ICT4D Community Newsletter

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Special points of interest:

- ICT Solutions for Fighting Social Ex-clusion, Discrimi-na-tion and Poverty
- Making Social Media Safe for Girls and Women
- Smartcards to Rohingya Orphans
- 10th Conference on ICT4D in Lusaka, Zambia

Editorial

ICTs have tailored into our everyday lives in a way that has created a strong nexus between technologies and economic, social and human development. This issue of the newsletter covers how CGIAR Platform can generate big data to enhance the impact of international agricultural research and help revolutionize farming in the developing countries where uncertainties about weather, pests and consumer demand are a big concern. It also features how ICTs are being used towards achieving robust policy to counter growing inequality and malnutrition worldwide, how Agricultural Innovation Lab will facilitate integrated bundle of services to foster innovation, R&D, youth employment opportunities through hands on learning and technology adoption in agricultural sector, and how artificial intelligence will transform agriculture. Other features include The South Asian Regional Conference on ICT in Knowledge Management and Action Research which was organized by Oxfam and University of Dhaka, ICT solutions to effectively deal with the problem of cyber bullying against women over social media as this has become a growing concern in Bangladesh and exciting news about the 10th Conference on ICT4D which will be taking place from May 08-10 2018 in Lusaka, Zambia. We aspire to highlight news related to ICT4D activities where innovation is reshaping our world.

Inside this issue:

Upcoming events:

CGIAR Platform for Big Data in Agriculture 2017-2022

The CGIAR Platform for Big Data in Agriculture is where information becomes power: power to predict, prescribe, and produce more food, more sustainably. It democratizes decades of agricultural data empowering analysts, statisticians, programmers and more to mine information for trends and quirks, and develop rapid, accurate and compelling recommendations for farmers, researchers and policy makers.

This is an exciting new frontier in agricultural research-for-development. Better use of data will help drive better policy decisions, helping solve development problems more quickly, cheaply, and at a greater scale than before.

Photo: Neil Palmer/CIAT

Data is much more than simply information: in expert hands, it is intelligence.
The rapid growth in processing power and global connectivity means we can now quickly collect, share and analyse enormous amounts of data and turn it into recommendations that can be of use to farmers and policymakers.

Applying these 'big data' approaches to agriculture promises to find new ways to reduce hunger and poverty, and develop robust responses to challenges such as climate change, pest and disease outbreaks, and land degradation. It could help reduce some of the daily risks farmers in developing countries face, enabling them to thrive.

The CGIAR Platform for Big Data in Agriculture will be a global leader in this effort. It aims to positively disrupt agricultural research, helping to generate impactful big data innovations that can revolutionize farming in developing countries.

It will provide global leadership in organizing open data, convening partners to develop innovative ideas, and demonstrating the power of big data analytics through inspiring projects. It will help ensure that the data revolution is deep, diffuse and democratic, reaching the most vulnerable farmers.

As the largest network of agricultural research organizations in the world, CGIAR is uniquely positioned to be a thought leader and global convener on the use of big data and information technology in agriculture.

Where We Work The CGIAR
Platform for Big Data in Agriculture is global. It connects experts all over the world to tackle stubborn agricultural challenges across the developing world, from Africa and Asia to Latin America and the Caribbean.

Impacts by 2022
The Platform aims to increase the impact of agricultural development by embracing big data approaches to solve development problems faster, better and at greater scale than before. The Platform will focus on opening up and sharing agricultural data, demonstrating that CGIAR is able to hold in trust and deliver data-related global public goods. In this way CGIAR will become a broker of big data information, actively promoting data-driven agricultural development.

The Platform will also work to develop novel methodologies and innovative pilot projects to increase the impact of its community or researchers and analysts. It will establish non-traditional partnerships to bring together institutions with complementary big data expertise, connecting CGIAR scientists to a global network of big data practitioners and developers, expanding the delivery capability and horizons of CGIAR research.

The expected outcomes of the Platform include:

- Greater data and knowledge sharing across CGIAR – by reducing barriers to information access and reuse, the Platform will democratize information availability and use, to help farmers and policy-makers take reliable, informed decisions.

- Foster a culture of open access publishing and data sharing across CGIAR Centers and partner organizations .

