

in partnership with presents...





27th ~ 28th MAY 2015

VENUE : DEVELOPMENT BANK OF SOUTHERN AFRICA MIDRAND | JOHANNESBURG

The science and technology and innovation capacity of Africa would be strengthened through the greater participation of women

OVERVIEW

EMPOWERMENT of women is a pre-requisite for achieving inclusive growth. Women farmers represent more than a quarter of the World's population according to the Food and Agriculture Organization, women comprise on average, 43 percent of the agricultural workforce in developing countries, ranging from 20 percent in Latin America to 50 per cent in Eastern Asia and Sub-Sahara Africa. Women grow, sell and prepare food for their families, yet women have less access to produce resources as men to agriculture related assets, inputs and services. If women enjoyed the same access to produce resources as men, they could boost yield by 20-30 percent, raising the overall agricultural output in developing countries by two and half to four per cent(FAO:2011). Women's role in agriculture is staggering with nearly half of the population involved in agriculture and its related activities. Most of the agricultural activities are women specific but sadly worldwide women mostly end up as hired agricultural labourers with substantial gender disparity in wages, earning far less than men in the same job. While there have been policies and progammes by governments to alleviate women's problems, they are however proportionately insufficient and their implementation is far from being satisfactory. A combination of logistical cultural and economic factors has meant that agricultural programs are rarely designed with women's needs in mind.

Agriculture is the cornerstone of most developing countries' economies. Unfortunately, agriculture alone is no longer able to provide a reliable livelihood for the growing populations in these countries. Aternative or additional income generating opportunities are needed to support the millions of poor families who can no longer support their livelihoods from the land alone

Agro processing is seen as an opportunity to provide for more income... The overall potential of agro processing is huge. It can reduce wastage, enhance food security, improve livelihoods for low-income groups and empower women. In sub-Saharan Africa, for instance, it is estimated that 60 per cent of the labour force finds part of its work in small scale food processing, and the majority of them are women

As a result, African women farmers have little or no voice in the development of agricultural policies designed to improve their productivity and a lot needs to done in terms of dealing with gender bias in all aspects of agriculture, access to resources including land and natural resources, assuming nutritional security, diversification of activities with emphasis on productivity including post harvest technology, creation of marketing facilities, ownership of land extensions functionaries and financial institutions. It is hoped that narratives arising from this conference will contribute towards the improvement of quality of life for women farmers, their families, and their communities.

FEATURED SPEAKERS



Molateto Enos Mamadi Director: Subsistence Farming Department of Agriculture, Forestry and Fisheries.



Thandeka Mbassa HOD: Department of Agriculture Rural Development (GDARD)



Cleopatra Ngulube Deputy Programme Manager TechnoServe



Jane McPherson Farmers Development Programs Grain SA Free State



Dimakatso Sekhoto (Nono) Director Makolobane Farmers Enterprises Free State.

WHO WILL ATTEND:

- Every Woman who wants to achieve success in her career, family, community, financial independence and relationship in and outside the workplace
- Policy makers from land reforms, rural development, women and child welfare organizations
- Rural development practitioners
- Members of farmers' associations
- Bankers and Agribusinesses officers
- Gender experts and activists from NGOs dealing with poverty, food security and agriculture
- Local Economic development and local authorities officers
- Bilateral and multilateral organizations representatives
- Financiers of small holder farmers and small businesses

SUMMIT OBJECTIVES

Strategies Presented by seasoned and knowledgeable women farmers who practically work on the ground are running various agricultural projects.

Case studies and success stories promoting women in agriculture

- LandBank SA
- **National empowerment Fund**
- **Makolobane Farmers Enterprises**
- **Tshwane University of Technology**
- **Agricultural Research Foundation**
- Women make up approximately half of the international agricultural workforce, but exercise significantly less power in the sector than men..

