

Water Scarcity and Risks to Agriculture: A Roundtable Discussion with the Minister for Agriculture, Irrigation and Water Development

AGENDA

Wednesday 11th July 2018

Mandela Room, Edinburgh City Chambers High Street, Edinburgh, EH1 1YJ

2.45–4.00pm: Water Scarcity and risks to Agriculture

2.30pm: Guests arrive, teas, coffee and networking

2.45pm: Welcome *Kathy Wright*

2.50pm: Overview of delegation and the work of hosts, the Scottish Government, Scottish Water and the University of Strathclyde

Prof Bob Kalin, University of Strathclyde

3.00pm: Arrival of Ministerial delegation

3.05pm: Welcome and introductions *Kathy Wright*

3.10pm: Short presentations from members: 5-minute case studies giving examples of Scotland-Malawi cooperation in this area:

Tyler Farrow, Water Witness International

*Prof Liz Baggs, Global Academy for Agriculture and Food Security,
the University of Edinburgh*

Ciara Commins, SCIAF

3.25pm: Presentation from Hon. Joseph Mathyola Nakari Mwanamvekha, Minister for Agriculture Irrigation and Water Development: outlining priorities for the Government of Malawi and responding to case studies

3.35pm: Open discussions on water scarcity and risks to agriculture

3.55pm: Concluding remarks

4.00pm: Minister departs

Teas, coffee and networking

ATTENDEE LIST

Hon Joseph Mathyolo Nakari Mwanamvekha	Minister for Agriculture, Irrigation and Water Development
Hon John Alfred John Chikalimba	MP for Zomba Opposition Party, PP and VC of Budget and Finance Committee
Wadi Chitembe	Principal Administrative Officer, Ministry AIWD
Emma Mary Mbalame	Director, Water Supply, Ministry AIWD
Prince Wellington Charles Mleta	Acting Director, Water Resources, Ministry AIWD
Oswald Kabalilo Mwamsamali	National Water Resources Authority
Quent Kalichero	Malawi High Commission
James Mambulu	BAWI
Paddy Abbot	LTS International Ltd
William Apted	LTS International Ltd
Claire Arnott	Thrive Scotland
Liz Baggs	Global Academy for Agriculture and Food Security
Amando Borge	The University of Strathclyde
Stephanie Terreni Brown	Clean Water Wave
Stuart Brown	SMP Board
Ciara Commins	SCIAF
Kirsty Connell-Skinner	University of Strathclyde
Zoe Cuthbert	Brewgooder
Ian Dunn	SCIAF
Tyler Farrow	Water Witness International
David Hopkins	SRUC
Peter Jeffries	GALVmed
Bob Kalin	University of Strathclyde
Alan Laverock	The Bananabox Trust
Natalie Magee	Print & Sign Centres
Yonah Matemba	UWS
Dory McIntosh	Challenges Worldwide
Ian Nicol	Scottish Government
Graham Niven	Independent
Jim Rae	WaterforallAfrica
Martin Rhodes	Scottish Fair Trade Forum
John Riches	JTS
Nick Rowan	Balfour Beatty
Lewis Ryder-Jones	The Alliance
Kevin Simpson	Malawi Fruits
Grace O'Donovan	SMP
Jackie Farr	SMP
Kathy Wright	SMP

APOLOGIES

Callum Aitken	People's Postcode Lottery
Norman Chipakupaku	Cooperative College
Dave Thomson	Associate Member

Jane Salmonson	The Alliance
Peter West	Hon. Consul for Malawi
Nicola Cogan	Scottish Government
Charlie Bevan	Tearfund
Lorna McDonald	Tearfund
Daniel Cosgrove	UNICEF
Percy Patrick	SCIAF
Charles Howie	JTS
Ruth Milliken	Scotland Lights Up Malawi
Nick Hepworth	Water Witness International

MINUTES

1. Welcome, Kathy Wright

Kathy Wright thanked guests for attending and noted the excellent turn-out for the meeting. She thanked the Edinburgh City Chambers for use of the room and apologised for the lack of space at the table. Kathy ran through the four main parts to the meeting outlined in the agenda and encouraged attendees to stay for networking over tea and Malawian coffee afterwards. Kathy apologised for David Hope-Jones' absence at the meeting as he is en route to Malawi, and encouraged members to follow his journey on Instagram (@scotland_malawi-partnership).

