

"The sky is adorned with the alluring moon
If we cannot survive, who will appreciate
her heavenly beauty?"

RESEARCHING FOR JUSTICE AND RIGHTS

MD SHAHNAWAZ KHAN CHANDAN

PHOTO: ORCHID CHANGMA

It is the folk song of an indigenous community called Khadia mostly found in Sri Mongol and Moulvibazaar. Most of these people are labourers of the tea gardens. When Pavel Partha first listened to this song, he was only a school boy visiting a Khadia village near his maternal uncle's home in Sri Mongol. At that time these people were on strike for a 10 paisa wage increment.

However, the song and struggle of this marginalised community made a deep impression on Partha's mind. Later that incident inspired him to dedicate his life to study the culture and lifestyle of Bangladesh's indigenous and marginalised communities. Pavel Partha has been researching on Bangladesh's indigenous communities for more than two decades.

He has published numerous books, journals and articles on different indigenous and marginalised communities living in different corners of Bangladesh. As a student of Botany from Jahangirnagar University, Partha's research titled "Ethno-botanical Investigation of the Ethnic Communities Living in Greater Dhaka and Sylhet Division" is till now the most extensive academic ethno-botanical research work in Bangladesh. For this research, he spent months and years with 14 indigenous communities living in different corners of Dhaka and Sylhet division. He is an uncompromising

activist to protect the rights of these marginalised and indigenous peoples of our country.

During his university life he got involved with the self-determination movement of the indigenous communities living in Chittagong Hill Tracts. He was also actively involved with the protest against government's Madhupur Eco Park Project which was implemented by evacuating thousands of indigenous Mandi and Koch people and the project also introduced invasive foreign trees like acacia and eucalyptus by destroying the indigenous Shal trees in Modhupur forest.

"We usually talk about the land rights of the indigenous communities. However, these people own a rich cultural identity; they have a unique and developed scientific knowledge on nature and they have the right to preserve and practice it. Very few of



Pavel Partha

us recognise this right," says Partha.

Thanks to Partha's continuous activism, our government has recognised the term 'sacred plant' and 'sacred forest' of the indigenous communities and ensured its conservation in the Wildlife Conservation and Security Act, 2012. In the same act, the government mentioned the species like acacia and eucalyptus as invasive species for which Partha has written numerous articles.

Partha is also the first person to research on unfamiliar indigenous communities such as Kora communities of Dinajpur, Laleng community of Sylhet, Koda community of Rajshahi and Dalu community of Sherpur district. "I have spent days and months with these people. They have unique and highly developed knowledge on natural resources. Nobody has shared their stories yet with the rest of

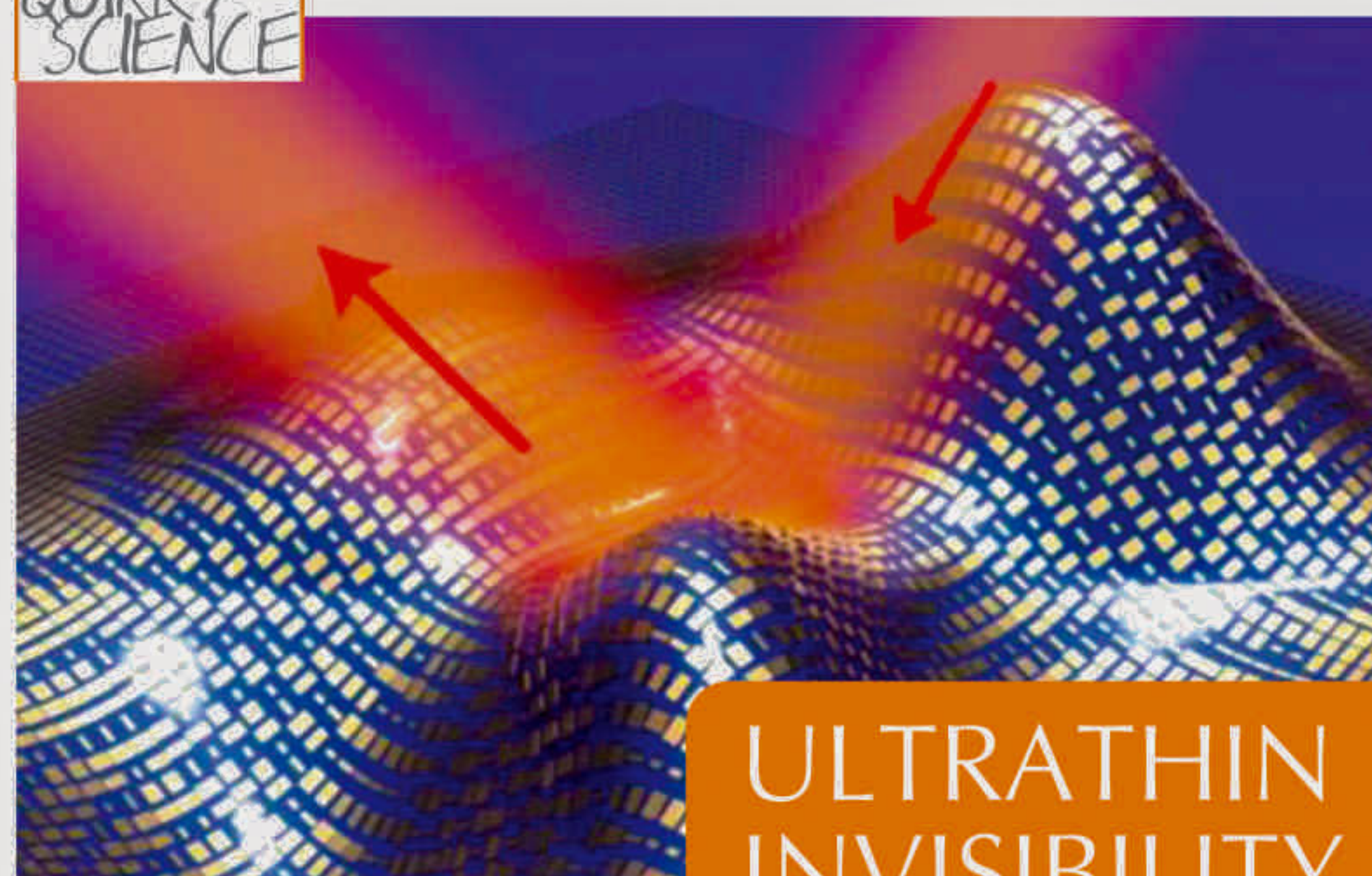
the world. So, we cannot even imagine how marginalised and poor these people are," says Partha.

