

Participants of the landscape/watershed management cross-learning visit of the Africa RISING project of the Ethiopian highlands

Duration-20-24 April 2015 Ethiopia



Dr. Davie Kadyampakeni has more than 12 years' experience as an expert in agricultural water management, soil management, crop production, plant nutrition and nutrient management in irrigated and rainfed systems. He has gained the experience in projects in the United States of America (Florida State), and in developing countries (Malawi, Tanzania, Kenya, Rwanda, Ethiopia, Madagascar, Burkina Faso, Mali, Ghana, Sri Lanka and India). He has consulted widely for several

organizations including ICRISAT-Nairobi, ICRISAT-Bulawayo, USAID, CIDA and several NGOs in Malawi. He has published more than 43 articles in refereed journals, book chapters and conference proceedings. He worked for the Malawi Ministry of Agriculture and Food Security from 2002 to 2006 as an Irrigation Agronomist. In 2007, he joined ICRISAT as a Scientific Officer. Thereafter, he worked for the World Bank-IFAD funded Irrigation, Rural Livelihoods and Agricultural Development Project in 2008. Around August 2008, he joined the University of Florida as a Graduate Research Assistant until 2012 when he became a postdoctoral research associate up to November 2014. Dr. Davie Kadyampakeni started work as a Researcher-Agricultural Water Management from November 2014 at the International Water Management Institute (IWMI), in Accra, Ghana, a CGIAR-supported research institute headquartered in Colombo, Sri Lanka. He leads the IWMI components on 5 projects targeting sustainable agricultural water management, soil health and sanitation, small scale irrigation, and, climate change, agriculture and food security. Contact: d.kadyampakeni@cgiar.org

(KNUST) in Ghana new AfSIS soils sampling and processing Protocols (2013). He is currently involved in Africa RISING project where participatory demonstration trials showcasing maize-bean integration, under different management and staking options has been set.

His future research interest is in carbon sequestration potentials of soils, with special attention to effects of variations land uses and soil mineralogy. He also harbour interest in facilitating fighting soil loss and land degradation to reduce siltation of Shire River through a thorough study of the driving forces in its catchment areas (Biophysical and social-economic factors). Contact: G.NDENGU@CGIAR.ORG



Job Kihara is a soil fertility scientist at International Center for Tropical Agriculture (CIAT) with a lot of research experience in SSA. With a PhD in Agriculture from the Center for Development Research (ZEF), University of Bonn, Germany, Job is conducting research on the diagnosis of nutrient constraints to crop production including establishing a direct link between soil spectra and crop response, and is also involved in AgMIPs sub-Saharan activities. In AfricaRISING, Job has been involved

in biophysical characterization and crop management efficiency aspects in Tanzania, and only recently co-opted into AfricaRISING Ethiopia. Job has published several papers in refereed journals and edited and co-edited several books on soil fertility management.

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Ndengu, Gift Benjamin is a holder of Master of Science in Environmental Sciences (soil, land and Water Resources Management), PG Dip. in Comp. Science (Designing, implementing and managing information systems) and Bachelor of Education Science (Physics, Mathematics and chemistry) all from the University of Malawi. He Worked as a part-time lecturer at St Luke's College of Nursing and

Midwifery as a part time lecturer (2007- 2010) teaching Applied Physics and Chemistry, as well as Biochemistry. Between 2010 and 2012, he worked as a NIR- Technician in the AfSIS project for the southern African node. He was also involved in the study of Shire river catchment area to determine hot spots of land degradation leading to high levels of siltation at the intake of the hydroelectric power stations along the Shire River (2011). In 2013 he undertook a soil sampling survey and trained government employees and members of staff of Kwame Nkrumah University for Science and Technology



Kennedy Nganga is a GIS and Remote Sensing Analyst working with the Soils and DAPA teams in CIAT Africa. His main responsibility is the analyses of geospatial and other datasets to support various research projects. He works at the intersection of the natural environment and agricultural systems; finding ways to intensify productivity while also conserving the environment. In particular, He

has a focus around ecosystem services valuation and sustainability. His work in this field through CIAT helped support the establishment of Africa's first water fund in Nairobi. He also has an interest in climate change, landscape ecology, and development of computer tools for assessing the environment. Contact: k.w.nganga@cgiar.org