Session on Gender inequality

- Rural decision-making bodies do not adequately represent women.
- Agricultural policy must be reframed to encourage women's active engagement in agricultural policy and practice. Failure to do so not only creates gender
- Gain new knowledge and experiences shared from cross-country programmes as well as inter-regional/global successes concerning the role of women in agriculture
- A strategy on how to retain talent and promote leadership and succession planning within the agricultural sector
- Practicing Climate Smart Agriculture
- Strategies on Feeding Africa through Agricultural Innovation.
- Innovations to improve productivity and resilience.
- Funding models for women in agriculture
 - Hear about various funding options which are available to women, small businesses and small scale farmers presented by the National Empowerment Fund
 - Promoting Access to rural Finance for Enhanced Agricultural Productivity in Africa

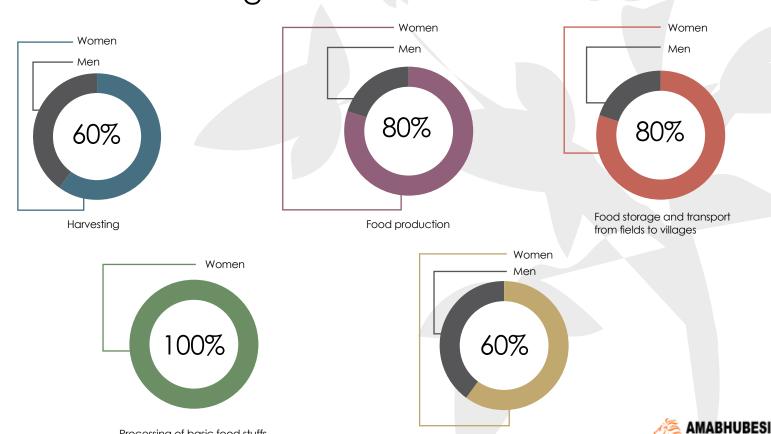
Promoting Entrepreneurship and Youth Development for women within agriculture

- Workshop on Agro processing
- Majority of the producers are women but researchers contribute 1 %
 - Promoting the practice of research and development for the women in agriculture
- Strengthening women programmes in Africa

Processing of basic food stuffs

Accessibility of governments programmes to women

agriculture value chain



Marketing activities

SPEAKERS



Molateto Enos Mamadi Director: Subsistence Farming Department of Agriculture, Forestry and Fisheries.



Nomvula Makgotlho Chief Director Gender Women Enmpowerment The Department of Trade & Industry



Akho Skenjana EC Dept of Economic Development Environmental Affairs and Tourism Agro Processing



Thandeka Mbassa Head Of Department Department of Agriculture Rural Development (GDARD)



Dimakatso Sekhoto (Nono)
Director
Makolobane Farmers Enterprises
Free State.

Dimakatso co manages the Makolobane Farmers Enterprises with her father. The farm is a commercial farming business situated on 2,300 hectares of land in Senekal, Free State and boasts a compliment of 24 permanent employees. Makolobane runs a dairy which supplies raw milk to Nkunzi Milkyway, which in turn processes the milk into various dairy products which are supplied to Woolworths.



Dr Lerato B. T. Matsaunyane Researcher Crop Protection, Plant Genomics, Agricultural Research Council

Lerato Bame Tsalaemang Matsaunyane obtained her matriculation certificate from Mmabatho High School in Mafikeng, North West Province. Her career pathing in research led to her enrolling and obtaining her Doctoral degree with the University of Johannesburg.. In addition, several publications have stemmed from the research projects. To balance the academic and practical aspect of research, Lerato has and is currently training students

at ARC-VOPI, within her research field which is molecular biology.



Annah Kganyago Investment Associate National Empowerment Fund



Dr Lindile Ndabeni Agricultural Systems of Innovation and Entrepreneurship Tshwane University of Technology



Cleopatra Ngulube
Deputy Programme Manager
TechnoServe

Cleopatra Ngulube is an agribusiness and rural development practitioner and expert with over 8 years in managing and providing technical, practical and strategic direction for value chain and market system based integrated agriculture and economic development programs across South Africa. An agricultural economist by profession, Ms. Ngulube's specific areas of expertise include Value Chain Development (VCD), Making Markets Work for the Poor (M4P), Innovation Systems Approach and Cost Benefit Analysis (CBA). Currently she is a Deputy Programme Manager at TechnoServe South Africa for Regional Programme aimed at developing youth-run agribusinesses in South Africa and beyond.



Jane McPherson
Farmers Development Programs
Grain SA



Mampiti Matete
Lead Economist
Economic Research and Business
Intelligence
Landbank of SA

Mampiti Matete is the Lead Specialist in Economic Research and Environmental and Social Sustainability at the Land Bank. Dr Matete is a seasoned researcher in issues related to environmental and agricultural economics. Her previous experience includes working



SPEAKERS

for the International Water Management Institute (IWMI) as an Agricultural Water Management Economist and more than 10 years as a Senior Lecturer and international consultant in agricultural and environmental economics areas. She is mainly recognised for her contribution in mainstreaming of economic issues in the management of water resources in the SADC region.



