

# IMPACT Journalism Day by Sparknews



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## THE HINDU Solutions come from below

Environmental degradation and barriers to women's development are among the major challenges faced by countries in the developing world today. Pollution is rising, as governments struggle to cope with a mounting waste burden. Women face hurdles to greater participation in society and the workforce. They also seek more educational opportunities. Only an enlightened response from policymakers, and innovative initiatives from civil society can address these and other challenges, and make the goals under the UN Sustainable Development framework meaningful. It will take a determined effort to broaden and deepen access to development if millions are to be pulled out of poverty and ill-health. This is beginning to happen.

As the articles presented in this year's special section for Impact Journalism Day show, voluntary efforts are often taking the lead to find innovative and inspiring solutions to issues.

The Hindu joins Sparknews to present some of these stories, which have a remarkable range and span several countries: such as the effort to replace plastic cutlery with edible spoons, teaching women organic farming in Madagascar, helping Afghan women fight for free expression, and teaching yoga to prisoners in Argentina.

Every initiative featured on these pages highlights the resolve of men and women to make a difference. As the world gets more networked, many more citizen-driven solutions will emerge, and good ideas will find a supportive audience.

### spark news

## Shaping a better future together

As communication technology develops, people have access to more information than ever before, literally at their fingertips.

But how many of us can say that we are truly well informed?

Headlines tend to paint a bleak picture of our world: conflict, terrorism, hunger, climate change, social injustice – the list goes on. We are indeed facing complex and seemingly insurmountable challenges. Yet the full picture also offers solutions and reasons for hope.

In 2015, 193 countries agreed to work toward the UN Sustainable Development Goals. An ambitious plan to guide global development until 2030, the goals are a call to action to end poverty, protect the planet, establish peace, and ensure prosperous, fulfilling lives for all. They can only be achieved if people everywhere embrace them.

Around the world, there is a growing grassroots movement to support the Sustainable Development Goals. Brilliant, innovative women and men are finding local solutions to global problems, helping to build a better society and economy for all. These entrepreneurs inspire others to replicate their solutions to issues such as health care, quality education, decent employment, clean energy and access to water.

A drive for positive change is gaining momentum. More and more people are working to help social entrepreneurs have a larger echo by supporting positive impact finance or investing in them and accelerating their approaches (such as the Skoll Foundation, Ashoka, Impact Hub, the One Young World Summit etc). These growing initiatives also find a way to scale up by developing connections with traditional businesses.

The news media can play a vital role in highlighting and spreading stories about innovative changemakers across borders. For the past six years, Sparknews has invited media from all over the world to take part in Impact Journalism Day, joining forces to publish articles about positive initiatives in special supplements or online reports, reaching 120 million people on the same day.

You, too, can participate in helping these projects to scale up and have even more impact. Share the stories that impress you the most on Facebook and Twitter (#ImpactJournalism, #StoryOfChange, @Sparknews, @YourNewspaper).

We can all take part in writing the future of our global story.

Christian de Boisredon, founder of Sparknews and Ashoka Fellow & the Sparknews Team.

# Eat your spoon!

An entrepreneur who had to eat hard rotis, hit upon an idea for edible cutlery

PRASHANTH CHINTALA

In 2005, while he was on a field visit to Mahabubnagar, a drought-prone district in Telangana, Narayana Peesapaty ordered a *jowar roti* (millet bread) for lunch. He arrived late at lunch, and the roti had become cold and hard.

"I had to break the roti and scoop the dal and curry with its pieces, crunching into them. That was the eureka moment for me. If a two-dimensional spatula can work, then why not a three-dimensional spoon? I felt that I

The spoons cost ₹3 each, and have high demand in several countries

would be able to hit two birds in one shot," Mr. Peesapaty said.

The birds he was referring to are two major issues: the need to reduce the acreage used for water-intensive rice cultivation in India, and the global problem of plastic pollution, as well as its misuse. Though the material is not intrinsically bad, Mr. Peesapaty explained that plastics should not be used for handling food, since they contain chemicals with carcinogenic and neurotoxic properties that leach into what we eat.

Edible cutlery was his solution, and he founded a company called Bakeys to produce it.

Bakeys manufactures

spoons made primarily from jowar, besides rice and wheat flour in three flavours – savoury, sweet and plain. Mr. Peesapaty said, "As an agricultural scientist, I want this world to be a better place to live." His wife, Pragna Keskar, says the spoons are safe to eat and "taste like crackers." Even if they are not eaten, they are safe to dispose of into the environment, as they are biodegradable.

Poor people in India have traditionally eaten millets as a staple and rice on special occasions such as festivals. Rice thus became an aspirational food until the mid-1980s, after which a policy to subsidise energy to the agricultural sector was adopted by some States. Since then, rice cultivation has grown exponentially and millets have lost their important place on the table.

In 2016, the Indian government kept nearly 50 million tonnes of rice as buffer stock. "The rice is rotting in warehouses and nobody cares. Something is wrong," Mr. Peesapaty said, adding that one solution to the impending crisis would be to reduce rice cultivation by 25% and encourage millet consumption.

He researched what was happening to used plastic spoons. Looking into garbage bins, he found plastic material and plastic bags but only broken spoons, which indicated that people were



From dough to spoons: The industrial unit turns millet flour into spoons in three flavours, which taste like biscuits. ■KVS GIRI

reusing them. "This strengthened my resolve to make edible cutlery and I began experimenting at home," Mr. Peesapaty said. "The kitchen was my laboratory."

Finding investors

He tried making cutlery using different combinations of flour. When he finally got it right, he had difficulty finding a mould maker. Then it was a struggle to find investors.

"Those were very bad days. Friends and relatives started avoiding me as I was asking them for money." He sold some of his assets, including a house in Vadodara and a flat in Hyderabad. He used his savings. "We have seen the worst," he recalled.