- Recognition of CGIAR as a global thought leader on big data in agriculture and development.

Source:http://ww w.cgiar.org/about-us/our-pro grams/cgiar-platform-for-big-da ta-in-agriculture-2017-2022/

CGIAR Platform for Big Data in Agriculture

Robust Policy Needed to Counter Growing Inequality and Malnutrition Across the Globe

By Wageningen University & Research

To ensure global food supply into the future, governments must formulate sharper and more robust policy to counter inequality and climate change. Scenario studies demonstrate that failure to act is likely to lead to increased inequality, malnutrition and instability caused by worsening climate issues.

Research into various causes of hunger and malnutrition

Hunger and malnutrition are complex problems driven by an array of factors, ranging from individual consumers to national treaties. To identify which policies reinforce food and nutrition security, and which policies are counterproductive, the European Commission financed a large-scale research programme entitled FOODSECURE five years ago. The programme involved pioneering research into the various causes of hunger and malnutrition. Alongside exploring the effects of instable food prices on the confidence of African farmers in their investments, it looked at the key role played by democratic transitions in reducing child mortality linked to malnutrition, the importance of coordinating donors and recipients of financial aid and the structural effects of international trade deals. Besides this, researchers developed future scenarios of potential global developments until 2050 and the number of people still going hungry in these scenarios.

The FOODSECURE Navigator

The researchers used the knowledge gathered during the programme to create the FOODSECURE Navigator, an online toolbox that helps policymakers see the bigger picture. 'Policymakers tend to focus on their own policy area, but it's also important to look at the relationships between nutrition, agriculture, energy, climate and economics,' says Thom Achterbosch from Wageningen Economic Research and member of the coordinating team. Given the swift changes in African, Asian and Latin American food systems, interventions and investments in agriculture or nutrition are more likely to have the desired effect if they are informed by a sound knowledge of the economic, social and political context. 'The FOODSECURE Navigator deciphers the indicators and causes of food insecurity and demonstrates how policies can influence this complex dynamic.' EU and non-EU policymakers can use the Navigator to compare their vision of the future with that of other stakeholders. They can test their policy ideas for eradicating hunger in two ways: by basing them on evidence of the effects of past policy and on potential developments over the coming decades.

Launched in 2012, the five-year research programme FOODSECURE was assigned a budget of 10.5 million euros, 8 million of which was from the European Commission. The programme aims to impr ove the effectiveness of EU policy for food and nutrition security, as well as the policy of other governments in Africa, Asia and Latin America in their respective countries. Wageningen Economic Research coordinated the programme, which was joined by tens of researchers from 19 different institutions in Europe as well as China, Ethiopia and Brazilwho produced more than 100 scientific publication.

