INFORMission Weekly

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Welcome to the Twentieth Issue of INFORMission Weekly

The objective of this newsletter is to try and capture informative, interesting and relevant happenings from around our world and country across the week, without a focus on crime and sensationalism. The concept is that anyone can tune in on a weekly basis into a couple of pages and stay informed and updated. INFORMission Weekly will evolve in design, format medium and content as we go along. If you have any comments or feedback, do write into informission.weekly@gmail.com.

OF SPECIAL INTEREST THIS WEEK

842 Million: Why Are They Still Hungry?



The Economist

Qualifying for the 2014 World Cup



Why the World's **Cheapest Car Failed**



AP/Bloginnovation.wordpress.com/

New Kids On the Block: A Look Into Xiaomi & Micromax



Looking Into the Heart Of a **Black Hole**



NASA/JPL/Caltech

Digitimes.com

Is It a Bird, Is It a Plane.....No, It's a

NOBEL PRIZE

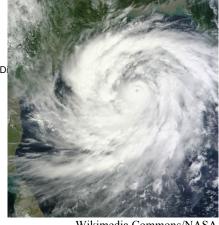
Scientific American

The SHUT DOWN -Postponed till Jan



Marcel van Leewen/aviationnews.eu

fonarena com Super Cyclone Phailin Saved from the Gates of Hell



Wikimedia Commons/NASA

Tunisia: Not Another Egypt



Evevine/The Economist

842 Million: Why Are They Still Hungry

You may or may not have read the about the Global Hunger Index that was just published on

World Food Day which was this week on 16th Oc-

tober (the day marks the founding of the UN's FAO – Food and Agriculture Organisation). But you should know that it is ironic and **a** huge tragedy that there are still 842 million hungry people, people who do not get enough to eat on our planet, in spite of the fact that as a species we produce more than enough food to feed



son per day – most people do not need to eat more than 500 grams to sustain their lifestyle and nutrition needs. There is twice as much food being produced than is required and we still cannot provide enough food to 842 million people. After Africa which has the highest number of hungry people at 226 million is India with 215 million hun-

gry Indians. The most tragic thing is that of all the food produced in the world ONE THIRD is wasted, it is allowed to rot or thrown away. So we waste 0.8 billion tonnes each year which would be more than enough to feed all the hungry. So, so tragic.

China's Answer to the iPhone A Look Into Xiaomi

them. The World Food Program which is charged

with eliminating world hunger since its inception in

1961 while feeding 90 million people directly each

grain production in 2013 is estimated at 2.5 billion

year has failed to end world hunger. World food

So we've all heard of them – all over the news – Xiaomi and Apple, China, Xiaomi – Xiaomi this, Xiaomi that - so who are these guys, and what do they have to do with Apple. The answer is simple - in the last 4 months in China - a baby, 3yr old company sold more phones than Apple – and took over the Chinese smartphone market. A market which Apple and its iPhone ruled, one of their big markets, and this new company beat them by a 100,000 phones. An ex-Google executive who joined Xiaomi recently this year describes how the Chinese move "at breakneck speed" - she's never seen such "fierce competition" and "impassioned desire". Yes, they want to go global too. With superfast processers and iPhone-level phones at much lower prices - they've taken the Chinese market by storm – and they're leading a revolution in



the Chinese smartphone sector. Growth is phenomenal, and so are unconventional strategies: putting Xiaomi services in non Xiaomi devices. As they go global – Chinese smartphones will soon filter into our lives – and maybe replace the iPhone; not as china-makes (knockoffs), but

genuinely better phones 'Made in China'.

