period of ethnic strife resulting in a breakdown in law and order. Coupled with the country's rapid population growth – from five million in 1980 to estimates of nearly 20 million in 2023 – and resulting traffic growth, bicycles have largely disappeared from Karachi streets.

An entire generation grew up without the experience of cycling on the city's streets, which are dominated by motorbikes and cars. Moreover, with the spring and summer temperatures being excessively hot, and the long distances in Karachi, the world's 12th largest city, people are often discouraged from cycling. The relatively low cost of purchasing a motorbike compared with the higher cost of purchasing a bicycle also puts people off cycling. However, this has created a major problem for Karachi in the way of an overdependence on fossil fuel vehicles which has caused immense air quality problems, making Karachi one of the most polluted cities in the world.

Partners

Critical Mass Karachi, a volunteer-run community group

In 2009, a group of friends formed a cycling group to promote safe cycling for families on weekends. They did this because they recognised there was no place in Karachi for kids and families to cycle safely. But, if people could be encouraged to cycle in a group, a cycling culture might form. This is how Critical Mass Karachi (CMK) was created.

A new community with the bicycle at its heart

CMK organises weekly rides that are open to everyone of all ages and abilities. The aim is to encourage more people to cycle for recreation, and then to transfer that experience into a potential for cycle commuting and using the bicycle as a means of transport. Many families, children and young people attend, and increasingly many women, who see the bicycle as an opportunity to become more independent with their mobility choices. Smaller children are invited to join in weekly kids rides where they learn how to cycle safely and enjoyably.

Creating an inclusive cycling community culture

CMK is a completely voluntarily social group primarily organised on social media through its Facebook page, which has over 20,000 followers. Social rides are organised every Sunday morning. CMK first began in 2009 with very small group rides. Ten years later, it was attracting 150-200 people for its Sunday rides. Attendance decreased during the Covid pandemic. While present numbers are not as high as before, weekly Sunday rides still attract 60-80 riders each

time. Participants are guided on cycle trips around the city that are typically 20-30 km long, on roads that are quieter and calmer than during the weekdays. Rides are joyous occasions, where friends and families can spend quality time with each other, and where new relationships are formed.

Special rides are organised on major public holidays, such as on Pakistan Day which commemorates the country's independence. On a ride like this, CMK might attract 400-500 people and cycle to the Mausoleum of Pakistan's founder, Muhammad Ali Jinnah. During these rides, various cycling groups from around the city will congregate and ride together. It is an example of how CMK has spun off into various other smaller groups around Karachi, providing inhabitants with more options to join groups that are closer to where they live, and giving people additional options to ride according to their interests and abilities.

CMK has created a significant cycling culture and community in Karachi. Its senior members observe that since CMK began, there are more bicycle shops in the city, offering higher quality bicycles and repair services. There is a strong community of people who come together around the bicycle, but who then use that to advocate for more active mobility in Karachi. Its members meet with city authorities to advocate for more bike lanes and other cycling infrastructure. Recognising that distances are long in the city, CMK members talk to local authorities about improving





multi-modal options for the city's residents, for example by connecting short bicycle routes with public transport services so people can combine modes and leave the car or motorbike at home.

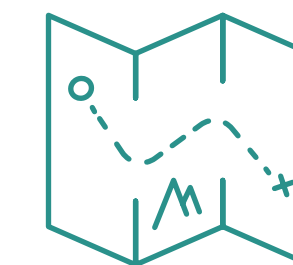
CMK has had a big impact on people's lives. It provides a lot of confidence to women riders. In Pakistan, women and girls are not often encouraged to take charge of their own mobility. The more women that cycle in groups like CMK, the more confident they feel on the road, which leads to a much greater sense of mobility independence.

Crucially, CMK has had a significant spin-off effect. Smaller groups have sprung up throughout the city, ranging from easy-riding groups to competitive training. Karachi is a large city, and this gives people the possibility of joining a more conveniently located group.

Spectacularly, CMK has nurtured some of its members to cycle professionally. Among the four Pakistani cyclists that raced in the 2021 UCI Road World Championships in Belgium, one was a member of CMK. And some of CMK's members have spun off to begin their own bike shop. The business has become so successful it now sponsors one of Pakistan's cycling racing teams, the Bikestan Crank Addicts. The team, which began their cycling journey with CMK, recently represented Pakistan at the 2021 UCI Road World Championships in Belgium. These are truly remarkable successes demonstrating that a simple act of community organising can lead to greater impacts, more than any of the organisers could have imagined.

Thanks to CMK, thousands of people have linked their identity to the bicycle and its potential for positive change.