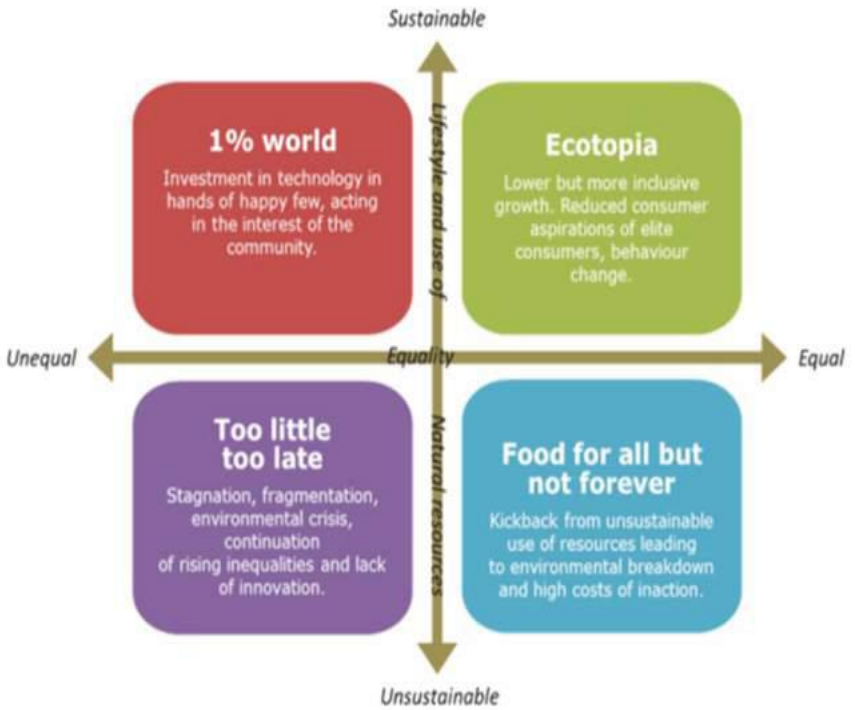
Vision for food security

The cross-institution programme did something never before seen: it also involved tens of stakeholders from the business community, government and NGOs in workshops lasting several days, during which participants brainstormed the complex issue of food security. These meetings produced a vision for food security with new concepts and frameworks for the research. 'Our most important contribution is the way in which we have changed how people look at food security,' says project leader Hans van Meijl from Wageningen Economic Research. In its considerations of what causes hunger, FOODSECURE not only looks at the availability of food as governed by technical, economic and biophysical factors, but also focuses on food access by comparing the incomes of people from various income brackets with the price they pay for food. Almost all current long-term studies into climate and food security neglect this crucial dimension of food security.

Levels of education, mobility, income distribution and consumer behavior all play influential roles in this dimension, as shown by the indicators used. As people in Africa purchase on average around 60 to 70% of their food at the market, the purchasing power of poor households is a much more telling measure of somebody's food security than purely the supply of food in an area. 'One change brought about by the stakeholders' consultation was particularly significant. In contrast to earlier models, ours was not only based on climate change and sustainability, but also on economic inequality,' says van Meijl. Inequality and sustainability now form the framework that stakeholders used to develop four future scenarios within the FOODSECURE programme.

Four plausible future scenarios for global food security

At this moment in time, the world is heading for the less sustainable and more unequal scenario. The stakeholders taking part in FOODSECURE expect we will have done 'too little, too late.' This scenario involves several financial crises resulting in low economic growth, a huge gap between rich and poor, poor agricultural harvests, marked climate change and a widespread loss of biodiversity. The 'one-percent' world is more sustainable. Although wealth is unequally distributed and the rich own the majority of natural resources, investments in research will solve global environment problems and ensure that agricultural harvests remain healthy. Another variant is the scenario 'Food for all but not forever,' in which consumption and economic growth are more important than sustainability and bumper agricultural harvests nosedive as a result of environmental crises. The last scenario of 'Ecotopia' sees an equal distribution of wealth and more sustainable consumption patterns brought about by diet changes. New forms of sustainable agricultural technology, and in particular more sustainable consumer choices, will eliminate waste, limit greenhouse gas emissions and lead to higher agricultural harvests and better environmental protection.



It should be remembered that the results from the models are based on assumptions, says Achterbosch. 'These are not hard predictions, so we need to be cautious about the results from the models. However, it is still a way of focusing attention on and encouraging discussions about causal connections and relationships.' The point that van Meijl and Achterbosch are making is that Ecotopia is not a scenario we will arrive at effortlessly. 'Almost all scenarios have the real possibility of a growing gap between higher and lower incomes, or of large groups of city dwellers and rural communities who are excluded from economic growth,' says van Meijl. 'Our economic system encourages inequality by enabling capital, technology and the rich

to take up an ever larger proportion of the extra income earned.' Poverty leads to hunger and poor nutrition, which in turn feeds inequality. This mechanism is visible today: many countries, particularly in Africa, are experiencing high economic growth in parallel with a growing number of people experiencing food insecurity.

The vast majority of economic decisions also bypass environmental and climate effects, as these effects are not automatically reflected in our prices. 'The conclusion is that more forceful policy must be introduced to counter climate change and inequality. The market will not do this on its own,' says van Meijl. 'There needs to be more guidance, and not only from a government level. Companies and consumers can also influence the route we take.'

A recommendation from the research is to strengthen the exchange between science and politics in this area by establishing a new intergovernmental panel on food and nutrition security, just like the IPCC for climate research.