2. Overview of delegation and the work of hosts, the Scottish Government, Scottish Water and the University of Strathclyde, Bob Kalin

Bob Kalin introduced the Malawian delegation, explaining that there was a Member of Parliament in attendance from the opposition party who is on the Agricultural Committee and the Budget and Finance Committee. As such, there are two different political parties present who will be discussing water resources, regulation, policy and the future of Sustainable Development Goal #6. Bob thanked the Scottish Government for its continued funding of the Climate Justice Water Futures Programme since 2011, noting that they are seeking to establish a partnership under the Water Resources (Scotland) Act 2013 in order to share the Scottish approach to policy regulation with the Government of Malawi in a detailed exchange every two years.

In 2013, Malawi also passed a new Water Resources Act, prompting more shared learning of the positives and challenges of implementing this legislation. Bob gave the example that in Scotland, we have learnt about the challenges to the rural sectors by learning about similar challenges in Malawi. Conversely, we are sharing our experience with water loss from pipes, and regulations. Malawi is currently looking at implementing a National Water Resources Authority, which should have started alongside the 2013 Act, but which has yet to be formalised. The Malawian delegation present will, as a result, be meeting with the Scottish Drinking Water Regulator, Economic Regulator, Citizens Advice Scotland, the Scottish Government Water Industry team, Scottish Water, and the Water Industry Commission for Scotland (WICS). The purpose is to share knowledge and information about how we regulate and monitor water resources so that the delegation can observe and apply this knowledge in achieving SDG 6.



Furthermore, Malawi has a unique opportunity in that its priorities on food security, climate change, irrigation issues, etc all fall under one Ministry – the Ministry for Agriculture, Irrigation and Water Development. In other countries these are usually separated. In Malawi this means that there is an opportunity for sharing knowledge and learning.

Bob Kalin also noted that the Minister and the delegation have the opportunity at the roundtable to engage with us and for both sides to observe areas of collaboration between the two countries.

The Malawian delegation arrived, including the Minister for Agriculture, Irrigation and Water Development, Hon. Joseph Mwanamvekha.

Kathy Wright officially opened the meeting, thanking the Hon. Minister, Hon. MP John Chikalimba, and the rest of the delegation for attending a meeting with members of the Scotland Malawi Partnership (SMP). Kathy referenced the significance of the President of Malawi's visit to Scotland earlier this year and the historic signing of the new Global Goals Agreement between the two governments.

Kathy gave a brief introduction on the SMP and the Malawi Scotland Partnership, noting that both are led by the Partnership Principles and Malawian priorities. The SMP strives to make members aware of flagship policies in Malawi and the Government of Malawi's National Agriculture Investment Plan will also be made available on the SMP website.

This was followed by a roundtable introduction of all attendees.

3. Short presentations from members: 5-minute case studies giving examples of Scotland-Malawi cooperation in this area:

Tyler Farrow, *Water Witness International*

Tyler Farrow explained that WWI deals with sustainable water resource management and water stewardship with the private sector, playing a positive and proactive role on water management, ensuring sustainable and economic efficiency.

WWI works through the Alliance for Water Stewardship Standard, similar to Fair Trade but for responsible water use. It guides and recognises those who use it responsibly, and comply with laws and regulations and manage water risks. WWI have a programme supported by the Scottish Government's Climate Justice Innovation Fund, and they work across Malawi to implement the Stewardship Standard and learn about the benefits from a development agricultural perspective.

Stewardship can bring strategic benefits, including regulatory compliance and alignment of government priorities. It requires users to show compliance with laws and regulations. It also brings in investment, as delivering on the national plan requires significant mobilisation of investment from the government and private sector. Increasingly, investors are aware of water risks and they want to feel comfortable that they are not investing in projects that are contributing to pollution, or having a negative impact on the environment. There is a safeguard



mechanism and there also is security for investors that they are investing in sustainable production, such as the investment from the CDC on agrigane.

Liz Baggs, *Global Academy for Agriculture and Food Security*

The Academy was set up by the University of Edinburgh less than two years ago, focusing on smallholder agriculture systems in sub-Saharan Africa and on achieving sustainable healthy diets. There are currently 15 core staff recently appointed in expertise ranging from agricultural law to policy to economic environmental systems and core production to civil science. They take a collaborative approach on research and education. There are now four undergraduate degree programs set up in collaboration with the Scotland's Rural College (SRUC).

The Academy is now looking at nutritional requirements and production to deliver nutrition in a sustainable way that ensures sustainability of the environment. Challenges faced include rainfall patterns, i.e. the indirect impact on water through soil degradation and soil organic stocks. Ways to increase nutritional diversity include building on experience, such as branching out from maize and translating learning into other crops which involves looking at the right legume for the right place and time. There needs to be consideration of which crops are the most resilient to flooding and drought. The Academy's links with Malawi are important for both education and research.

