InSTAnZa

Briefing Document

Inherited Soil Surveys:

Transdisciplinary Appraisal in Zambia

If agriculture is to develop sustainably in a changing climate then decisions on policy and land management must be based on sound information about the soil, its composition, properties and status. Because the soil is variable this information is hard to obtain.

1

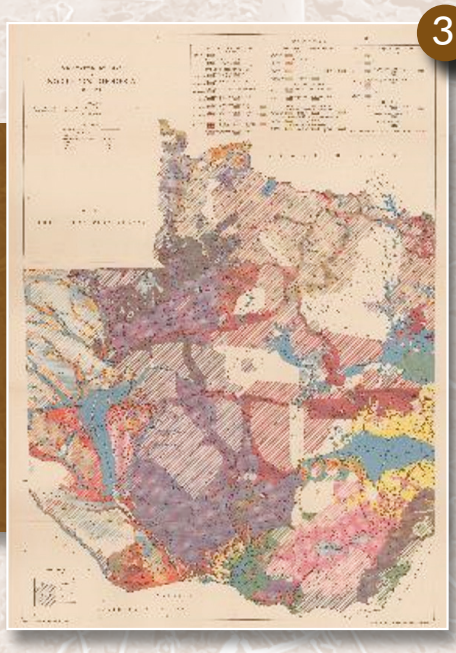
2

Many countries in the Global South, with challenging problems in agricultural development, have a legacy of soil surveys from the colonial and post-colonial periods. Could this information be used to address contemporary problems, for example, to identify the soils where conservation agriculture interventions might have the biggest impact?

Zambia has an inheritance of soil surveys dating back to the 1930s when Colin Trapnell and colleagues undertook a series of traverses across the country, examining vegetation, farming practices and the soil. This culminated in a national Vegetation and Soil Map published in 1947 (western sheet shown to the right).

This raises the question: could this legacy information be deployed to help us address contemporary problems?

3



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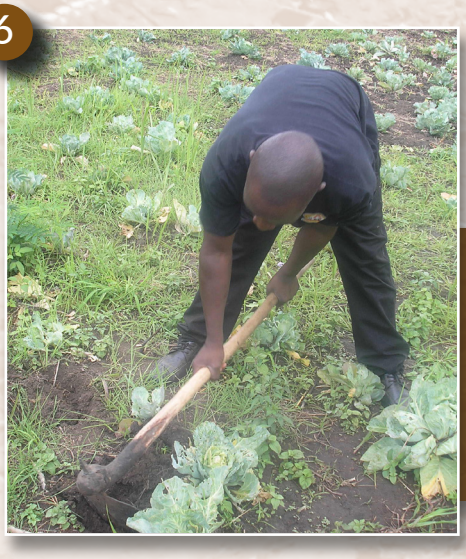
The InSTAnZa project sets out to address this question, but from different perspectives.

There is a pedological dimension to the study of legacy surveys, regarding the ongoing validity of soil data, the contemporary relevance of the soil classifications used and how new data and old maps might be integrated.


4

There is also an historical dimension. What priorities and policies framed the survey, and its terms of reference? Whose voices dominated the framing of these questions, and who was not heard?


5


6

Legacy soil surveys must also be read in social context alongside other factors that influence decisions on land use, the social development of science and technology, and the overall social context in which science influences policy.

The InSTAnZa project aims to explore these three dimensions of legacy soil information in Zambia. It is a collaboration between pedologists, historians and social scientists from the University of Zambia, Zambia Agriculture Research Institute, University of Nottingham and University College London.

We are particularly eager to engage with stakeholders interested in the application of soil information to problems in sustainable agriculture in Zambia today. Anyone interested should contact Dr Lydia Chabala (University of Zambia) at lchabala@unza.zm or Prof Murray Lark (University of Nottingham) at murray.lark@nottingham.ac.uk

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Illustrations 1 and 2 are from Chitedze Experimental Station, Malawi (R.M. Lark). **Illustration 3** is a scan of Map Sheet 1 (West) of the Vegetation and Soil Map of Zambia (Trapnell et al, 1947. Government Press, Lusaka) made available under a CC-BY licence by International Soil Research and Information Centre at http://edepot.wur.nl/486611 This image also forms the watermark to this document. **Illustration 4** shows Professor Max Lowole lecturing at a soil pit (Vertisol) in Malawi (R.M. Lark). **Illustration 5** is kindly provided by Professor Richard Webster, showing soil survey in Zambia in the late 1950s. **Illustration 6** shows vegetable cultivation on the margins of a dambo in Copperbelt Province, Zambia (RML).

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