Dr. Kifle Woldearegay Woldemariam is an academic staff at Mekelle University, Ethiopia. He has over 23 years work experience (teaching. research and consultancy) in the areas of water harvesting and site investigations for different projects. Kifle has a PhD in Engineering Geology from Graz University of Technology (Austria), an MSc in Engineering Geology from ITC (The Netherlands). He has been teaching several courses (undergraduate and postgraduate), involved in different research projects, and assumed different administrative positions (at Mekelle and Axum Universities). Dr. Kifle has been involved in several projects, among which are: (a) the study, design and construction of different water harvesting schemes (such as dams, diversion weirs and others) in Ethiopia, (b) assessing the hydrological effects of natural resources management in northern Ethiopia, (c) evaluation of the sustainability of small-scale irrigation schemes in Tigray, (d) Issues related to groundwater irrigation in Tigray, northern Ethiopia, and (e) water harvesting from roads.

Currently, Dr. Kifle is leading (at national level) the following research projects: (1) Water Harvesting for Rainfed Africa: Investing in dryland agriculture for growth and resilience" (WAHARA) (EU funded: FP7-AFRICA-2010-1); (2) Optimizing road development for Groundwater Recharge and Retention (NERC, UK funded); (3) Watershed management and groundwater recharge in the Tekeze basin, Ethiopia (IGAD funded); (4) Sustainable water productivity enhancement for improved food and nutrition security in Eastern and central Africa (ASARECA funded); and (5) Ethiopia: Feeder road development for inclusive productive employment (NWO/WOTRO funded). Dr. Kifle is also a member of the Africa RISING project of the Ethiopian highlands. Contact: kiflewold@gmail.com



Festo S.Ngulu is an agricultural scientist, currently working with IITA Tanzania, as a Consultant-Agronomist attached to Africa RISING-ESA project, in Babati district, Northern Tanzania. He has MSc. in Plant Pathology, Advanced Diploma in Seed Pathology and BSc. in Agriculture. Prior to the current post, Ngulu worked for two years in the extension services and thereafter 33 years as plant pathologist mainly on cotton, coffee and common beans, under the Ministry of Agriculture. He joined Africa RISING-ESA project in 2013. His main task is to

facilitate timely conduct of the various operations; essentially linking the researchers (who live outside Babati) with strategic stakeholders on the ground. It also entails advisory and timely communication of relevant information to the A-R Project Management, Researchers and other stakeholders regarding performance of the research themes. Contact: ngulufsale@gmail.com



Mr. Tesfaye Yaekob is a PhD student (CIAT) and his study topics mainly focused on Land Degradation
Assessment and Eco-Hydrosedimentation Modeling under Change Climate, Land use and Management. He received M.Sc. (2005) from the Wageningen University and Research, The Netherland in International Land and Water Management (with a specialization of Erosion, Soil and Water Conservation) and B.Sc. (2000) from the Mekelle University, Ethiopia in Soil and Water

Conservation. His professional carrier started in Ethiopian Institute of Agricultural Research based at Jimma Research Center where he served more than 10 years starting from junior researcher up to associate researcher. His research activities focus on land degradation, soil and water conservation, erosion and sedimentation modeling, water pollution (coffee effluent) and watershed management. He has also consulted different organization on degraded land rehabilitation and pollution management related fields. Just before joining Addis Ababa University for his PhD study, Mr. Tesfaye has served as national case-team/program coordinator of integrated watershed management research, in Ethiopian Institute of Agricultural Research. Contact: tesfayeyt@yahoo.com



Zenebe Adimassu is a
Postdoctoral Researcher in
Water and Landscapes at the
International Water
Management Institute (IWMI).
Prior to joining IWMI, Zenebe
had been working at the
Ethiopian Institute of
Agricultural Research as
Researcher (EIAR). Zenebe
obtained a PhD in Land
Management from Wageningen

University and Research Centre (WUR). He obtained MSc degree in International Land and Water Management from the same university. He has also a BSc degree in Soil and Water Conservation from Mekelle University. He has more than 10 years of research experiences related to natural resources management such as soil and water conservation, water balance studies, watershed management, water harvesting, water balance studies, and conservation agriculture. He had a privilege to coordinate the National Watershed Management Research Programme at EIAR and African Highlands Initiative (AHI) programme. While coordinating these programmes, Zenebe led an interdisciplinary team in the development and implementation of participatory action and empirical research projects to improve livelihoods through the intensification of under-utilized and degraded areas in Ethiopia. Currently, Zenebe is conducting his postdoctoral research related to watershed management interventions in Ethiopia. Moreover, has been supervising several MSc and PhD students at different Universities in Ethiopia and overseas. Contact: Z.adimassu@cgiar.org