The couple raised more than ₹20 million (\$300,000) on their own; it was not until 2014 that they got a bank loan. In the meantime, Pragna had taken up casual jobs to supplement their income. "I share his passion for making edible spoons. So does his mother," she said.

In 2016, Bakeys raised ₹18.7 million by crowdfunding on Kickstarter and more than ₹2.4 million on Ketto, thanks to a social media film that went viral.

Bakeys now employs eleven people – eight at the factory on the outskirts of Hyderabad, besides an accountant, a web designer and a researcher. It produces 10,000 spoons a day using 500 kg of jowar flour and an

equal quantity of rice flour and other ingredients. More than 120 countries are currently trying to place orders, but Bakeys is not accepting them.

"Our web site is meant to take orders but it has stopped as we can't supply," Ms. Keskar said, adding that the mismatch between demand and supply is huge. The company's largest orders come from the United States, United Kingdom, Canada, Australia, Dubai, Singapore, Taiwan and China.

The spoons cost ₹3 each (including the courier cost, it's ₹4). Bakeys has sold 2.25 million spoons since September 2016. Mr. Peesapaty says he cannot sell more due to production constraints.

"We don't want to do more. Now we want to sell machines [to make the cutlery] and teach them [buyers] to use them. Let them sell it under their own brand because we can't do huge bulk production with just one machine," Mr. Peesapaty said, adding that the machines will cost ₹1.4 million apiece. Profits from these sales will help pay for Bakeys to expand its product line from cutlery to utensils.

Bakeys' patent has been pending since 2012. "I realised that the world had woken up to our products, but our prototype to mass produce edible spoons took two years to perfect," said the entrepreneur. "Now we are ready."

# A World Cup for the people in Russia

An alternative programme for soccer fans hopes to spread awareness about different aspects of social life

ANGELINA DAVYDOVA  
KOMMERSANT, RUSSIA

The FIFA World Cup is currently taking place in Russia, and a network of Saint Petersburg-based civil society activists and social entrepreneurs have launched a campaign called "Cup for the People," providing an alternative programme for hundreds of thousands of soccer fans arriving from all over the world. From guided tours held by local residents about LGBT rights or environmental issues to a map of responsible consumption, the campaign hopes to spread awareness about different aspects of social life in Russia, while fostering diversity, tolerance and sustainable development within the food, retail and tourism sectors.

Behind the campaign is Olga Polyakova, a 31-year-old activist engaged in civic education, citizen cooperation movements and circular economy.

"I was in Hamburg, Germany, when the G20 meeting took place there [in 2017], and I saw what kinds of alternative programmes local activists carried out – with actions, discussions and performances," she says. "In almost every country there

are people who are critical of such mega events, which are normally financed with public funds but benefit mostly politicians and corporations. So I thought about creating a similar alternative programme for Saint Petersburg."

In early 2018, Ms. Polyakova gathered some 30 activists from local NGOs and civil society groups to create the programme. It includes debates about the impact of sports events, guided tours of lesser-known neighbourhoods in Saint Petersburg, and themed tours around LGBT rights or social and environmental issues such as homeless people's living conditions or grassroots recycling initiatives. Everything takes place in English.

In addition, there is a map for tourists to locate human rights movements in the city. Meetings are organised with Soviet-era dissidents and Amnesty International. A Live Library project organises talks with those who suffer from stereotyping – namely members of the LGBT community and disabled people.

The Bars without Violence initiative teaches bartenders how to react when they see gender-based violence or harassment against women.



Scoring a point: Guided tours will tell visitors about LGBT & minorities rights. ■SPECIAL ARRANGEMENT

"We'd like to show Saint Petersburg beyond the tourist clichés, and that problems in most countries – the relationship between citizens and the state, corruption, megaprojects' influence on urban life, our contemporary perception of history, social inequality and discrimination – are similar to those in our country in the eyes of locals who are trying to improve society," says Arsene Konnov, curator of the tour programme, urban researcher and tour guide.

Some of these initiatives also take place in Moscow. Overall, up to 1.5 million foreign visitors are expected in Russia for the event – more than 400,000 in Saint Petersburg alone.

One partner of the Cup for the People campaign is the Fare Network, which unites activists and civil society organisations promoting equality and diversity by using sport as a means of social change. The network has opened two "Diversity Houses" – one in St. Petersburg and one in Moscow – to hold events such as discussions and exhibitions. It has also published a *Diversity Guide to Russia*, about the risks and challenges different minorities and civil society activists face in the country, and has launched a WhatsApp hotline to help visitors if necessary.

"Big sport events are a chance to speak about human rights, about the role of

minorities, about diversity – both on the soccer field and elsewhere in society. I see it as an instrument for positive social change," says Fare's Eastern Europe development officer Pavel Klymenko.

Alongside environmental and sustainability experts, the activists have also created a map of sustainable consumption, after thoroughly vetting the daily practices of local cafes, restaurants, bars, souvenir and craft shops. The main criteria are environmental (waste management, water and energy efficiency, use of locally produced organic products), as well as social and ethical (employment terms and history, lack of discrimination,

organisation or support of cultural and educational events, fostering urban communities).

The campaign organisers expect these initiatives to outlive the sports event, helping the city to develop long-term sustainability.

Ethical tourism

"We expect quite a few participants to take part in the programme. The trend for sustainable and ethical tourism is very big in Europe; we also notice a growing interest from the service industry toward sustainability in Russia. The World Cup is an opportunity to make it more popular in cafes and restaurants," says Yulia Gracheva, director of Ecouinion, an environmental NGO that distributes ecological labels in Russia and also participates in the Cup for the People.