A strong bike culture has formed in Karachi, which has provided citizens with a new strength to advocate for more and better cycling in the city. CMK has provided a crucial outlet to families and young people to discover their city with their bicycle. It is yet another example of how small acts can make a big difference.



Next steps

CMK continues to organise weekly Sunday rides for anyone wishing to join. It aims to remain a volunteer-run community group, using its Facebook page as its main publicity and organising tool. As CMK continues to expand, it will offer more riding opportunities to ensure any one of its members can enjoy cycling with other people, from young to old. And CMK aspires to include more of its members in local advocacy, with the goal of creating more space for people to cycle in Karachi.

Top tip

To start a new cycling community, keep it simple, use social media, and provide consistency. A once weekly ride starting from the same location, with a consistent duration and pace, will be a beacon to attract people. Focus on inclusivity by keeping rides within people's general abilities and ensure people have a good time.

Key learnings

There is a strong interest in cycling even in places that are car dominant. A small action is all it takes to spark that interest.

To foster a cycling community, it must be open to all ages and abilities. As it grows, the community can cater to specific rider interests.

Community rides should be fun, enjoyable, easy, and promote social interaction. This is how new riders are attracted, and how experienced riders derive a benefit.



Nigeria // Schools Cycling Challenge

Bridging sport and everyday cycling: Inspiring youth in Nigeria through a sporting challenge

The Schools Cycling Challenge (SCC) is an event organised by the African Cycling Foundation (ACF) in Nigeria to inspire young people to cycle, exhibit their cycling skills and learn about the benefits of cycling. Although it is a sports competition, there is a strong focus on developing skills and interest in cycling among young people which can then be used for everyday cycling, contributing to healthier and more sustainable communities.

Planting the seed of cycling

The Schools Cycling Challenge (SCC) aims to create change at the grassroots level by encouraging school children to cycle more, and thus triggering behavioural change not only among the children but also the community as a whole. Many children do not have the opportunity to learn to cycle and are often unaware of the great advantages of cycling for their health and the environment. The programme focusses on developing skills, spreading knowledge about the health and environmental benefits of cycling and building greater motivation and enthusiasm for cycling among school students.

Partners

African Cycling Foundation



More than just a sports competition

The SCC is a competition which provides an exciting platform for young people to display their riding skills by competing against their peers within a safe environment. The event aims to foster an interest in cycling among school students, to educate them about the benefits of cycling and to encourage schools to set up cycling clubs and include it in their sports curricula.

Starting in 2016, the challenge was piloted in a private school. After great attendance, massive excitement and keen interest from schools, it was repeated again over the next two years, opening up to public schools for the largest event in 2018. The event took place in a sports stadium and over 200 participants exhibited their skills over two days in three events: the sprint, obstacle course and point race. The challenge involves teenagers, younger kids and both male and female categories. The idea is to

create an opportunity for children to develop their cycling skills in the lead-up to the event and to spark an interest and motivation in cycling, which should then encourage them to see the benefit of cycling in everyday life. With this in mind, the ACF uses opportunities in between the competitions to hold talks which explain the health and environmental benefits of cycling to participants and their families. The competition is seen as a gateway to greater participation in cycling.

In order for the children to learn to cycle and develop their skills, the ACF gives bikes to school, which can also be used for the commute to school. Winners of the challenges received educational scholarships and some were even enrolled into professional cycling clubs after the event. The ACF also has other programmes – such as one which helps children in rural areas to cycle to school – which they connect with the challenge.

Building Strong Community Partnerships

The ACF worked with a diverse set of partners and stakeholders to pull off the event each year, for example the Lagos State Cycling Association, community elders, educational authorities, government agencies, and businesses. The event was authorised by the Nigerian Ministry of Education each year and funding was mainly received through business sponsorship. Bicycles, helmets and other equipment were rented from sister organisations as many kids do not own a bicycle. Funding was also used to pay for refreshments and branded jerseys. The ACF then enlisted the help of coaches and

volunteers who helped out on the ground, registering people, organising the competitions and assisting with various other tasks. They also had cooperation from the Ministry of Health to get an ambulance at the event and to make sure the necessary health and safety measures were in place.

The cost of the event ran into a few million Naira (a few thousand Euro) each year, which the organisers consider relatively cheap for the high value received from the event. The costs, for example of renting bicycle equipment, are relatively low and the ACF relies on strong partnerships and a network of volunteers. The costs are low compared to many of their other programmes but the value of instilling an interest for and knowledge of cycling in children from a young age cannot be quantified.