Agriculture is a serious risk for food security

This is in large part a response to the current situation, in which many policy areas with various aims threaten to compromise each other and lead to trade-offs. However, ensuring synergy between policy measures is no easy task. And if we are to reach the climate goals in the Paris Agreement and the ambitious target of limiting warming to 1.5 degrees, then agriculture must do its part in reducing emissions and storing carbon. Reforestation and bio-energy are currently the main drivers in this respect, but the way in which they take up valuable agriculture land poses a serious risk for food security. Food-waste reductions, technological improvements and diet changes (e.g. less meat) have multiple benefits, as they can have a positive effect on the climate as well as food security. Formulating coherent policy for food security remains an important theme within the EU, too. Incoherence in EU policy persists, although the researchers no longer point to EU agricultural policy as the cause. Unlike before, the current European system of agricultural subsidies has hardly any demonstrable impact on food security by disrupting the global market.

The bilateral trade treaties currently in place between EU and countries in Africa, Asia and Latin America have varied effects. Generally, these agreements lead to limited export and revenue growth and have a negative impact on local producers and government revenues from import levies. Achterbosch explains, 'As the agreements bring no great benefit to these regions, they are ultimately unfit for purpose.' The EU still has a major negative effect on food security in other parts of the world as a result of its enormous contribution to climate change and the way in which it occupies agricultural land elsewhere in the world to feed its consumption pattern and huge imports of soya, palm oil and other tropical commodities. However, within value chains, these trade flows can generate revenue and innovation and strengthen local food security.

Policymakers can use FOODSECURE to learn which policy areas require action to get to a desired situation or development path. Achterbosch adds, 'The extent to which countries take action to stimulate entrepreneurship, innovation and technology plays a decisive role in improvements to agricultural productivity. Countries can try to limit their population growth by strengthening the position of women. Additionally, they can attempt to influence consumer behavior, such as by encouraging them to eat less meat. A logical progression is to analyze the expected effects of policy on long-term food security, but this will call for a high degree of detailed knowledge and follow-up research within the Consultative Group on International Agricultural Research (CGIAR) in its programmes on climate change and healthy diets in Nigeria, Bangladesh and Vietnam.

Focus on health factor and evaluate

FOODSECURE differentiates between the short and long term. Short-term measures to combat inequality include a 'cash for work' programme or another form of social security, while mid-term measures could involve a differentiated tax system that imposes higher taxes on the middle class than on poor households.

Finally, long-term measurements could include investments in education and innovation to enable more people to improve their income. Using the knowledge in the FOODSECURE Navigator, policymakers can weigh up the short-term and long-term effects. 'Although a food-producing country can counter an acute food crisis as a result of drought, for instance, by imposing an export tax to halt food exports, the resultant lower price of food in the long term will disincentivise farmers from investing,' explains Achterbosch. A recommendation from the researchers is to ensure the EU focuses more on the health factor in the many billions it gives in aid for food security, and to effectively evaluate the results of this.

Source: https://www.wur.nl/en/article/Robust-policy-needed-to-counter-growing-inequality-and-malnutrition-across-the-globe.htm

Agri-Incubation Unit, A New Service Portfolio of BIID Agricultural Innovation Lab

A BIID Contribution

Youth comprises around 57% of total population which is around 94.8 million within the age range of 15-39 in Bangladesh and agricultural sector contributes 19% in GDP along with 45% employment opportunities. The trend of urbanization and economic growth in rural areas has been transformed in a big way in Bangladesh since last 2 - 3 decades. Farming is no more an attractive profession for rural communities, even not to the farmers. It reflects the need for making agricultural sector more attractive (in terms of financial return), socially respected and 'smart' (managing business professionally) to cater the interest of the youth. Agricultural sector in Bangladesh needs to be more innovative in terms of entrepreneurial perspectives and has to be 'attractive' as profession for the youth population.

Bangladesh Institute of ICT in Development (BIID) introduced the Agricultural Innovation Lab (AIL) initiative as a service platform (physical) to facilitate integrated bundle of services (and smart solutions) to foster innovation, R&D, youth employment opportunities through learning (hands on) and technology adoption (for the research agencies & policymakers) in agricultural sector. With the private sector led market driven approach, BIID foresee to position the AIL as the national and regional hub for Learning &Center of excellence on agro-entrepreneurship and innovation. The AIL will operate and managed by multi-stakeholder partnership.