Malatji Dikeledi Petunia PhD Candidate Agricultural Research Council

Ms Malatji is a PhD student at the Agricultural Research Council, based at the ARC Onderstepoort Campus in Pretoria. She is registered at the University of Pretoria. She has presented her scientific work at numerous conferences both locally and internationally. She has received several scholarships, which include: DST NRF, UP postgraduate support award, European Molecular Biology Laboratory travel award and best paper presentation awards by Congress of the Parasitological Society of Southern Africa. Her passion for community development drove her to do community work in the villages to share wisdom in order to uplift farming system.



Thulile Nhlapo
PhD candidate
Agricultural Research Council's
Professional Development Programme

Miss Thulile Nhlapo is a PhD candidate in the Agricultural Research Council's Professional Development Programme. She obtained her B.Sc. (Hons) degree from Rhodes University and is currently registered with the Molecular and Cell Biology School at the University of the Witwatersrand. Her research interests include identifying economically devastating plant viruses and investigating

host-pathogen interactions. When she's not sequencing viruses, she enjoys listening to jazz, travelling, photography, baking, and is involved in community outreach activities that focus on mentorship and reading programmes for primary and high school learners.



Dr Farai Catherine Muchadeyi Senior Researcher Animal Genetics and Genomics

Dr. Farai Muchadeyi holds a PhD in Animal and Molecular Genetics from Goettingen University, Germany. She joined the Agricultural Research Council of South Africa as a Senior Researcher in Animal Genetics & Genomics in March 2011 after a three-year postdoctoral fellowship at Stellenbosch University. Farai's research interests are in the characterization, sustainable utilization and conservation of livestock genetic resources. Her current research involves the application of genomics and population genetic tools in unravelling the genetic diversity andidentifying adaptive features associated with livestock species from marginalized farming environments. She is passionate aboutinvestigating how the genetic adaptation can be harnessed in mainstream commercial agriculture. Her other projects involve the identification of the causal mutations of genetic disorders and the inclusion of molecular genetic marker information in selection programs. She heads the Animal Genetics and Genomics research group at the Biotechnology Platform (ARC) managing various projects on livestock and wildlife genomics. She is currently a supervisor and mentor to 8 PhDs and 5 MSc students who are training in advanced and statistical genomics relevant to the livestock industry both of the smallholder and commercial farming sectors.

AGENDA

Day One

08:30-09:00 MORNING TEA AND REGISTRATION

09:00-09:15 CHAIRPERSON OPENING REMARKS

09:15-10:15

Key Note Address

"ONGOING INITIATIVES AT THE INTERNATIONAL, NATIONAL AND

LOCAL LEVEL TO PROMOTE AGRICULTURE AND AGRIBUSINESS INNOVATION IN AFRICA".

- What the department is doing to mainstream women and the youth in agriculture?
- Case studies

Speaker: Mr Molateto Enos Mamadi, Director, Subsistence Farming, Department of Agriculture, Forestry and Fisheries

10:15-10:30 NETWORKING OVER TEA



AGENDA

10:30-11:30

WOMEN ENTREPRENEURSHIP, THE PRACTICAL CHALLENGES"

Speaker: Nomvula Makgotlho, Chief Director, GWE The DTI

11:30 - 12:30

FUNDING WOMEN IN AGRICULTURE AND YOUTH

The Established by the National Empowerment Fund Act No 105 of 1998, the NEF is a driver and a thought-leader in promoting and facilitating Black economic participation through the provision of financial and non-financial support to Black empowered businesses, as well as by promoting a culture of savings and investment among Black people. This presentation will look at issues relating to:

- Limited own capital,
- Access to affordable capital,
- Limited management skills, including financial, marketing and technical expertise,
- Lack of accurate and reliable financial information,
- Poor quality of business plans,
- Lower bargaining power and strong competition from established businesses with entrenched market dominance, and
- Lack of access to local international markets.

Speaker: Annah Kganyago, Investment Associate, National Empowerment Fund

12:30 - 13:30 NETWORKING OVER LUNCH

13:30 - 14:30

RESEARCH AND INNOVATION

A majority of chemical pesticides currently used in agriculture contain non-biodegradable chemicals. Through improper applications and disposal, these chemicals end up seeping into the ecosystem and result in adverse effects on the environment and human health. The South African government is intending on implementing comprehensive pesticide reduction strategies that include amongst others replacement of current pesticides with less toxic products and non-chemical alternatives. In addition, pesticides are too expensive for the small scale, resource poor and household farmers and as a result, serious crop loss occur which lead to loss in financial income as well as food supply. According to literature, several plants have been identified to contain fungicide, bactericide and insecticide properties. The use of extracts from these plants as a biological control will provide; for the small scale, resource poor and household farmers; an inexpensive and biodegradable alternative to protect their crops.