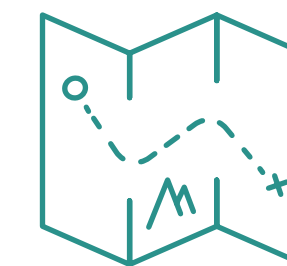


Key learnings

Catch them young! When given the opportunity and the means, children tend to really enjoy cycling and, if they start young, are more likely to continue cycling into adulthood.

Data collection is an important element of the event. If something is not recorded, then it is as if it were never done! Monitoring and evaluation is important when demonstrating the value of the programme to potential future partners.

Processes are key. Community/stakeholder engagement and media publicity are all extremely important. The programme itself is not difficult to implement, but rather getting the right funding and partners which can facilitate it is the challenge.



Next steps

The last SCC took place in 2018. The plan was to take a break in 2019 to look for more funding but then came the Covid-19 pandemic. However, planning is again underway to bring the challenge back in autumn of this year. Previously, the challenge has mainly taken place in the Southwest of Nigeria but there are plans to expand it where possible.



Ljubljana // Bicivrtec

Every child deserves access to a quality bike

Bicivrtec is a project that aims to promote cycling amongst children attending kindergarten in Ljubljana, Slovenia. Meaning “bicycle kindergarten,” the goal of Bicivrtec is to provide preschool children with a positive cycling experience. They do this by working with kindergarten school authorities and staff to integrate a bike learning programme into the kindergarten curriculum. This boosts children’s confidence on the bike and puts them on a path toward an active mobility lifestyle.

Including children in a budding cycling city

Ljubljana has made good progress on promoting active mobility through installing pedestrian streets and some cycling infrastructure in the city centre. However, there is still much more to do to ensure that more of the capital city’s inhabitants have access to safe bike infrastructure, be it cycle tracks or bike parking. PiBiP Kids, a company that offers a subscription platform for high-quality kids bikes, undertook interviews with a kindergarten school, its staff and the parents and found that there are several barriers that discourage parents and kindergarten staff from promoting cycling with kids.

Aside from the lack of cycle infrastructure, many children do not have access to bikes, and their cost is prohibitive for many families given that growing children often need new bikes. The bikes that are available tend to be big and heavy, discouraging kids from riding them. School staff

Partners

Municipality of Ljubljana, Slovenia; PiBiP Kids



and teachers lacked training to teach young students how to ride or how to become more aware of cycling.

Instilling cycling skills from a young age

In cooperation with the Municipality of Ljubljana, PiBiP Kids launched Bicivrtec in June 2022 with an aim to address these problems. The pilot project took place at a kindergarten in Ljubljana with financial support from the Municipality of Ljubljana. Bicivrtec provides all the cycling equipment and lessons for kindergarteners on how to ride a bike, be it a balance bike for absolute beginners or pedal bikes. Kindergarten staff and nursery teachers are trained so they can continue to raise cycling awareness among children. Bicivrtec boosts children's agility and balance, increases their motivation to cycle, and teaches them valuable lessons about cycling in road traffic.

Teachers become the trainers

The cycling pedagogical programme is implemented by PiBiP Kids. It is designed to help kids develop their motor skills, concentration, coordination and independence. It takes place in the safe environment of the kindergarten where children, under the guidance of professional staff or their trained nursery teachers, develop their agility skills on balance bikes and kids pedal bikes while using specially designed didactic aids. One didactic aid is a trainer for kids pedal bikes, where a bike is attached to a board that enables children to learn how to rotate the pedals without moving. This gets them accustomed to the act of pedaling, and builds their confidence to eventually ride independently.

Once children have had practice within the safe confines of the kindergarten, they are led on short cycle routes in

the pedestrianised areas of Ljubljana, safe from motor vehicle traffic. Here they learn how to cycle in public areas, how to cross the streets and how to cycle safely and enjoyably on the cycle path.

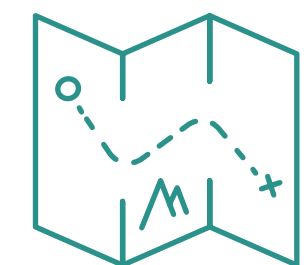
As a part of the Bicivrtec programme, PiBiP Kids took part in the activities of European Mobility Week in Ljubljana. There, they devoted themselves to raising awareness among parents about cycling. Parents were encouraged to bring their kids to kindergarten using sustainable modes of transport. As a fun exercise, children designed a poster with a gray flower, and every time they came to school on foot, by bike or with public transportation, they filled the flower with a colourful sticker. At the end of the week, many children had colourful flowers and memories of coming to kindergarten in a pleasant way.