"I hope that by inviting cafes and bars to join the map we'll help develop initiatives and enable businesses to share their best green practices," she adds. "I very much hope that this map will remain after the World Cup and help the local food industry shift toward sustainability." <http://cupforpeople.spb.ru/>





**Healing steps:** Dance is used as a therapy for those with Parkinson's. •SPECIAL ARRANGEMENT

## Dancing Parkinson's disease away

ADRIANA BAZZI  
CORRIERE DELLA SERA, ITALY

A stage is set in one of the exhibition halls of the Museo Civico (Civic Museum) in Bassano del Grappa, near Vicenza, Italy, during a contemporary art exhibition titled *In-colore* by Italian artist Daniele Marcon. Performers are dancing on the stage. Most are people with Parkinson's disease, but there are also young - and very young - visitors, immigrants, and people from all walks of life dancing. They are invited to draw inspiration from paintings with geometrical patterns, squares and rectangles, mainly in dark colours, with sharp contrasts and well-defined lines. Their goal is to stimulate the audience's emotional response, precisely because strong colours can convey the flow of life's energy.

The performers are part of a contemporary dance initiative called 'Dance Well,' using dance as a therapy and integration technique for people with Parkinson's disease. They take one-hour dance lessons in the museum's exhibition halls each Monday and Friday.

### Imaginary paths

One Monday morning in April, during a lesson at the Marcon exhibition, the teacher-choreographer invites the participants - about 70 strong - to move along imaginary paths in space, following lines that the paintings on the walls seemed to suggest.

"It all started from the idea, later confirmed by scientific research, that contemporary dance can help people who suffer from Parkinson's disease to improve their ability to move, and therefore their quality of life," says Daniele Volpe, director of the Neuro-Rehabilitation Department at Villa Margherita in Arcugnano (Vicenza), one of six treatment centres at the Fresco Parkinson Institute in Italy.

Parkinson's is a degenerative disorder in the brain that causes sufferers to become increasingly hampered in their movement and balance. Experts say there were 6.9 million patients worldwide in 2015 and this number could double by 2040. The 'Dance Well' initiative was launched in 2013 in Bassano del Grappa by Roberto Casarotto, artistic director of the Operaestate Festival Veneto.

# From slums to affordable green homes

More than 80% of Nigerians live in substandard housing conditions, and many lack access to electricity

JUSTICE ILEVBARÉ  
THE NATION, NIGERIA

Rapid urbanisation has forced millions of Nigerians to live in slums and squatter settlements, as the country's population is growing faster than its ability to build new housing. Today, more than 80% of Nigerians live in substandard housing conditions, and many lack access to electricity.

However, for some, relief is on the way, thanks to a company called Comprehensive Design Services (CDS). It caters to people who would not otherwise have access to home ownership.

The company seeks to improve the living standard of Nigerians by providing affordable houses, reliable renewable energy, clean water and recycling strategies. CDS was launched by architect and social entrepreneur Chinwe Ohajuruka, who was the Sub-Saharan African Laureate of the Cartier Women's Initiative Awards in 2015. "Comprehensive Design Services aims to turn challenges in the Nigerian built environment into opportunities," she said.

In 2012, CDS was one of 17 winners (out of 495 entries) in the African Diaspora Marketplace (ADM II) Business Plan Competition in the United States.

Between 2013 and 2015, CDS built 12 affordable green housing units in two locations in Port Harcourt, four of which belong to the government. Ms. Ohajuruka said, "People's lives have been changed for the better because eight families [38 people] now live in decent homes with access to clean water, improved sanitation and renewable energy. More importantly, they now live with dignity."

The group is currently preparing to build its next multi-housing development comprising approximately



**A dignified life:** Reliable renewable energy and clean water are some aspects of the new houses. •SPECIAL ARRANGEMENT

40 small homes including studios, one-bedroom and two-bedrooms houses.

### High land costs

Last year, Nigeria's Minister of Power Works and Housing Babatunde Fashola said that factors working against home ownership in Nigeria include the high cost of land, lack of financing, high interest rates, high material and construction costs, and delays in obtaining titles to land and buildings.

Ms. Ohajuruka believes

that few housing developers are interested in affordable housing, as the profit margins are not large. "We have seen a need, and have developed ways to build decent housing quickly, affordably and sustainably," she said.

"We are trying to lead by example, to improve the lives of Nigerians with simple, sustainable housing. We are trying to tackle large, complex problems with simplified solutions, one home at a time. We design, engineer and build compact

homes that are self-cooling, solar-powered and water-sufficient. They combat climate change in a natural and groundbreaking way."

### Bio-Climatic Design

She explained that the technology is quite simple and is called Bio-Climatic Design. "It means designing and engineering the buildings to suit the climate by going back to first principles: keep out the sun, rain and insects; maximise natural ventilation and natural lighting; raise

the building off the ground for flood prevention and control, and capture rainwater where possible."

Water comes from underground boreholes, pumped using solar power. "We have the best climate in the world, but our buildings have become hot, stuffy and dark, requiring fans and air conditioners," said Ms. Ohajuruka. "We should work with the climate in the design of buildings and not against it."

She explained that CDS did not invent the technolo-

gy; the country's traditional architecture was better suited to the climate than many modern buildings. "We simply revived and modernised traditional architecture principles. We are not the only ones doing it in Nigeria. There are many climate-conscious architects who are doing similar and better work."

### Raising funds

Initially funded with a grant from USAID and Western Union Foundation, CDS is now working to raise funds from the private sector.

Ms. Ohajuruka said that CDS's constructions typically cost 25-50% less to build than similar homes in comparable regions, and consume 50-75% less energy. "That is why they are called affordable and green. The cost varies according to the quantity: the more we build, the cheaper they become because of economies of scale."

Nonetheless, she noted that it will take a major effort to curb the country's housing crisis.

"I am of the opinion that that we have to do much more if we hope to close the 17 million housing unit deficit. Sustainable thinking will have to be deployed on a massive scale," she said.

"Our greatest challenge to date has been that all we have done so far barely scratches the surface of what needs to be done. Scaling up our operations has not been easy. It has often been said that if you want to understand a problem, try to solve it. We now understand first hand why providing affordable housing is a global problem."

