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REPUBLIC OF SOUTH AFRICA



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UK and South African entrepreneurs collaborate in initiative to alleviate poverty in South Africa

A collaboration between South Africa (SA) and the United Kingdom (UK) has brought together pioneering innovators from the two countries, to create a positive impact in low-income communities in South Africa.

This through the Scaling Out For Impact (SOFI) initiative which is a co-venture between Innovate UK, Newton Fund, and the Technology and Innovation Agency (TIA) of South Africa, supported by the Black Business Council and the Department of Science and Innovation (DSI) of South Africa. The programme is delivered through its commissioned partner Liminal.

SOFI 2020 brought together thirty-eight (38) pioneering innovators from South Africa and the UK as part of an immersive 6-week programme to gain insights into inclusive innovation and work together to address three interconnected challenges that have come into sharper focus during the COVID-19 pandemic. The socio-economic effects of the pandemic are felt particularly hard in both rural and township economies of South Africa. SOFI aims to ameliorate impacts of the pandemic through partnerships and innovation, contributing to a path of recovery and growth for these communities in South Africa. The partnership with Black Business Council has served to broaden the base of participants to include highly skilled and innovative entrepreneurs who would have missed out on some of the national government's initiatives to support and grow black businesses in the country. The SOFI Programme goes a long way in helping to fulfill the vision of a transformed economy. The implementation of programmes such as SOFI and others serves to position black businesses, in particular Black owned small and medium enterprises, at the centre of economic growth and participation.

Co-created ideas and innovations will be guided by South African entrepreneurs who bring understanding of what works and what is needed in their communities, by facilitating meaningful partnerships with UK companies, while drawing on the knowledge and insights from UK innovators and other supporters from SOFI.

Innovators on the programme from both countries brought together a diverse set of expertise, technologies and experiences. During the virtual showcase on Monday, 15 February 2021, fifteen projects presented their innovations and four (4) partnerships were announced for follow on joint funding from both TIA and Innovate UK. The projects selected are aligned to the TIA's position on inbound technologies - *Inbound technologies can be further improved, developed, adapted and utilized by South Africans or in collaboration with international partners. Further technology development work must be performed in SA and comply with the provisions of the IPR Act.* The four partnerships are;

Future Matters

Community-driven transitions to the circular economy through biomaterial exploration. The project is a collaboration between Big Circle Studios co-founder Kiera Crowe from SA, Eco Invader Solutions from SA and Materiom led by Zoe Powell from the UK. Future Matters is a community engagement programme centred around material research, organic waste management, and skills creation. This pilot project aims to target the intersection of social, economic, and environmental impact through workshops and community co-creation. The project will explore 50 recipes for biomaterial production by working with communities.

SA Waste and Biomass Valorization (Waste to Value)

Manufacture of low cost, high quality filament for 3D printers from waste: Recycled PET and Bio-waste Bagasse. The project is a collaboration between SA Rebuilders, led by Dr Maryam Jordan; Bluepile from SA and Tech for Trade led by William Hoyle from the UK. The project will be implemented in the Umlazi community and is linked to Mangosuthu University of Technology. The development presents an attractive market opportunity to develop cheaper, versatile filament with improved mechanical properties from plastic waste and bagasse with reproducible print quality. The project will also seek to offer waste collectors a fairer price for plastic collection. Further filament production would mean skills development for South African youth and potential job creation linked to the successful market share of PET filament made locally.

4IR Aqua Security

Drives the accelerated implementation of SDG-6 through the strategic deployment of smart technologies across the South African water sector. In tandem, the 4IR-AquaTech Accelerator Programme will deliver tailored support and mentoring to entrepreneurs and innovators to deliver positive impact around water security and sustainability. Twenty-seven youth (representing 27 years of SA democracy) with water related technologies will be incubated in the accelerator programme for training and further technology development through UK technologies. The project is a collaboration between the ICDR group led by Lucky Litelu from SA, Amanzi Technologies from SA, Hexsor Scientific Ltd led by Dr Jeyan Sreekumar from the UK, Membranology Limited and AquAffirm Limited from the UK.

Sexier Waxier (Blockchain Eco-Surf Wax)

Pilot production to secure distribution of an innovative high-value sugarcane wax from a biorefinery waste stream in SA. Product adulteration is common and the integration of a UK-developed block chain certification technology will provide sourcing provenance, reduce counterfeiting, and improve supply chain management. The unique properties of this sugarcane may be applicable in the cosmetics industry and thus will stimulate the growth of cosmetics industry in rural communities. The project is a collaboration between Sucrochem (Pty) Ltd led by Warwick Thompson from SA and BlockMark Technologies Ltd led by Tom Alcott from the UK.

Deputy Director-General for International Cooperation and Resources at the DSI, Daan du Toit, welcomed the SOFI initiative, saying it aligned well with the policies of the department.

“There is a complete alignment with our policies through which we seek to build an ecosystem which is responsive to the imperatives of using inclusive innovation to fight poverty in South Africa,” said Mr Du Toit, referring to the involvement of the Black Business Council in the project.

He said all the focus areas of the initiative, including health innovation, digital economy or circular economy, were key strategic priorities for the DSI, as well as international cooperation through which to share experiences and expertise.

“SOFI adds value and also to the many years of collaboration between South Africa and the United Kingdom through the Newton Fund. We also delighted at the role played by the Technology Innovation Agency and its UK partner, Innovate UK,” he said, adding that international cooperation in science and innovation reinforced global solidarity particularly in recent developments with COVID-19.

“It has been a pleasure and a privilege to work with TIA and the BBC on SOFI. The programme is a testament to the potential of collaborative innovation to lift people out of poverty and transform their lives and their environments. We look forward to seeing these projects grow and scale” said Innovate UK Newton Fund Programme Manager, Mr Niraj Saraf.

Technology Innovation Agency, Innovation for Inclusive Development Manager, Dr Anitha Ramsuran said “The SOFI programme was conceptualized as a model for deploying UK based technologies with further technology development conducted in SA to communities in a *scale out* approach as opposed to a *scaling up* approach. It has been an exciting journey working with our strategic partners: Newton Fund, Innovate UK and the Black Business Council and the 38 innovators in a collaborative, intelligence sharing, co-created and inclusive approach. We are looking forward to the implementation of these co-created projects and tracking the impact it will make to the communities involved”.

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