In addition to Bicivrtec, PiBiP Kids runs a subscription platform for high-quality kids bikes and balance bikes available to anyone in Slovenia. The purpose of this is to inspire as many children as possible to cycle in a way that is affordable and helps parents and educators to choose the right bike for their kids. PiBiP Kids purchases high-quality bikes and makes them available to parents for a monthly subscription fee. Parents and their kids can keep the bikes for as long as they want, and then exchange them for a new bike as the child grows. PiBiP Kids provides support to parents so that they can accompany their child into the world of cycling in a playful and memorable way. Last but not least, PiBiP Kids extends the life of kids bikes through maintenance and reuse, which are key goals in the circular economy. Children become guardians of the bike and support sustainable care for our planet.

Key learnings

To replicate a project like Bicivrtec, it is essential to work closely with kindergarten staff and parents. They should be involved at the earliest stages.

Bicivrtec became successful because it was gradually integrated into the daily lives of kindergarten children. Children learn to ride a bicycle through play and the use of specially designed didactic aids, which relieves them of their fear of something new and paves the way to a healthy lifestyle in adulthood.



Next steps

PiBiP Kids will continue to provide their subscription service that is run out of Ljubljana but available to anyone in Slovenia. They are continuing to run Bicivrtec in the kindergarten and hope to expand it to other locations and are actively looking for funding partners.



Mozambique // Mozambikes

Empowering rural communities through the power of cycling

Mozambikes is a social enterprise that improves access to bicycles for people living in rural Mozambique. They partner with NGOs or businesses who fund the bikes through donations or by purchasing branding space on the bicycles.

Since 2010, Mozambikes has distributed over 60,000 bicycles. Mozambikes produces its light, cargo-carrying bicycles in-country with local staff. Mozambikes is a prime example of how access to mobility can have a transformational effect for disadvantaged and marginalised communities.

Partners

Mozambikes works with many partners. They have cooperated with businesses on corporate social responsibility projects and with NGOs that focus on issues such as malaria, nutrition and various social problems. The mobility challenges in rural communities cuts across all these issues, as a lack of mobility often prevents people from accessing the services that the NGOs provide. This leads to partnerships, helping Mozambikes to identify and access communities that could benefit from the bikes.

Mobility challenges prevent development

Rural areas of Mozambique are especially disadvantaged when it comes to accessing services and employment. In a country where more than 50% of the population live below the poverty line and two thirds of people walk more than an hour to reach a healthcare centre, access to mobility is a big challenge. Especially in rural areas, people often must travel long distances carrying heavy cargo such as water, charcoal bags or other people. Bicycles can make a huge impact in such communities. However, previously bicycles were inaccessible to most due to high costs and yet still were poor quality and unsuitable for local road conditions. This is where Mozambikes stepped in.

A social enterprise with high ambitions

Mozambikes is a social enterprise with a focus on donating and selling high-quality bikes to companies, individuals and people in need. Their model is a mix, meaning that sometimes bicycles



are donated to the beneficiaries for free and other times the beneficiary pays a portion of the cost of the bike while the rest is subsidized by the partners.

Due to the already strong presence of NGOs in Mozambique, Mozambikes' founders decided to run the organisation as a for-profit social enterprise, with an associated non-profit. This has allowed them to grow and to make their model sustainable for the future. Bikes are produced locally in Mozambique in their factory of around 40 workers, supported by seven office staff. Producing in Mozambique allows Mozambikes to create more employment in-country and to ensure the quality of their products. Their bikes are specially designed to be

light, suitable for rough terrain, good for carrying cargo and useable by both men and women.

In addition to designing a higher quality bicycle, Mozambikes brands bicycles with the colors and logos of its partners, adding value to the partners in advertising and brand awareness. Branding on the bicycles has also been used to spread key social messages, such as preserving water and using proper hygiene.

Cycling as a solution: from concept to current model

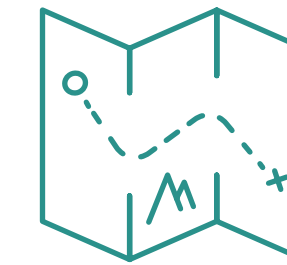
The development of Mozambike's current model has evolved over their 13 years in operation. It began with an advertising business model by selling advertising space to companies on the bike to enable Mozambicans to purchase bikes at very affordable prices using a distribution network that had good access to rural markets. Then, as the remaining price was so low, many businesses demonstrated a preference to purchase the bikes and distribute them to their own stakeholders.

Currently, this model represents most of Mozambikes' sales. Mozambikes also runs mobility programs in partnership with NGOs and companies, whereby they identify the need for bicycles in a community, register beneficiaries, distribute bicycles, and provide workshops that teach end-users to care and maintain their bicycles. This is a for-profit model, with profits intended to be leveraged to scale up the impact of the company's footprint.