Over the long term, Ms. Ohajuruka's goal is to replicate the success of her model across other countries in Sub-Saharan Africa. She remains optimistic: "Our progress is slow but sure."

**TODAY, 50 MEDIA OUTLETS WORLDWIDE HIGHLIGHT LOCAL SOLUTIONS TO GLOBAL PROBLEMS.**

Let's discover and share them to shape a better future, together.



# Afghan women write for their rights

Women continue to face violence because of their writings or simply for falling in love with someone

RAMIN MAZHAR  
HASHT E SUBH, AFGHANISTAN

Rabia Balkhi was one of the first female Persian poets. She was killed by her brother, a king, hundreds of years ago for falling in love with a slave and daring to write poetry in a male-dominated culture. Much like her, women of modern-day Afghanistan still face violence because of their writing (namely journalists), while some are murdered because they fell in love.

In late 2016, the Afghanistan Independent Human Rights Commission (AIHRC) investigated 5,575 cases of violent crimes against women, noting that most cases go unreported due to traditional practices, stigmatisation and fear of the consequences for the victims. A UNAMA 2009 report states that women participating in public life face threats, harassment and attack. In extreme cases, some have been killed for holding jobs that are seen to disrespect traditional practices or are considered "un-Islamic."

Now, about 11 centuries after Balkhi's murder, her nation's daughters have launched a non-profit organisation to stand up for their rights through writing. It's called Free Women Writers.

One of the collective's members is Roya Saberzadeh, a painter and writer who lives in Mazar-e-Sharif. Unlike many of her countrywomen, she's unafraid of laughter, but her smile suddenly disappears when speaking about the status of



**Fighting with words:** Members of the Free Women Writers using public spaces to create awareness on gender equality among Afghan women. •SPECIAL ARRANGEMENT

women in Afghanistan. "The situation is bad," she says. "Violence increases every year." Yet she remains optimistic, because awareness is spreading among them. "The more women are aware of their rights, the less violence they will face," she believes, adding that there's still much work to be done.

## An anthology

Founded in 2013 by Afghan activists Noorjahan Akbar and Batul Moradi alongside a collective of writers, students and activists, the non-profit hopes to improve women's lives by simply telling their stories, in their own words. Their first book, *Daughters of Rabia*, an anthology of Afghan women's writings inspired by Balkhi's story, was published the same year.

Ms. Akbar, who was featured in the *Forbes* list of 100 Most Powerful Women of the World for her advocacy work, says she wanted to use this book to raise awareness of gender equality among Afghan women - who rarely have access to feminist literature - but also among men who wish to join their fight.

"In the streets of Kabul, many vendor children were selling extremist books written and published in Pakistan for 30 afghanis (\$0.42). Most of these books were about women and they spread misogyny under religious pretences. We wanted to provide an alternative," she says. Using Ms. Akbar's personal savings, the organisation managed to print 1,500 copies.

"All the copies were distributed within a month. Peo-

**The more women are aware of their rights, the less violence they will face**

ROYA SABERZADEH  
Member of Free Women Writers

ple from six provinces came to Kabul and took the books back to their provinces and schools," she recalls. In order to make the contents of the book accessible to everyone, they then decided to publish it on social media and on a website.

"We drew a lot of attention and many other women began to send in their writings," Ms. Akbar says. They have now published poems, memoirs and articles written by more than 140 women and some of their male counterparts, hundreds of which have been translated into En-

glish thanks to the work of 15 volunteers based in Kabul, Mazar-e-Sharif and Washington DC.

## Govt. funding

Over the last couple of decades, international NGOs and institutions have tried to foster women's rights in the country with initiatives often funded by the Afghan government, but the results of these efforts generally remain imperceptible. For Afghan women to find empowerment, Ms. Akbar believes the change should come from within. "It was very important for me to work independently and not to receive any financial assistance from governments or foreign embassies because I have always wanted us, the women of Afghanistan, to value our own priorities," she says, adding

that unless Afghan women start seeing themselves as independent humans with human rights, a shift in mentality and gender equality will be unlikely.

In September 2017, the collective published its second book, a short guide for women facing gender-based violence that provides practical tips for seeking legal aid, forming networks of support and protecting their mental health.

Titled *You Are Not Alone*, it is available in Persian, Pashtu and English. Profits from its sales allow the non-profit to finance higher education scholarships for young women in Afghanistan on creating awareness-rising literature about basic women's rights.

<http://www.freewomenwriters.org>



**Value from waste:** A designer makes furniture out of plastic packaging. •SPECIAL ARRANGEMENT

## Upcycling plastics into furniture

JAN VICTOR R. MATEO  
THE PHILIPPINE STAR, THE PHILIPPINES

Interior designer Wilhelmina Garcia has spent years attempting to find solutions to the worsening problem of plastic waste.

Recent studies reveal that approximately 8 million tonnes of plastic are dumped into the world's oceans every year, destroying marine biodiversity and causing significant environmental and economic damage across the globe.

According to a report by the non-profit organisation Ocean Conservancy, the Philippines is among the top contributors of plastics dumped into the world's oceans.

Ms. Garcia established JunkNot Eco Creatives, a social enterprise that produces furniture, bags and other accessories out of discarded plastic packaging. She tapped a local community on the volcanic island of Taal, a popular tourist spot south of Manila, to produce plastic rope, which serves as the centerpiece of her designs.

In addition to offering an alternative to plastic waste, the programme also provides a livelihood to as many as 60 locals, many of whom are housewives with no other income.

In just a few years, the community came up with a collection system that reduced plastic waste in waterways. Some locals in the programme were able to use the extra income to buy solar panels to light their homes, since there is no electricity on the island.

Ms. Garcia's designs have been exhibited and received recognition in the Philippines and abroad. She hopes they will enter the mainstream market, so that her company can grow and help more communities deal with the plastic problem.