The Agri-Incubation Unit will focus on attracting youth to the agriculture sector by setting it into a business and offering them new paths……

Goal

The Agricultural Innovation Lab fosters economic and social growth of Bangladesh through agro-entrepreneurship and ICT driven eco-system.

Objectives

- To develop a sustainable and inclusive platform for youth entrepreneurship & modern digital solutions in agricultural sector;
- To make agricultural sector as a preferred profession to attract to the youth communities to get engaged in;
- To stimulate innovation and build up social talent, projects and inclusive businesses through entrepreneurship and facilitation among youth for agricultural sectors including nutrition and safe food;
- To facilitate development of an innovation hub to conduct research on the existing eco-system of innovation and agro-entrepreneurship among youth, capacity & scopes of ICT enabled solutions to ensure access to information, identify and areas of capacity building of entrepreneurs;
- To support achieving goals set by Digital Bangladesh, WSIS and SDG 2 & 8
- The Agri-Incubation Unit will focus on attracting youth to the agriculture sector by setting it into a business and offering them new paths and opportunities to engage along the agricultural value chain. The BAIL will promote young entrepreneurs in farming, agro processing; retailing, trading and local service provider (LSP) business through skills, resources and services based opportunities. This will operate in a public private partnership mode and will serve special features for girls & women segments of the youth communities.

Service Portfolio

	Unit	Facilities
1.	Demonstration (Living Lab) 3 Unit	Production Process (Planting to Harvesting) Agriculture, Poultry, Fisheries
2.	Service Unit (BDS)	Bank, Investor, Planning, Advisory Service, Call Centre & Help Desk
3.	Entrepreneurship School	Library, Training and Design Lab
4.	Multifunctional Unit	Meeting place, Refreshing Corner,
5.	Incubation Unit*	Start Ups (Service, Production, Specialized unit : Hydroponic, Food Processing, Support service & Inputs)
6.	Input and Technology	Seed, Machineries and IPM/ICM
7.	Market Place	Show casing products of incubators
8.	Tech Unit (ICT)	RS, Big Data and IoT
9.	Young Leaders	Nutrition Club and 4 H
10.	Administrative Unit	Management, Communication (PR, Visitors visit), Trouble Shooting

Call from the South Asian Regional Conference on ICT in Knowledge Management and Action Research

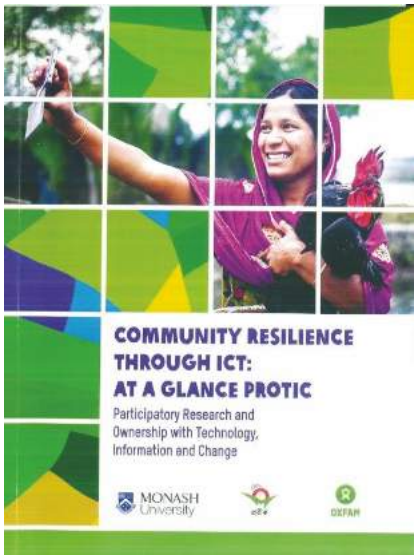
Edited by Priodarshine Auvi and Tapas Ranjan Chakraborty, Oxfam

The South Asian Regional Conference on ICT in Knowledge Management and Action Research was organized by Oxfam and University of Dhaka on 3 and 4 December 2017. There was participation of Australia, Bangladesh, Bhutan, India and Nepal. More than 240 participants attended the gathering. South Asia has a common history.

Our problem, opportunities and scopes are nearly same. Development and sustainable growth depend on a favourable policy environment, including a favourable investment on climate, transport and communications infrastructure, and research and development in the service of innovation.

ICT investments in support of sustainable development must include reliable and affordable infrastructure, as well as measures that target agriculture and rural communities. South Asia is committed to the SDG goals. The scholarly gathering was a step towards partnership and cooperation.

In the nine sessions of the conference there were 65 papers. Current approaches to development and management actions consider the perspective of the local people. Participatory Action Research has been tried as an alternative to the authoritarian approach for development projects and resource management. ICTs can impact the lives of ordinary people in many ways and enable better planning, sharing of knowledge, and dissemination of



information to most remote areas and create new opportunities.