Dr. Kindu Mekonnen is a Crop-Livestock Systems Scientist working at ILRI. He has more than 20 years research experience in the National and International Research systems. Kindu has PhD degree in Natural Resources Management (NRM), MPill in forestry/agroforestry and BSc in plant sciences. Kindu's research experiences has been focused on integration of niche compatible high

value trees and shrubs into different farming systems, landscapes and watersheds; nutrient cycling by trees and shrubs; organic resources characterization and utilization to manage soil fertility; screening of high value tree and shrub species for various products and services; soil and water conservation; water harvesting techniques; land-care and climate change adaptation interventions. In the last five years, he has been working at ILRI and involved in System wide Livestock Program (SLP), Dairy intensification, Nile Basin Development

Challenge (NBDC), ILRI-UNEP-Wollo University watershed based climate change adaption, and Africa RISING projects. He has also consulted various individuals and organizations on R&D projects, supervised and examined MSC and PhD students of the different African and European Universities, coordinated national and regional research projects. Currently, he is spending most of his time on research and coordination in Africa RISING project of the Ethiopian highlands. Contact: k.mekonnen@cgiar.org

Kalifa TRAORE is a researcher in the Soil-Water-Plant laboratory. He holds a Doctorate degree in Soil Sciences from the University of Montpellier II, ENSAM, France. He started his research works since 1989 in the joint Project International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) /CIRAD (Center of International Co-operation in Agronomic research for the Development) as research assistant. He continues with the same works in the Soil-Water-Plant laboratory of IER

(Institute of Rural Economy) from 1996 to now. He has in charge research questions related to on farm runoff and erosion control strategies or technics development and soil fertility management to sustain cereals crops production. These tasks included chemicals fertilizers types identification, adequate fertilizer rate determination, and various combinations with organic manure (compost production) to control soil acidity and soil aggregate stability, identification of adequate period of application (synchronization of plants needs and nutrients availability). Other activities concerned studies of fast growing exotic trees species according to soil type and agriculture conditions (irrigation or rain feed plants) and greenhouse gases measurement for carbon credit as far as the climate change adaptive technologies development and implementation. Contact: ibosimon l@yahoo.fr



Mr. Gilbert P. Botha is the Natural Resources Field Coordinator of Total LandCare Zambia. Total LandCare Zambia. Total LandCare Zambia is implementing a reforestation and community support program. He holds a Diploma in Forestry and Certificate in Governance for forests, nature and people. Mr. Botha has 8 years of experience working with rural communities in Zambia.

This gives him a privilege in handling issues that affect natural resource management in rural communities. His strong capability is assessing and analyzing issues/problems and resolving conflicts arising from natural resource management. Mr. Botha's experience has been focused on the following areas; tree planting, natural resources management, agro forestry interventions, community empowerment, training of (trainers, extension agents and farmers in agro forestry, conservation agriculture and Bee- keeping). Gilbert has also worked for Wild life Conservation Society (WCS) and Community Markets for Conservation (COMACO).

He is also working with SIMLEZA- Africa rising project being implemented by IITA and CIMMYT in Collaboration with partners (Total LandCare (TLC) and Zambia Agriculture Research Institute (ZARI). Contact: gilbertbotha@gmail.com



Edward L.Mzumara is currently pursuing a Masters of Science in Agronomy at the Lilongwe University of Agriculture and Natural Resources, courtesy of a scholarship by the Africa RISING Malawi Programme. He has actively participated in the implementation of legume/cereal intensification trials in Malawi coordinated by Africa RISING. He also holds a position of

a Crop Development Officer in the Ministry of Agriculture, Irrigation and Water Development of the Malawi Government since July, 2009. The major role in the Ministry is developing strategies for the implementation of crop production development programmes. Contact: edolmzumara@yahoo.com



