

FTurban ingenuity

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BANKING IS A DULL WORD FOR POSSIBILITY

There are epic challenges facing the world today. The environment, health care, education, to name a few. Who will lead? It is, as the pages of this magazine show, those who see possibility everywhere. Who think beyond traditional boundaries. Who believe that, with enough imagination, we can build a better world.

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Diverse thinking



This is the second year of a global awards scheme aimed at addressing one of the most important challenges facing civilisation – the explosive growth of cities.

Already more than half the world's population lives in urban areas. Two centuries ago that figure was just 2 per cent, but within two decades the proportion is expected to rise to 70 per cent.

Countries vary widely in the way that they classify urban populations and the amenities they offer those citizens, but the issues are the same the world over – ensuring that quality of life, health and productivity are enhanced rather than degraded for people living in high-density conditions.

The FT/Citi Ingenuity Awards: Urban Ideas in Action programme last year saw strong entries from all over the world in the fields of energy, health, education and infrastructure. They ranged from high-tech to low-tech, and from profitmaking to charities.

The overall winner last year was the ingenious Community Cooker Foundation of Kenya, whose industrial-scale oven burns street litter safely to produce energy for cooking, heating and boiling water. Not only does the cooker avoid reliance on highly polluting energy sources such as wood and charcoal, but it also provides a communal meeting point that has eased tensions in crowded slum communities.

For 2013 we have switched to a geographical split to encourage an even more diverse range of entries. This, the first magazine in a series of three, features profiles of the strongest contenders in three regions: Africa, Asia-Pacific and Europe.

Videos analysing the challenges of urbanisation in these regions, and possible solutions, are published on FT.com to accompany this magazine – go to www.ft.com/ingenuity.

The next magazine and videos will be published in September and will focus on North and South America. The third magazine and accompanying videos will be published at the time of the awards themselves in December. The views of experts and opinion formers will also feature in our coverage.

The FT is proud to bring, once again, its reputation for impartial, incisive reporting and its global reach to support a programme that encourages the best of solutions to one of the most pressing issues facing the world today.

Lionel Barber
Editor, Financial Times

URBAN INGENUITY CONTENTS



38

INTRODUCTION

- 6** The value of sustainable ideas to improve city life

AFRICA

- 8** Namibia's **Bicycle Empowerment Network** brings marginalised people back into the job market
- 12** **Sanergy** has given the people of Nairobi's slums the chance to make money from their own excrement
- 14** **Leap** is an organisation focused on turning the youth of Nigeria into the country's leaders
- 18** **Shack/Slum Dwellers International Alliance** has upgraded Cape Town's informal housing as well as improved communal spaces

ASIA-PACIFIC

- 22** **AProCh** offers time, space and respect to children in India with the aim of countering widespread indifference to their needs
- 26** In Papua New Guinea, **Digicel PNG Foundation's** programme aims to tackle poverty and crime by teaching basic life and business skills
- 30** **CMC** has come up with a technological answer to ease the pressure on public transit systems serving India's swelling urban population
- 32** **Parinaam** gives social support to the "ultra-poor" families of Bangalore in India who are trying to better their lot

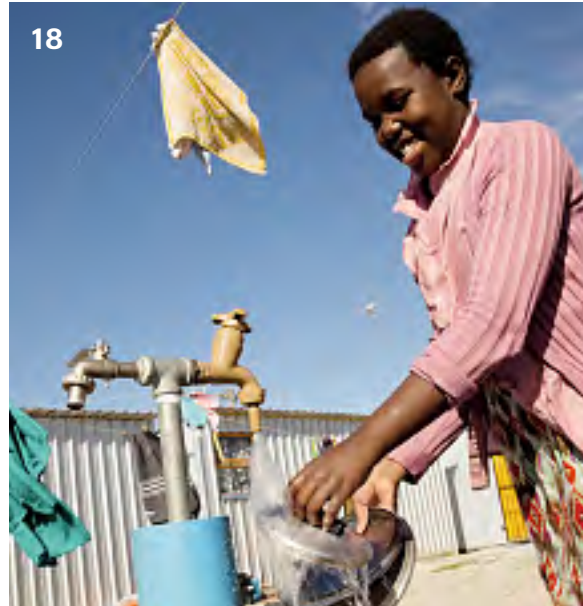


36

EUROPE

- 36** **3Space**, founded by Andrew Cribb, below, is forging social entrepreneurship in London through the use of empty office buildings
- 38** In Copenhagen, architects **BIG** and collaborators have rejuvenated one of the city's poorest districts
- 42** French website **BlaBlaCar** wants to transform long-distance travel with its digital hitchhiking venture
- 44** **Edible Playgrounds** is an initiative mushrooming across the UK to teach children the link between horticulture and food
- ## COLUMN
- 46** Congestion and energy concerns bring new challenges for car designers

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INTRODUCTION

AWARDS

ENTRIES



Global network

Original ideas that improve life in one city are invaluable if they are sustainable and can work in other cities, says **Michael Skapinker**

The FT/Citi Ingenuity Awards have already displayed their ability to celebrate the most innovative urban projects around the world.

Last year's shortlisted candidates were flown to New York for our prize-giving dinner, where we announced the winners and runners-up in four categories: energy, health, education and infrastructure. All the candidates said being able to network with other urban innovators was as valuable to them as winning.

Buoyed by this success, we sat down a day later to think about what we would do differently

this year. What more could we do to promote the best in urban ingenuity?

We decided not to have separate categories in 2013, because we wanted to attract some of the entrepreneurial urban projects whose originators felt they, perhaps, had not fitted precisely into our four sections last year. We thought there might be some that straddled different categories or were involved in imaginative efforts that were not that easily defined.

For this reason, we have opted for regional categories in 2013. This magazine looks at some of the entries in Africa, Asia-Pacific

Loco motion:
high-speed
urban
commuters in
Mumbai, India

and Europe. The next magazine will profile some of the entries from the Americas.

We will then compile shortlists in each region to put to our judges – a panel of distinguished architects, city planners, academics and public policy specialists from around the world.

They will choose the winners, based on such criteria as originality, how much of a difference the project has made, whether it is sustainable and whether it can be transferred to other cities.

The Financial Times has its headquarters in London, but we are a worldwide news organisation and this competition demonstrates our belief that the best solutions to problems of urban living can come from anywhere. *Michael Skapinker is the editor of FT Special Reports*

PHOTO: REUTERS



WHY A BANK SHOULD LOOK AT MICROSCOPIC DETAILS

A remarkable thing is happening in the Czech city of Brno. Scientists at TESCOAN, a.s., a leading maker of scientific instruments, are finding ways to see deeper into things: human tissue, art restoration, dust in outer space. And the results have the potential to open up new worlds. But not unless the company can expand globally.

Citi helped TESCOAN expand in China, Korea and the United States without depleting their vital research and development capital. With Citi people in Brno working with Citi people around the globe, we're helping TESCOAN products reach some of the best minds in the world to improve people's lives.

For over 200 years, Citi's job has been to believe in people. To help make their ideas real. To be a bank of what could be.

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AFRICA
BICYCLE
EMPOWERMENT
NETWORK





Back on track

A network of cycle repair shops in Namibia has helped marginalised people return to the employment mainstream, writes **Andrew Jack**

Dressed in neat blue overalls, Mary strides towards a customer shaded from the midday heat by a small tin roof, and launches into a discussion on the price of repairs to a bicycle the customer has brought in.

Her shop – located in a dusty car park in the Soweto district of Katutura, a shanty town on the outskirts of Namibia’s capital Windhoek – is a converted shipping container painted a fading red. Inside, donated bicycles await renovation and sale. Outside, Mary (not her real name) has posted a price list for eggs and other snacks for sale.

Just six years ago she was scraping a living as an HIV-positive sex worker. Since then, she has learnt basic business skills, trained as a mechanic and become the backbone of a small company that provides employment to marginalised people and generates sufficient surplus to fund social projects. “I’m very happy here,” she says, describing a salary that also helps support her brother and sister.

The outlet is one of two in Windhoek and more than 30 across the country that form the Bicycle Empowerment Network (BEN), an expanding chain of bike shops-in-a-box. They have tapped western donations to create local enterprises designed to be sustainable, aid social projects and promote environmentally friendly and affordable transport.

Each outlet is supervised by a local community organisation. In Soweto, it is the King’s Daughters, a faith-based group launched locally in 2006 when six former sex workers came to a church seeking support and a new way of life.

“The driving force behind prostitution is alcohol and

Chain reaction: the 30-plus outlets in the BEN network in Namibia sell refurbished donated bikes



drugs,” says Esme Kisting, who has helped oversee the organisation. “Many of the women had dropped out of school and were living in poverty with no alternatives. They wanted help and I saw the need to empower them.”

After setting up a bible study group and offering basic skills training, the group came to the attention of BEN, which in 2009 offered it a role overseeing one of its shops. Despite some false starts, including theft by a former employee, it is expanding, with a second container of donated bikes now almost all refurbished and sold.

Surplus income after costs and salaries has allowed the King’s Daughters to fund support groups and nutrition programmes for families with HIV, pay school fees for children and underwrite workshops for women, including jewellery-making. Some 68 people have benefited to date.

The organisation’s growing credibility and prominence earned it sufficient respect with local officials that it was able to negotiate free places in a government drugs and alcohol rehabilitation centre that would

normally charge. It has also gained support from the US embassy and other donors.

“Every time we meet people involved with BEN, they tell us something we would not have imagined,” says Michael Linke, the Australian founder of BEN Namibia.

“It might be someone who has created a business selling fresh meat from their bicycle, or another who no longer needs blood pressure medication because they keep fit by cycling.”

Such broader benefits were far from his mind when he started the project. He had always been interested in bicycles but had no particular interest in development issues or Africa. It was when he was living in Hamburg, Germany, that he began looking for a project to keep him busy.

“I saw an old bike chained up, with weeds growing around it, and thought there had to be a better use for it,” he recalls. That drew him into the work of a charity shipping donated bikes to

Helping hand: community groups have been involved in training bike shop workers

“I saw an old bike with weeds growing around it, and thought there had to be a better use for it”

developing countries. He developed his knowledge at Re-Cycle, a similar group in London. It was a logical step to volunteer on a trip delivering bikes to developing countries. Then, a decade ago, Linke received an email requesting supplies for health-care workers in Namibia.

Not everything went as planned. The first revelation was the gap in local technical skills. “I thought it would be a matter of having a meeting, providing a few spanners, going back to Germany and shipping bikes,” he recalls. “I realised there was not the capacity on the ground to manage the programme and that I would have to invest time.”

Apart from reminding Linke of the “breezy country town” in which he grew up, Windhoek had other advantages as a place to build his fledgling organisation. It was relatively flat, offering scope for cycling. Namibia’s comparative wealth – at least in per capita income – meant donors were withdrawing. And there was great inequality and poverty, and pressing problems such as a high prevalence of HIV.