Mozambikes developed a separate (but affiliated) registered non-profit to collect donations from around

the world to donate to people earning below the minimum wage who have a need for a bicycle to improve their quality of life. Mozambikes provides these bicycles to further its mission of improving health, education and income generation in low-income communities. The non-profit charges zero overhead for donations so every cent goes towards buying the bicycles.

Mozambikes is also helping children to stay in school. As there are fewer secondary schools than primary schools in rural Mozambique, children are often forced to travel much longer distances to receive a secondary education. Mozambikes recently operated a programme in cooperation with the Mozambican government to provide 5,000 bicycles to schools around the country. Mozambikes has also launched a new program targeted at primary schools, whereby children are started off on balancing bikes and support is provided through cycling lessons and training teachers.



Next steps

Mozambikes is building a network of bike technicians around the country. Wherever they distribute bicycles in quantity, they provide a capacity building workshop for a local person to be a skilled bicycle technician for that community. These new entrepreneurs are trained to run a shop and purchase equipment, thus creating local economic opportunity. Mozambikes is also keen to replicate its model in other African countries, and is looking for potential partners to do so.

Top tip

For similar social enterprises, it is important to create a product that suits the local terrain and local people's needs. In Mozambikes' case, this means providing bikes that can carry heavy loads in uneven terrain, while staying light and easy to use.

Key learnings

Quality control is important. It ensures that bikes are made to a high-quality standard which strengthens Mozambikes reputation and improves business development and donations.

Mozambikes opened the local market to bike awareness which has created competition. Maintaining its unique selling points help Mozambikes stay competitive and provide more people with bikes.

Complementing its business with local advocacy is important to improve road safety and bike infrastructure, which gives people confidence to continue cycling.



Netherlands // CycleOn

Biking safely, aging beautifully: empowering seniors through safe cycling

The programme **CycleOn** organised by the Dutch Government acknowledges the importance of cycling as a means of transportation for the elderly in the Netherlands, keeping people healthy and included in their communities. However, elderly people are also the most at risk of cycling accidents. In response to this issue, CycleOn works with local social networks to promote safe cycling among the elderly.

Including everyone in the country of cyclists

The Netherlands is a country of cycling. There, the bike is an important means of transportation and elderly people are no exception to this. Cycling helps to keep people fit and included in their communities, but elderly people are unfortunately among the most at risk on a bike. The number of elderly cyclists injured in accidents has increased dramatically in the past 25 years. Therefore, under the motto “do not get off, but keep on pedalling”, CycleOn aims to ensure that elderly people are included in the Dutch cycle network, by motivating them to continue enjoying the health and pleasure benefits of cycling while focusing on safety.

Partners

Dutch Ministry of Infrastructure and Water Management

Road safety was the main motivation for initiating the project, with a focus on behavioural

change rather than infrastructure. This initial emphasis on road safety quickly transformed into a broader project of promoting cycling among the elderly for the benefit of their health, happiness and social inclusion.

Cycling for health and community inclusion

Running for the last five years, the CycleOn programme collaborates with provinces and municipalities across the Netherlands to organise interventions and activities that encourage elderly people to cycle and help them to improve their own road safety. The Dutch government facilitates these interventions by providing materials, resources, information and training. The implementation of the project, however, is heavily decentralised, with municipalities having great freedom and space for creativity in how they carry out the project. Activities on the ground vary from cycle groups, workshops with bike mechanics, information services, safety campaigns, recreational cycling campaigns, trainings for e-bikes and sessions with physiotherapists who help people learn how best to cycle as the body gets older. CycleOn has also mapped a network of cycle routes which are safe and accessible for elderly cyclists, providing an important resource for them to enjoy longer leisurely cycles. These routes tend to be about 25 km long, with wide cycle lanes, lots of greenery and no dangerous interactions. A network of around 100 of such routes has now been put together.

The programme's activities take place as a large collaboration between many partners, such as cycling organisations, local sports groups, bike mechanics, physiotherapists and ergotherapists, organisations that support the elderly and social or religious organisations,

such as the church or bridge clubs. The aim is to reach people where they are in a way that is accessible and enjoyable, promoting cycling in a safe and responsible way for the health and social benefits it can bring.