There is new challenge in agriculture like climate impact, urbanization and migration. Feminization of agriculture is a fact. ICTs are playing greater role in all development efforts and are recognized as important tools to achieve the SDGs and its goals, No Poverty, Zero Hunger and Good Health which are dependent to agriculture. Information is expensive to generate and keep up-to-date.

Developing a proper information system is a costly affair and requires skilled human resources. Economies of scale can be realised through collaboration and use of shared platforms and common standards by information providers.

The re-use of information and the implementation of common technical standards and classification systems will increasingly take place. It is important to develop multi-stakeholder mechanisms at the regional level that address this issue and thereby assure that information becomes more easily accessible for end-users.

There is a need to encourage young people to bring sustainable changes. The conference talked about green technology, agro-meteorology, technology for adaptation, people's participation and diversified use of information technology.

The conference made a call to stakeholders targeting a community of practice. The conference expected to:

- Strengthen relationship between the South Asian Actors including academics, practitioners and policy makers on learning and experience sharing regarding Action Research and Knowledge Management
- Establishment of Community to Community Cooperation among the South Asian Countries on the promotion of information technology on agriculture, gender justice, climate change and natural resource management
- Bridging the Science Policy Gap through knowledge sharing and access to information
- Ensuring South Asian Cooperation towards achieving Sustainable Development Goals (SDG) and its Targets
- Access to Technology for a Climate Resilient Sustainable Community

Oxfam has published the book `community Resilience through ICT: At a Glance PROTIC' on November 2017. The book is a compilation of five studies conducted during the piloting of the project, Participatory Research and ownership with Technology, Information and Change, and was edited by PriodarshineAuvi and Tapas Ranjan Chakraborty. The 44-pager book also contains 3 case stories. The application of Participatory Action Research in technology promotion for adaptive and sustainable agriculture was detailed in the chapter 4. Chapter 5 brief the community experience on using technology for agriculture knowledge management. Both printed and PDF version of the book is available on request to tchakraborty@oxfam.org.uk

How Sensors, Robotics and Artificial Intelligence will Transform Agriculture?

By Jennifer Kite - Powell

The world population is expected to reach 9.7 billion by 2050. China and India, the two largest countries in the world, have populations totaling around one billion. In four years, by 2022, India is predicted to have the largest population in the world, surpassing China.

This means we need new ways to grow food that are smarter and helps regulate our use of land, water and energy in order to feed the planet and avoid a global food crisis.

Researchers at Carnegie Mellon University's Robotics Institute believe the answer lies in sensors, artificial intelligence (AI) and robots.

In a new initiative called FarmView, researchers are working to combine sensors, robotics and artificial intelligence to create a fleet of mobile field robots they hope will improve plant breeding and crop-management practices.

According to FarmView's Senior Systems Scientist, George Kantor, robots can gather data in agricultural fields with an unprecedented level of accuracy and timeliness that can be used to help solve the world's looming food crisis.

A mobile field robot in the FarmView research program out in the field collecting data and measuring sorghum plant function at Clemson University. A mobile field robot can gather information that can be used to help growers make better management decisions that allows them to grow more, higher quality food with fewer land and water resources. They can even help crop breeders, produce higher-yielding crops faster.

How can a mobile field robot make a difference? For starters, it can take a visual survey of a vineyard at the start of the season and then use a combination of computer vision and machine learning to predict the expected fruit yield at the end of the season.

Armed with this data, the farmer can act by using a robot to prune leaves or thin fruit to maintain an optimal balance between leaf area and fruit load. This action ensures a high fruit quality at the same time, reduces water and nutrient uptake.

"Plant breeding is another interesting application we're pursuing, where robotically gathered plant phenotype data can be collected over much larger breeding experiments that current manual measurement techniques allow," said Kantor. "Machine learning tools can then combine the collected phenotype data with genetic and environmental data to help a breeders and geneticists better understand the relationships between genetics, environment, and plant performance."

"This in turn accelerates the breeding process, allowing breeders to evaluate many more plants each season so that they can more quickly select for desirable traits such as yield or disease resistance," adds Kantor.

Kantor says this kind of accelerated breeding program could have significant benefit in the developing world such as Subsaharan Africa.