A second lesson was the need not only to provide an outlet

AFRICA BICYCLE EMPOWERMENT NETWORK

to sell the donated products but also to reduce and mitigate damage to bikes. Linke focused initially on delivering bikes to female healthcare volunteers so that they could reach remote patients. He also modified bikes for use as pedal-powered ambulances to reach villages far from main roads or clinics.

But Namibia's rough roads caused problems such as punctures, so Linke urged donors to supply robust mountain bikes with tougher tyres. Last year, he received more than 7,000 from Canada, Australia and Europe.

He also stressed the importance of management. "The hardest thing to teach is not how to fix a bike but how to run a business," he says.

"Then it is easier to address development needs." That required the supervision of community groups such as the King's Daughters working alongside the people running the shops.

"The aim was to supply bikes to entrepreneurs and help them develop," he says. "But I didn't find the entrepreneurs. Apartheid had a lot to do with it. People were very controlled and there was a history of suppressing small enterprise."

A final realisation was the value of fostering benefits beyond those created by the bike sales and repairs. "We had to have self-generating resources for people on very low incomes, who were not investing in bikes because they were not a priority in their households."

The result is that the BEN outlets have created a growing range of spin-off businesses, from selling biomass "bush bricks" to Mary's eggs and other simple foods.

In Hakahana, Windhoek's other shop in the network, Yacovina, the manager, says she sells half a dozen bicycles a



Spin-offs: profits from the shops, below, have funded other social projects

month and repairs more than one a day. Rentals are rarely offered, partly because customers have failed to return bikes.

Yacovina has converted one end of the container into a small office where she makes photocopies and laminates birth certificates for a fee, as part of broader efforts to encourage women to register their children to ease access to education and social and health services.

Outside, solar-powered radios and lights are also on sale. Abigail Bachopi, director of Family of Hope Services, the supervising partner, says many people without access to grid electricity buy the lamps and then charge their neighbours a fee to use them to recharge mobile phones.

Next door stands a small kindergarten run by Bachopi's organisation for orphans, many with HIV. A land ownership dispute means it receives little official support, but surplus income from the BEN shop has funded refurbishment, nutrition and other support for the children and their carers.

Bachopi stresses the importance of bikes in providing

affordable transport. Apartheid's legacy of segregation means while most black Namibians in Windhoek live in Katutura, many work in the city centre – a long trip that can cost N\$9 (\$0.88) each way in a shared taxi. Investment in a typical refurbished bike at N\$800 can be recovered quickly.

BEN's work has attracted the eye of GIZ, the German development funder, as it supports efforts for a new urban plan in Namibia to incorporate cycle lanes. For now, as Kisting says, rough roads, dangerous driving and even attempts by gangs to steal bikes from women riders limit more widespread adoption.

Linke is optimistic. "We have had some near misses but have only closed one shop, and that was early on when our assessment of a partner was not good."

The uptake of cycling remains limited, donated bikes remain essential to BEN's model and managerial capacity can be thin. But there have been clear benefits, and Linke is exploring expansion of the network into Madagascar, Kenya, Zambia and Botswana. ■





Waste not...

Recycling human effluent in Nairobi's slums has improved sanitation and offers the chance to make money, reports **Katrina Manson**
Photographs by **Siegfried Modola**

On a muddy, rubbish-strewn walkway in Nairobi's Mukuru kwa Ruben slum, Esther Munyiva is peering at a small, bulging, plastic bag on the ground. That, she points out, is a "flying toilet" after it has landed. "Look, this is the way we were using toilets before. You can't [pick it up] with your bare hand because it is full of waste. They throw [them] at night while you are fast asleep... we are used to it."

The inability to deal with human waste has long been one of the most distressing aspects of living in the slums of Nairobi, where 200 informal settlements house an estimated two-thirds of

the city's 3.5m people. Every year 4m tonnes of waste from Kenya's slums are dumped into waterways and the soil.

For those who choose not to use plastic bags, pit latrines offer little extra comfort. The raised loo blocks topped by corrugated metal sheeting, with pits dug out for the waste, regularly overflow during the rainy season. For the rest of the year, waste water and disease seep into the soil and the latrines are regularly so badly maintained that "flying toilets" hold more appeal.

"They give you the key, but the toilet is full, so there is nowhere to step. They don't take care of the toilets, so people use paper and polythene at home and just throw it," says one resident.

Soiled: tonnes of waste gets dumped into the streets and waterways of Kenya's informal settlements

It is part of a much wider, global problem. The World Health Organisation says 2.5bn people lack adequate sanitation. This undermines development and spreads illness – an estimated 1.8m die every year from diarrhoeal diseases, accounting for the vast majority of deaths of children under five.

The scale of this problem first absorbed social entrepreneur David Auerbach during a spell in China. Later, he did an MBA at Massachusetts Institute of Technology and co-founded Sanergy in an attempt to solve it. The resulting idea sets out to turn human waste into gold.

By creating a network of low-cost franchised toilets, operated on a pay-per-use basis by

AFRICA SANERGY



resident micro-entrepreneurs throughout the slum, the Sanergy team can collect the waste and generate huge amounts of organic fertiliser with it, selling it to farmers at a profit.

“It is a market-based approach. It is all a function of the amount of waste we collect,” says Auerbach. So far, the company has sold 202 toilet blocks. That adds up to four tonnes of solid waste a day, but he says this could reach 10 tonnes a day by the end of the year.

He estimates the project – which is half-funded by grants and private capital – will break even once it has sold 1,000 blocks, but the idea is to create something that can scale up.

A simple design separates col-

lected liquid and solid waste into two sealed plastic containers in the stall. Instead of flushing with water, residents pile on sawdust, saving 150,000 litres of water a year for each stall. Sanergy sells each prefabricated bright blue Fresh Life toilet block, painted with cheery yellow sunbursts, at cost price for 50,000 Kenyan shillings (\$575) – a hefty sum given that it is more than half the average annual gross domestic product per capita.

Munyiva, who borrowed money from a local women’s microfinance organisation to buy one of Sanergy’s first stalls last year, says she has already repaid her debt in instalments. “The toilet is now mine,” she beams, saying she charges out usage at Ks3 a go for adults and Ks2 for children.

“I love this business... it has brought me somewhere,” says the 55-year-old mother of six. She takes Ks350 a day. “You [don’t have to] sleep with hunger when you have this. I’m taken seriously. I want to buy another one.”

A production plant on the edge of the slum makes up to eight blocks a week with local cement, each one equipped with a starter pack that includes toilet roll, a solar lantern and a mop, plus training in bookkeeping and branding, which Sanergy believes is key to maintaining hygiene standards and encouraging customers to keep coming back.

Munyiva and other Fresh Life operators are required to keep the blocks spotless or risk having them bolted shut. At the same time, the company tries to tackle the stigma of the messy business.

“We throw a block party for the opening of the toilet, with a

“It is a market-based approach. It is all a function of the amount of waste we collect”



Flush with success: a Fresh Life operator (above) and David Auerbach (below)

sound system, face painting for the kids, balloons. Fresh Life operators love it – it means a lot to be leaders in improving their community,” says Nicole Parisi-Smith, Sanergy communications manager.

Each day, the company’s “frontline team” removes the waste from the blocks and carts it out of the slum. It is piled into covered vats in an open-air yard and starts to decompose, turning into organic fertiliser within eight months to be sold to local farmers, who grow everything from vegetables to flowers.

The liquid waste, for now, is removed by truck and released into the sewage system, but the company

is working on a way to recycle this waste too.

Farmers are still testing quite how nutrient-rich and fertile the organic compost is. The key will be to generate enough waste and secure enough deals to sustain and grow the scheme.

But while profit is an important driver of the project, it is a necessary ingredient rather than the lure. “If we were in it to make money there is a ton of other things we could do,” says Auerbach. “We are in it to solve a massive social problem.” ■



AFRICA LEAP

The “Professor” stands at the front of the sweltering fourth-floor classroom, a rice sack filled with textbooks at his feet. Through the open windows blast the sounds of the megacity – generators, car horns, the shouts of street vendors. The Professor looks at the 101 students before him, points a finger in the air and begins.

“Effective leadership requires collaboration with other people,” he says. “That’s the essence of democracy.”

The Professor wears glasses, which is how he got his nickname. He is 13 years old. His name is Muhammadul Fatiu Adepeju, and he is a student at the Eko Akete Senior Grammar School, on Lagos Island, in Nigeria’s biggest city.

The school is run by the government, and most of the 1,600 children enrolled there are from poor families. Muhammadul’s mother does menial work, and his father sells mobile phone air-time in the market. In a country of more than 160m people, and startling inequality, Muhammadul faces a huge challenge to stand out from the masses.

But he does not believe that. Ask him what he wants to do when he leaves school and he does not hesitate.

“I am going to be a judge.”

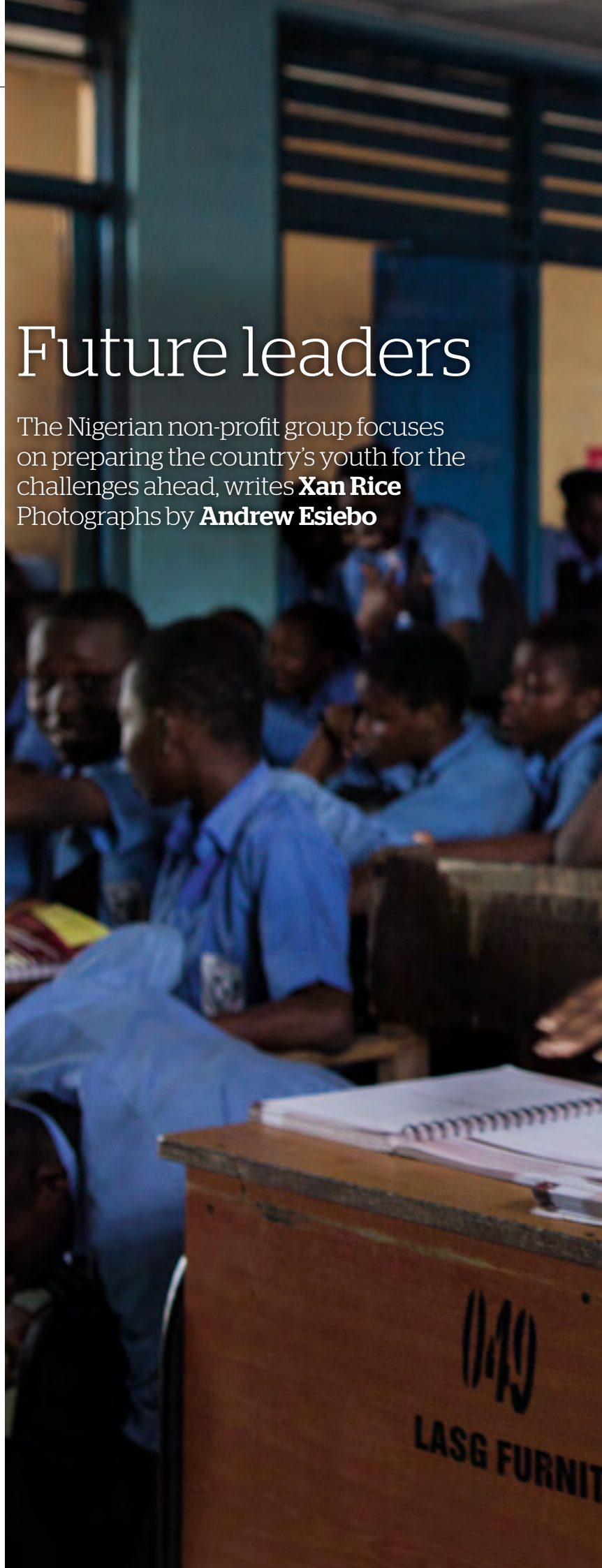
His self-assurance and ambition are remarkable, but not unique in the classroom. The 102 pupils, aged 13-17, are all taking a course called Leadership, Ethics and Civics (LEC), which is designed to give them the confidence to take charge of their young lives and make a difference in their communities.