Mr. Aberra Adie ILRI's research assistant with over 20 years of experience in livestock feed research (especially cultivated forages including multipurpose trees, shrubs and herbaceous forages). Aberra worked for ILRI as a field supervisor for livestock and crop research on over 180 hectares of land and over 400 heads of large and small ruminants at Debre Zeit Research Station. He was also involved in the research projects involving food-feed crops (dual-purpose crops) in

partnership with a variety of stakeholders both from the international and national research centers. His recent project engagements include: Fodder Adoption Project (FAP), Nile Basin Development Challenge (NBDC), Research in Sustainable Intensification for Next Generation (Africa RISING) and Innovation Laboratory on Small Scale Innovation (ILSSI). Aberra has a university diploma in Animal production technology from Addis Ababa University and a BA degree in Business Management. He is currently finalizing his master's degree on marketing management in Addis Ababa University. Contact: a.adie@cgiar.org



Lulseged Tamene Desta is a Research Fellow at the International Centre for Tropical Agriculture (CIAT). Lulseged holds PhD in 'Ecology and Resources Management', specifically on 'modeling sediment source areas and management options'. He has accumulated research and teaching experiences on land degradation and restoration, watershed management, and designing landscape planning and management tools. Dr. Lulseged is specifically interested in landscape restoration and ecological intensification, understanding spatial

processes, their dynamics, interactions and feedbacks as well as socioecological modelling to understand best-fit options that can promote agricultural system transition to eco-efficient state. Dr. Lulseged has over ten years of working experiences in Ethiopia, Ghana, Burkina Faso, Germany and Malawi. Contact: LT.Desta@CGIAR.ORG is working towards the management of land and water resources from farm field to watershed scale across the different agro-ecological zones in Mali. Birhanu is also a principal investigator for the Global Climate Change Project in Mali, funded by USAID. He has authored more than 20 journal articles and book chapters and participated in many international conferences and consultancy publications. Contact: Z.Birhanu@cgiar.org



Mwila Mulundu is a Bachelors degree (BSc.) holder in Forestry from the Copperbelt University, Zambia. He is currently enrolled for the Master of Science (MSc.) Degree in Agronomy with the University of Zambia. He hopes that the MSc. Studies may be concluded by the close of the year 2015, having successfully defended his dissertation and incorporated changes recommended by Examiners.

He has 15 years of experience in natural resource management and agriculture with small-scale farmers in various parts of Zambia. He is currently employed in the Farming Systems and Social Sciences Division (FSSSD) of the Zambia Agricultural Research Institute (ZARI). During his working life, he has collaborated with international partners including the International Potato centre (CIP), the International centre for Maize and Wheat Improvement (CIMMYT) as well as the International Institute for Tropical Agriculture (IITA) in among other things validating and promoting Conservation Agriculture and Diversified Agriculture. He is currently implementing the SIMLEZA/AR Project with CIMMYT and IITA in Eastern Zambia. Contact: mmulundu@yahoo.com



Birhanu Zemadim is currently coordinating Africa RISING program in Mali with a total annual budget of \$US 700,000. He was a postdoctoral research fellow at the International Water Management Institute (IWMI) in Addis Ababa until August 2010. In September 2013, he took a position as Scientist, land and water management in ICRISAT, West and Central Africa, Bamako, Mali. In his current work Birhanu



Mr Elirehema. Y. Swai holds Professional Master in Sustainable Agriculture and Natural Resource Management (GIS & Remote Sensing application); MSc in Soil Science and Land Management and BSc in General Agriculture. Mr Swai is currently Head of Special Program, Crop Research Central Zone of Tanzania. He is currently serving at capacity of Principal Agricultural Research Officer I with the Directorate of Research and Development of the Ministry of Agriculture, Food Security

and Cooperatives. He is based at Agricultural Research Institute (ARI) Hombolo, Central Zone of Tanzania. From 1990 to date has been involved actively on field based research with wide range of experiences and skills on cropping systems; Soil and Water Management with a special attention on Insitu rainwater harvesting (IRWH) technologies; Climate change adaptation mainly focusing on Climate Smart Agriculture for semi-arid zones. From 2012 to date is participating in implementing Africa RISING Project at semi-arid zones of Kiteto District in Manyara Region and Kongwa District in Dodoma Region under Feed the Future Initiatives on project titled "Intensification of maize-legume based systems in the semi-arid areas of Tanzania to increase farm productivity and improve farming natural resource base". Specifically, through Africa RISING Project since 2012/2013 growing season to date has contributed on natural resource conservation research which aims at generating best bet IRWH technologies for imparting yield stability and concurrently control of soil erosion employing both physical barriers and biological control measures basically targeting at landscape level with fully engagement of farming communities to address serious land degradation in semi-arid areas of Kiteto and Kongwa Districts. Contact: eyswai@yahoo.com













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