Leveraging ICT in agriculture to develop rural communities
Critical role players recognise the Eastern Cape’s potential to improve the livelihood of its communities through agriculture and rural development by using ICT. Read more on p1

Developing competencies with e-skills
The Intel Easy Steps course was offered by the Limpopo CoLab, in partnership with the Intel ‘She Will Connect’ initiative. Read more on p4

e-Skills research to inform policy and implementation
Research is part of the cycle of embedding e-skills (digital skills) in South Africa. It informs and improves decision making. Read more on p7

International Conference on Public Participation
The International Conference on Public Participation (ICPP) was held from 18-19 February 2016 in Durban. Read more on p11
Leveraging ICT in agriculture to develop rural communities

Critical role players recognise the Eastern Cape’s (EC) potential to improve the livelihood of its communities through agriculture and rural development by using ICT. Because this needs partnership and innovative approaches, the EC CoLab: ICT for Rural Development has been organising mini conferences to develop the process. These are hosted together with:

- Eastern Cape Socio Economic Consultative Council (ECSECC)
- Walter Sisulu University (WSU) Centre for Community Engagement and Internationalisation (CE&I)

The second ‘ICT and Agriculture: Realising the Development Dividend’ mini conference was held on 18 February 2016 in East London.

Collaborative approach defined in the first conference

The approach agreed upon in the launch seminar (March 2015) outlined three main components for the programme to use ICT for rural development in the agriculture sector. These components form a continuous cycle of research and development:

- **Research:** Initial (e.g., identifying key issues, the policy environment, best practices and existing resources) and ongoing research (e.g., monitoring and evaluation of interventions, the study of research theses and reports, annual conference etc.)
- **Product development:** This focuses on the development or sourcing of apps and systems, technology (e.g., hardware) and multi-channel communication tools (e.g., tv, radio, webinars, podcasts, videos and portals)
- **Skills development:** Developing or sourcing of courses (certificates, diplomas, degrees etc.) and providing training and learner access to training

To achieve maximum impact, these activities should take place within the framework of multi-stakeholder collaboration and aggregation.

Aligning with broadband policy – infrastructure, services and e-skills

This approach aligns with the Digital Opportunity pillar of South Africa’s broadband policy, SA Connect. SA Connect recognises that providing infrastructure alone will not create an e-literate society. While infrastructure and services are essential, there needs to be a demand for these. Hence one of the SA Connect pillars is called Digital Opportunity. This focuses on creating the demand through developing a nation of people that are e-skilled and e-astute.

Themes of the 2016 programme

The 2016 conference shared some of the existing and potential practices taking place by role players. It showed the context in which ICT can, should and is being used to help increase agricultural productivity, capacitate small
and emerging farmers, and encourage the participation of women and youth, among other objectives. There were also examples of how training in ICT and training using ICT are critical components of this.

The mini conference was opened by Prof Khaya Mfenyana, Interim Vice-Chancellor, WSU. The conference was placed in a provincial context by the MEC for Rural Development and Agrarian Reform, Hon Mr Mlibo Qoboshiyane. Among other points, the MEC highlighted the need for a provincial database covering the agricultural landscape and systems (or applications) that provide real-time data of benefit to farmers. Examples include weather reports and market prices.

The following plenary presentations were made:

- **Using ICT to develop agricultural value chains in Africa** (Dr Vuyokazi Mahlati, African Financial Group) - This outlined the importance of value chain development to grow and transform Eastern Cape, African and South African agriculture. The use of ICT can be a major contributor to improved organisation, communication and connecting the right people. Dr Mahlati unveiled the Iivi Loboya app which will be used to connect smallholders and processors in the Eastern Cape wool and cashmere sector.

- **Enhancing rural ICT access in the Eastern Cape** (Mr Ayanda Madyibi, Provincial CIO from the Office of the Premier) - He spoke on the current status of broadband roll-out in the province and related activities. These included establishing the Provincial Broadband Steering Committee and sub-committees. The EC e-Skills CoLab co-chairs the skills sub-committee with the Eastern Cape Development Corporation.

There were also panel discussions:

- **To what extent can ICT help increase agricultural productivity through providing access to knowledge, information and technology? Practical examples from the Eastern Cape and beyond.** Panel Chair: Mr Luthando Jack (COO of ECSECC). Panelists included: Mr Johann Janse van Rensburg (CSIR), Mr Christo Grobler (Intelligent Output Systems, an SMME) and Dr Motebang Nakin (WSU).