“It is teaching us how to become better leaders than those that we have today,” says Muhammadul.

Public speaker: the 13-year-old ‘Professor’ is part of Nigeria’s youth that aims to be seen as the leaders of today and tomorrow

Future leaders

The Nigerian non-profit group focuses on preparing the country’s youth for the challenges ahead, writes **Xan Rice**
Photographs by **Andrew Esiebo**





LEADERSHIP, ETHICS &
CIVICS (LEC) PROGRAMME MANUAL

URE 2010



The programme, which was launched in 2008, is an initiative of a non-profit organisation called Leap Africa, whose work has been widely recognised and supported by local governments and the private sector in Nigeria. The LEC curriculum has been implemented at 30 schools in five states, reaching 14,800 children. Over the next few years, Leap's managers hope to more than double the number of youths who benefit.

Leap – which stands for Leadership, Effectiveness, Accountability and Professionalism – was established in 2002 by Ndidi Okonkwo Nwuneli, a Harvard alumnus who worked as a consultant with McKinsey before returning to Nigeria to promote entrepreneurship. (She also co-founded a food company and is a director of an advisory and investment firm).

Nwuneli was driven by two convictions. First, she felt strongly that Nigeria – and Africa – needed a new generation of leaders, and wanted to help ensure that there were enough people with the training

“In Nigeria, the government sees young people as a challenge to be dealt with”

and skills to take over. Second, she believed that small groups of Nigerians with the same vision could make a real change to their communities, rather than just wait for the state or federal

government to act.

Leap has several focus areas. One is business leadership. Owners of small and medium-scale enterprises – an important driver of the economy – are given training on how to build sustainable organisations that will survive even if they move on to other ventures.

Another priority is integrity, and nearly 1,500 people have been trained on how to recognise and curb corruption in their communities. There are also courses on employability, aimed at improving the job prospects of disadvantaged Nigerians by teaching them basic skills, such as how to write a CV, and by assisting them to find work experience placements, internships or staff positions.

But Leap's main interest is in assisting the country's youth. This is not surprising, given the demographics. Africa has the

Top school: Eko Akete was last year awarded the title of best school teaching Leap courses

fastest-growing population in the world. By 2050, there will be 440m Nigerians, according to the UN's latest projections, with only China and India having more people. The high fertility rate – Nigerian women typically give birth to at least five children – means the population is skewed drastically towards young people. About 44 per cent of all Nigerians are under 15.

The education system is struggling to cope. It has been in decline for years, with poor facilities, an outdated curriculum, crowded classrooms and teachers who are overworked and sometimes underqualified.

The elite in cities such as Lagos can afford to send their children to excellent private schools that cost \$10,000 or more a year, and provide a good grounding to move on to university, usually abroad. But the vast majority of Nigerians must make do with state education. Many of these pupils that leave school lack the skills and confidence to find jobs and compete with their privately educated peers. Leap is trying to change that.

“In Nigeria, the view of the government is that young people are a challenge to be dealt with,” says Oje Ivagba, the organisa-

tion's director of programmes. "But we see them as an asset to be deployed in transforming Nigeria. We are trying to change the mindset to show that the youth are the leaders of today, not tomorrow."

The LEC programme is designed to give life and leadership skills to students nearing the end of their school education. It targets public secondary schools, such as Eko Akete, where most of the pupils are from low-income families and have little or no access to training programmes. Teachers from the schools attend a week-long train-the-trainer course, and are then qualified to present the one-year curriculum to the students. Typically, the classes are taught for one hour each week.

Ivagba is keen to stress that the programme is not just to motivate students – they need to understand what they are being taught. Thus, there is a strong practical component to the course. In groups of 25-30, students are expected to design and execute "change projects" that will benefit their communities. Leap provides a small grant to help with the costs. The idea is empowerment.

"People here still see leadership as being associated with having a title, mostly through getting elected to public office," says Ivagba. "There is a sense of hopelessness, that you cannot change anything unless the person at the top does something about it. So people complain but they don't act."

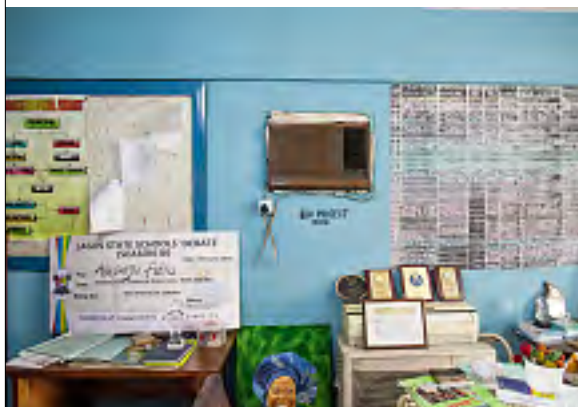
The same cannot be said for the pupils who have taken the LEC course; their change projects have reached more than 150,000 people, Ivagba says. At Eko Akete, which last year was awarded the title of best school teaching Leap courses, the ambition is admirable, especially con-



Ambitious:
pupils are being taught about leadership, ethics and civics

sidering the difficulty of getting permission from the authorities to get anything done.

One team of pupils wanted to improve the street lighting in a neighbourhood of Lagos, where the dark streets are a security risk. Another wanted to dig a borehole, so that residents would not have to buy water from out of a truck. Ultimately, both tasks proved overly challenging – the bureaucracy was too great – so together they came up with a new plan: a day of free medical evaluations for



people living in the built-up area around the school. Nurses were brought in to test people for diabetes, typhoid, malaria, and blood-sugar levels. The demand for the service was so great that the nurses – and pupils – worked into the night. How many people were tested?

"I cannot say!" says Nurat Ekemode-Coker, a teacher at the school, with a laugh. "So many!"

Ekemode-Coker, a bubbly woman who normally teaches Islamic studies, is one of the LEC presenters at Eko Akete. She participated in a train-the-trainer course at Leap in 2011, and has been teaching the course

ever since, even though she does not get paid anything extra for doing so. "The children gain a lot from this," she says. "It teaches them about leadership."

Leap intends to expand the programme to some of the 31 states in Nigeria where it currently is not operating. It also has plans to increase the scale and scope of the LEC curriculum by targeting young people aged 14-35. By 2015, with help from the private sector, it aims to enrol 300 people – including teachers, youth leaders, and representatives of faith-based groups – in a new train-the-trainer course. The trainers will then pass on the skills they learn, including goal-setting and decision-making, to up to 21,000 youths in six states.

Nigerians entering the job market are especially in need of assistance. According to official statistics, 37 per cent of those aged 15-24 do not have jobs. Other reports put the unemployment rate at more than 50 per cent, and rising. Among the jobless are millions of university graduates.

Back in the classroom, the Professor sits down and another student, Dosunmu Hammza, 16, explains his recycling project. "Look down there," he says, pointing to the pavement outside the school. "We can recycle many things, the water sachets and the

plastic bottles. It can help the environment."

Together with some classmates, Dosunmu has been collecting plastic and other recyclable waste, and is now trying to connect with people who can

use it. He explains what he has learnt. "This course teaches you – how do I say it – to be a master of your own destiny." ■

"There is a sense that you cannot change things. People complain but they don't act"

AFRICA
SDI ALLIANCE



Home sweet home: the use of materials such as zinc-aluminium has improved safety and security



Shack therapy

Upgrades of informal housing in Cape Town have improved not just individual homes but communal spaces too, write **Andrew England** and **Sam Mkokeli**
Photographs by **Samantha Reinders**

AFRICA SDI ALLIANCE



While women put out their laundry on new washing lines, Litho Gladile, an energetic teenager, chases a rugby ball in a courtyard in the middle of a clutch of shiny zinc-aluminium-walled shacks.

“At least there is space to play around here, compared with the place we used to live in,” the 13-year-old says.

The shacks, in neat groups of five or six, form part of new settlement constructed to replace some of the hundreds of homes destroyed when fire swept through Cape Town’s sprawling Khayelitsha township at New Year. The reconstruction and layout of the informal homes in the area known as Barney Molokwane was supported by Ikhayalami, a non-governmental organisation that has been a driving force behind a programme to improve the lives of some of the millions South Africans who live in informal settlements.

Shacks in such settlements are normally erected haphazardly with little planning and few, if any, services such as run-

ning water and sanitation. The rickety and unorganised nature of the shanties means they are particularly vulnerable to the kind of fire that destroyed hundreds of homes in Khayelitsha.

If a fire does break out, it is often hard for the emergency services to move between the tightly packed homes.

But Ikhayalami – a strong contender in the Urban Ingenuity awards last year – and other NGOs working under the umbrella of the SDI (Shack/Slum Dwellers International) South African Alliance, the network of community organisations, are trying to change that through a concept known as “blocking out”.

The idea is that living conditions can be improved if homes are reorganised in a more structured way. Reconfiguration leads to better use of space, allowing for the creation of the courtyard where Litho plays, and can help improve security and safety, while providing better access in and around the homes.

Importantly, the process also encourages an environment into which local authorities can move



Stakeholders: residents of the shacks put up 20 per cent of the costs of renovations but are also involved in the planning

to provide improved services, such as toilets and taps, which are often shared by several families.

“In essence it is looking at a technical solution linked to a social solution that can improve conditions where people are now because the scale of informality and of the housing backlog is so huge,” says Andy Bolnick, the founder of Ikhayalami.

The upgraded shacks are built with zinc-aluminium walls, which are thicker and more fire-resistant than the materials traditionally used, and the community is involved in the planning.

People living in the shacks are expected to contribute 20 per cent of the cost, which ranges from 3,600 to 5,000 rand (\$360-\$500) depending on the shack size.

The SDI South African Alliance also supports communities





in other ways, including putting in taps, drainage systems and other facilities such as crèches.

“Our work is all about setting precedents – it’s not for us to do at city scale but to see how we impact on policy. It is [up to]

cities or governments to say this is something that could be rolled out further,” says Bunita Kohler, a spokeswoman for the Community Organisation Resource Centre (Corc).

Corc is a partner in the SDI alliance, which also includes the Informal Settlement Network, the uTshani Fund and the Federation of the Urban and Rural Poor, as well as Ikhayalami.