Currently he is writing books on Koda indigenous community and nomadic Bede community. He is also writing a book on the villages and communities that have been evicted by the Kaptai Hydroelectric Project and preparing maps of those destroyed villages.

Partha's dream is to create an academic platform through which the knowledge of our indigenous communities will be practiced and evaluated. "I want to make our government realise that all the subaltern people of our country have developed an indispensable relation with nature for their survival. If they realise it and respect this relation, none of our development project will turn into disaster for these people," says Partha. ■

STAR PEOPLE

QUIRKY SCIENCE



ULTRATHIN INVISIBILITY CLOAK

Invisibility cloaks are a staple of science fiction and fantasy, from Star Trek to Harry Potter, but don't exist in real life, or do they? Scientists at the US Department of Energy (DOE)'s Lawrence Berkeley National Laboratory (Berkeley Lab) and the University of California (UC) Berkeley have devised an ultra-thin invisibility "skin" cloak that can conform to the shape of an object and conceal it from detection with visible light. Although this cloak is only microscopic in size, the principles behind the technology should enable it to be scaled-up to conceal macroscopic items as well.

Working with brick-like blocks of gold nano antennas, the Berkeley researchers fashioned a "skin cloak" barely 80 nano meters in thickness, that was wrapped around a three-dimensional object about the size of a few biological cells and arbitrarily

shaped with multiple bumps and dents. The surface of the skin cloak was meta-engineered to reroute reflected light waves so that the object was rendered invisible to optical detection when the cloak is activated.

"This is the first time a 3D object of arbitrary shape has been cloaked from visible light," said Xiang Zhang, director of Berkeley Lab's Materials Sciences Division and a world authority on met materials – artificial nanostructures engineered with electromagnetic properties not found in nature. "Our ultra-thin cloak now looks like a coat. It is easy to design and implement, and is potentially scalable for hiding macroscopic objects."

THE CHIEF GEEK

NAZIBA BASHER



Sidrat Talukder

PHOTO: COURTESY

Sidrat Talukder could hardly be called an ordinary boy during his childhood, and the same applies still. Always an avid gamer, his boyhood days were filled with technology, computers and video games. Co-founder and Managing Director of StrateGeek Digital, Sidrat, fondly known as Chief Geek, he has always been the kind of person you would expect big things from.

"I moved to Saudi Arabia with my family when I was just three years old, and I have attended multiple schools," says Sidrat. Having attended a Pakistani school, a Bengali medium school and English medium school, Sidrat believes the diversity helped him greatly to understand different perspectives.

He finished his middle and high school in Bangladesh International School, English Section, Riyadh, Saudi Arabia. "During my high school years, I was thrust into many leadership positions- prefect, head boy, vice captain of the cricket team- which I believe ultimately shaped me for everything I was able to achieve later on in life," he says.

