

MEDIA RELEASE

8am, 4 September 2023

LESSONS FOR SUSTAINABLE INTENSIFICATION IN ACTION

Sustainable intensification of agricultural production is needed to feed 10 billion people with limited land and water resources in a changing climate. There is proof positive that community driven programs can deliver lasting change, but it takes social as well as technological innovation.

Professor Jamie Pittock from the Fenner School of Environment & Society, ANU is well known for his work on Australian environment policy, but it is his work in Africa that will be the focus of his talk at the Crawford Fund's international conference - Australia's key food security event - *Global Food Security in a Riskier World* being held in Canberra, 4-5 September.

"Australia faces many problems and challenges around governance of the interlinked issues of water management, energy and food supply, responding to climate change and conserving biological diversity. But for those facing these issues in developing countries, the outcomes can be life-threatening," said Prof Pittock, who directs research programs on irrigation in Africa, and hydropower and food production in the Mekong region, as well as sustainable water management in the Murray-Darling Basin.

"Growing food is complex. Reducing poverty and increasing sustainable food security requires investment in social changes as much, or more, than technological changes," he said.

"The Transforming Irrigation in Southern Africa (TISA) project which has been underway for the last decade, led by ANU and funded by the Australian Centre for International Agricultural Research, demonstrates how Australian partnerships in developing countries can greatly increase food production and incomes from the same land while using less water."

He explained that in Africa, enormous investment in irrigation schemes have failed and trapped farmers in poverty.

"The ten-year TISA project aimed to reboot failing small-holder irrigation schemes in Mozambique, Tanzania and Zimbabwe with simple inexpensive tools - **The Chameleon and the Full Stop** developed with CSIRO with ACIAR funding - and social changes."

"Simple to use soil monitoring tools enabled farmers to manage their water application and soil fertility. Farmers at the head end of canals reduced their water application by half to two thirds, increasing crop yields and generating many other benefits."

"But it wasn't all production focused. In a social process, farmers formed agricultural innovation platforms. They identified, prioritised and fixed problems that they could influence, including to grow more profitable crops, lower input costs and better access markets. This increased household incomes and catalysed many other benefits which helped many weather the COVID pandemic," he said.

According to Prof Pittock, the TISA project illustrates that long term research for development investment into community driven research has enabled lasting change.

"Empowering farming communities and businesses with social and technological investments is key to building profitable agricultural systems that deliver lasting benefits," he concluded.

Other speakers include **Dr Cary Fowler**, the US Special Envoy on Food Security, **Em Prof Kym Anderson AC**, renowned trade economist and winner of the Crawford Fund medal, **Professor Wendy Umberger**, CEO, The Australian Centre for International Agricultural Research; **Ben Fargher**, Environmental Markets Lead, Cargill Asia Pacific, and **Dr Warren T K Lee**, Senior Nutrition & Food Systems Officer, UN FAO.