  Mr Janse van Rensburg presented a model to bridge the digital, service and trade divides. This will be done by using science, engineering and technology (including ICT) in ways that will provide, for example, entrepreneurial and other socio-economic development opportunities for young people in rural areas. Mr Grobler spoke on the use of Radio Frequency Identification (RFID) tags and related hardware and software as comprehensive tools for managing livestock, monitoring crops etc.

- **What ICT training is needed to bridge the digital divide in the agricultural sector and how ICT can be used to provide sector-related training.** Panel Chair: Mr Mzoli Payi (Director WSU CE&I). Panelists included: Prof Walter Claassen (WC e-Skills CoLab), Mr Lwando Rwayi (principal of the Arthur Mfebe Agricultural...
Positive reception
The event was for anyone with an interest in training and skills, product development and research related to using technology for rural development, as well as those involved with agriculture. There were around 90 attendees. Of the 39% that responded to the evaluation form, there was 100% agreement that the conference was worthwhile.

Two main outcomes - ICT and Agriculture working group and a digital repository
The intention is to find ways to direct these initiatives towards a larger effort. Two main outcomes were proposed:

- Establishing a provincial ICT and Agriculture Working Group (working within the ambit of the Provincial ICT Working Group). This will provide direction for those looking to start initiatives in the sector and avoid unnecessary duplication and wasted expenditure. Maximum impact will be achieved by going forward as multi-stakeholders working together with a common goal – to leverage ICT to realise the development dividend for the EC rural communities.

- Establishing a (moderated) digital platform to serve as a repository of relevant resources and information. This will provide an entry point to the wealth of useful information and free research, tools etc. on the internet. It will include South African data, in particular EC data. For example, highlighting existing agriculture-related technology and apps (or those being designed) can steer funds for new innovation into identified needs that are not being addressed.

Contact NEMISA
The National Electronic Media Institute of South Africa (NEMISA) can be contacted at the following:

- info@nemisa.co.za
- 011 484 0583
- 21 Gilton Road, Parktown, Johannesburg, 2193
- PO Box 545 Auckland Park, Johannesburg, 2006

NEMISA's head office will be moving to the following address at the end of April: South Building Waterview Corner, 2 Oppenheimer Ave, Bruma Lake Office Park, Bruma 2026.
What does the course involve? Intel Easy Steps involves acquiring basic computer skills in word processing, presentations, spreadsheets, email and the internet. Then participants discover how these skills can be applied so as to have a positive impact on their daily lives. This includes:

- An introduction into entrepreneurship
- Managing money and finances (including creating a cash flow projection)
- Creating a budget or business plan
- Developing a marketing plan
- Branding yourself or your business
- Creating a portfolio to present to the group

Results?

Following are the results from the course.

| Introduction to computers and operating systems | At the beginning of the course 50% of the participants felt comfortable with finding their way around computers and operating systems. By the end of the course this had increased to 90%. |
| Internet and email | At the beginning, 43% of the participants felt comfortable using internet and email. By the end, this had increased to 96%. |
| Word processing | At the beginning, 43% of the participants felt comfortable with word processing. By the end, this had increased to 96%. |
| Spreadsheets | At the beginning, 25% of the participants felt comfortable using spreadsheets. By the end, this had increased to 87%. |
| Multimedia | At the beginning, 47% of the participants felt comfortable using multimedia. By the end, this had increased to 95%. |

The value: “These young participants have been exposed to technology and the role that these tools can play in their daily lives and in improving their circumstances,” says Mr Scholtz.

Follow up: A significant challenge will be access to technology and the internet. The Limpopo e-Skills CoLab intends to follow up to determine the impact of Intel Easy Steps on the participants’ lives in the future.
Meet Molatelo Mainetje, filmmaker and entrepreneur

Molatelo Mainetje is an award-winning TV producer, video director and documentary film maker. She is a filmmaker entrepreneur and part of NEMISA's alumni. We find out more about her.

**Q** Tell us a little about your work?

I'm the owner of Bolobathaba Multimedia. I am also a board member and secretary of the Documentary Filmmakers' Association of SA and I founded the Bolobathaba Filmmaking Project in 2009.