After coming back to Dhaka, Sidrat enrolled himself in the Institute of Business Administration, Dhaka University. "The years in IBA really set me on-course. I met my founding partners, and every kind of inspiration I needed." Having prepared for various business and marketing competitions, preparing for presentations and even just simple class work had their effects of Sidrat, as they ignited a passionate interest in Marketing. He found 7 others who share the same kind of passion, and on the 2nd year of university, collaborated with them to start Maverick Studios. "We started early on so that even if it doesn't work out, we can still look for other options," says Sidrat. Since 2010, Maverick Studios has been up and running successfully. They have created a wide range of corporate videos, promotional videos, commercials, animations, charity videos, training videos and more for some of the

leading clients around the globe, like Unilever, HSBC, Nestle, Citi Bank, Gramophone, and more. Maverick then split into three different parts- Maverick Studios itself looks after audiovisuals, while Ice9 Interactive

researches and develops cutting edge marketing solutions that involve mobile apps, augmented reality, gesture tracking etc. StrateGeek helps clients navigate Social and Digital media marketing, by managing online strategy, content creation, advertising and customer service. Together, the three companies are able to offer best-in-class solutions across multiple digital marketing disciplines-- all under one roof. The reason Maverick, Ice9 and StrateGeek stand out from the rest is solely because of the thought-process. "I always like to think outside the box. And coincidentally, so do all the other founders. We only challenge ourselves to think above and beyond because we know we can. We are always pushing ourselves to do more than possible."

One of the works that Sidrat was personally proud of was a motivational video for the National Cricket Team, during the 2011 ICC World Cup. "There were no specific clients for the video. We were our own clients. But we got a phenomenal response from the general public. What surprised us most was when Ian Pont, the then bowling coach of the national team, noticed the video and not only appreciated our work, but showed the video to the entire team for inspiration," says Sidrat. He adds, "In the press conference after a certain victory, the captain had even mentioned how the video had motivated them to play as well as they did."

Recently, Sidrat Talukder has been cited by CMO Asia as one of 'Asia's Most Influential Digital Media Professionals'. "It was never about the recognition and accolades for me. The most important thing for me is to do better than I did yesterday. It is this desire to think big and do big that has led me this far."

To young aspiring entrepreneurs, Sidrat says to "always give a 100%, never stop believing in yourself despite the challenges, and find ideal partners to help you move further. And remember, success is mostly effort and self-belief." ■

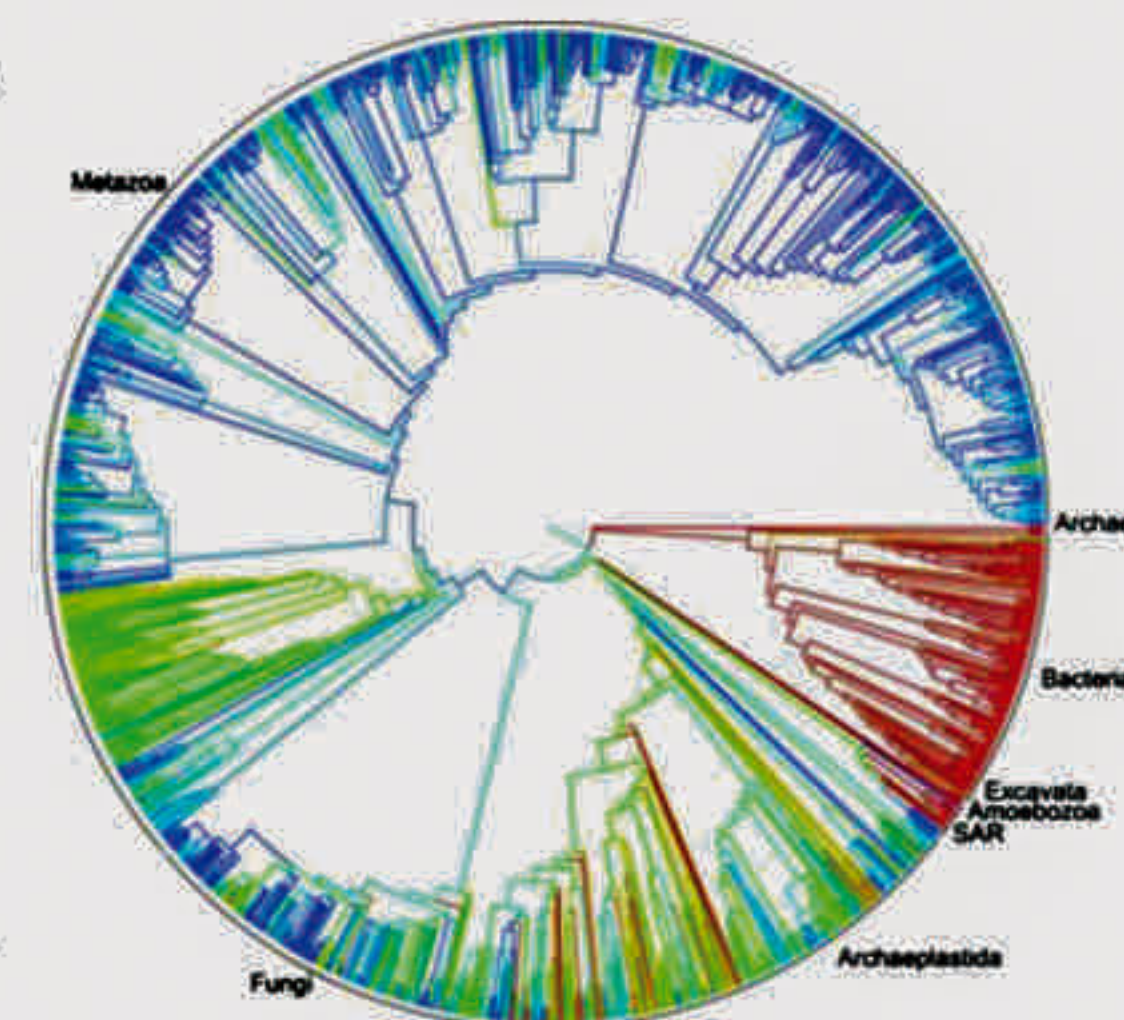
A first draft of the "tree of life" for the roughly 2.3 million named species of animals, plants, fungi and microbes – from platypuses to puffballs – has been released.