Image courtesy of Carnegie Mellon University A mobile field robot in the sorghum fields in South Carolina. The FarmView initiative wants to develop inexpensive robotic systems that small-

to medium-scale growers can afford to implement.

The mobile field robot in the FarmView initiative is equipped with a camera, a laser scanner that measures the plant's geometry and a multispectral camera that can see non-visible radiation bands and measures plant function.

"We are collaborating with Clemson University on a project to use robotic phenotyping to accelerate the breeding of sorghum as a biofuel crop. They provide breeding and genetics expertise and conduct field work at research farms in South Carolina and Mexico, where we deploy our robots to collect the necessary data and work together to determine which measurements to take and to interpret the results.

FarmView is also working with Cornell and the University of California Davis (UCD) on a project to increase efficiency and quality in grape production by actively managing vine balance.

According to Kantor the idea is that robotically deployed sensors count grapes and measure leaf canopy everywhere in an orchard and then a decision support system can recommend where the grower should thin leaves or prune fruit in order to keep the vine in balance.

"A well-balanced vine produces high quality fruit while minimizing water use," said Kantor. "The Cornell and UCD collaborators provide plant science expertise, especially in the area of plant physiology, and they provide access to test sites and an interface to progressive growers through their extension programs."

The group also worked with several land grant universities led by University of Maryland and including University of Georgia, Colorado State University and Cornell to develop an intelligent irrigation control system for nursery and greenhouse crops.

Advances will not come overnight but they will come as growers get actionable information which helps them make better decisions.

How will robotics change the world of agriculture as we know it?

If you ask Kantor he'll tell you quite decisively that robotics will change the world of agriculture in three ways: vine balance management for wine and table grapes; robotic phenotypic for accelerating crop breeding; and intelligent irrigation control using sensor networks. Kantor believes that crop breeding is the application is likely to have the largest impact.

"Looking further out, we will begin to see robots doing intelligent manipulation tasks in the field, such as carefully thinning flowers in an apple orchard," adds Kantor. "These capabilities will be used to help implement the decision making tools we are working on today, closing the loop in the sense that machines will be able to intelligently carry out management tasks as they are needed."

Source:https://www. forbes.com/sites/jennifer hicks/2017/03/19/how-sensors-ro botics-and-artificial-intelligence-will-transform-agricul ture/#15ecb179384b

Cyber Bullying against Girls and Women over Social Media

By Bangladesh Institute of ICT in Development

Despite the many wonders of the internet, a new form of crime, commonly referred to as cybercrime, especially through social media, has become a new and growing problem in today's society. While harmless in many occasions, this new method of technological interaction over social media can lead many to fall victims of aggressive behaviours, more particularly in case of women and girls.

Bangladesh is relatively a new comer in the cyber world. Although the challenges regarding access to internet still prevail, creating a digital Bangladesh with universal access to information technology is a top priority of the government. However, along with the benefits, the possibilities of misusing the internet, especially the Social Media, is becoming evident. The rate of cyber bullying is increasing with the trend of social networking. It was not until 2001, that the possibility of cyber bullying was recognized by the government. The Information Communication Technology Act 2015 covered few cyber bullying acts in its provisions. However, the issue of cyber bullying is still a low priority and girls & women are the prime victims of it.

The unfortunate part of cybercrime is that few victims ever report that problem. As social media has become fully integrated into the lives of people, the negative effects of life online are becoming more clearly identified. While information is becoming more readily available regarding the prevalence of cyber bullying, there is limited research indicating the best way to deal with it. This limited research base highlights a great need for research on cyber bullying in Bangladesh.

The recent growth trend of social media usage is massive and globally around 2.79 billion users are active in social media (Source: Global Digital Snapshot, Jan, 2017). In Bangladesh, there are 70 million Internet users and 22 million active social media users out of which a significant number is girls and women. This is about 13% of our total population of Bangladesh which is still urban centric. The active engagement of girls and women in social media tend to make them vulnerable to various abuse, harassment and insecurity by and large. To provide a solution to the victims of cyber-bullying, Bangladesh Institute of ICT in Development (BIID) has proposed a few steps that will help address the issues of cyber-crime. Methods such as "Computer assisted personal interview" or CAPI process will be used to conduct surveys. This process is one of the great modern techniques used in today's world. In this interview process tabs will be provided to the interviewers, with that they will conduct the survey and on the spot these data of the survey will go into a server so that data will be secure. For research effective tools such as ICT based tools for reporting crimes and social and behavioral change approaches will be developed which can be used in interventions to combat cyberbullying. Awareness building campaign will be held which will include events at educational institutes in both urban and rural areas, social media activation and dissemination of messages through promo-materials banner, leaflets, billboards) and ICT tools. The campaign will help in making people aware of cyberbullying issues, inform them about ways to