**Q** What happened with your studies?

I grew up in rural GaModjadji, Limpopo. We didn’t have access to TV and the other things that kids do these days. I never imagined that I would be a businesswoman or be in the broadcasting industry. In 1999, I was in my final year of study at the then-named University of the North (now called University of Limpopo) when I was chosen as part of the first NEMISA student intake. There I obtained a post-graduate Diploma in TV Production.

**Q** How did you get to where you are now?

In 2003, my first business, Lilitha Multimedia, went through a business incubation process. This was part of an initiative by the then-named Department of Communications. That’s what instilled the spirit of entrepreneurship in me. I kept my day job and ran my business on the side.

My entry into the professional world was working as a trainee video editor on Generations. My full-time employment history has included being a local producer for the Australian Broadcasting Corporation (Africa bureau) and working as a producer for eNews Channel Africa (eNCA).

**Q** When did you go out on your own?

I realised I needed to focus on my own business. So in 2013, I resigned from my full-time job at eNCA. By then Lilitha Multimedia had dissolved because of partnership challenges so I started Bolobathaba Multimedia. I registered it in 2010 as the sole owner.

It’s been challenging to be on my own but very fulfilling. As an entrepreneur, I can go for months without an income. Making a TV programme or a film can take years. I've been working on several freelance documentary projects, while trying to stay afloat as a business. This work involves pitching to broadcasters, looking for funding (which takes a lot of time) and taking the projects and completed films to international film festivals and markets.

**Q** Tell us about your development initiative, Bolobathaba Filmmaking Project?

I started it in 2009 at my home village. It’s a community development initiative by my company. We train young people in television and film production, as well as in acting. I used to do it during the holidays but, in 2014, I recruited a full-time trainer, set up a production office and beefed up the equipment.

The project was self-funded from 2009 until 2015. Then the National Film and Video Foundation gave us funding to do four months of training. It meant that we could be more structured and use outside trainers.

We’re currently looking at ways to create a platform where the trainees can use their skills and earn an income. We’ve lost many good people who needed money so had to find any work they could. Some are still unemployed.

Some comedy clips created by Bolobathaba Filmmaking Project trainees as part of the training

- Vulozwi TV Adult Class: [www.youtube.com/watch?v=tbWA2Ordmo](www.youtube.com/watch?v=tbWA2Ordmo)
- Vulozwi TV Water Boys [www.youtube.com/watch?v=ly_iK0D6-0](www.youtube.com/watch?v=ly_iK0D6-0)
- Vulozwi TV Bold and Beautiful [www.youtube.com/watch?v=k26GF8siCXA](www.youtube.com/watch?v=k26GF8siCXA)
- Vulozwi TV Voice of God: [www.youtube.com/watch?v=0tYAWKTtdCw](www.youtube.com/watch?v=0tYAWKTtdCw)
- Vulozwi TV Child of God: [www.youtube.com/watch?v=m22cE9D0j6g](www.youtube.com/watch?v=m22cE9D0j6g)
I was just a girl from rural Limpopo and then suddenly I was in the world of broadcasting. I have memories of the first time holding a camera and my first editing lesson. I remember asking our video editing lecturer, Eddie Mbalo: “Ke e bethe?” (Should I hit it?). This referred to his instruction to stop the knob so that there is an in-point for the edit. (And no I didn’t hit it, I learnt to press the button.)

I met people I never thought I could and did things I never thought possible. I remember the diversity of people in the first intake – from all over South Africa. NEMISA created a harmonious learning environment for us.

Today if my editor lets me down, I sit and edit myself. If my camera operator doesn’t pitch, I operate the camera myself. I write too. I can run a full production by myself, only asking help to perfect it. That’s why I can train others because I’m multi-skilled. NEMISA gave me a platform to unleash my potential. It played a role, not only in my life, but in the lives of the community that raised me.

Q: So you also want to create a television channel. Explain what’s happening there?
I founded Vulozwi TV with the hope of growing it into a television channel. It focuses on the marginalised people of South Africa.

A lot of work has been done on social media to ensure it has the market base and content. The idea is that Vulozwi TV will also be the platform that creates employment for the Bolobathaba Filmmaking Project trainees. The business is currently in progress.