A national plan with a local flair

CycleOn is run by a small team at the national level and offers guidance to provinces and municipalities that carry out the programme. They provide toolboxes, communications and branding materials, a national website with accessible information and guidance on different interventions that can be made. Each participating municipality appoints a CycleOn coordinator whose task is to search for and connect with potential local partners who come into direct contact with elderly residents in that area. The coordinators are often people from the transport or health departments of local government. Along with the local partners, such as a bike repair shop or a physiotherapist, they then add step-by-step actions to existing activities, ensuring the local partners can work as independently as possible while also promoting the activities. Currently, around 220 municipalities are actively participating in the programme, with up to 3,000 participants in some areas.

The decentralised nature of the programme goes together with its strong focus on learning and knowledge-sharing. Municipalities can implement activities in their own way and even use the CycleOn resources to come up with their own interventions. When something is successful at the local level, that knowledge is brought to the national level and spread to the rest of the network.





The most easily targeted group for the programme is the elderly who have been cycling for their entire lives. However, it was soon noticed that some groups were being excluded, such as those with a migration background or those who had not cycled before. Therefore, trainings are now also offered for beginners to learn how to cycle.

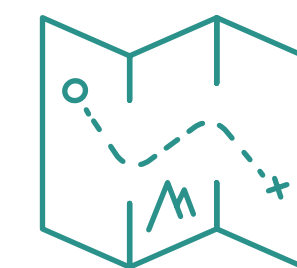
One of the most popular events of the programme is the CycleOn Day. This is a large gathering of people with a strong focus on social activities. The day involves many local partners such as bike mechanics who install free bike mirrors, service bikes, promote the use of helmets

and give advice, for example about having the saddle at an appropriate height.

Representatives from the cycling union, Fietsersbond, organise fun quizzes about the rules of the road, physiotherapists teach mobility exercises that people can do at home and different bikes are presented, such as tricycles, e-bikes and cargo bikes. Although the goal is to encourage elderly people to cycle more, a central element of the programme is to ensure that this is done in a good way, with a focus on safety, education, and using suitable bicycles.

Despite CycleOn’s success and broad reach, it is not an expensive programme. This is because it mainly relies on already existing networks and groups. The Dutch government does not provide direct finances to the participating municipalities. These tend to have a budget of around €10,000 per year to carry out activities. They build on what is already there in their communities, such as bike mechanics and social groups. Such participants get additional training in “Train the Trainer” programmes.

Many participating municipalities carry out surveys after their activities and have reported improvements in cycling safety as well as an uptake in the use of helmets among elderly residents. With everything that has been learned so far in the programme, CycleOn has developed a road map at the national level to provide inspiration and ideas for further projects at the local level. With a vibrant and diverse network of participants and a strong culture of learning and knowledge-sharing, there is no end in sight for the future development of the programme.



Next steps

CycleOn has just finished an evaluation period where its progress to date was reviewed and assessed. The responsible ministry has signed off on another 5 years of running the programme, so there is great potential for building on the progress that has been made so far.

Top tip

For municipalities that want to run a similar programme, it can be helpful to start with small pilots to get the programme going. Be action-focused and keep it simple. The experience of CycleOn shows that elderly cyclists are happy to participate in simple activities that let them socialise with others.

Key learnings

The reach of the programme was broadened once the core focus was switched from solely safety to fun and exercise. This also made participants and organisers more passionate.

The network established through the programme is close-knit, where everyone has a role. It is run in a bottom-up and welcoming way with a focus on knowledge sharing.

Behavioural change is slow so it takes time to see progress, but CycleOn is a learning programme under constant development.



Utrecht // SportUtrecht

Peddalling towards independence: empowering children in special education through cycling

SportUtrecht, commissioned by the municipality of Utrecht, organises cycling lessons at special education schools throughout the city. Students receive intensive and personalised guidance to help them to gain the skills and confidence needed to enjoy the independence which cycling brings. Students who participate in the programme report being healthier, having more confidence and the concerns of their parents about having their child in traffic are also addressed.

Partners

SportUtrecht

Cycling for greater independence and safer schools

Despite being a famously bike-friendly city, there are still groups in Utrecht who are less likely to enjoy the benefits of cycling. One of those is children in special education. Even though many have a desire to cycle, the barriers are high.

The demand for bike lessons originally came from special education schools. Teachers and parents observed that there were too many cars and busses around their schools at the start and end of the day and were concerned about the impact of this on the school environment. The presence of cars made the area more unsafe for children, leading to even

more parents bringing their children to school by car as they feel it is safer than letting them walk or cycle in traffic.

Many children are brought to school by so-called taxi buses, as many parents receive subsidies for this. They are often collected one hour before school starts, meaning that each day the children spend an hour sitting in the bus both before and after school. Furthermore, there is a shortage of bus drivers for this service, which has led to many disruptions. This can often cause negative experiences for the children, for whom consistency and familiar routines can be very important.