Speaker: Dr Lerato Bame Tsalaemang Matsaunyane Researcher: Crop Protection, Plant Genomics, Agricultural Research Council

14:30 - 15:30

PROMOTING YOUTH DEVELOPMENT AND ENTREPRENEURSHIP WITHIN THE SECTOR.

The Agriculture Youth Development Initiative aims at facilitating the development of programs that will capture the interest and commitment of South African youth, particularly young Black people, to agriculture and agriculture-related opportunities that exist in the sector. Although the disadvantaged groups will be the primary focus of this initiative, other non-target groups such as the White male youth will also be included. The initiative also aims to develop support structures and incentive opportunities for its target where possible. The purpose of this initiative is more than just creating interest in pursuing agriculture as a career. It is also about encouraging everyone who has an interest to embark on agriculture-related activities. As part of the awareness campaign it must be stated very clearly that one does not need to own a farm to be involved in agricultural activities. There are a series of activities where people can get involved despite the fact that they may not have any background in agriculture. The initiative should also undertake to market the spin-offs of agriculture, which are currently totally understated, and generally not seen as part of agriculture.

The purpose will be achieved through:

- identifying opportunities in rural areas in which the youth can participate;
- identifying appropriate young individuals and groups who would benefit from this initiative;
- designing assistance packages to benefit special youth; and
- creating financial assistance programmes for young people studying agriculture-related

disciplines at tertiary institutions.

Speaker: Ms Thandeka Mbassa, HOD: Department of Agriculture and Rural Development (GDARD), Gauteng Provincial Government

13:30 - 15:45 NETWORKING OVER LUNCH

15:45 - 16:30

WOMEN FINDING ALTERNATIVE WAYS TO CONTRIBUTE TO FOOD SECURITY

It is about women identifying niche markets; finding the right stakeholders to support you in these markets; developing the required skills in order to establish a strong business case in this niche market. Above all it is about finding ways to leverage the relationships with fellow farmers that can be mobilised to build the capacity that can take the business to another level and even up the value chain. The long term outlook for sustainable food security should always be about finding ways to give farming businesses access to the entire value chain Speaker: Dimakatso Sekhoto (Nono), Makolobane Farmers Enterprise

16:300 - 17:15

AGRICULTURAL SYSTEMS OF INNOVATION AND ENTREPRENEURSHIP

Speaker: Dr Lindile Ndabeni, Agricultural Systems of Innovation and Entrepreneurship, Tshwane University of Technology

End of day One

Day Two

09:00-10:00

COLLABORATIVE INITIATIVES FOR IMPROVED SMALL SCALE AGRICULTURAL PRODUCTION- CASE STUDIES FROM SUB SAHARAN AFRICA

Speaker: Jane McPherson Farmers Development Programs Grain SA Free State

10:00-11:00

AGRO PROCESSING PROGRAMMES SUPPORTED BY GOVERNMENT

Speaker: Mr Akho Skenjana, Senior Manager, Agro-processing at the EC Dept of Economic Development Environmental Affairs and Tourism (DEDEAT).

11:00-12:00

CLIMATE SMART AGRICULTURE

The world's farmers have a central role to play in making agriculture both climate-smart and more productive. FAO's 2011 State of the World Report on Agriculture notes that "women comprise, on average, 43 percent of the agricultural labour force in developing countries."

Therefore, if climate-smart agricultural practices are to be accepted in farming communities in the developing world, they must be viewed as beneficial by both men and women farmers. Benfits include improved productivity, better livelihoods, more income and more options for coping with uncertainty and change. The State of the World Report also points out that "women in agriculture and rural areas have less access than men to productive resources and opportunities" and that "closing the gender gap in agriculture would generate significant gains for the agriculture sector and for society", which could "reduce the number of hungry people in the world

Speaker: Mampiti Matete, Lead Economist, Economic Research and Business Intelligence, Land bank of SA

AGENDA

12:00-13:00 LUNCH

13:00-15:00

ARC PANEL:

"WHY DOES THE THE ARC HAVE SUCH GREAT WOMEN DRIVING THEIR RESEARCH?"