Q: Advice for those who want to go into broadcasting?
It’s about passion, hard work, perseverance and vision. Don’t be afraid to take risks and break from the norm. If you have a concept and believe in it, it doesn’t matter who says what or how long it takes to mature, just keep fighting for it. Modify it, if necessary. Learn from the negatives and keep moving.

Most importantly, I’ve learnt to work on multiple projects at the same time. While it takes effort, time and money, it also multiplies your chances of success.

Molatelo’s experience at NEMISA
After university, a lot of my friends and classmates were off to the bigger cities. Without any city contacts or family to stay with, I had to go back to my village and hope for the best. So I went home, feeling directionless.

It was early January 2000 when I received a call from NEMISA. I was selected as one of their first student intakes.
Research is part of the cycle of embedding e-skills (digital skills) in South Africa. It leads to understanding how e-skills can be used effectively within a South African context. This informs and improves decision making, as well as improving implementation. Following are two research areas that are being studied:

- The role of gender in influencing and impacting on ICT use in marginalised communities
- Conditions for using social media to engage with marginalised communities and the role of e-inclusion intermediaries (ICT resources in disadvantaged areas)

The role of gender in influencing and impacting on ICT use in marginalised communities

Empowering women vital - especially for development goals
ICT can provide women with opportunities to improve their quality of life. It can assist with changing the power relations between men and women, tackling existing gender inequality.

Addressing a digital gender gap and empowering women is also vital for contributing to national socio-economic development and developmental goals. Empowered women can make a significant difference to the economy, society and the country.

Causes for the digital gender gap
Adopting ICTs is slower among low income socio-economic groups in South Africa, particularly with more sophisticated technologies. One of the main reasons is unaffordable internet access.

While there are high levels of cellphone ownership, research shows significant differences in the type of device and how it is used. Far more men own internet-enabled cellphones and far more men use the internet. This is due to higher income and education, as well as additional responsibilities around unpaid housework and childcare.

The research shows that the South African digital gender gap is largely because more women are unemployed and poorly educated. (The information comes from ‘Lifting the veil on ICT gender indicators in Africa’, Deen-swarray, Gillwald, and Morrell. 2012).
Article continued: e-Skills research to inform policy and implementation

**Lack of information on gender-based use of ICT**
There is little information on a gender-based perspective of ICT use in South Africa and Africa. It's important to understand how women use, understand and view ICT, as well as to show the challenges that limit or prevent use. (Information about women in marginalised communities is especially important.)

This research can help with the effective implementation of strategies and interventions that address the challenges. The UWC research aims to contribute to this body of knowledge, with a particular focus on marginalised communities.

**Conditions for using social media to engage with marginalised communities**

Natasha Katunga from the University of the Western Cape

Natasha Katunga (University of the Western Cape) is conducting her doctoral thesis research on social media, identifying the conditions needed to use these tools to engage with marginalised communities. The research will also look at the role of e-inclusion intermediaries (ICT-based resources in marginalised communities).

**Creating a South African knowledge-based society**
As part of the digital revolution, the internet and other technologies are changing the way we live and work. These technologies have an enormous impact on individuals, industries and government - they are changing the way society and economies work.

What is social media?
Social media means the online communications channels that allow people to create communities, interact, collaborate and share content. These can be websites and internet/online applications.

The aim is for South Africa to become a knowledge-based society and digital economy. The benefits include the population knowing about their rights, the economy and opportunities. It also means that citizens can use the knowledge, along with technology, to participate electronically (e-participate) and to improve themselves and their communities.

To gain these and other benefits, the population needs access to ICTs and the e-skills to use them. However, this is still to become a reality for SA.

Marginalised communities are also digitally and socially excluded
Communities become marginalised for a number of reasons, such as poverty and lack of education. These marginalised communities are also digitally and socially excluded from society. This means they cannot participate fully in a digital economy or access online government services provided for their benefit.

Marginalised communities not using ICT resources (e-inclusion intermediaries)
The only way some marginalised people can access internet is through organisations that provide ICT resources for free or at a very low cost in their disadvantaged communities. Examples of these organisations include telecentres or internet cafes. (Ms Katunga's research refers to these organisations as e-inclusion intermediaries.)

E-Inclusion intermediaries aim to equip community members with engagement skills and tools to participate in the information society (and consequently uplift their
ICTs effectively. This is particularly important for communities that are currently marginalised. With the South African government moving to online service delivery, marginalised communities need to be able to access these services.