The housing problems are acute in South Africa, where hundreds of thousands of families have moved to urban areas since the end of apartheid in

search of work – and have ended up in shanties.

It is estimated there were 300 informal settlements in 1994, the year South Africa made the transition from apartheid to democracy. But by the end of 2010 the number had swelled to 2,700, home to 1.2m families. The government struggles to keep pace with the demand.

Seth Maqetuka, executive director for human settlements for the City of Cape Town, South

Africa’s second-largest city, says working with the alliance has provided a solution to the enormous housing backlog the municipality is battling with. There are almost 190,000 informal units in the city, which has a housing waiting list of around 340,000 families.

“We see opportunities in this partnership with the alliance,” Maqetuka says. “In a way, they

Block parties: nearly 1,000 shacks in Cape Town have been upgraded in the past year, but a huge backlog remains

give us a point of entry into these informal settlements and become a link between the city and the communities.”

He says the municipality is working with the alliance’s partners in more than 120 informal settlements across the city.

Bolnick says in the past year nearly 1,000 shacks have been upgraded – mostly in Cape Town but also 100 in Johannesburg – as momentum behind the initiative has picked up.

“It has really captured the hearts and minds of shack dwellers,” she says. “It is saying this is an affordable, realistic, practical way to deal with a compounding problem, not only in Cape Town but throughout Africa.”

Sithembele Nongcauza, chairman of a residents’ committee that has sampled blocking out, concurs. There is more space between the shacks, and the beautiful thing about this place is the concrete foundations,” he says.

“The cement [base] keeps the floor dry when it rains, compared with our old shacks, which got wet and muddy.” ■

“This is a realistic, practical way to deal with a compounding problem”





Kids go free

An Indian initiative aims to allow children to reclaim time, space and respect in a fast-growing business-oriented urban environment, discovers **Amy Kazmin**
Photographs by **Amit Dave**

Until India's economy began growing rapidly a decade ago, residential streets were mostly the domain of children, who could play cricket, hopscotch, and other games freely on the roads, with only rare disruptions from the occasional motorcycle or car.

Today, cars have displaced children and their games on most Indian residential streets, while kids are kept inside and amused with computer games and videos. Indian parks, especially smaller ones in residential areas, are often considered mainly as space for adults to walk, rather than for children to play – and some even ban kids from playing cricket.

But on a recent humid Sunday, nearly 200 children were at Ahmedabad's lush Parimal Garden for a special morning programme of children's activities. Story-tellers acted out classic fables under the shade of a huge

Banyan tree. A sports teacher led the kids in exercises and games. Finally, a magician performed.

The event was organised by aProCh, a network that has set out to make Ahmedabad – a fast-growing urban agglomeration – into a “child-friendly” city through activities catering to kids from across India's vast socio-economic spectrum.

aProCh – the name derives from the slogan “A protagonist in every child” – was started by designer Kiran Bir Sethi, the founder and director of Ahmedabad's innovative Riverside School, which focuses heavily on experiential learning.

Sethi was dismayed at the indifferent attitudes towards children, and their needs, in the fast-growing, business-orientated urban space, and by the local authorities. “Children were not given time, space or respect,” she says. “That bothered me enough to say, ‘this is ridiculous’. They

Street smart: the children who attend aProCh's activities not only come from Ahmedabad's slums but also from affluent schools

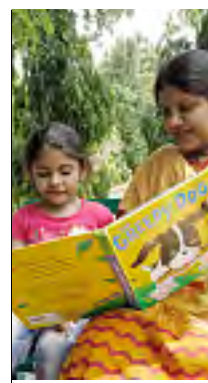
have to have a message that the city cares.”

The initiative began in 2007, when Sethi and her students persuaded the Ahmedabad police and municipal authorities to shut down the city's busiest shopping street to cars for a day, and turn it into a vast play area.

“It became a metaphor that a city can close down and stop traffic for one day – that the city can slow down and see its children afresh,” Sethi says.

Today, Ahmedabad authorities close down a main thoroughfare six times a year for a child-orientated street party organised by aProCh. The ethos of shutting roads to vehicular traffic has also spread – the city now turns a smaller thoroughfare into a car-free area for a farmers' market every Sunday.

Meanwhile, aProCh organises special activities for kids in city parks twice a month. These events, dubbed “Parents of the



Child-proof: most of the activities are covered by a budget of \$25,000 a year

Park”, rely on volunteers to stage and lead the activities. Most of the volunteers are teachers and parents from different schools that are involved with aProCh, and host the gatherings on a rotating basis. Others, like Nafees Hussain, 32, are simply people who have been captivated by the idea of helping children.

With a day job in sales and marketing for US Pizza, a chain with 105 outlets in India, Hussain is also a magician who performs under the stage name “Magician Rahul Raj” and has participated free in dozens of aProCh events.

“I just want to see the smile on the children’s faces,” he says. “There is a saying, ‘If you can’t pray, if you don’t have time to go to a mosque, at least make a child smile.’”

Some of the children who attend these activities are affluent

students from private schools; many come from Ahmedabad’s slums and are brought to the events by non-governmental organisations in buses provided by aProCh supporters in the transport industry.

Some, like 10-year-old Priyanka, are simply members of the community, whose parents read about the programmes in the newspaper.

“There are very few activities for kids, and so if there is something like this, we are always ready to participate,” Priyanka’s mother, Jayanti Raja, said as they watched the story-teller at the recent event in Parimal Gardens.

Priyanka Prasad, one of two co-ordinators for the initiative, says one of the aims is to bring children of different backgrounds – and adults from different walks of life – together. “The whole idea is to integrate,” she says. “We do not differentiate between kids.”

However, with the support of local businesses and wealthy families, aProCh also stages special

“A city can slow down and see its children afresh by closing a road”

events each month for children from impoverished backgrounds so they can experience recreational and leisure activities that would otherwise be beyond their families’ reach.

Often these events have involved taking 150 slum kids to movie theatres to watch films. Initially, the group had to raise funds to pay for the tickets, but some cinemas now allow the children to visit free at off-peak times. Organisers are diversifying to include visits to other entertainment spaces for children, with students from private schools coming along as “buddies” to the slum children.

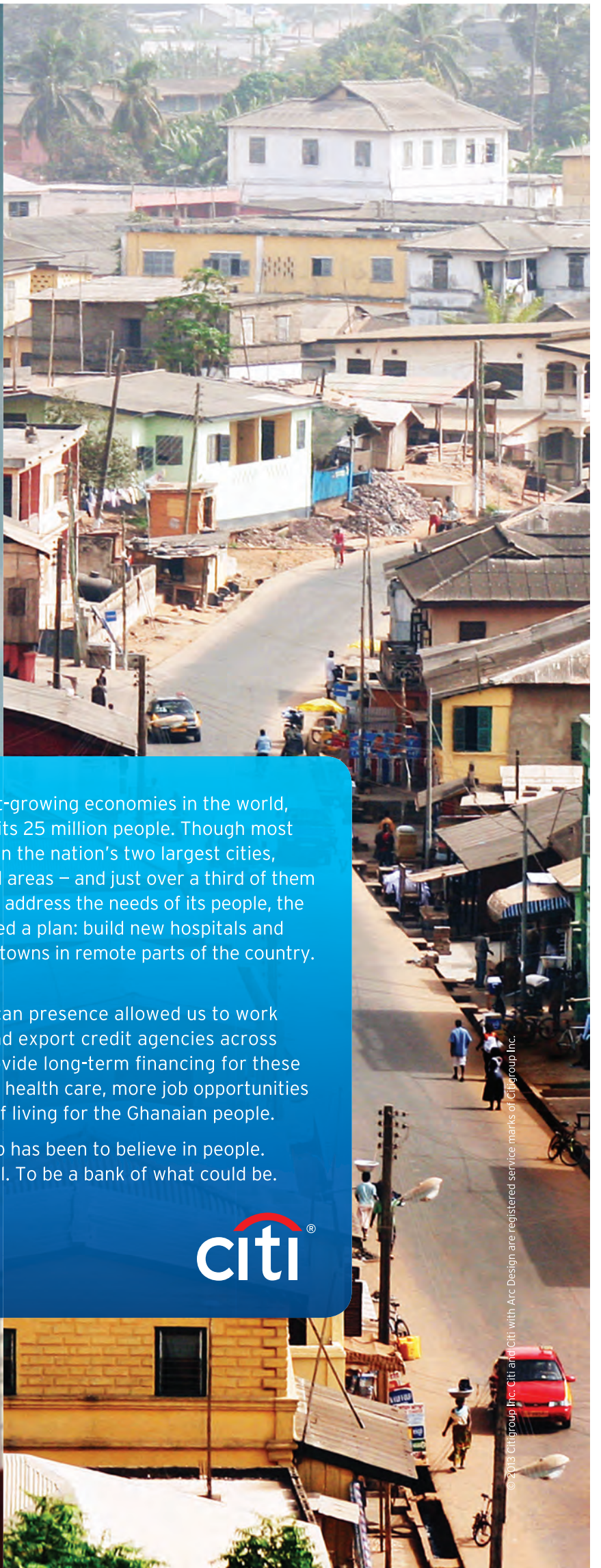
aProCh has also been working with municipal authorities to enhance the physical environment for children, with such initiatives as colourful “child-friendly pedestrian crossings” painted near schools.

The initiative operates on a shoestring budget of about \$25,000 a year, mainly covering the cost of two full-time co-ordinators. Money is raised through special events – such as auctions of children’s paintings, donated by private schools.

The organisers’ next aim is to spread their idea of making Indian cities more child-friendly. “We want to take it to a national level,” says Kirti Zala, one of the aProCh co-ordinators. “The essence of this initiative – of opening spaces of children – should go to cities everywhere.” ■

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ASIA-PACIFIC DIGICEL PNG FOUNDATION

Back to work

A programme in Papua New Guinea to teach basic life and business skills aims to combat poverty, reports **Ben Bland**
Photographs by **Caroline Thomas**

In a country where many children never make it to high school, Gabriel Farisa was fortunate that support from his family allowed him to stay in education until he was 16.

But having dropped out before getting his diploma because of financial pressures, he was unable to find work – like many other young inhabitants of the notorious “settlements” of Port Moresby, the crime-ridden capital of Papua New Guinea (PNG), the largest of the Pacific island nations.

These squatter areas are home to tens of thousands of people who have moved to the city in recent decades in the hope of tapping into the growing riches being funnelled through the capital from the many mining and oil and gas projects around the country.

PNG’s economy has grown rapidly over the past decade on the back of the country’s vast resources of gold, copper, oil and gas, and the burgeoning of a small, consuming middle class in the main cities and towns.

But inequality has also widened. When it comes to key social indicators such as literacy and maternal death this nation of more than 7m people has gone backwards, performing little better than war-ravaged countries such as Afghanistan and the

Democratic Republic of Congo. As the benefits of PNG’s mineral boom trickle down only very slowly, many in the settlements are without access to running water, electricity and, worst of all, proper job opportunities.