Ciara Commins, *SCIAF*

SCIAF is the Scottish Catholic International Aid Fund, the official aid agency of the Catholic Church in Scotland. SCIAF has been working in Malawi since 1985 and currently has nine partners working on seven different projects. One is funded by the Scottish Government Climate Justice Fund, the recently announced Climate Challenge Programme Malawi. This will focus on climate justice and an integrated approach to the food, water and energy nexus, using community-led decision-making for the priorities of the programme.

In terms of water security and agriculture, SCIAF has supported communities with a number of irrigation projects over the past few years. There are now 25 irrigation schemes in Malawi, which use a range of technology based on geo-location, needs, priorities and the outcome of integrated water resource management plans. The technologies include rainwater harvesting, gravity water harvesting and groundwater harvesting using solar pumps. To date the irrigation schemes have supported over 10,000 people and have resulted in farmers harvesting twice a year, diversifying crops, increasing access to water for domestic and agricultural purposes.

Alongside the schemes SCIAF employs soil and conservation techniques in agriculture projects to conserve water whilst increasing access to it. The systems are managed and maintained by trained committees with strong female representation and participation. Positive impacts to date include a solar irrigation group in Chikwawa district, Malawi, saved enough money to purchase the 3.5 hectares of agricultural land and to buy new solar panels. A night storage reservoir in Dedza, Malawi, resulted in a reduction in conflict between the community and downstream neighbors because of the project. SCIAF are committed to learning from their programmes and sharing this with others. Some lessons learned to date include the fact that rainwater harvesting systems work best with tin or tiled roofs yet, in Malawi, few of the most vulnerable HHs have such roofs hence there's need to consider other technologies more broadly. Watersheds need to

be considered when selecting communities. Management and maintenance committees need to be trained on lifecycle costing as sometimes monthly collections were based on what people agreed they could afford, rather than realistic expectations of what might be required to ensure sustainability.

4. Presentation from Hon. Joseph Mwanamvekha, Minister for Agriculture, Irrigation and Water Development: outlining priorities for the Government of Malawi

The Hon. Minister thanked Kathy Wright for hosting this meeting, Professor Bob Kalin for organising this visit, the Scottish Government for their support, his colleagues from the delegation, Her Excellency the Deputy High Commissioner and guests for attending.

The Hon. Minister gave some background on the Malawian economy which is predominantly agriculture-based. Over 80% of the population is employed in agriculture and it accounts for 70% of exports. 30% of GDP is from agriculture and the economy depends on it; if agriculture is affected by drought, the economy, exchange rates and interest rates are similarly affected.

Most of Malawi's agriculture sector is comprised of smallholder farmers, and support for the challenges they face comes from the Department of Education, the Department for Water (Resources and Supply), land management, etc. Unfortunately, there is very little private sector investment in agriculture in Malawi because of the challenges and risks associated, such as drought. The Ministry is trying to address these barriers to investment.

The Hon. Minister followed this introduction by providing an overview of the [National Agriculture Investment Plan \(NAIP\)](#). The NAIP is a medium-term investment framework for the agriculture sector in Malawi covering a five year period from 2018 to 2023. It provides a framework to coordinate and prioritise investments by various government agencies, development partners and non-state actors (NSAs) in the sector and is the main implementation vehicle for the National Agricultural Policy. The NAIP consists of four main programs and these together with their costs include:

- A. Policies, institutions and coordination. This program aims at improving the policy and regulatory environment, stakeholder coordination and accountability. The cost for this program is USD372 Million.
- B. Resilient livelihoods and agricultural systems. This one is meant to strengthen resilience of livelihoods and natural resource base for agriculture. The cost here stands at USD925 Million.
- C. Production and productivity. This one targets increase in production and productivity of a more diversified agricultural sector. It is estimated to cost USD994 Million.
- D. Markets, value addition, trade and finance. This one is aimed at enhancing the market access, value addition, trade, and access to finance. This one is estimated to cost USD927 Million.

In its entirety, the NAIP is estimated to cost a total of USD3.218 Billion. In order to achieve the objectives of the NAIP, 16 Intervention Areas have been identified for implementation:

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| 1. Policy, Program and Stakeholder coordination | 9. Agricultural innovation systems |
| 2. Farmer Organisation | 10. Access to inputs |
| 3. Public agricultural services delivery | 11. Natural resource management and climate |
| 4. Food and nutritional security | 12. Irrigation development |
| 5. Food safety and Quality | 13. Mechanisation |
| 6. Empowerment and tenure security | 14. Agricultural markets and trade |
| 7. Disaster risk management | 15. Investments in agribusiness |
| 8. Pest and disease management | 16. Access to financial services |

The Hon. Minister concluded by thanking the Scottish Government for the support they continue to give to the Malawian Government.