Current practices and theories position e-inclusion intermediaries as a link between technology and people. This includes providing digital literacy as well as other skills around technology (e-skills).

While there are e-inclusion intermediaries focused on marginalised communities, in general these have not been effective. Research indicates that this may be due to lack of awareness of the intermediaries and the services they provide. This shows us that current communication channels (used by the intermediaries) are not effective.

Other e-inclusion intermediaries also need to engage effectively with their community members. Thus, we need to find out how successful e-inclusion intermediaries are using social media to accomplish their goals. Once the full cycle of the process is understood (strategies, tools, which social media platforms etc.), recommendations can be made.

Role of e-inclusion intermediaries in marginalised communities
For all South Africans to be e-literate by 2030 (as set out by the National Development Plan), e-inclusion is essential. This means that all people are included – they have access to technology, information and the digital skills (e-skills) to use ICTs effectively. This is particularly important for communities that are currently marginalised. With the South African government moving to online service delivery, marginalised communities need to be able to access these services.

Some South African e-inclusion intermediaries are successfully using social media to reach vulnerable people and promote e-inclusion initiatives. This allows them to market their services, provide information and – most importantly – engage with community members.

Other e-inclusion intermediaries also need to engage effectively with their community members. Thus, we need to find out how successful e-inclusion intermediaries are using social media to accomplish their goals. Once the full cycle of the process is understood (strategies, tools, which social media platforms etc.), recommendations can be made.

What are e-inclusion intermediaries?
e-Inclusion intermediaries are public, private or civil society organisations that focus on social inclusion through ICTs or promote the use of ICTs to enhance the socio-economic inclusion of marginalised and disadvantaged groups and of people at risk of exclusion.

Examples of e-inclusion intermediaries:
- public internet access points
- internet cafés
- e-centres
- business centres

Using social media to create awareness about available ICT resources
Within marginalised communities, mobile devices have become increasingly popular. These are used for engagement and accessing the internet. Social media, in particular, is used by marginalised communities.

Some South African e-inclusion intermediaries are successfully using social media to reach vulnerable people and promote e-inclusion initiatives. This allows them to market their services, provide information and – most importantly – engage with community members.

Other e-inclusion intermediaries also need to engage effectively with their community members. Thus, we need to find out how successful e-inclusion intermediaries are using social media to accomplish their goals. Once the full cycle of the process is understood (strategies, tools, which social media platforms etc.), recommendations can be made.

Role of e-inclusion intermediaries in marginalised communities
For all South Africans to be e-literate by 2030 (as set out by the National Development Plan), e-inclusion is essential. This means that all people are included – they have access to technology, information and the digital skills (e-skills) to use ICTs effectively. This is particularly important for communities that are currently marginalised. With the South African government moving to online service delivery, marginalised communities need to be able to access these services.

Current practices and theories position e-inclusion intermediaries as a link between technology and people. This includes providing digital literacy as well as other skills around technology (e-skills).

E-Inclusion intermediaries to rethink communication strategies
While there are e-inclusion intermediaries focused on marginalised communities, in general these have not been effective. Research indicates that this may be due to lack of awareness of the intermediaries and the services they provide. This shows us that current communication channels (used by the intermediaries) are not effective.

E-Inclusion intermediaries need to rethink their communication strategies. Marginalised communities are using social media (such as Facebook and Twitter) to communicate, share and access information straight from their mobile devices. Thus e-inclusion intermediaries need to also use social media to engage with community members more effectively.

Public sector social media use needs to be researched
While the conditions around social media use in business have been documented, this is not so for public sector. Furthermore, business strategies for social media are not easily adapted for the public sector.

An expected UWC research outcome is a structured set of recommendations. These will focus on how e-inclusion intermediaries can use social media effectively as an engagement channel to reach vulnerable people in marginalised communities.
The International Conference on Public Participation (ICPP) was held from 18-19 February 2016 in Durban. It was hosted by the Durban University of Technology (DUT) and the Ethekwini Municipality in partnership with NEMISA’s KZN e-Skills CoLab, MILE (Municipal Institute of Learning), Live Moya and Evaluations.