India's Smartest Smartphones: A Look Into Micromax

A friend of mine was recently asked by his sister to find her a phone, which **had all the features and**



qualities of a Samsung Galaxy Grand, but at half the price. And he found an arguably better phone (she seems to think so) at a price less than half – the Micromax A11 Canvas. This is what the genius pioneers at Indian smartphone maker Micromax have done – they've made cheap, cool smartphones with

tons of features – and catapulted themselves to the top of the Indian smartphone market, along with the Indian manufacturer Karbonn, overtaken Samsung and Apple – an unbelievable achievement in terms of sales, and also in terms of the Indian psyche. Homegrown electronics are always looked down upon, always – and yet these two, Micromax mainly, have attracted the youth and achieved the cool status – with clever, clever marketing. Micromax has made itself a smart young self confident brand – with a uniquely catchy ad for each product, and a brand ambassador like Hugh Jackman! They've fitted themselves into the 'cool cheap feature filled phones for the youth' niche – and had a major impact as a result.

there is on average 350 kg of foodgrain per person available to us - that is about 1 kg per person per day – most people

tonnes, the highest it has ever been. This means

A Look Into the Heart of a Black Hole

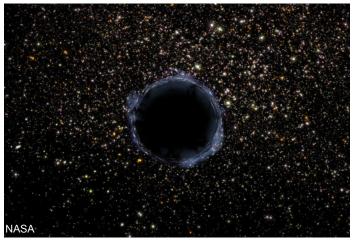
Modern day astronomy revolves around the **basic** concept of capturing light from far away objects in space and using this light to tell us where the object is and what it is. This works for everything in space – be it a star, a galaxy, or even a planet (we use deviations in light from a star for that last one) – except the two things that are most mysterious and most important. Black holes cannot be

seen with light – because they are BLACK HOLES – objects that have so powerful a gravitational pull that light cannot escape from their grasp – they **absorb all the light and therefore cannot be seen**. So telescopes can't detect them – the only way we know they're there is because it's **an unusually dark spot surrounded by bright stuff** – not a very soundproof technique. Especially because we may know where they are – but **we can't study them or their insides – no light comes out of there**. But scientists are

now working on a way – that involves using the only thing that black holes affect/are affected by to detect them and study them - GRAVITY. To be more specific, gravitational waves (ripples in space-time) - emitted by major objects and events, including objects with high gravitational pull like black holes. These disturbances, unlike light, are not absorbed or affected by objects in their path – and can come straight from the heart of the black hole to our detectors on Earth. It would be the suc**cessor to the telescope** – except for one little hitch - we don't know how to detect them yet. The LI-GO (Laser Interferometer Gravitational-Wave Observatory) Project was inaugurated in 1992, and started operating in 2002. It used two laser waves fired at the same time and received back at the same time - any slight time lag or disturbance indicates a gravitational wave. In 2010, it was temporarily shut down so that it can be upgraded in all 8 years, it hadn't detected a single gravita-

The 2014 FIFA World Cup Qualifiers are ending. There will be 32 teams in next year's World Cup. 21 teams have qualified as of 15th October 2013. These are Brazil, Japan, Australia, Iran, South Korea, Netherlands, Italy, Costa Rica, The United States of America, Argentina, Belgium, Switzerland, Germany, Colombia, Russia, Bosnia and Herzegovina, England, Spain, Chile, Ecuador and Honduras. There are 11 spots remaining. There have been some sur-

tional wave. But don't give up hope yet – they are increasing the sensitivity of LIGO and re-starting operations this year. Chances are, however, that we still won't get a detection – because LIGO, awesome as it is, is based on a mountaintop on planet Earth, and that is a problem. On Earth, with all its shifting tectonic plates and interference, such a tiny disturbance can't be felt. But up in space – it



probably can. Therefore, two new projects have come up – one that expands LIGO's technique to fifteen million kilometers in space (LISA) and one that uses a completely new technique. The

Laser Interferometer Space Antenna (LISA) involves an equilateral triangle of satellites orbiting Earth with 5mn km lasers between them. Similar to LI-GO, disturbances in the lasers show presence of gravitational waves - but such long lasers and that too in space mean its almost a 1000 times more sensitive than LIGO. The newest technique, atomic interferometry, is still prototypic and untested, but even more exciting. Instead of difference in lasers from satellites millions of km apart, it uses two satellites just a thousand kilometers away from each other with one extremely cold cloud of atoms outside each one. The atoms are placed in specific positions with respect to each other by lasers between the satellites - any slight change in position indicates a grav wave. Its sensitivity is even higher than LISA – these 2 projects may really show us what's inside a black hole, and the other place light cannot take us - they may show us the beginning of the universe.

