Strengthening Capacity in Environmental Physics, Hydrogeology and Statistics for Conservation Agriculture Research



CEPHaS Project Briefing

No. 12 March 2021

STAKEHOLDER ENGAGEMENT IN THE CEPHaS PROJECT

CEPHaS is an interdisciplinary project about conservation agriculture (CA). We want to understand how CA affects physical properties of the soil, and what this means for the movement of water in soil, the recharge of groundwater reserves, crop growth, food security and farmers' livelihoods. Our experiments in Zambia, Zimbabwe and Malawi are done in collaboration with stakeholders, and we are trying to engage with a wider stakeholder group. This is because agricultural research should be people-centred rather than output-oriented, the objective is to improve the wellbeing of people by supporting better policies and practices.



Stakeholders visit to the Liempe farm field experiment site, Zambia, 2019.



Stakeholder engagement event, 3rd CEPHaS network meeting, Lusaka, 2019.

Importance of stakeholder engagements

CEPHaS's engagement with stakeholders should ensure that the project's priorities and objectives reflect real-world needs and priorities and are therefore relevant. We hope that this engagement will allow us to maximize the potential benefits of the project. Projects have a limited life span and so, engagement of stakeholders, to increase ownership by the intended beneficiaries, should help to ensure the ongoing sustainability of project activities. This requires that stakeholders' views are taken into account from inception. This leads to strong partnerships and increases the possibility of long term research collaboration because of the forged relationship and trust built during the course of project implementation. We hope that engagement with stakeholders will lead to improved policy decisions regarding CA and its impacts, and it will make it easier to circulate information as the different stakeholders will spread the information to various interest groups.

Stakeholders involved in CEPHaS

CEPHaS's stakeholders include government departments and agencies. In addition to departmental staff responsible for areas including agriculture, water resources and meteorology who have attended Stakeholder events, we work directly with the Malawi Department of Agricultural and Research Services (DARS) at the Chitedze Research Station and with the Zambia Agricultural Research Institute (ZARI) of the Ministry of Agriculture and Extension, with staff directly engaged in the project. DARS and ZARI representatives sit on the CEPHaS project board, as does Mr Daniel Kalala from Kasisi Agricultural Training Centre, an organization based near Lusaka which



Mr Gideon Musukwa presenting equipment installed by CEPHaS in the soil physics laboratory at the University of Zambia, 2019.



Farmers and community members at the Kabeleka site, Zambia.



The author of this briefing, Mr Chawezi Miti, CEPHaS Research Fellow.

undertakes research, advocacy and training in organic agriculture as an apostolate of the Jesuit Province of Zambia-Malawi. Mr Kalala was involved in the CEPHaS project from its inception in 2017.

To take advantage of the fact that CA produces benefits over a long period of time, CEPHaS has engaged stakeholders who have been running long term CA experiments. In Zimbabwe, CEPHaS collaborates with CIMMYT on their CA experiment at Domboshava training centre which was established in 2010/2011. Similarly in Malawi, the CEPHaS project collaborates on the long term CA experiment established in 2007 by DARS in collaboration with CIMMYT at Chitedze agricultural research station. Individual farmers are included in the study; soil moisture and hydrogeological measurements (13 boreholes) are being monitored at sites owned by individual farmers who have been practicing CA for more than 15 years in Zambia.

Stakeholder days have been organised during the annual CEPHaS network meetings held in Lilongwe and Lusaka in July 2018 and July 2019 respectively. This was done to disseminate information on the progress of the project and get feedback from stakeholders. Some of the notable organisations that have attended include Caritas-Zambia, Livelihood Support Programme, Participatory Landuse Management, Catholic Relief Services, Women's Rural Assembly, MUSIKA Zambia, Zambia Agricultural Research Institute, Zambia Meteorology Department, Ministry of Agricultural-Zambia, Ministry of Agriculture-Malawi, Development Fund of Norway and Department of Agriculture and Research Services-Malawi.

Increased knowledge and awareness of CA practices and its positive and negative effects is a key planned outcome for CEPHaS with the vision that it may enable stakeholders to blend their local knowledge with 'expert' scientific knowledge in a complementary way. Project briefing documents on project progress are issued every quarter (3 months) and circulated to stakeholders to share progress and to get feedback. In addition we have begun publishing the CEPHaS Conservation Agriculture Perspectives series, in which stakeholders are invited to give their views on the challenges faced by farmers in the region as a result of climate change. So far we have had responses from DARS (Malawi), Indaba Agricultural Policy Research and Outreach Institute (Zambia), Foundations for Farming (Zimbabwe) and the Kasisi Agricultural Training Centre (Zambia).

WHO ARE WE?

We are soil scientists, agronomists, hydrogeologists, geo-physicists, statisticians and agricultural economists from the University of Zimbabwe, the University of Zambia, Lilongwe University of Agriculture and Natural Resources, the University of Nottingham, Rothamsted Research, Liverpool School of Tropical Medicine and the British Geological Survey. We are working with the Kasisi Agricultural Training Centre, Zambian Agriculture Research Institute, the Department for Agricultural Research Services (Malawi), and our commercial partner, Delta-T Devices (UK).

To find out more, visit our webpages at https://www2.bgs.ac.uk/ CEPHaS and follow us on twitter @CEPHaS_Soil











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