<http://junknot.ph/>

## Yoga behind bars: a stress buster that works

250 inmates of a jail in Argentina take lessons offered since 2015

MICAELA URDINEZ  
LA NACION, ARGENTINA

**A**dho mukha. Chaturanga. Uttanasana. These words are becoming part of the prison lingo in Argentina, thanks to a group of young yoga instructors who created the "Moksha - yoga in jail" project.

On a sunny day, you can hear phrases such as "hands to the centre of the heart," "open up your chests," "now, cobra" and "exhale as you transition to crescent lunge" in the yard of the 48th Penitentiary Unit of the San Martín state prison in Buenos Aires.

Thirty barefoot inmates with their eyes shut try to imitate the poses that a woman instructor, Milagros Colombo, gently demonstrates. Behind them, there is a multi-coloured mural, painted by the inmates. Gratitude, willpower, patience, resilience, responsibility, freedom and peace are some of the words they have painted.

"During the two hours of class, you forget about your problems. We do plank, downward-facing dog, *chaturanga* and end up feeling relieved, relaxed. You feel free doing yoga; you leave the world for two hours. You're so focused that you don't want the class to end," says Lucas Roldán, a 33-year-old inmate who has been in prison for the last eight years.

Like him, 250 inmates participate in the yoga lessons that Moksha has organised since 2015 in two units of the San Martín prison, with the goal of transforming lives now and in the future. The idea was born out of the instructors' desire to share the benefits of yoga with the most vulnerable.

## 'A treasure'

"All of us instructors live and breathe yoga, and it's a treasure so valuable to us that we asked ourselves where we could share it," says 29-year-old Ms. Colombo. "The prison sector is neglected in ma-



**Inner calm:** Yoga inside the San Martín state prison.

•FERNANDO MASSOBRIO

ny aspects. So if these men can make the most out of their time here, they'll have more opportunities once they leave, and we will all have better neighbours."

This prison is a study in contrast. Locks, bars, spiked fences and uniformed guards characterise the enclosure, while the neatness of the place, with its large, well-kept gardens, creates an unexpected sense of peace. The inmates behind bars greet the Moksha volunteers as they walk through the halls, but they can't even shake hands.

Roldán knows that yoga changed his life. For this reason he anxiously awaits the weekly lesson each Thursday. Some mornings, he even meets with other inmates to practice the exercises.

"It's much more pleasant at that time of the day because you can hear the birds. People often think the worst of us for being arrested for theft or for killing a police officer. And maybe they think we should be left in this place to rot. I've achieved profound change here," he says.

Roldán is one of a group of inmates in maximum security who sometimes tag along with Moksha volunteers to teach yoga in medium-security wards.

The project has continued to grow as other wards ask for access to classes, including the women in Unit 47.

Currently, 20 instructors volunteer for the Moksha project, which aims to acquire non-profit organisation status. For now, it is wholly funded by private donations, with plans to grow.

## Growing food in the Sahara

Poor nourishment is prevalent in Africa, but hydroponics has come to the rescue

NADIR IDDIR  
EL WATAN, ALGERIA

**W**hen considering the need to develop agriculture in the world, to grow food for animals or people, the Sahara Desert is certainly not the first location that comes to mind. But it's precisely here that such an activity is perhaps the most necessary.

According to the Food and Agriculture Organization (FAO) of the United Nations, the prevalence of undernourishment in Africa rose from 20.8% in 2015 to 22.7% in 2016, affecting 224 million people on the continent.

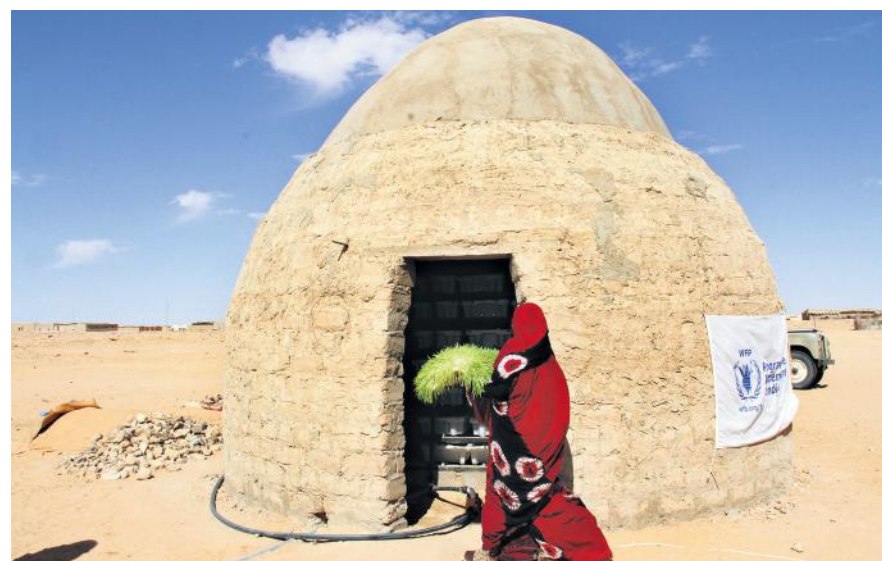
In the refugee camps of Western Sahara, which shelter more than 173,000 people who fled the disputed territory 35 years ago, the figures are more alarming: the malnutrition rate is as high as 40%, affecting mostly children, according to the Red Crescent.

The United Nations World Food Programme (WFP) has sought to tackle this issue by setting up fodder production units in the Sahrawi refugee camps in Tindouf, southwestern Algeria. These units rely on hydroponic agriculture, which means the plants are grown on a material that's naturally inert, such as sand.

The technique requires no fertilizer and enables the production of fresh fodder for animals in desert regions or areas where the soil quality is too low for agriculture. Only water is needed.

It was a Sahrawi engineer, Taleb Ibrahim, who came up with the idea, and it was quickly adopted by the U.N.'s food aid agency, which provided the necessary funds to launch the initiative.