Many families eke out a hand-to-mouth existence, forcing them to pull their children out of school to save on book costs and other educational fees –

making it hard for such unqualified youths to find work.

Fortunately for Farisa, after six years of doing odd jobs he has secured his first formal employment with the help of a programme set up by the Ginigoda

Bisnis Development Foundation, a local non-governmental organisation, and the Digicel PNG Foundation, the charitable arm of the country’s leading mobile phone network operator.

“It was difficult to find work before without a certificate and references,” Farisa says, while taking a break from his shift in the bakery at the gleaming, new Waterfront Foodworld supermarket by the city’s spectacular bay. “The pay here is not great, but I want to learn and I like baking scones and bread.”

He is one of several young people from a settlement in Konedobu – one of many no-go areas marked on the maps handed out to expatriate oil

Many families pull their children out of school to save on book costs and other fees

Fresh start:
Gabriel Farisa
in his first
formal job, in
the Waterfront
Foodworld
bakery, Port
Moresby





ASIA-PACIFIC DIGICEL PNG FOUNDATION

and gas and development workers – who have been employed at the high-end supermarket with the help of Ginigoada and the Digicel Foundation.

Together the two organisations set up a two-week life and business skills course aimed at improving the living standards of settlement dwellers by teaching them about everything from personal health and gender equality to basic financial awareness and interview skills.

Those who complete the course are eligible to apply for vocational training organised by Ginigoada in conjunction with the Port Moresby Chamber of Commerce and Industry. The training helps participants connect with employers such as supermarkets and hotels, or supports them in developing small businesses in, for example, electronics repairs.

Beatrice Mahuru, chief executive of the Digicel Foundation in PNG, says the scheme began life as a one-week discussion programme launched in 2011 to tackle violence against women, which has reached horrific levels in a nation where many of the 800-plus tribes view men as masters of their household.

“People told us many other organisations come to talk to them about gender-based violence and they wanted something that would help them find work,” Mahuru says at Digicel’s offices in Port Moresby, which are heavily fortified like many buildings in the city.

“Many people from the settlements get sucked into crime because they don’t have jobs and there is no other way to put bread on the table, especially for those without a good education.”

At first, the courses, which are held on a rotational basis in different settlement areas, attracted only a few dozen participants. But this quickly grew to more than 150 in many cases.

The skills that are taught, from personal hygiene to household budgeting, are very basic but help the students to gain badly needed confidence.

Last year, nearly 3,000 people signed up for the life and business skills programme, which was run in 17 settlements and three villages, and 2,269 completed the course, which requires them to attend every day. More

than 1,400 people have graduated this year from the course, which Ginigoada is now running on its own, having secured independent funding.

Last year, 333 of the business and life skills graduates attended the further skills training and 56 of those obtained permanent jobs. This year 92 have attended further skills training and 19 have obtained permanent jobs.

Not all the graduates are young and without work. The courses have attracted a wide range of people in search of a way to get their lives back on track, including Amos Cook.

With his baseball cap, low-slung jeans and “Badboys”-

The skills taught are very basic but help the students gain confidence



Back on track: Amos Cook, above, graduates from training. Below: life in the Joyce Bay settlement, Port Moresby

branded shirt, his gangster-chic style could place him in almost any capital city in the world.

But when he opens his mouth he reveals a set of teeth stained deep red, a side-effect common in PNG among those who chew betel nut, a mild stimulant.

The 29-year-old’s chiselled features tell the story of a hard life, from running with a gang of armed robbers to serving a five-year prison sentence and from alcohol addiction to fights with his wife.

Speaking just before the graduation ceremony in a dilapidated theatre at the Murray Barracks, the headquarters of the PNG defence force, Cook explains that since giving up crime after being released from jail four years ago, his problem has been not money but drink.

When rubber prices are good, he can earn as much as 300 kinas (\$134) a day from his family’s 10 hectares of rubber trees near the town of Kupiano, 130km south-east of Port Moresby.

But on some days he spends more than half of that on beer, which costs K7 a can in Kupiano, once it has been transported down a road that is in poor condition, like many across this geographically diverse and poorly connected nation.

“I’m drinking myself to death,” he says. “I know I need to change and I hope the budgeting and other skills I’ve learned will help me.”

The long graduation ceremony is interspersed with Christian prayers and an energetic sermon by Mike Field, an evangelical pastor who is Ginigoada’s manager, underlining the deep role religion and the churches continue to play in PNG.

Relatives crowd





at the back of the theatre and on the balcony to support the course participants. Mahuru says this shows how much this means to people who may never have received a formal certificate before.

NGO initiatives like this are no substitute for the role of a government that for too long has turned a blind eye to the need to promote health and education.

But having learnt what works in the capital city, the Digicel Foundation is seeking to scale up its efforts by funding the roll-out of a similar programme in the agricultural town of Mount Hagen, in the fertile but under-developed Highlands. Despite rapid urbanisation, 85 per cent of the country's population still lives in rural areas.

Rather than preparing participants for formal employment, this course will be designed to help farmers and small market traders develop their business acumen to improve productivity and incomes.

But, in a sign of the depth of the challenges in PNG, the Digicel Foundation will not launch the programme until the end of local elections in July because, Mahuru says, this period can be volatile and "we don't want the

facilitators or the local community to get hurt."

The life and business skills course has helped people like Farisa to take their first step on the formal employment ladder.

"People are disenfranchised, disillusioned and feel forgotten," says Field. "If we can encourage them to feel cared for and connected and give them a pathway, it's amazing to see what they can do."

But there are no easy solutions to Port Moresby's social problems, particularly as its population swells to nearly 1m, according to some estimates.

Hudili Magau's predicament demonstrates that. She first studied bookkeeping on a short course back in 2000. But, without a school graduation certificate, she could not find a job, so she worked as a shop assistant before the needs of her family forced her to give up – in her settlement, she had to fetch water by the bucket every day, which she could not do while working a long shift and looking after her three young children.

Now, the 31-year-old has moved to a better settlement with running water and in April she completed the business and life skills course in an attempt



Tough environment: PNG's crime-ridden capital Port Moresby, above, and teaching at Murray Barracks, top

to find formal work after years subsisting by selling betel nuts and fruit on the street.

Magau is two weeks into an eight-week paid work experience stint in the administration department of the Gateway hotel, part of a local chain owned by the Swire group, the London-based conglomerate that also owns Hong Kong's Cathay Pacific airline.

It is the first time she has worked in an office or on a computer and she says she is enjoying the experience so far.

But after failing so many times to get a formal job in the past, she is cautious about her future. "I want to improve my skills and get a better job to support my family," she says. "But the problem is that I need more time and money to do so." ■



On the buses

Technology gives hope to India's transit systems creaking under swelling urban populations, writes **James Crabtree**

Photographs by **Ayush Ranka**

Mysore's main bus station stands just next to the Amba Vilas Palace, a magnificent colonial-era complex that once housed a famous maharaja, and is now equally well-known for the nearly 100,000 bulbs that light it up each year during the Hindu festival of Dasara.

The bus depot is rather less

grand, with a chaotic crush of vehicles, but it also now comes with illuminations – in the form of flashing electronic notice boards next to each bus stop, providing information on the comings and goings of the south Indian city's 430-strong fleet.

Although common in the industrialised world, the project is the first of its kind in India, providing Mysore's commut-

ers with real-time data on their trips around the city, updated by global positioning system (GPS) satellite data every 10 seconds.

"This system has been done in other places, but India is different," explains Karthi Madhavan, regional director for CMC, the technology company that leads the project, and is also part of the Tata group, the business conglomerate that is the country's

largest company. “The roads are different, the vehicles are different, the culture of the users is different. So it’s been quite a difficult exercise,” he says.

Known as Mitra, a word meaning “friend” in Kannada, the local language, the Mysore Intelligent Transport System was commissioned in 2011, backed by the state government and with a budget of 146m rupees (\$2.4m) over three years.

Although small in scale, the pilot was funded by the World Bank in the hope that its technology could be used in other Indian cities, potentially bringing a modicum of order to transit systems creaking under an urban population that is set to grow by a staggering 250m over the next two decades.

The project’s nerve centre is sited just off the main station concourse, where technicians sit in a cool, air-conditioned room, monitoring a system powered by a specially built predictive algorithm.

Madhavan pulls up a map populated by hundreds of bus icons, marked out in different colours: blue for stationary, green for moving, and pink for speeding. “When we started there were lots of pinks,” he says. “But that has mostly stopped now. The drivers know we are watching.”

CMC had a background developing transport data systems, not least given its work digitising timetables for India’s vast railway network, but the Mysore pilot presented obstacles nonetheless.

The city’s drivers were suspicious of the GPS-enabled boxes installed in their vehicles. They also had to be cajoled to stop at every stop – even when there were no passengers waiting – to make the system function properly.

Infrastructure was an issue too: vibrations from rickety roads damaged many of the GPS units, requiring more resilient fittings, while frequent power cuts necessitated special back-up battery packs in bus shelters, to keep the display screens powered up.

Then there was a more basic problem: identifying the city’s 2,500 bus stops, many of which turned out to be dustbins, shacks or trees, whose precise locations were known only by bus drivers and their customers.

“Over a period of time something has become a bus stop, and people know it is a bus stop,” explains Ashvini Kumar, Mitra’s operations manager.

“One is a banyan tree, one is a neem tree, one is a palm tree. Often that is what they are called too, so the bus announcement system now says: ‘next stop is Banyan tree.’”

Persuading passengers to wait at the right place was also often difficult.

“Even if I stop at the right place, people will wait for the bus elsewhere down the road. They wait at the old places,” complained one driver as he sat at the wheel of a Volvo bus waiting to depart from the depot.

Yet despite all this, the system began operating last December, and now its boards dot the city. Users, who pay about Rs7



In transit: CMC’s regional director Karthi Madhavan (above), in a bus where displays give real-time travel data, monitored from the project’s nerve centre (below)

(\$0.11) for a typical bus ride, can also text an SMS code for each stop, receiving upcoming arrival information within seconds.

The system already seems to have contributed to a startling spurt in users. A World Bank survey suggests rider numbers have jumped 20 per cent during the past nine months.

CMC admits this increase is partly due to extra buses and an extensive marketing campaign for the new system, but they credit Mitra for at least some of the rise, for convincing users that once-tardy local buses are now more reliable and punctual.