fight such crimes and motivate people to combat the problem. For solution a context sensitive filtering technology will be developed to determine whether or not the word is offensive and give the context writer a second chance to reconsider their decision before they bully someone. An alert module will also be added in the solution so that local law enforcement can take steps before any tragic incidents occurs. Crime occurred in social media reported online will be an easy and logical solution for the cyber-crimes against women which makes this concept innovative. GPS based crime reporting system will increase the efficiency of the existing systems. Moreover, anonymous reporting system will increase the frequency of reports against cyber-crimes as women sometimes hesitates to disclose their identity publicly.

Rohingya Orphans to Get Separate Shelter, Smartcards

By United News of Bangladesh

The government plans to provide separate shelters and smartcards to Rohingya orphans who have entered Bangladesh since violence erupted in Rakhine State of Myanmar last month.

It will take steps to make special arrangements for accommodation, food and other relief items for all the orphans aged up to 18, State Minister for Social Welfare Nuruzzaman Ahmed said yesterday.

An initiative has been taken to get 400 acres of land -- 200 acres each

in Ukhia and Teknaf -- from Cox's Bazar district administration for that purpose, he added.

"As per the prime minister's directives, measures are being taken to provide every Rohingya orphan with a smartcard," the state minister told a press briefing at the secretariat.

"Details of some 2,000 orphans have already been added to a database through Google forms. And all the preparation for the database will be complete within a week. The smartcards will be issued after that."

Source:http://www.thedail ystar.net /frontpage/mayanmar-ro hingya-ref ugee-crisis-or phans-get-separate-shelter-smart cards-1468237

10th Conference on ICT4D

Be a speaker at the 10th ICT4D Conference taking place May 8 - 10 2018 in Lusaka, Zambia

ICT4D is looking for practical case studies and presentations on truly cutting-edge applications and innovation in the use of ICT for agriculture

Agriculture conference track leads CRS and ICRISAT encourage you to submit your speaker application via the website: http://www.ict4dconfer ence.org/speaker/call-for-speakers/

Topics to be addressed in the Agriculture Track 2018 may include:

- From Registration to Service Delivery
- Helping farmers with decision support
- Precision Agriculture
- Shifting from Spot Relations to Platforms

Closing date for submissions: **January 15th 2018.** Successful applicants will be notified by February 9th 2018. ICT4D particularly welcom applications from women.

Join your ICT4D community of non-governmental agencies, private sector comp anies, multi-lateral and govern ment agencies, academic and research institutions, and aid and development funding organizations in Lusaka next May.

For more information on the Conference and how to register, please visit ict4dconference.org

e-Krishok Selected as the WSIS Prizes 2017 Champion

International Telecommunication Union (ITU) announced e-Krishok, an initiative of Bangladesh Institute of ICT in Development (BIID) as the Champion and finalists of the WSIS Prizes 2017 with over 1.1 million votes cast by WSIS stakeholder's community.

e-Krishok is among those first five most voted in the category ICT Applications: E-Agriculture. ITU congratulated BIID on this amazing achievement and to share the excitement of promoting the recognition.

BIID will be awarded with a Champion certificate from the ITU Secretary-General during the special event dedicated to the achievement, the WSIS Prizes 2017 Champion Ceremony, on Tuesday 13 June 2017 at Geneva, Switzerland.

BIID has been facilitating e-Krishok services to foster ICT enabled solutions for farmers and agro-businesses in Bangladesh since 2009.

More details on the award is available at http://www.itu.int/net4/wsis/prizes/2017/

For submission of articles, cases, initiatives and sharing news on ICT4D events or for giving any feedback on ICT4D Community Newsletter
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