Qualifying for Brasil 2014

prise qualifications and it has come as a shock that teams like

Portugal, Uruguay, Sweden, Ukraine, France and Romania are still stuck in playoffs.



Is It a Bird, Is It a Plane.....No, It's A NOBEL PRIZE

Last week was Nobel Prize Week – yayyyyy. Well, actually, the last two weeks were the weeks in which the winners of all 6 Nobel prizes were announced. And what an exciting couple of weeks it was - for those who knew what was going on – and a learning of interest for those of us who didn't.

The whole concept of the Nobel Prize began with a chemist and innovator who made a terrible invention. Alfred Nobel, inventor of dynamite - the mother of all explosives - but that was just it. He did not want to be remembered just as the "merchant of death", and in a sort of atonement - he started the Nobel Prizes – 5 international prizes that awarded outstanding achievement in any of the 3 sciences, literary work "in an ideal direction", and for rendering services "to the cause of international peace and fraternity". It was his dying wish to start something good – and that is the Nobel Prize. In 1969, at the request of his son, a Nobel Memorial Prize for Economics was introduced – and its been 6 awards a year ever since. One Nobel Committee each was created for the peace and medicine prizes; the others are awarded by preexisting institutions – namely, the Royal Swedish Academy of Sciences (physics, chemistry and economics), and the Swedish Academy (literature). This is a featurette on the Nobel Prizes 2013, and we'll tell you a little story about each one.

Transporting Stuff Around

The first to be served up was the not-so-famousbut-very-prestigious Nobel Prize for Medicine & Physiology, awarded to three guys who made one crazy discovery – learning how the body's transport system works. On 7th October, James E. Rothman, Randy W. Schekman, and Thomas C. Südhof were awarded the prize for figuring out how the body decides what to do with the molecules it produces. Our body has cells, right; now these cells do stuff by manufacturing/making molecules of 'non-living' substances – which are then transferred to other cells and used by them. Examples of such substances are hormones, proteins, nutrients like calcium, neurotransmitters – unlike cells all these are non-living – so how are they able to go to the right place at the right time? With an interesting experiment (read about it here), they found that details for transport are coded in our DNA, and proteins produced from the DNA tell the molecules where to go when. Aside from being a leap forward in biology, this will help solve the fatal conditions that can arise due to transportation defects - because we now know how it works.

The Higgs - Finally Gets It

Next was the big one – no other award in the field even compares to it – the ultimate achievement in Physics – the Nobel Prize for Physics. And what an unusual choice it was – so predictable, yet so unexpected – when the Royal Swedish Academy of Sciences announced Peter Higgs and François

Englert as the winners on Tuesday, 8th October, for **postulating the Higgs Boson**. Remember that thing – all the hype at the start of the year – but the odd bit is that these 2 postulated, i.e., **predicted its existence way back in 1969**. So why the award now – because it was confirmed now – discovered this year – and their theory was proved right. Most thought they would be given the award last year. The most amazing thing is that Higgs and Englert were

Physics 2013

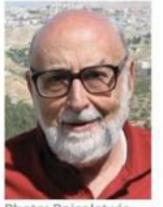


Photo: Pnicolet via Wikimedia Commons François Englert

Scientific American

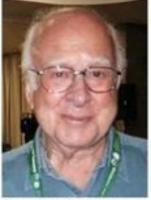


Photo: G-M Greuel via Wikimedia Commons

Peter W. Higgs

not 2 researchers working together – no, they were two independent physicists who came up with the same theory at the same time – of a particle that gave other particles mass. It was extremely controversial that the particle was named after Higgs and not Englert – but by awarding them the prize together – the Nobel guys have righted a wrong and accorded these two great scientists equal place in history. A funny fact: the reclusive Dr. Higgs had gone away without a phone for the week, and did not know he had received the prize till much later.

Cyber-Chemistry

Malala Didn't Win

The guiet, unceremonious Nobel Prize for Chemistry was awarded next on Wednesday to a trio of chaps - Martin Karplus, Michael Levitt and Arieh Warshel - who did something very interesting. Usually, the award goes to some latest complex discovery or study – but this time, it was the simple concept of developing computer models and simulations for chemical reactions instead of using plastic sticks and balls. Way back in the 1970s, these 3 took chemistry modeling into cyberspace by developing the first few software models, and as computers got more powerful – the effects became more and more apparent. These guys transformed chemistry - what took the Royal Society so long!