Hon. MP John Chikalimba then spoke about how regardless of political parties in the Malawian Government, all party leaders come together over issues of agriculture and water security. He noted that while some may have differences of political opinion, when it comes down to development and the needs of the people, they speak with one voice. Rather than opposition parties, they can be called supporting parties.

Kathy Wright supported this by highlighting the cross-party support for Malawi through the Cross Party Group in the Scottish Parliament and the All-Party Political Group in Westminster.

5. Open discussions on water scarcity and risks to agriculture

Q: Yonah Matemba, UWS: Given that the Malawian population grows every year by 3.3%, if in five years it has grown by 6.6 million, are there future plans to deal with population growth?

A: The Hon. Minister explained that the government knows the population is growing exponentially. One of the solutions is education. There is a positive correlation between families that are more educated and child spacing. Training them on the importance of managing family and being able to judge capacity based on resources is our focus.

Another controversial debate is implementing policy to limit households to two children, although religions will see this as unacceptable. One of the reasons the population is going up is that parents aren't sure if their children are going to survive in life, so they have multiple children so that some will stay alive. If parents have assurances about their children's lives through safe water, then they would likely have smaller families.

Q: Stephanie Terreni Brown, Clean Water Wave: Can you talk about the social enterprise model where revenue generated can be used for socially and environmentally beneficial projects? Does the social enterprise world feature in your remit?

A: The Hon. Minister affirmed that social enterprise is a sector that they are interested in supporting. Ian Nicol of the Scottish Government added that they are funding the Social Enterprise Academy to increase capacity in Malawi, and that fits in with the Government of Malawi priorities.

The Hon. Minister added that he kindly requests that organisations work with the Government of Malawi and within their priorities. This was not a request to give the money to the Government, but to work with them. The Government has regulations, for example for the construction of boreholes, yet it is difficult to trace what the NGO's are doing, and therefore how the Government can monitor their adherence to standards and provide support. NGO's take a leading role in this area but the Government must know what they are doing. It is important we all work together for the common aim of clean and potable water for everyone.

Ian Nicol from the Scottish Government added that they expect all of the projects they fund to let the Government of Malawi know what they are doing and what they are working on. For example, when it comes to boreholes, they would expect projects to link in with Bob Kalin's Water Futures Programme to ensure they are not funding sub-standard projects.

Q: The Hon. Minister asked whether anyone in attendance at the meeting could speak about their interest or experience in investing in Malawi.

Dory McIntosh from Challenges Worldwide spoke about their focus on supporting capacity building for enterprise in the agricultural sector through a social business model which is self-sustaining. Peter Jeffries from GALVMed spoke of their work on market development in Malawi with the African Union Centre for Ticks and Tick-Borne Diseases, and how their partners are looking at ways to increase their investment in the sector. Tyler Farrow from Water Witness International referenced the increased investment from the CDC Group in agriculture. John Riches from JTS responded on their work with smallholder farmers through NASFAM but recognised the challenges for investing in this sector:

Q: John Riches, JTS: I can't see how it is possible to invest in smallholder farming until the farmers are organised into groups big enough to make them worth investing in. The use of water must be effective, which is much easier to do when you are working with 7,000 people. So I welcome developing smallholder farm organisations, but how does the Malawi Government propose to go about doing that?

A: The Hon. Minister expressed support for smallholders and referenced the Smallholder Act that is being worked on at present. He recognised the importance of organisations such as NASFAM. He recognised there's more risk working with smallholders, but there is pressure to do more in this space and there is important impact about shared knowledge amongst these groups. The Government is putting plans into place but the issue is more resources and value addition.

6. Concluding remarks

Oswald Mwamsamali and Prince Mleta reminded attendees that the issue being discussed today is water scarcity. Water scarcity manifests in two ways: physical water scarcity, which is not the main issue as Malawi has an abundance of water in rivers and Lake Malawi; and economic water scarcity, which is the lack of infrastructure or lack of human capacity to deal with water scarcity. Because agriculture is at the core of the Malawian economy, the risks to agriculture and water become risks to all other sectors. If Malawi is to avoid this economic water scarcity, there is a need to invest in infrastructure like boreholes, and catchment materials for water which flows



down into Mozambique. There are insufficient structures to catch water, like aquifers, so it is this aspect that requires addressing.

The Hon. Minister gave his closing remarks, thanking all for the opportunity to learn and share, and welcomed everyone to visit Malawi, either as a tourist or to invest in the Warm Heart of Africa. The Government of Malawi will shortly be having a National Education Policy and an Investment Forum on water supply and resources, and invited all to attend.

Kathy Wright thanked the Hon. Minister, Hon. MP, the delegation, the Deputy High Commissioner, speakers, the SMP team and all attendees.

----- End of meeting -----