A collaborative effort among eleven institutions, the tree depicts the relationships among living things as they diverged from one another over time, tracing back to the beginning of life on Earth more than 3.5 billion years ago.

Tens of thousands of smaller trees have been published over the years for select branches of the tree of life – some containing upwards of 100,000 species – but this is the first time those results have been combined into a single tree that encompasses all of life. The end result is a digital resource that available free online for anyone to use or edit much like a "Wikipedia" for evolutionary trees.

"This is the first real attempt to connect the dots and put it all together," said principal investigator Karen Cranston of Duke University. "Think of it as Version 1.0."

THE TREE OF LIFE



The current version of the tree – along with the underlying data and source code – is available to browse and download at <https://tree.opentreeoflife.org>. It is also described in an article appearing Sept. 18 in the Proceedings of the National Academy of Sciences.

Source: Sciencedaily.com

FIVE THINGS

FIVE SIMPLE WAYS OF SAVING MONEY

M H HAIDER

PHOTO: KAZI TAHSIN AGAZ APURBO

There are two kinds of people in this world: those who are good money managers and those, well, who are not. Unfortunately, the world is filled with people belonging to the second category. Managing and saving up money is no rocket science. Here're 5 easy tricks that may make you rich!



- Keep track of money:** Forget about saving for a while. Make recording your incomes and expenditures the primary objective. Do you wonder at the end of every month where all your money went? If you maintain a list of your transactions - big, small, tiny - you would not have this problem. There are user-friendly money management applications for free. You can set budgets, record cash inflows and outflows, identify areas where you spend the most, etc. Let your smart phone be your money manager.
- No amount is insignificant:** Keeping track of money paves the way to saving up. Start small. Don't be discouraged if your income is relatively low. Imagine a university student with an income of Tk8000 from a part-time job. If he saves up a mere Tk500 per month, he would have approximately Tk24000 in his bank account when he graduates after four years. Even this accumulated amount is small for an effort put out for four years. But think of the contrary scenario: the student graduates with absolutely no savings. If you do not start saving - no matter how minor an amount you can afford to put aside - you will regret it five or ten years from now.
- Find out what motivates you:** Why do you want to save money? It might sound snobbish and uninspiring, but having money can take you a long way in fulfilling many dreams, from exotic vacations to a good car to a nice house. And of course, let's not forget that you need to save up for a rainy day. Find out what brings out the saver in you.
- Force yourself to save:** If the carrot-approach doesn't work for you, there is the stick-approach. Open up a savings account or sign in for an insurance service. Allow your company to cut a portion of your salary for provident fund. This way, you are bound to save up.
- Budget for overindulgence:** We won't ask you to give up impulse buying, stress eating or overspending on a hobby: we have a feeling you won't pay heed to it and continue to do what you do! None of us are super-humans and we do succumb to guilty pleasures from time to time. Make a budget even for overindulgence. Allocate a sum for 'stupid' (unnecessary/avoidable) expenditure per month; just make it your goal not to exceed that amount. As long as you have control over money, you will be eventually able to save.

And here's an extra tip: don't be lazy and start being proactive! Make a start. Don't think of excuses. The more time you delay the more money it will cost you - money which could sit comfortably in your bank account if only tried. The real problem is that whether you would actually like to take up the challenge or not. Will you? ■