The Greatest Short Story Writer Alive

The mysterious Nobel Prize in Literature, given for lifetime achievement rather than single books or stories, came next - and again we were surprised when Alice Munro, a Canadian short story writer,



Washington Post

and poets - a short

story only writer rarely wins - and yes, I haven't heard of her either. The award is almost always given to non-mainstream writers who have a greater literary importance – well known to connoisseurs, but unknown to casual readers like you and me. Why was it a surprise then – well, thereby hangs a tale. Ladbrokes, a world famous sports betting site, also supports bets on the literature Nobel winners and they usually get it right, or come close! But this time, they got it wrong – Munro was an outsider – advanced up the rankings late – and still behind the top two, Svetlana Alexievich and the favourite Haruki Murakami, when the Nobel committee surprised Ladbrokes and the world. But it is definitely not undeserved – a recipient of the Man Booker Prize, Munro was called the "master of the contemporary short story" by the Nobel guys, and is one of the greatest short story writers alive today.

The extremely controversial and highly anticipated Nobel Peace Prize was the last to be awarded in the first week. Although criticized by many for being political and biased, the choice this time seems



very different, to say the least. The outright favourite (no betting here) and people's choice was Malala

Yousafzai, Pakistan's 16-yr old hero (issue 9) working to bring education to young girls in North-West Pakistan, fighting the powerful Pakistani Taliban – who shot her last year. The Norwegian Nobel Committee - who have been under fire recently for giving the award, which is supposed to recognize the silent workers for peace, to Barack Obama and then the European Union, political authorities who don't need "recognition" - may have for once done what it is supposed to do, even though it didn't award Malala. It awarded the Organisation for the Prohibition of Chemical Weapons (OPCW) – an organization which, for the last 16 years, has been doing the dirty, dangerous and unsung job of ridding the world of horrific chemical weapons. They work in the middle of war zones, and with ultratoxic chemicals – their lives are in danger all the time – and yet not a single OPCW official has been killed. Silently and efficiently, with no media attention, they have been a super success story destroying 80% of the world's chemical weapons - disarming in USA, Russia, Albania, India, Korea, China, and most recently, Syria. So while Malala may not have won – she's won more than a few prizes already (Sakharov's, Amnesty International, etc.) and will probably win it (the Nobel) sometime in her life most importantly, people who deserved it equally if not more won it in the end. Thank god they didn't give it to Putin!

The 3 Economists

The Nobel Memorial Prize for Economics was the last to be awarded, to 3 American economists - who all independently, and sometimes conflictingly, explained how stock prices cannot be predicted in the short term but can be in the long term. The Nobel Prizes introduced us to the world's pioneers, past and present, and to great individuals and organisations – whether they may or may not have won – Denis Mekwege, the OPCW, Ms Munro - and finally, that is what its all about.

Super Cyclone Phailin: Saved From the Gates of Hell

Cyclone Phailin that hit the coastal areas of Andra

Pradesh and Odisha on October 12th 2013 arrived

with the much anticipated and expected fury and flair of a super storm - gale winds of 200 km/hr, surging tides, fallen trees and power-llines, extensive flooding and damage to houses ,cattle and crop.....and yet a minimal loss of life - just 21 people were killed as a direct result of the stormthe last time a storm of this magnitude hit India (1999 ,Odisha) 10,000 people died. So yes –while every loss of life counts – this contrast in death toll for a storm just as powerful is nothing short of a miracle. A guick round up of what went right this time: As the Economist reports - the state government successfully evacuated 1.2 million people to



safety to 3000 schools, storm shelters that were specially rebuilt to double as shelters after the 1999

storm. More accurate assessment and warnings due to a better equipped meteorological department, locals having better access to information through television, radios and mobile phones. The World **Bank** too has played a big role in financing the National Cyclone Risk Management Project in Andhra Pradesh and Odisha. However the worst is not over - even with the minimized death toll -there is an urgent need to rehabilitate victims and tackle the looming threat of an epidemic due to extensive flooding. We hope local Government does as well to tackle the aftermath as it did with its evacuation efforts.