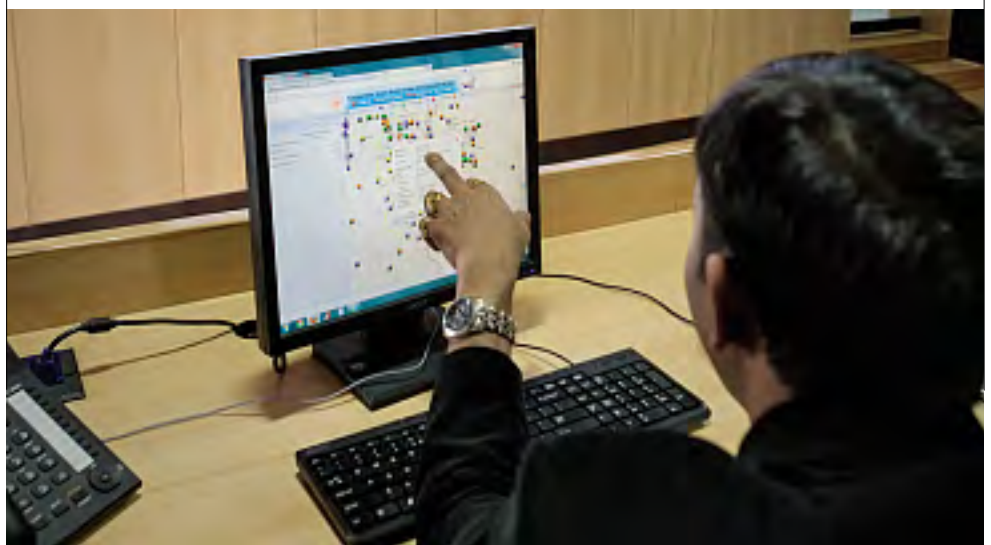
Earlier this year the same system began to be rolled out across the state’s inter-city bus system, while a handful of other Indian states are considering introducing similar technology in the coming years.

CMC’s Madhavan, however, has bigger ideas, suggesting that Mysore’s system could now be rolled out in every Indian city.

“That is what they should

do,” he says. “The beauty is the algorithm. This isn’t proprietary, we have already given it to the government as part of this deal, so they are free to use it where they like. They should do it.” ■

“The roads are different, the vehicles are different, the culture of the users is different”





Holistic view

The non-profit foundation offers social support to urban poor families trying to better their lot, writes **James Crabtree**
Photographs by **Ayush Ranka**

ASIA-PACIFIC PARINAAM FOUNDATION

Bangalore's LRDE slum sits wedged between an area of well-to-do middle-class houses and the striking, angular glass buildings of Bagmane Technology Park. Entirely hidden from the surrounding streets, even the name seems an afterthought, taken from the acronym for an Indian government research body located just down the road.

Duck down an alleyway, however, and a mud track leads to about 300 dwellings, many little more than tarpaulin sheets strung over wooden struts. The residents are India's forgotten: "ultra-poor" families of migrant labourers, many living on less than \$1.25 a day. It is, in short, a grim scene. But it was just the sort of place Elaine Ghosh was looking for.

Ghosh founded the Parinaam Foundation in 2006 to help some of Bangalore's least fortunate residents. She and her husband had moved to India's technology capital after twin careers in banking, much of them spent abroad. Three years later, after researching areas like LRDE, she came to a realisation.

"We discovered that there were pockets of slums that were in such bad condition. Broken-down huts with a little blue tarp, no roads, no electricity, often no water, definitely no toilets," she recalls. There were projects in deprived rural areas to help such people, many of which gave over a 'livelihood asset', such as a cow, to provide a path out of poverty. Yet none existed for urban slums, where conditions were often worse, especially for women.

"The men get desperate [without work] and they have

access to alcohol and gambling in the city. So they invariably become drunks. They're sitting there all day gambling," says Ghosh.

"The poor women are left trying to manage the children and find food to cook. When we talk about the desperately poor, that was the kind of condition that we were looking at, which is why we call them the ultra poor."

Parinaam's Urban Ultra Poor Programme (UUPP) is Ghosh's answer to the question of what can be done to help, combining tailored social programmes. Its operation is narrow – working in just eight slums across Bangalore so far, helping about 470 families – but deep, focusing on four areas: employment oppor-

tunities, financial literacy, health and childcare.

"This business of just offering a livelihood asset is absolutely the craziest thing," she says, as we discuss the programme on her balcony in a pleas-

"This business of just offering a livelihood asset – such as a cow – is the craziest thing"

ant Bangalore suburb one morning in mid-June. "That doesn't take care of the kids, [and it] doesn't take care of their health. So the first health issue they have, they're going to sell that cow, or that buffalo, to pay the hospital bills for the child. And then they're back to square one."

She adds: "There are hundreds of NGOs that walk in [to slums] every day, and government officials promising this, promising that, but hardly ever delivering anything. [But] if you want to make a dent in poverty one has to take a multidimensional approach. You have to give them healthcare, you have to give them access to vocational training, you have to help the kids get into decent schools, and

Desperate conditions: the Parinaam Foundation was started after its founder realised there were few projects helping urban "ultra poor" slum dwellers

ASIA-PACIFIC PARINAAM FOUNDATION

stay there, so that the parents won't pull them out and send them to work."

Ghosh is forceful and passionate, but jocular too, with arguments and anecdotes that tumble out in a rush. Her home is crammed with beautiful old teak and rosewood dressers and chairs – the legacy of a previous antique furniture restoration business that brought her into regular contact with poorer labourers for the first time.

After moving to Bangalore, her husband, Samit Ghosh, set up what would become Ujjivan, one of India's foremost microfinance lending institutions. The couple also started to build a new house, a task Ghosh took on herself, bringing her into contact with urban labourers once again.

"When I'd built the house everyone kept asking me for help building their houses, so that became a business," she says. "I started doing this premises consultancy, where I'd work with contractors. But I also then realised that the biggest problem was the construction workers." Typically

hard-up newcomers from other parts of India, they were often ripped off by employers. "It was a horrible feeling. My workers always got paid, but their conditions got me thinking."

Parinaam now operates what it describes as a "strategic partnership" with Ujjivan, whose office Ghosh also helped to set up in 2006: "It was an old tailoring building, with one grungy little toilet on each floor and huge floors filled with sewing machines," she recalls. The foundation's early work piggybacked on Ujjivan too: the microfinance group gave tiny loans to groups

of women in local slums, while the foundation helped some of the same people with health-care programmes.

It was through this process that Ghosh began to meet other, even less fortunate slum

dwellers. "The conditions of those families was so poor that clearly they couldn't borrow any money [from Ujjivan] ... they were literally the bottom 5 per cent or 10 per cent of the poor," she says. "The bottom of the bottom of the pyramid, not

"They were the bottom of the bottom of the pyramid, not even close to 'bankable' poor"

even close to what we called the 'bankable' poor."

This realisation led her to launch the UUPP in late 2009. The system is designed along microfinance lines, working with small groups of women, not individuals. It is demanding too, requiring participants to attend regular group meetings. "It's really hard getting them to come once a week, because they are working", she says. "But only those who turn up are allowed to keep getting help."

On a visit to the LRDE slum, I met one woman who kept coming along: Chowdamma, a slight, 30-year-old widow, dressed in an elegant orange and pink sari. Sitting on the floor of a tiny communal brick building, with her young daughter Swapma on her lap, she explained her history as a construction labourer.

"It was difficult, because I had to carry bricks up to the second floor," she says, before Parinaam helped her find a new job as a cleaner. "People come there and work on computers," she says of the Hewlett Packard office in the tech park next door, where she works. The job doubled her income, and after two years with the programme she now has a bank account too.

In a shack down an alley I talked to Pushpa, 31. She cares for five children, two of whom she took in when her sister died after setting herself on fire after an argument with her husband.

Pushpa seems cheerful, however, as she explains that she too has a job in the tech park. "I work in the canteen there," she says, gesturing towards the park, "and they let me take leftover food home after work, which is a help." Even better, Parinaam now sponsors her daughter, Meenakshi, allowing her to attend a high-quality local private school.

Overall about 100 women in

**Forgotten:
there are
pockets of
slums that
have no roads
electricity and
often no water
or toilets**



the slum have enrolled, getting help finding work and applying for basic identity documents, advice on how to save money and find better health and child-care services, and much more.

Back on her balcony, Ghosh says the UUPP has faced innumerable challenges. Many of the women drop out, while she has to be firm with those who stay on, often cutting from the programme those who refuse to follow its rules – an approach she describes as “tough love”.

It is a tricky balance, given that many participants lack basic self-confidence, a fact she illustrates with the example of Chowdamma. “She got three interviews at the tech park. She’d go for the interview, she’d agree to take the job, but she didn’t go for work. She was too frightened,” Ghosh recalls. On the fourth occasion a Parinaam community worker accompanied her, and made sure she stayed.

The organisation faces other obstacles too. The UUPP’s mix of services is relatively expensive per family, and also difficult to scale rapidly, a criterion that is often important in attracting cash from international donors. Funding is mostly provided by the Michael and Susan Dell Foundation but that cash comes to an end soon, meaning new funds must be raised.

Despite these challenges, Ghosh says she is determined to continue and hopes to expand to cities such as New Delhi and Calcutta. “We can’t stop this programme,” she says, with a determined look. “We have families that we found doing hard labour, and at the end of the programme they can access microfinance, they have bank accounts, they are sending their kids to amazing schools. The change we’ve seen in these women will not let us stop.” ■



Hands on: Elaine Ghosh is determined to continue the project after seeing how it can change lives



Unlikely venue: artists exhibiting at 3Space can enlist the help of other tenants in the same building



Our space

The charity wants to spark a wave of social entrepreneurship by ‘meanwhile use’ of office buildings, says **James Pickford**
Photographs by **Rick Pushinsky**



Enter the courtrooms of Audit House on London’s Embankment, and you are greeted by a strange sight: the magistrates and clerks who once dispensed justice have been replaced by young people in T-shirts tapping quietly on laptops, some listening to music through headphones.

The building, a former employment tribunal court at a prime site overlooking the river Thames near Blackfriars Bridge, has been commandeered with the full agreement of its owners by 3Space, a charity that is seeking to spark a wave of social entrepreneurship through the so-called “meanwhile use” of office buildings.

The charity approaches landlords or leaseholders whose buildings are empty and asks them to open their doors – under strictly controlled conditions – to social start-ups for a limited period.

For its founders, Andrew Cribb and Henry Mason, the scheme not only gives a leg-up to deserving start-ups, but also

eases a growing urban population problem and – if they can succeed in their aim of boosting its scale – will create vibrant communities of entrepreneurs that can revive downtrodden areas by raising property prices.

There is no shortage of potential real estate. According to the Local Data Company, a retail information group, almost one in seven UK shops stand empty, with vacancy rates running at 14.1 per cent in May 2013. A combination of online retail growth and the downturn has caused many shops on Britain’s high streets to pull down the shutters.

“We’re getting more people coming to cities, and at the same time we’ve got limited resources, says Cribb, a former town planner and ex-employee of the London Development Agency. “How can we use those resources better? Property is an asset that can be used when its owners essentially think it’s of no value. It’s a way for them to engage with the community.”

As at Audit House, the owners may simply be awaiting planning

permission for development. They may want to sell the property or mothball it for a period. Occupancy can be for as little as six months, and the charity guarantees that owners can take it back at short notice.

“3Space offers a control mechanism. We’re good at finding people and we’re also good at getting them out when they need to get out,” says Cribb.

The charity, which has seen 45 buildings pass through its hands and currently has eight on its books across the UK, has given space to 140 organisations. It says landlords benefit from reduced insurance, maintenance, business rates and security costs.