Success and Real life stories

Speaker: Miss Thulile Nhlapo PhD Candidate, Agricultural Research Council

Abstract

Sweetpotato is ranked as the seventh most important staple crop and the third most important root crop. Sweetpotatoes are rich in vitamin A, vitamin C, vitamin B6, potassium, folate, and essential mineral salts. The tubers are also high in carbohydrates and dietary fiber. In South Africa, sweetpotato addresses two national problems, malnutrition and food insecurity. A survey conducted in the rural areas of KwaZulu-Natal, the Eastern Cape and the North West provinces shows that an estimated 64% of children between the ages of 1 to 9 years are vitamin A deficient and sweetpotato plays an important role in alleviating the deficiency. Viral diseases pose a serious threat to the production and quality of sweetpotato tubers, and can cause up 100% yield losses. Extensive studies have been done to elucidate the etiology of sweetpotato virus diseases in other parts of the world. However, detailed genomic characterisation of sweetpotato viruses in East and Southern Africa is lacking. Development of virus detection and identification techniques is important where viral disease control is concerned. Once the viruses are identified, it becomes easier to develop indexing procedures, search for sources of resistance or develop other control measures. Therefore the aim of this research project has been to use high throughput sequencing technology available at the Biotechnology Platform, to detect and characterize sweetpotato viruses in two sweetpotato growing provinces. This project falls within the strategic goal of the ARC, "To improve productivity, production, competitiveness and sustainability of crop based agriculture". A multiplex RT-PCR was developed using the sequence data generated from this study. This will aid with the indexing of plant material (cuttings), prior to sale and distribution to farmers and various nurseries around the country. This sequencing approach has been applied to detecting viruses infecting other crops (potato, cassava, and tomato) in South Africa and Mozambique.

Speaker: Khanyisile Mdladla, PhD candidate, Agricultural Research Council

Abstract

Smallholder farmers in communal areas keep more than half of South Africa's indigenous goats under extensive production systems. In these communities, the dominant goat types are the local ecotypes often described by their eco-region. These ecotypes, have dispersed across the country through historic human migrations and settlement of tribes, formal and informal trading networks, and expansion of agriculture, and so they carry the genetic legacy of past historic events, and adaptation of local environment and production system. The resulting genetic variation lends itself as a starting point for initiating community-based genetic improvement programs for better overall performance and productivity. The paucity of information in the genetic potential of the ecotype populations remains a challenge in these farming systems. Therefore, the study looks at the genetic diversity and relations of indigenous goats populations both commercially developed breeds and non-descript village agats. In addition, we also look at the level of association between genetic variation pattern and environmental (including geographic) characteristics to make inferences on adaptive genetic structure of indigenous goat populations to different habitats in order to identify the goat genotypes suitable to a given environment.

Speaker: Malatji Dikeledi Petunia, PhD Candidate, Agricultural Research Council

Abstract

Village chickens are the most important poultry species owned

by village communities in South Africa. They add value in alleviating poverty and contribute to a global increase in food supply. About 80% of the chicken population in Africa is kept under scavenging system, which is characterized by low productivity & high motality because of lack of proper management, lack of adequate nutrition, diseases, predators and parasitism. Control of gastro intestinal infection depends on the use of anthelmintics, which have negative consequences by prompting the appearance of drug resistance strains and coupled with relatively high costs. Alternative control strategies such as the use of genetic differences in resistance need to be adopted. This study overall seeks to facilitate genetic control measures in the management of farm animal health. This will minimize use of antibiotics and vaccines and improve product safety and animal welfare. Breeding for immune defenses is needed to improve sustainability of livestock systems and is becoming more common throughout the world. We also cater for the needs of the broad communities, to share knowledge, provide support and collaborate with these communities.

Speaker: Dr Farai Catherine Muchadeyi, Senior Researcher, Animal Genetics and Genomics

CAN GENOMICS BE USED IN THE LIVESTOCK SECTOR? - CASE STUDIES FROM SOUTH AFRICA

The advent of whole genome sequencing has seen the development of high density SNP genotyping technologies and their applications in livestock improvement programs. Genomewide SNP data has found application in breed characterization, genetic diversity analysis, genome-wide association studies as well as genomic selection. This review looks at the application of genome-wide SNP data in the characterization and evaluation of South African livestock genetic resources with a special emphasis on indigenous species raised by marginalized smallholder farmers. Case studies are presented in which population genomic tools were applied in a range of livestock species to determine intra-species diversity and population genetic structures as well as infer on genetic adaptation using signatures of selection. Examples are given where genomewide SNP data is utilized in estimating effective population sizes and genomic inbreeding levels in populations where pedigree information is not kept. Determination of causal mutations for livestock genetic disorders by applying genome-wide association analysis is presented. The value of these genomic tools to smallholder livestock farming which is characterized by use of non-descript livestock populations, limited recording and random and unmonitored mating systems as well as exposure of animals to extreme and fluctuating environmental conditions is demonstrated.