Why the World's Cheapest Car Failed

Tata Motors, the company that turned around Jaguar Land Rover, also had one very hyped launch in 2008 – a "revolutionary" car they called it – the Tata Nano. 5 years later, the world's cheapest car has failed to make an impact at all – its sales this year are equal to those of the luxurious Jaguar XF – and that is not a good thing. Its

sales this year are 80% worse than last year – so why did it fail? How come Ratan Tata, who bought JLR when it was at the brink of bankruptcy and turned it into a money making machine, was unable to sell the Nano? The answer lies in something a rival said back in 2011, "Nobody wants to buy the world's cheapest car." The niche they were trying to fill – buy this instead of a twowheeler – just was not getting filled, as Tata executives admit now. "...others think I'm buying something between a two-wheeler and a car...", say many potential consumers – they want to buy a

"real" car, and not a jellybean shaped Nano. Aside from the ideological issue, it was plagued with a number of issues – **delayed launch, huge** factory inauguration problems, cars catching fire, and, of course, the price. It just wasn't as low as they first promised – at 2.5 lakh rupees instead of 1 lakh – it wasn't cool enough for car owners, too expensive for bike owners, and bikers moving to cars waited a little longer and bought a "real" car. The failure was in this, and now Tata



hopes to revive sales by re-launching it as a cool cheap car, competing with other hatchbacks, instead of the world's cheapest car. Shame.

The SHUT_DOWN Postponed Till 15th January

The US Government shutdown has finally ended and the USA did not default on its debt on 17th October, which would have been historic. Thankfully

NASA is back online and the NSA is back to its snooping ways. What is more of concern is that this childish argument and brinkmanship between the two main US political parties has cost the US economy 0.5% in GDP growth and caused untold harm to the credibility of the world's only

superpower! It has reduced it's AFP/channelnewsasia.com respect in the world community. However **the problem has only been deferred not solved**, so this is a temporary truce and the battle will resume soon. The next shutdown date is 15th January 2014 when this deal runs out and maybe 7th February when the US debt crosses the next milestone of

17.5 trillion dollars! Believe it or not, this is the amount that the USA borrows, mostly from other countries and individual people to finance its expenditure - this borrowing has reached the limit, and a cutting of expenses or repaying of debts is needed. Hilariously enough, 9 US companies including Apple,

GE, Google, Microsoft and Berkshire Hathaway, had more cash than the US Government last week.

Tunisia: Not Another Egypt

Remember Tunisia, that little country in North Africa, where Mohammed Bouazizi, a common shopkeeper, burnt himself and started the 'Arab Spring'. It was the model that laid the foundation for the rest of the Arab revolutions - as we said in our report on the Arab Spring (issue 9), the one successful revolution. But we were wrong, and so was the rest of the world - appearances were not as they seemed. Like Egypt, protests broke out again this year against the elected Islamist government, elected in 2011. Like Egypt, there are tensions between the Islamists and the "people" over their unpopular, un-secular policies. But unlike Egypt, riots and war have not broken out between the two sides. Unlike Egypt, the protests have remained peaceful, and the Islamists have agreed to step down. And unlike Egypt, the army has not rushed in and taken power - democracy survives. But only barely. The inspiringly secular and moderate country that started the uprising in the Middle East has been overrun by over-eager Islamists in the last 2 years. In a chain of events parallel to Egypt, President Zine al-Abidine Ben Ali betrayed his people by trying to Islamise the moderate nation - and his unpopularity grew until the "second revolution" this year. Luckily, it was not exactly that. Sure there were 2 political assassinations - at that moment, everyone thought the country would spiral into violence. But they kept the democracy alive. The government agreed to step down, and the opposition kept it peaceful. Both

sides are **willing to hold elections** -'when' is still under

negotiation. With non-army organisations like the labour unions negotiating, another election will happen soon. Tunisia may have been a failed revolution, but at least wasn't another Egypt.

Sources

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Black Hole - Scientific American

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