The aim of the bike lessons is to give the children the opportunity to develop their cycling skills, gain independence and encourage more children to take the bicycle to school, thus improving the school commute and environment.

Cycling lessons that give everyone a chance

The programme was originally launched in one school in the Utrecht municipality. It involved ten weeks of cycling lessons in the schoolyard for two groups of ten children each with a final ceremony involving the issuing of certificates. Following early successes, the Covid-19 pandemic caused a setback for the programme. However, SportUtrecht then compiled a report of the first project, explaining its successes, which encouraged other municipalities to contact them with interest in the project. Since then, the programme has kept growing and this year there are four schools involved.

The cycling lessons cover both primary and secondary schools, starting with students aged 10 to 12. It is also designed for both students who do not know how to cycle at all and those who can cycle but find it challenging to do so in traffic.

Building confidence gradually and through fun!

The cycling lessons are designed to be as structured as possible. They start off with the same activity each day, which is naming all the parts of the bike on a chart or naming traffic signs. By the end this is not usually challenging for the children anymore but starting off with something they can do easily allows for some positive reinforcement and encouragement. The lessons then involve a method of 16 steps, for example trying the brakes, walking on the bike, emergency braking, looking over the shoulder or stretching out a hand. The steps get progressively more difficult, allowing the students to gain confidence along the way. Lessons also include theoretical knowledge such as the meaning of signs, who has priority etc.

Each lesson lasts around 45 minutes which helps to maintain the attention of the students. Throughout the programme the coordinators incorporate games as much as possible alongside the strong emphasis on learning. Fun is extremely important because if the students do not enjoy it, they will not be likely to cycle after. Each class is run by at least two teachers and sometimes by the end they even have three, especially if they want to go out into traffic.

After all 16 steps have been completed, the level of the students is assessed and a challenge is developed





that is suitable for their level. The final lesson often takes place, for schools located close by, in a so-called “traffic garden”. This is a park with miniature cars, junctions, traffic lights and roundabouts where children can become more familiar with the rules of the road. Parents are also invited to the final lesson to witness the progress that their kids have made. This is because one of the biggest barriers to children in special education cycling to school is not only their own confidence, but also that of their parents. When they see the progress that their children have made, they often gain much more confidence. On the last day, there is a small ceremony. The coordinators give a speech praising and encouraging the students

and they all receive a certificate. The certificates are differentiated by the level of cycling achieved. This is so that students and parents can have an accurate idea of their cycling ability but that all students’ achievements are acknowledged.

The programme does not have any permanent funding, but rather they must search for funding with each new school they work with. Some schools can finance themselves, for example through a budget for healthy living, and sometimes the funding comes from the municipality or other sources. The cost of the programme is about €4,000 for a ten-week course covering 20 children. For a school this can be quite expensive but for a municipality it is usually much more affordable. Although sometimes it is possible to make cycling more accessible for children with physical disabilities, e.g. through the use of tricycles or pedal brakes, this is not generally the focus. Therefore, the programme is mainly designed for those children who do not face great physical challenges in riding a conventional bicycle. However, with more funding the coordinators would like to expand the programme to also make cycling more accessible for those with physical disabilities, for example through the use of adjusted bicycles.

In one school, coordinators did a follow up survey after the programme had ended and found that 13 out of 16 participants were still cycling daily. They have also done many follow-up calls with parents and often found that the children continue to cycle a lot in their free time. This is still an important achievement, even if they are not able to cycle to school.

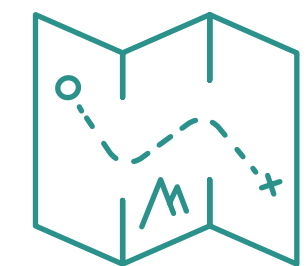
Key learnings

It is best not to start this kind of programme with very young children.

Around ten is the ideal age as the children should have some basic movement skills.

Always let the schools decide who can do the cycling lesson as they know the children best.

It is important to keep a strong emphasis on the fun side! This is what keeps children interested in the classes and makes them more likely to cycle afterwards.



Next steps

To gather more data on the impact of the programme, SportUtrecht has started asking every parent to complete an assessment at the start of the programme. This data is now being carefully documented and will be compared against questionnaires at the end of the project. It is hoped that this data can be used to advocate for more funding and to expand the project.



Cities Changing Diabetes

Cities Changing Diabetes is a global public-private partnership programme which addresses the systemic issues underlying the rise in obesity and type 2 diabetes, and aims to reduce health inequity. Started in 2014, today the programme includes more than 45 cities with more than 150 partnership organisations involved.