Three hundred families living in the refugee camps are now beneficiaries of the project. Ibrahim



**Miracle in the desert:** Using water and soil-less medium to grow food for livestock is helping people living in the harsh landscape. •SPECIAL ARRANGEMENT

himself is a resident of the camps. He presented his idea, named "Growing in the desert," at the WFP Innovation Accelerator boot camp in Munich, Germany in 2017, where it was selected as the jury's first choice.

Using trays of local barley, the Sahrawi families who benefit from the programme grow plants that, one week later, can be used to feed their livestock. To protect them from the heat, the trays are kept in containers, in greenhouses or in mud-brick constructions. The positive effects on the livestock are unmistakable: an improvement in milk production in terms of both quantity and quality, and a drastically reduced mortality

rate of goat kids, according to a report by the United Nations in Algeria.

## Food security

"The WFP wants to improve the food security of households and ensure they have better access to meat and goat's milk. We also aim to give them opportunities for job creation," Romain Sirois, WFP Representative in Algeria, said.

The organisation, which has signed a contract with the Algerian company Agro Solution, ordered the installation of units consisting of stacks of trays (containerised units), in addition to units made on site, in order to produce fodder in large quantities. "The containerised unit can produce up to 100 kg of green fodder a day, which is enough to feed around 20 goats, while the locally-made unit produces 60 kg," Mr. Sirois explained.

Around 50 smaller units, each capable of producing up to 15 kg of fodder a day (sufficient for five goats), were distributed to families during the pilot phase of the programme, in partnership with the NGO Oxfam in 2017.

Agro Solution is currently producing another 170 units, which should be operational by September.

"By the end of this expansion phase, we should be reaching 220 families. But with a population of 173,600 refugees in five camps, there's potential to further develop the project," Mr. Sirois said.

## German gesture

Among the donations the WFP has received to fund the project are those made by the German government, via the Munich Innovation Center, and the Canadian Embassy in Algiers.

A large contribution from the United States will enable the next phase of the programme to be launched.

"We have managed to reduce costs, all the while maintaining a good level of production. We're currently in discussion with Agro Solution about producing [family-sized] units that would be even cheaper, at \$150 per unit," Mr. Sirois said.

The project, which has the support of the Sahrawi people, could expand to other Sahel countries.



**Shared spaces:** Members grow vegetables for home use and for the market. •SPECIAL ARRANGEMENT

## Women rise with organic gardening

HANNIFAH SAWADOGO  
L'ECONOMISTE DU FASO, BURKINA FASO

**I**n Africa, it is often said that poverty has a woman's face. Rural women face discrimination just like those in other socio-economic sectors, particularly where access to land is concerned. But in Burkina Faso, the non-profit association La Saisonnière (French for "The Seasonal One") has developed a technique to help women to climb out of poverty while growing organic food.

"When I started coming to La Saisonnière in 2006, I had no bicycle, no idea how to take care of a garden and no income generating activity," says La Saisonnière's team leader and producer Aminata Sinaré. "Today, I know how to garden and I own a motorcycle."

Like her, many women have seen their living conditions improve, thanks to the non-profit. Initially created as an informal group in 2003, La Saisonnière became an association in 2006, after it planted a garden. Since 2007, it has worked to help disadvantaged women in the 10th district of Burkina Faso's capital, Ouagadougou, on land granted by the city council.

La Saisonnière has a market garden with a wide array of African agricultural products, but its activities also include sewing, weaving and even carpentry. Convinced that the empowerment of women can be only achieved through education, the association teaches the beneficiaries reading and mathematics. Around 30 women are learning gardening, while around 80 do weaving and sewing.

Since its creation, the association has promoted organic farming. Its efforts paid off in October 2017, when it received the organic certification label. Chemicals are replaced by a mix of rice husks, peanut shells and compost.

In 2015, La Saisonnière also started focusing on soil-less culture. The Italian NGO Acra introduced the micro-gardening method. This technique makes it possible to keep vegetables clean throughout the growing process and use drip irrigation.

According to Sophie Sedgho, president of the association and a retired professor of natural sciences, women are entitled to seven boards with a cultivable area of six square metres. Some produce is kept for the family.





**Projects that pay:** The initiative has produced successful entrepreneurs. • MISONGA FIHANKA

## Madagascar's 'youth first' creates leaders

LOVA RABARY-RAKOTONDRAVONY  
L'EXPRESS, MADAGASCAR

For Olivia Malala Rakotondrasoa, creating and managing her own company had been a dream. But she had no clue on which industry to invest in before signing up to the Young Women Leadership Program (YWLP), created by the Madagascar NGO Youth First.

YWLP invites women aged 15-24 to work in groups of four to develop and present a project. The projects are assessed at the end of the programme, and the top five are awarded 1.6 million Madagascar ariary (\$500). Rakotondrasoa, a communications major, suggested that her project team work on the Moringa tree, which grows all over Antsirana - the region of Madagascar where she grew up. "We use its leaves all the time to prepare *romazava* (broth), but they hold significant nutritional and medicinal value," she explains.

It took the team four training sessions spread over several weeks - to finish the "Moringala" project. "We decided to use the product for cosmetics," Rakotondrasoa says. The women gained knowledge and took inspiration from meetings with mentors recruited by Youth First, and from other entrepreneurs.

But the jury did not select Moringala. To Rakotondrasoa's disappointment, her teammates also gave up on the project. For Rakotondrasoa, the experience bolstered her determination to become an entrepreneur. She continued the Moringala project alone. Thanks to the training programme, she developed self-confidence, leadership and advocacy skills, as well as the capacity to gather resources - and she was off to a flying start.

Her products - soap, massage oil and tea - all made of moringa leaves, are available in several hotels and beauty salons in her native Antsirana. Like Moringala, many projects undertaken by young women have succeeded.



**Against the tide:** Improving quality helped raise prices. • SHIGETAKA KODAMA

## Japanese tale: work less, yet prosper

KAZUYO NAKAMURA  
ASAHI SHIMBUN, JAPAN

The economic development of post-war Japan has been supported by people working long hours, submitting to job relocations and rarely refusing to travel.

