

Section 1 – Introduction to the course

[Phil Woodhouse](#) is Professor of Environment and Development at the Global Development Institute, at The University of Manchester. He was the lead researcher on the Studying African Farmer-Led Irrigation project.

After training as an agricultural scientist at Oxford and Reading, Phil worked in Mozambique for eight years for the National Agronomy Research Institute and the Food and Agriculture Organisation of the United Nations. After returning to the UK he was first based at the Open University and subsequently at Manchester. He has undertaken research in a number of countries in Francophone West Africa, southern Africa, and East Africa.

Watch the video here: <https://www.youtube.com/watch?v=S6-RWtirK6E>

Video transcription

Welcome to our introductory course on farmer led development of irrigation.

Early in my career when I was working as a soil scientist in tropical Africa, it became very clear to me that water management was central to any improvement of soil productivity, not least because the variability of rainfall – both from year to year and across the course of any given rainy season.

And so for a number of years I've been undertaking research on how farmers – small scale farmers – in Africa are adapting their land and water management both technologically, socially and economically, to deal with changing agricultural circumstances.

A long running theme in this work is the extent to which when you observe what farmers are doing in the field, it diverges greatly from the expectations of policymakers. In particular, farmers seem to be much quicker to identify new opportunities and to respond to them than agricultural planners seem able to imagine.

So when I began to read research reports of rapidly expanding irrigation by small scale farmers in central Mozambique I was very keen to collaborate with the researchers who'd been leading this work in Wageningen University in the Netherlands.

When we got talking, we realised that this kind of thing was going on in many different places throughout sub-Saharan Africa. So together with colleagues of mine here in Manchester, with Hans Komakech in Tanzania and with Angela Manjichi in Mozambique, we formed a team to investigate this phenomenon of farmer led irrigation development in more detail and to engage policymakers in government and elsewhere in discussion of what should be the response to it.

This became a three year project which we call Studying African Farmer-Led Irrigation.

This course was conceived after we had run a couple of two week workshops in Tanzania. The workshops were oversubscribed and we wanted to find a way to share more widely at least a summary of the lessons and discussions that had taken place.

Of course this short online introductory course can only provide a summary of the many practical and policy questions which are raised by the phenomenon of farmer-led development of irrigation in

Africa and we encourage you to sign up to the SAFI network which is hosted by Hans Komakech and his colleagues at WISE futures in Arusha in Tanzania.

Recognising the potential of farmer-led irrigation with Dr Hans Komakech

[Dr Hans Komakech](#), centre leader of WISE Futures and researcher in the Studying African Farmer-Led Irrigation project, explains the growing realisation of the potential for farmer-led irrigation.

Watch the video here: https://youtu.be/AqIQUg8a_As

Video transcript:

I think there is now an awakening moment that irrigation development could be best done by farmers. In the past, the strong focus was on how government-led large schemes could contribute to the African Green Revolution – but the high cost of, and the challenges with, those schemes made people turn away from irrigation in Africa; it made it difficult for people to come back to irrigation.

But later there was a realisation that actually farmers have been taking the initiative of irrigation development further, and that this irrigation development by farmers is actually contributing enormously to economic development, employment and food security.

So now people realise that farmer-led irrigation could actually be the way to go to solve some of the issues of agricultural crop production.

Of course there are still elements of thought around how you engage with that process. Is it about technology? Is it about the process? Some people look at it as a vehicle by which they can promote some of their ideas on cheap technology, because we know that, for most of these farmers, skills and technologies have contributed quite a bit, e.g. the arrival of solar panels which are low-cost, or the arrival of diesel pumps. But for the most part I think farmers react to markets, and technology has enhanced the opportunity to produce for the markets and that is the area which many people are now interested in.

Of course governments have also supported this initiative with some of the things that have taken place, either by roads or through developments in some of the policies that have also enhanced the capacity of farmers to invest in their agriculture.

But it still leaves that gap there in the understanding of whether farmer-led is more about technology or is about engaging with the process in which farmers can be supported to enhance their agricultural production.