**Audience:** The audience comprised of national, provincial and local government officials.

**Conference aims:** Following are some of the aims and benefits.

- To create a platform for critical discussion around implementing public participation. This includes understanding the history, context, principles and approaches to participatory democracy, as well as looking at legal and regulatory frameworks.
- To enhance the capacity of the 200 municipal employees currently registered as students of the Public Participation Training Programme at DUT. (Students prepared presentations for the conference.)
- To gain an understanding of reasons for public service delivery protests and how to deal with them (within the context of people-centred development and good governance).

**What is public participation?**

As explained by the International Association for Public Participation, public participation is the “collective efforts of the beneficiaries of development (ordinary people) to organise and pool their social capital... to obtain grassroots objectives through influencing, directing and eventually owning the development process.”

It's about the empowerment and participation of ordinary people. The idea is that people work with government and officials to improve their situation—socially, politically, economically, politically etc. People and communities then build self reliance and capacity so they can contribute to sustainable development.

Across the world, the role of public participation is recognised as central to achieving sustainable and democratic governance. However, typically there is a gap between the legislative and policy framework (which is inclusive and supportive of public participation) and practices on the ground. Government officials, politicians, civil society groups, academics and ordinary citizens all have an interest in bridging that gap and making public participation real.

**Programme:** The conference was opened by Councillor Logie Naidoo (Ethekwini Municipality) and Professor Jairam Reddy (Chair: DUT Council). This was followed by sessions that included the following topics. There were international and local academics and government officials as speakers.

- Overview of public participation: making public participation real.
- South African, African and international experiences of public participation.
- Case studies in public participation.
- e-Participation, leadership and service delivery.

**Next steps?** The aim is to publish a book on public participation consisting of selected papers from the conference.
At the International Conference on Public Participation, Dr Colin Thakur (KZN e-Skills CoLab Director) and Dr Ndlovhoniwani Aaron Tshidzumba (NEMISA CEO) presented on ‘e-Citizenship: a panacea for citizen driven services?’ The paper examines the nature and extent of e-citizenship activities within South Africa through case studies.

Post-apartheid South Africa has a vibrant culture of community activism. This activism has led to an increasing number of community protests over unfulfilled promises. As a developmental economy, South Africa may struggle to meet these demands. This challenge multiplies in the face of a global recession. However, during apartheid the community turned to itself to solve some challenges.

The paper looks at the new and emerging uses of technologies, such as social media, to solve citizen centric challenges in South Africa. The promise of e-government is still in its infancy in South Africa. Even when solutions are presented, they generally haven’t been used by the public. This paper reconsiders if citizen’s activism, through social media at least, can partially fulfill this gap?

Social media refers to forms of electronic communication, such as web sites for social networking and micro-blogging, through which users create online communities to share information, ideas, personal messages, and other content.

Social media is very useful for social activists. It’s an instant form of communication, easy to use and transparent. South Africa’s demographic figures show there are 50.4 million citizens (Stats SA, 2015) and 46% are active internet users. This implies almost 1 in 2 citizens are internet users. There are 79.1 million mobile subscriptions, which is more than the population (including youth and children). The number of social media accounts is 11.8 million or 22% of the population. (40% of the users are under the age of 25.) In essence, there is a tipping point of access to social media for this to be used as a mechanism for social activism.

Following are examples of social media use for social activism. Facebook, Twitter and WhatsApp have been used by local communities for local community support, such as:

- Neighbourhood security, e.g. monitoring and alerting around suspicious activity
- Locating a person thought to be missing
- Locating someone who has been hijacked
- Locating missing pets
- As an early warning system for natural occurrences such as thunderstorms

The provincial e-skills CoLabs are based at universities. Each has a focus on a specific area in e-skills:

- Western Cape e-Skills CoLab: e-Inclusion and Social Innovation, based at the University of the Western Cape
- KwaZulu-Natal e-Skills CoLab: e-Enablement for Effective Service Delivery, based at Durban University of Technology
- Eastern Cape e-Skills CoLab: ICT for Rural Development, based at Walter Sisulu University
- Gauteng e-Skills CoLab: Creative New Media Industries, based at the National Electronic Media Institute of South Africa (NEMISA)
- Limpopo e-Skills CoLab: Connected Health, based at the University of Limpopo
- Southern Gauteng/Northern e-Skills Cape CoLab: e-Literacy and e-Business (knowledge economy and e-social astuteness), based at the Vaal University of Technology
- North West e-Skills Cape CoLab: e-Agro-tourism, based at the University of the North West