It is difficult to combine such a work culture with family life, namely providing child-rearing and nursing care.

*Karoshi* (death from overwork) and companies that overwork their employees have become real problems. And yet, according to a 2017 OECD report, Japan's productivity ranks the lowest among G7 nations, well below the average.

With a working population decreasing due to a decline in births and an increase in the number of elderly, there is a widespread labour shortage that has affected even the service industry. Many enterprises have been forced to shorten business hours.

One might think that working less leads to lower profits. But in Hadano, Kanagawa Prefecture, one *ryokan* (a traditional Japanese inn) managed to double its profits despite closing its doors three days a week. The average annual salary of its staff grew by 40%.

A few simple yet effective changes made all the difference. The Jinya inn's watershed moment came after the sudden death of its owner in 2009. His eldest son, Tomio Miyazaki, now 40, left his job as an engineer to take over the business. Miyazaki's wife, Tomoko, also 40, became its manager just two months after giving birth.

The couple found that the inn had debts of one billion Japanese yen (\$9.1 million) due to mismanagement. After an analysis, they decided to tap information technology to automate tasks, and improve meal and service quality.

They gradually raised room rates, and created an extra revenue stream by selling the management system.

In 2014, the couple made the radical move to close the inn every Tuesday and Wednesday. Customers expressed disbelief that a *ryokan* would close on certain days. But they went further in 2016, deciding to close after lunch on Mondays and to stop taking overnight guests on Mondays. Annual sales for the inn and its group rose from 290 million yen in 2010 to 726 million yen today.

# Painting for people who don't see colour

Portuguese designer's alphabet to describe colour is helping the colour-blind

KARLA PEQUENINO  
PUBLICO, PORTUGAL

For more than 19 years, Tiago Santos did not understand colours. As a child, growing up in Santa Maria da Feira, a city in Portugal, he had trouble choosing the right crayons. It seemed so easy for others, but when he tried colouring brown trees or blue skies, his classmates laughed at the crayons he chose.

"I thought I did not 'get' colours, just like some people struggle with mathematics," Santos, now 34, said.

Today, Santos knows he suffers from daltonism, which is a genetic form of colour blindness. While most people can spot around 30,000 shades, people with daltonism can identify up to 800. But when Santos was young, people did not talk about colour blindness in Portugal. He often used to leave his crayons at home, so he could ask his friends to pass him the right ones and avoid being bullied.

Choosing ripe fruit, matching clothes, and understanding the subway lines were other challenges. Santos finally learned why, when he arrived at university and had to ask for help drawing maps during history exams. Being diagnosed did not make his life any easier. "I spent another 10 years



**Understanding shades:** A demonstration of the colour code system created by Miguel Neiva. • KARLA DANIELLA PEQUENINO

**In 2014, a group of Portuguese programmers even used it to create an iPhone app**

pretending there was nothing wrong," Santos said, adding that he felt ashamed of having a condition that few people understood. "ColorADD changed that."

In 2008, a Portuguese designer named Miguel Neiva presented a new system to identify different colours

through shapes as part of his Masters dissertation at the University of Minho, in Portugal.

With ColorADD, each of the three primary colours (red, yellow and blue) is linked to a basic geometric shape (triangle, slash and inverted triangle). By combining different symbols, it is possible to recognize different colours; orange is represented by a triangle with a slash (the combination of red and yellow).

Neiva, 49, said it took him years to perfect the system. He has never struggled with identifying colours, but is familiar with Tiago's childhood story. "I had a kid like that in my classroom and I was part of the group that used to laugh at him. Children have a cruel innocence about things they do not understand," Neiva said.

"At the time, only referees who were criticised for giving red cards to soccer players were described as

colour blind. I developed a phobia of becoming like that."

As a designer, Neiva needs to be able to distinguish different shades. Colour blindness affects about one in every 12 men and one in 200 women around the world. "It seems little, but in a classroom with 14 boys, up to two of them can have this problem," explained Neiva.

He spent eight years interviewing colour-blind people all over the world to create

what he calls his "special alphabet."

**On garment labels**

Today, ColorADD is included on the garment labels of several Portuguese brands, on coloured pencils for children, on card games and transport systems.

In 2014, a group of Portuguese programmers even used it to create an iPhone app to label colours automatically through a smartphone camera. It was praised by the United Nations for its global impact.

"More than a code, the projects that come from ColorADD made it possible for me to stop hiding my condition. They give me independence in a society that lives by colours," said Santos, who uses the smartphone app daily.

Companies and institutions that want to use ColorADD in their product pay a licence fee, but there is a pro-bono version for schools and universities. The money goes to ColorADD Social, a project that takes Neiva's new alphabet to schools and libraries all around the world. But the designer believes there is still a lot of work to be done. Many subway systems do not use ColorADD, the new iOS 11.9 updates are interfering with the iPhone app, and there is no Android version.

## Saved by the godparents

When rural residents moved out, olives in Spain faced a threat. But not for long

PATRICIA PEIRÓ,  
EL PAÍS, SPAIN

There are few things worse than being neglected into oblivion. The olive trees of Oliete, a village in Teruel, Spain, were disappearing for this very reason. Oliete's 300 residents live surrounded by the trees, and most families own land with at least a few. But Oliete is located in one of the most deserted areas of Europe and, due to a rural exodus, its 100,000 olive trees seemed doomed. Then, four years ago, hundreds of "godparents" came to their rescue.

Alberto Alfonso, 41, is one of Oliete's many children who emigrated to the big city (in his case, Barcelona), looking for work. Each year, he would go back to his family's farm for the olive harvest. In 2013, he took notice of the empty and neglected neighbouring fields; there was nobody left to work them, and 70% of the trees had been abandoned. "He said to me, 'The village is dying, we have to do something,'" said Sira Plana, 40. Her grandfather was the village veterinarian in the 1950s, and her parents had emigrated to Madrid.