Learn more at
citieschangingdiabetes.com →

European Cyclist's Federation

Founded in 1983, ECF is a Brussels-based independent non-profit association dedicated to achieving more and better cycling for all in Europe. ECF is the single umbrella organisation for cycling as transport and leisure, with more than 60 member organisations in over 40 European countries. In addition to its civil society members, ECF coordinates a network of over 40 European cities and regions, bicycle-friendly employers, academic researchers, and ECF coordinates the yearly Velo-city conference, the world's biggest cycling-focused conference.

Learn more at
ecf.com →

Novo Nordisk

Novo Nordisk is a leading global healthcare company founded in 1923 and headquartered in Denmark. We drive change to defeat diabetes and other serious chronic diseases such as obesity and rare blood and endocrine disorders by pioneering scientific breakthroughs, expanding access to our medicines and working to prevent – and ultimately cure – disease.

Learn more at
novonordisk.com →

References

- Ding D, Elbarbary M. Addressing the syndemics of physical inactivity and air pollution. *CMAJ*. 2021;193(32):E1255-E1256.
- Andersen LB, Schnohr P, Schroll M, Hein HO. All-cause mortality associated with physical activity during leisure time, work, sports, and cycling to work. *Archives of internal medicine*. 2000;160(11):1621-1628.
- Celis-Morales CA, Lyall DM, Welsh P, et al. Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *bmj*. 2017;357:j1456.
- Organisation WH. Cycling and walking can help reduce physical inactivity and air pollution, save lives and mitigate climate change. Accessed May 2023, 2023. <https://www.who.int/europe/news/item/07-06-2022-cycling-and-walking-can-help-reduce-physical-inactivity-and-air-pollution--save-lives-and-mitigate-climate-change#:~:text=walking-%20for%2030%20minutes%20or,30%25%20lower%20among%20bike%20commuters.>
- Ried-Larsen M, Rasmussen MG, Blond K, et al. Association of cycling with all-cause and cardiovascular disease mortality among persons with diabetes: The European Prospective Investigation Into Cancer and Nutrition (EPIC) Study. *JAMA internal medicine*. 2021;181(9):1196-1205.
- Younkin SG, Fremont HC, Patz JA. The Health-Oriented Transportation Model: Estimating the health benefits of active transportation. *Journal of Transport & Health*. 2021;22:101103.
- Flint E, Webb E, Cummins S. Change in commute mode and body-mass index: prospective, longitudinal evidence from UK Biobank. *The Lancet Public Health*. 2016;1(2):e46-e55.
- Flint E, Cummins S, Sacker A. Associations between active commuting, body fat, and body mass index: population based, cross sectional study in the United Kingdom. *Bmj*. 2014;349.
- Turrell G, Hewitt BA, Rachele JN, Giles-Corti B, Busija L, Brown WJ. Do active modes of transport cause lower body mass index? Findings from the HABITAT longitudinal study. *J Epidemiol Community Health*. 2018;72(4):294-301.
- Quist JS, Rosenkilde M, Petersen M, Gram A, Sjödin A, Stallknecht B. Effects of active commuting and leisure-time exercise on fat loss in women and men with overweight and obesity: a randomised controlled trial. *Int J Obes (Lond)*. 2018;42(3):469-478.
- Blond MB, Rosenkilde M, Gram AS, et al. How does 6 months of active bike commuting or leisure-time exercise affect insulin sensitivity, cardiorespiratory fitness and intra-abdominal fat? A randomised controlled trial in individuals with overweight and obesity. *British Journal of Sports Medicine*. 2019;53(18):1183-1192.
- Roth MA, Millett CJ, Mindell JS. The contribution of active travel (walking and cycling) in children to overall physical activity levels: a national cross sectional study. *Preventive medicine*. 2012;54(2):134-139.
- Lubans DR, Boreham CA, Kelly P, Foster CE. The relationship between active travel to school and health-related fitness in children and adolescents: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*. 2011;8:1-12.
- Martínez-Gómez D, Ruiz JR, Gómez-Martínez S, et al. Active commuting to school and cognitive performance in adolescents: the AVENA study. *Archives of pediatrics & adolescent medicine*. 2011;165(4):300-305.
- Brand C, Dons E, Anaya-Boig E, et al. The climate change mitigation effects of daily active travel in cities. *Transportation Research Part D: Transport and Environment*. 2021;93:102764.
- Standen C, Crane M, Greaves S, Collins AT, Rissel C. How equitable are the distributions of the physical activity and accessibility benefits of bicycle infrastructure? *International journal for equity in health*. 2021;20:1-15.

**cities
changing
diabetes**