15:00-16:00

DEFINING STAKEHOLDER ROLES IN PROMOTING INCLUSIVE YOUTH DEVELOPMENT AND ENTREPRENEURSHIP IN AGRICULTURE

Africa faces the paradox of having enormous wealth potential in a youthful population but a huge social and economic burden in the significant high youth unemployment levels. Agriculture presents an opportunity for the continent to tap into the potential and reduce the burden. However, the fundamental question is how do we achieve this? The answer lies in borrowing from the traditional African proverb "it takes a whole village to raise a child", to bring all stakeholders in the agricultural market ecosystem – private, public and civil society together to 1) think outside the box to capitalise on the gains of modern agriculture, 2) transform the commercial business model to cater for the youth business peculiarities and 3) to complement each other's efforts. This presentation explores TechnoServe's model for promoting youth development and entrepreneurship in agriculture focusing on the ideal roles for all stakeholders. Speaker: Cleopatra Ngulube, Deputy Programme Manager ,TechnoServe



REGISTRATION FORM

Authorising Person: / First Name: Surname: Company / Organisation: Designation: Phone: Email Address: Company VAT No: Postal Address: Postal Code: Person dealing with accounts: Country: Email Address: Date: Signature:

By completing and signing this form, the signatory accepts the terms and conditions as stated on the registration form.

SUBSTITUTIONS:

Delegate Substitution. Substitution is welcome at any time and do not incur any additional charges. Please notify AMABHUBESI in writing of any such changes at least 3 days before the date of the event.

- Please note that the speakers an topics were confirmed at the time of publishing however circumstances beyond the control of the organizers may necessitate substitutions, alterations or cancellations of the speakers and/or
- As such, AMABHUBESI reserves the right to alter or modify the advertised speakers and/or topics if necessary. Any substitutions or alterations will be updated and sent to you as soon as possible
- Delegate substitution must be made in writing 7 days before the start of the

PAYMENT BY MEANS OF BANK TRANSFER

- Please state your full names clearly on the money transfer.
- Please note, bank charges are of your OWN account and this should be stipulated to your bank. Please advise your bank that the charges should be included in your deposit
- A copy of the bank deposit receipt should accompany your registration form and must be posted or faxed (+ 27 11 326 0354)

Africa's Women in Agriculture **Entrepreneurship &** Youth Development Summit



27th ~ 28th MAY 2015 Development Bank of Southern Africa Midrand I Johannesburg



+27(0)11 326 0353



+27(0)11 326 0354

R2,999

PER DELEGATE

Cost, excl VAT pp

Please complete and return this form to Linda

CANCELLATION NOTICE:

By signing and returning this registration form, the authorizing signatory on behalf of the stated company is subject to the following terms and conditions:

- Charge of 50% of the registration fees, plus R700 (+ VAT) Administrative charge will be made for cancellations received in writing at least 14 working days prior to the event.
- For any cancellations received in less than 7 working days before the date of the event, the full fee will be payable and no refunds or credit notes will be
- If a registered delegate does not cancel and fails to attend the summit, this will be treated as cancellation and no refund or credit will be issued.

Registration fees above INCLUDES the following entitlements: Entrance to session, registration pack, daily lunch and refreshment breaks.

Registration fees above EXCLUDES the following entitlements: Travel costs and accomodation

PLEASE NOTE: - AMABHUBESI HAS A STRICT NO CASH REFUND **POLICY**

| Company VAT No. | 4870237817 | | |
|-----------------|---|--|--|
| Branch name | FNB - Randburg Square | | |
| Account name | Amabhubesi Training cc | | |
| Reference | Insert your ref number on the deposit slip please | | |
| Name of Bank | First National Bank (SA) | | |
| Branch Code | 261 - 750 | | |
| Account number | 621 346 581 55 | | |
| Swift Code | FIRNZAJJ | | |

| Delegate Attendance Information: NOTE: Please provide information as you wish it to appear on your name badge and on the official participant database | | | | | | |
|---|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