**100-year-old ecosystem**

Alfonso and Plana decided to create Apadrina un Olivo (Adopt an Olive Tree), a non-profit hoping to create jobs in the village, save its 100-year-old ecosys-



**A green future:** One of the olives that was adopted in Oliete, Spain. • EL PAÍS

**Adopt an Olive Tree found takers as far away as Germany, and raised donations**

tem and bring life back to a dying region. They had the will but lacked the money. What's more, most of the trees they were trying to rescue did not belong to them; many were inherited by people who had left town and had neither the time nor the will to return. "We worked it out with a legal entity called land stewardship. It's an agreement between two parties in which one promises to take care of a natural area that belongs to the other," Plana said.

Two young computer engineers who Alfonso had

met at a party in London in 2013 tackled the money issue. The internet was the only real way to spread the word.

The engineers, Pablo García and Adrián Martín - and his brother José Alfredo - took pictures of all the trees, then identified each one with a code and offered the world the possibility to adopt one for €50 a year. In return, the donors would receive two litres of oil from each harvest.

The engineers created a user-friendly website, which, combined with an excellent social media strategy and occasional media appearances, opened Oliete to the world. They obtained 500 donations that first year, and ended 2017 with

2,450 donations, many from France and Germany.

Nicole Escolier, a 68-year-old French woman, is a godmother to some of the trees. "I'm very Mediterranean, olives remind me of my French and Algerian roots, so when my husband came across this project, he adopted a tree for me. Now we have four," she said.

Since its foundation, the non-profit has saved more than 7,000 olives and created 14 jobs, two of which brought in families from other Spanish regions, adding eight children to the village. Thanks to them, the local school remained open. Oliete has acquired an olive oil press too.

<https://apadrinaunolivo.org>

## Off course: why disability apps fail

They don't do much for wheelchair users

LOUISE BRUTON  
THE IRISH TIMES, IRELAND

"An access app must be easy to use and it should provide relevant information," says Matt McCann, chief executive and founder of Access Earth, an Irish-made access app. "The app needs to keep pace with innovation. Technology has opened so many doors by improving accessibility and we want to be at the forefront of that."

For wheelchair users and others living with a disability, map-based apps for access - to restaurants, bathrooms, parking and other public buildings and services - seem like an obvious solution. So why does it feel like existing apps are lagging behind if you are mildly tech-savvy and have local knowledge on your side?

I'm in a wheelchair for life but for one day only, I am acting as a tourist in my own town - to see if technology and crowd-sourced information can make my day easier.

My plan is to get from my front door in to Dublin's city centre, stopping for coffee somewhere along the way, and using four online services as my guides: the Danish-made WheelMate app; the German-made WheelMap; the Access Earth app; and the Irish website Mobility Mojo. All of them are map-based and review-generated. When I log into Access Earth, it tells me that

my nearest location is a convenience store that has been closed for the last 10 years, immediately making me doubt its reliability. I wander through the inner Dublin suburbs of Rathmines and Portobello, and the majority of shops and restaurants are mapped, but none are reviewed. I move on to WheelMap. Here, everything is marked, from sports grounds to supermarkets, bars to barbers and pharmacies to fast food joints but when I click in, there are no reviews.

**A test of four services shows that they don't have the best answers**

I test out WheelMate, an app that lets wheelchair users worldwide locate accessible toilets and parking, but they include the occasional business reviewed by users. "We're sorry, it looks like we haven't collected any locations in this area."

In all of County Dublin, an area of over 900 sq. km and 1.3 million people, WheelMate has just 16 marked disabled parking bays, accessible toilets and reviewed businesses. With Mobility Mojo, I search for parking near Trinity College Dublin and the first three options are in Malahide, a 33-minute drive away.

Our phones can answer almost everything, but with access apps, the answers can't come from users alone.

## Discarded books carry the strength of words

As the driver of a garbage truck in Bogota, José Alberto Gutierrez recovered books from trash and helped thousands



**Retrieved wisdom:** José Alberto Gutiérrez peruses a volume from his street-collected books. • CESAR MELGAREJO

JULIÁN VIVAS BANGUERA  
EL TIEMPO, COLOMBIA

"The day I fill Colombia with books, I'll feel like Odysseus when he rescued Penelope and saved Ithaca from the war," José Alberto Gutierrez said with an air of stoicism. The 55-year-old man has dedicated the last two decades of his life to filling over 450 libraries, schools and reading centres in Colombia with books recovered from garbage.

By rescuing books from the trash, the "lord of the books" (as locals call Gutierrez in Bogotá) has helped

more than 22,000 Colombians in vulnerable, mainly rural areas.

To enter Gutierrez's house is to go through a labyrinth of thousands of stacked books, covering about 15 square metres. Among them are universal classics such as *Gone with the Wind* by Margaret Mitchell, an English edition of *The Little Prince* by Antoine de Saint-Exupéry and a collection of Spanish author Miguel de Cervantes Saavedra's works. The books started showing up here at the end of 1997, when Gutierrez began his job as a garbage

**The 'lord of the books' has rescued and distributed over 50,000 titles**

truck driver in Bogotá. While working his nightly route, he was struck by the potential of discarded books. With help from his wife, Gutierrez decided to build a community library in his own home.

Ten years later it became the *Fundación La Fuerza de las Palabras* (Strength of Words Foundation). Since then, the lord of the books has rescued and distributed more than 50,000 books to

hundreds of community centres and rural schools.

La Fuerza de las Palabras' process is simple: It receives a call from someone, in any area of the country, who wishes to donate or receive books.

Then, Gutierrez and his wife select the texts. Depending on the distance, the organisation will either deliver the books in its own vehicle, or try to finance the delivery. Gutierrez has delivered Nobel Prize winning authors' works, such as those of Gabriel García Márquez and Mario Vargas Llosa.