“They make a saving of 50 per cent on their rates,” Cribb says.

3Space opened its first premises in London’s Chancery Lane in December 2010 through developer Derwent, followed by five shops with Littlewoods, the retailer. Later it took on 30

lects excess or unsold food from farmers’ markets and supermarkets, including J Sainsbury and Waitrose, to give to those in need. The charity, which has been given a grant of £120,000 by the Cabinet Office to explore ways of expanding, says the opportunity to be close to policy makers in Whitehall and Westminster has been invaluable.

Kelvin Cheung, chief executive of FoodCycle, says: “Most places were charging £300 a desk. This is free and we even have our own meeting room. We’ve saved probably about £8,000 by being here.”

Elsewhere in the building, the Restart Project saves waste by helping people repair their electronic equipment at pop-up events in pubs, markets and community halls – and teaches the expertise to repair the gadgets if they go wrong again.

Janet Gunter, co-founder, says: “We started up a year ago



Room to grow: the charity asks landlords with empty buildings to open their doors to social start-ups for a limited time

an exhibition opening that evening. Other tenants are welcome to attend.

3Space encourages collaboration between its tenants. FoodCycle has catered for other companies’ events in the building; Pod Academy, a podcast developer, has helped fellow tenants with their web presence. Once a month on Fridays, says Cribb, fundraisers from each enterprise meet in the building to discuss opportunities and share tips.

“Where you have organisations that are very socially minded, there are always opportunities for sparks to fly – for sharing, talking and combining resources,” says Cribb.

However, occupiers should not expect plush conditions. At Audit House, the lift – an unnecessary expense, according to Cribb – is not in operation. What is more, a water pump in the roof has to be turned on manually twice a day to keep the taps running. “That saves us £1,000,” he says.

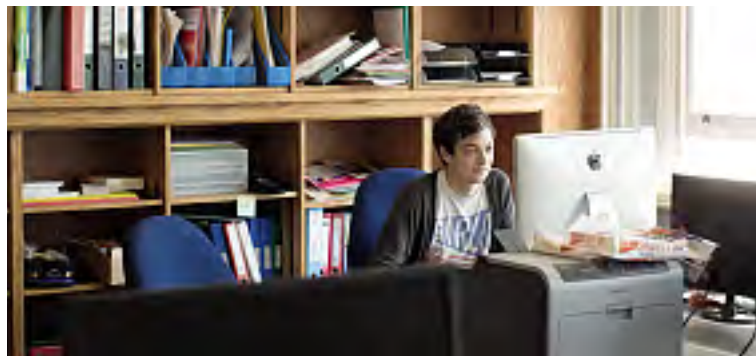
Cribb says the biggest barrier to expansion is the attitude of

many asset managers and property owners, who see only inconvenience in the scheme and prefer easier ways of avoiding business rates by engaging in “any number of scams”.

But his aim is to

take on a sufficient number of buildings so as to provide enterprises with semi-permanent homes, and generate the kind of buzz that has revived formerly down-at-heel neighbourhoods such as Shoreditch in east London. “The dream is that if we can get to 100 or 200 buildings it would be all about people moving in and out. It’s the diversity and experimentation you get in these places that is inspiring.” ■

“We’ve got more people coming to cities and we have limited resources”



buildings through retailer JJB Sports. “That was really testing the model,” Cribb says.

It will leave Audit House by September, when Fore Partnership, the property investment group that owns the building, expects to begin redevelopment.

Meanwhile, though, the site has become a hive of social enterprise. On the third floor, with a spectacular view over the Thames, is FoodCycle, which col-

lects excess or unsold food from farmers’ markets and supermarkets, including J Sainsbury and Waitrose, to give to those in need. The charity, which has been given a grant of £120,000 by the Cabinet Office to explore ways of expanding, says the opportunity to be close to policy makers in Whitehall and Westminster has been invaluable.

The space is not limited to full-time enterprises. On the ground floor, artists are frantically painting walls and assembling sculptures in readiness for



PHOTO: IWAN BAAN

People's park

The input of local residents has been the key to the rejuvenation of one of the Danish capital's poorest areas, writes **Richard Milne**

The taxi driver looks concerned when told the destination. "We call it Nørre-bronx," he says. "There was a shooting there last week," he adds, stopping several streets early.

We are in Copenhagen, capital of what the UN calls the world's happiest nation. But Nørrebro, a district in the north-west of the Danish city, has often not been so happy. The scene of some of the country's biggest riots in recent years, it is also one of its poorest areas, with plenty of social housing and dozens of different nationalities.

Pass the Western Union branch, the halal butchers and various kebab shops and pizzerias on its main street of Nørrebrogade and an extraordinary sight awaits. The square in front of the local sports hall is decked in bright red rubber. Neon signs from Russia, China, Taiwan and the US vie for attention.

This is Superkilen, Copenhagen's newest park – a space where basketball-playing youths mingle alongside elderly chess players, all surrounded by a global smorgasbord of objects, from Ghanaian traffic bollards and Finnish bike racks to British litter bins and an Indian playground. That most quintessential of Danish ideas – the cycle path – winds its way through the park, past benches from Cuba, Iran, Germany and Ethiopia, barbecues from Argentina, and phone booths from Brazil.

The project is a collaboration between Danish architects BIG (Bjarke Ingels Group), German landscape architects Topotek 1 and Danish artists Superflex. Their striking use of colour and myriad objects from around the world have helped rejuvenate the area and reflect the diversity of the district, which is home to people from some 60 different nations.

"This area was bad, really bad, before," says Fadoua, a local resident whose family comes from Morocco. "But this has just added some fun, some colour, life to the area. It's great. I come here all the time." She speaks just metres from the object from her homeland – a fountain – but says her favourite object is a series of double swings from Iraq.

Superkilen was designed as a way to improve a narrow wedge (*kilen* in Danish) of land about 750m long and in places just 30m wide in Nørrebro. The wedge itself is a diverse area, containing richer property in the south, co-operative blocks in the middle and poorer social housing in the north.

"Socially and economically, people are extremely diverse in that neighbourhood," says Jakob Fenger, co-founder of Superflex. "That was an interesting starting point to do something to reflect that in a physical space."

The city council listed all the nationalities that live nearby. From that came the idea that every nationality should have

Coming together: the diversity of Superkilen's features reflects that of the local community



“The area before was very undefined. We wanted a way to create an identity”

an object that represents them in some way. The ideas range from the capricious – a manhole cover from Switzerland, a dentist’s sign from Qatar – to the practical – a set of high swings from Afghanistan, a black octopus playground from Japan.

Nanna Gyldholm Møller, the project leader at Copenhagen-based BIG, which is renowned for its striking designs, such as public baths in Copenhagen harbour and the Lego House (a visitor centre for the Danish toy company in Billund), says: “The area before was very undefined. It was just one long bike path. It was very messy, like a backyard. We have been pushing it with the objects. But we wanted a way to create an identity in this area.”

The land was split almost naturally into three sections by roads and squares, so the BIG-led team came up with a trio of distinct areas: what they called, in clear puns, Red Square (there is even a street sign from its Moscow namesake), Black Market (located near the former tax authority building) and Green Park. So now, says Møller, residents can say: “Let’s meet up at the Black Market.”

Red Square is designed as the heart of the project, as a place for sport and social functions, such as concerts or markets. The Black Market is a meeting place where children can play and families can have barbecues, while Green Park is a more traditional area for sunbathing and picnics, and has a sunken hockey pitch and basketball court.

Each of the 100 objects in Superkilen has a story behind it, having been nominated by local residents. A plaque next to each one says what the object is in Danish and the language of where it came from.

But for some items Superflex – known for its subtly subversive

projects, such as placing grandiose toilets in public spaces (a copy of the UN Security Council's in a Dutch park, for example) – went much further. Fenger says its concern that consultations are usually dominated by middle-aged men led it to seek out young people and pensioners.

In an exercise of extreme participation, it picked five groups of people to go to their chosen countries (not necessarily their homeland) to find objects. “It was a way of criticising the normal way of doing things. Kids on the street never show up,” Fenger says.

It is no surprise that the Superflex pieces are some of the most special in the whole park. From a massive replica of a Jamaican sound system, found by local youths, to a giant metal bull from Spain, chosen by a couple of pensioners, and a Thai boxing ring, the stories behind them were captured on video. Perhaps most moving is two young girls' desire to have some soil from Palestine in the park.

That soil now sits atop one of the park's highlights – an artificial hill in the Black Market that stands out as noticeably different in colour to the native Danish earth. Every minute or so a whoop is emitted as somebody runs down the side of the hill, which is covered in black asphalt and psychedelic white lines.

Grilling some sweetcorn at the bottom of the hill as his children slide down the tentacles of the Japanese octopus playground, Mohamed says: “We come here all the time. It is such a friendly place to meet people. And some of the things are crazy – did you see the elephant slide from Chernobyl?” It may only be a replica of the Ukrainian original but, like many of the exotic objects, it has been adopted wholeheartedly by the community.

A year after opening, the park



Noises fill the park: from the rumble of bouncing basketballs to the whoops of children playing on an artificial hill

Watch videos of the search for objects for the park at <http://superflex.net/tools/superkilen>

is busy. In the June sunshine amid the ever-present whir of cyclists flying past, children frolic in the fountain, couples sunbathe and there is a continuous rumble of basketballs being bounced on the red rubber. “It is really getting used. It is a relief to see it works in that sense – and in ways we wouldn't have imagined,” Møller says.

But that popularity comes at a price. All the use has taken its toll on the park. Red Square, for instance, is looking less vivid than in the promotional material. Møller says it is a contractual issue with the supplier of the surface, which soon should be restored to its correct level of brightness. The cycle path had to be changed after cyclists complained that it became too slippery when wet.

Fenger says it is no surprise there are small problems with such a radical project. “With Superkilen there are a lot of experiments. We had some real challenges with some objects,” he adds. One is the replica Jamaican sound system. Using Bluetooth, anybody can play music from their phone through it. Naturally, some neighbours have complained, so the volume of the music and the hours in which it can be

used are now restricted. “For us it was important to do this kind of experiment,” Fenger insists.

A bigger issue is maintenance of the park. Residents complain that items can lie broken for weeks without being fixed. The difficulty in repairing such diverse objects is clearly a challenge for the city council.

Fenger compares it with the speed with which things are fixed in nearby Fælledparken, which is in a more upmarket neighbourhood. “You have to maintain it. If you don't, it will eventually be rejected by the people here. You have to remember that nobody went here before.”

Ali, a local resident, also worries about the wider area: “It was good to see some money invested here. But putting in a nice park doesn't solve all our problems. People are still struggling here, there's still violence, poverty.”

Møller, who is showing off the Armenian picnic tables and the sole Danish object, a set of bird nests, agrees – but only up to a point: “We can't cure everything. But I hope someone will look into how the park changes the area.” Some children accidentally squirt her with their water-pistols. “Look how much fun people have here,” she says. “I'm just happy to see it being used so much.” ■



Ride sharing

Digital hitchhiking is fast becoming a business, meaning a lift is just a click away, writes **Hugh Carnegie**



Not very long ago, hitching a ride meant standing by the roadside, sticking your thumb out and hoping that some kind driver would take pity on you and give you a lift in the direction of your destination.

These days, a lift for a would-be hitchhiker is just a click away on the internet, where ride-sharing is fast becoming a business. One of the outfits seeking to make money out of digital hitchhiking is Paris-based BlaBlaCar.

Founded in 2009, BlaBlaCar now claims 3m users across 10 countries and is aiming to hit 10m by the end of next year. “Our ambition ultimately is to have tens of millions of members,” says Nicolas Brusson, one of the three founders and a former venture capitalist.

Car owners and ride-seekers sign up as members of BlaBlaCar, posting details not just of their planned journeys, but about themselves in addition, much like a social network. BlaBlaCar places lots of empha-

Thumbs up: potential passengers no longer have to take their chances at the roadside but can find a ride online

sis on how it is promoting social interaction.

Drivers set out where they are going and when, and a price for their proposed journey, within limits capped by BlaBlaCar – usually about €12.

The intention is that drivers do not make a profit, just recoup a portion of their costs – BlaBlaCar does not want to morph into a site for professional drivers. And car-owning members also need to stay within insurance rules and outside the attention of tax authorities.

EUROPE BLABLACAR

In 2009, they raised €600,000 from a group of mainly French and Spanish “business angels” to get started.

By 2010 BlaBla had 100,000 members, but still lacked a real business model.

“At that stage all the money flow was offline, directly from the passengers to the drivers. The big challenge was to bring the transactions online and become a proper booking system,” says Brusson.

Many potential investors were reticent, says Brusson. But BlaBlaCar was backed to the tune of €1.25m by Isai, a French fund run by Jean-David Chamboredon, best known as the leading spokesman of Les Pigeons, the group of French online entrepreneurs who rose up in a successful protest in 2012 against the new socialist government’s plans for a big increase in capital gains taxes.

With a booking system in place, BlaBlaCar decided to scale up internationally “before we had even really proved the concept in France”, says Brusson.

With many players entering the shared-ride market, particularly for shorter-distance journeys and commuting, BlaBlaCar wanted to be a leader in inter-city, long-distance journeys. The main competition comes from German-based carpooling.com, which claims nearly 4m users across Europe.

A big step forward came with a \$10m investment by Accel Partners, a Silicon Valley fund that had invested in companies such as Facebook, Spotify and Angry Birds.

This enabled BlaBlaCar to extend its reach across Europe, establishing offices in Paris, Milan, Madrid, Hamburg, Warsaw and Lon-

don. It now employs 75 people, the majority in Paris, which remains the headquarters. “By the end of the year I don’t know how many people we will be,” says Brusson.

The majority of users are still in France, but growth outside the country is now at a faster pace.

The company does not reveal financial information, but based on its flat-rate commission of €2 per ride and its claimed current 600,000 rides per month, revenues are in the region of €1.2m a month. Brusson says BlaBlaCar is not making a profit, but adds: “Profitability depends on how fast you want to expand.”

BlaBlaCar is keen to stress its environmentally friendly credentials. Brusson says the average car occupancy of 2.8 within its “community”, compares with a broad European average of 1.7.

Nor is it just for 20-some-things. There are a lot of students, but the average age is “heading for 30”, says Brusson. “We have lots of 40-plus drivers. They are super-reliable – our ‘golden drivers’. They travel

regularly and do repeat journeys.”

And the name? Every member is asked to rank themselves in terms of how much they like to talk to their fellow passengers during a journey.

One bla means you want to keep yourself to yourself.

Two blas means you are moderately chatty. BlaBlaBla means you can’t stop yakking. Hence BlaBlaCar. ■

“Our car occupancy of 2.8 compares with a European average of 1.7”

Potential passengers then sign up for a place in the car and the deal is done on BlaBlaCar’s online booking system. The company makes its money by levying a €2 fee on each transaction.

The original idea came from Frédéric Mazzella, a former fellow classmate of Brusson at Insead, the business school near Paris. Francis Nappez, BlaBlaCar’s technical leader who had experience at companies such as Orange, the mobile operator, was the third founder.



Seeds of ideas

Horticultural projects in UK schools are helping children appreciate healthy eating, writes **Sarah Neville**
Photographs by **David Parry**



In the playground of a Victorian school in north London plants are flowering and sprouting in a fashion that belies the institution's grittily metropolitan setting.

Rotherfield primary school is at the forefront of the Edible Playgrounds movement, which aims to introduce city-bound children to the delights of gardening and fresh food.

Most of these youngsters live in high-density housing with a balcony as their only outside space. But, says head teacher Richard Hunter, their lives – and entire urban experience – have been transformed by this daily contact with nature.

As parents and children approach the school, they are “confronted with lush, verdant green and trees full of fruit. It is a wonderful presentation of vitality in a very sterile urban environment,” Hunter adds.

The charity behind the initia-

tive, Trees for Cities, which he says he “cannot praise highly enough”, has long believed that grass and grit can mix.

Sharon Johnson, the charity's chief executive, laments that many children have lost their connection with nature. “They’ve been told not to climb trees because of health and safety. Many children still don’t know what a worm looks like. But with [the edible playground] the children get engaged with it and learn about healthy eating – they’re looking at strawberries and green vegetables and having that connection.”

Like all the best horticulture, the initiative grew from a seed – in this case an idea 13 years ago involving small-scale plantings of fruit trees in school grounds. The charity was inspired by an American, Alice Waters, who 17 years ago was struck by the dismal appearance of a middle school near her home in Berkeley, California. This

EUROPE EDIBLE PLAYGROUNDS

reflection led to the creation of a 0.4 hectare “edible school yard” on the school site, which has now endowed more than 7,000 children with cooking and gardening skills to take into their adult lives.

Inspired by a visit to the project, Johnson knew she would have to adapt the idea to the confines of land-poor London. Her solution was what she calls “container gardening” – a way of growing crops without having to rip up hard playground surfaces.

There are now 20 edible playgrounds in the UK, and Rotherfield has become the showcase

Oliver, the celebrity chef who has made a mission out of improving the nutritional quality of children’s food, a “curriculum kitchen” has been set up.

Through it the children have been introduced to such delights as focaccia bread and pea-and-mint soup. They grow food for specific recipes, reinforcing the link between gardening and newly acquired culinary skills.

Trees for Cities believes the approach holds promise for tackling food poverty among children in deprived areas. Johnson says that unlike food banks, which can assuage immediate hunger,



Green fingers:
Rotherfield pupils learn about the link between nature and food

A soon-to-be-launched website will help to spread the garden gospel by allowing school staff around the country to download teaching and learning materials, network with other schools, find volunteers, share information and ask questions.

The charity is pressing businesses to “adopt” an edible playground by allowing employees to take a turn at maintaining the

garden while sharing their skills with the children and their families.

As it seeks better ways to measure the impact of its work, Trees for Cities plans to draw on a model it has devised to gauge the social, economic

and environmental returns on its investment in food-growing projects overseas, primarily in east Africa.

Back in north London, Hunter watches his youngsters harvesting raspberries during their breaks. He treasures a remark made by an eight-year-old pupil to his parents: “Cooking is better than computer games.” ■

“The children engage with [the edible playground] and learn about healthy eating”

site for the charity’s work. Three years ago the school was under-subscribed and staff wanted to raise its profile while getting parents and children more involved in the life of the school.

Hunter explains that it is now the second most improved school in the borough of Islington, based on its attendance record. It has also seen its academic results soar, with children who once would have scored in the 60s now hitting the 80s in standardised attainment tests.

The edible playground, he says, has been instrumental in promoting a culture of excellence; the children’s horizons are raised beyond the level to which many could naturally aspire. With the help of the Better Food Foundation, created by Jamie

the edible playgrounds can tackle its underlying causes: a lack of awareness, understanding and education around food and what constitutes a healthy diet.

Some private schools, where parents may lack the time to cook a family meal, have also latched on to the edible playgrounds concept. But the latest evolution is taking shape at another London state primary school, St Paul’s in the deprived east London borough of Tower Hamlets. Its edible playground will be a resource that can be used by up to 10 other schools in the area as well as community groups. The charity has dubbed this scheme “sow and grow” and believes this distinguishes its approach from the model pioneered by Waters in the US.



OPINION

DALE HARROW



The road ahead

Urban congestion and energy concerns are laying down new challenges for car designers

Hold on to your hats: the car is set to change, even more fundamentally than in its fast-moving first century. Above all, it has to be integrated into urban networks, human and technological.

The “big three” factors for vehicle designers are energy, environment and congestion.

Design is crucial in an era when we have fundamentally “solved” the function of the car; issues such as reliability are no longer at the front of a buyer’s mind. The myths of speed, freedom and luxury previously sustained users’ love affair with the car. But in a new century dominated by the “big three”,

the challenge of designing for a sustainable and ecological future mean the following themes will inform the way ahead.

CONNECT Consumers are increasingly sophisticated and urbanised. We will see different models of ownership – car sharing, for example. The car may become part of an integrated urban transport system, but it may also have to respond to local needs. Urban and other consumers will be involved with the design, leading to greater diversity and customisation.

INTERACT Cars will interact with people, each other and the

Cars will be part of a network working with the urban environment, interacting with people and each other

city itself. They will communicate with and act as part of a system. Autonomous driving is here with prototypes such as the Google driverless car. Catering for this technology will have an increasing influence on city planning and systems. Cars will be part of the urban network.

CREATE New technologies will enable new ways of making cars. Rapid manufacturing techniques will mean cars can be “printed” for individual consumers. New methods of production will provide the opportunity for new platforms and architecture.

We are in a new age of vehicle design. Can a car be lighter, interactive, have fewer components, be energy efficient, work in the city – and look great? What a great challenge, and opportunity, for designers. *Professor Dale Harrow is head of vehicle design at the Royal College of Art in London*



WHY A BANK SHOULD MAKE CLEAN AIR ITS BUSINESS

Ulaanbaatar is one of the coldest capital cities in the world. And as in some other countries with emerging economies, many Mongolians use inefficient and unhealthy cookstoves for heating and cooking, the offshoot of which is air pollution.

MicroEnergy Credits had an idea: partner with XacBank, a Mongolian microfinance institution, to distribute clean-burning, fuel-efficient cookstoves. Because of our global reach, they were able to turn to Citi for help. And today, more than 100,000 households in Mongolia are using these stoves.

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WHAT'S POSSIBLE?

Every day, in cities around the world, people are doing amazing things. They're creating, innovating, adapting, building, imagining. What about a bank? Shouldn't we be equally ingenious? Strive to match our clients' vision, passion, innovation? At Citi, we believe that banking must solve problems, grow companies, build communities, change lives.

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The Citi logo, featuring the word "citi" in a white, lowercase, sans-serif font with a red arc above the "i", set against a blue rounded rectangular background.

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