

Bulletin

SIMLESA Highlights

July-December 2011

A bi-annual publication of Sustainable Intensification of Maize-Legume based Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) program

Australia's Foreign Affairs Minister praises SIMLESA achievements in Africa

"Agricultural research will remain pivotal to lifting agricultural productivity in the next 50 years as it has over the past 50 years."



Kevin Rudd, Australian Foreign Affairs Minister

This was one of the key messages of Australia's Foreign Affairs Minister Kevin Rudd in a plenary address closing the 5th World Congress on Conservation Agriculture, held in Brisbane, Australia during 26-29 September 2011.

Rudd spoke in depth on the importance of agricultural research in ensuring global food security, recognizing the contributions of CIMMYT and other Consultative Group on International Agricultural Research (CGIAR) centers. "Food security requires that governments, global organizations, policymakers, scientists and farmers work in partnership to develop the best possible strategies to rise to this great global challenge of our time."

The minister singled out the impressive achievements of the initiative on Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) since its launch in early 2010. "This particular project is helping to develop drought and disease-tolerant maize and legume varieties and to educate farmers about new farming technologies in conservation agriculture in five African countries.

In the first eighteen months of the program, we've helped train more than 150 agricultural researchers from Malawi, Mozambique, Kenya, Ethiopia and Tanzania and trialed conservation agriculture in 215 fields owned by local farmers. It's on track to reaching its target of increasing crop productivity of maize and legumes by 30% on around half a million African small farms within 10 years."



From left) Dr. Mulugetta Mekuria, SIMLESA Program Coordinator, Dr. Bruno Gerard, the Global Conservation Agriculture Program Director and SIMLESA PMC member, Dr. Bekele Shiferaw, Director, Socio-Economics Program and Dr. Menale Kassie, CIMMYT senior Agricultural Economist at the SIMLESA stand at the World Congress on Conservation Agriculture in Australia.

SIMLESA which is funded by ACIAR, and led by CIMMYT while being implemented in collaboration with the national agricultural research systems of Ethiopia, Kenya, Malawi, Mozambique, and Tanzania; the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT); and Australian partners including the Queensland Alliance for Agriculture and Food Innovation

Continued on page 2



ACIAR

Research that works for developing countries and Australia

aciarc.gov.au



CIMMYT

International Maize and Wheat Improvement Center



(QAAFI) in association with Queensland Department of Employment, Economic Development and Innovation (QDEEDI), Murdoch University and the University of Queensland. These partnerships with Australian and African universities have been key to the capacity building of National Agricultural Research Stations (NARS) through short-term training and postgraduate fellowships for researchers. Adopting the Innovation Platform framework, further co-operation with a range of private and Public sector organizations, NGOs, and famers' organizations in Africa has meant the project has been able to quickly and effectively reach farmers on the ground with outputs such as varieties and technologies. Rudd emphasized the value of investing in partnerships like these, particularly with respect to the growing field of conservation agriculture, the theme of the congress. "Conservation agriculture is one of the newest success stories in this quest to impart Australian knowledge to help feed the world," he said. He reminded his listeners that Australia is both a world leader in agricultural research and a major international donor, mentioning the country's role as a core supporter of the CGIAR. Affirming Australia's commitment to agricultural research and ending his address, he said

"We need a new Agricultural Revolution of the 21st century if we are to feed a further 3 billion members of the human family. As a responsible global citizen, Australia stands ready to play our part."



Dr. Mekuia Mulugetta,
SIMLESA Program Coordinator

Complementing the Foreign Affairs Minister's address at the 5th World Congress on Conservation Agriculture, Mulugetta Mekuia, CIMMYT socio-economist and SIMLESA program coordinator, was interviewed by Australian media, including the Australian Broadcasting Corporation (ABC) and several radio stations, on SIMLESA's potential role in contributing to enhanced food

security in eastern and southern Africa. He acknowledged the role of partners in national agricultural research systems who are helping to implement activities in Ethiopia, Kenya, Malawi, Mozambique, and Tanzania; Australian institutions, regional and international partners for their technical backstopping; the support of the Australian government and ACIAR; and CIMMYT's leadership of the program. "SIMLESA was designed to have impacts at both the household and regional level", says Mekuia. "We want to increase food security and incomes while driving economic development through improved productivity from more resilient and sustainable farming systems. Project activities focus on integrated cropping systems, the use of innovation platforms to test and promote promising practices, and ensuring positive and measurable impacts."

Forging regional linkage

ACIAR also facilitated the participation of scientists from Botswana Department of Agricultural Research in SIMLESA review and planning meetings and regional trainings. Consequently, two scientists (Anastacia Ramaina, an agronomist and Kabelo Mate, soil scientist) attended the Mozambique SIMLESA review and planning meeting in Chimoio from 04 to 09 Sept to get some insights on the on-going activities and interact with international Partners. Ms Mapena Ramokapane, Grain-Legume Researcher; and Mr Joseph Pharudi, an Agronomist attended the Tanzanian Review and Planning Meeting (03-06 December 2011) in Dar es Salaam. Dr Stephen Chite, Head of Crop Research and Breeder, and Mr Ugele Majaule, a soil scientist, from Botswana participated in the 5th WCCA through the support from ACIAR.

SIMLESA and the Agricultural Research Council of South Africa (ARC-SA) have agreed in principle to work together in the area of capacity building. This was the outcome of a meeting held in Pretoria, South Africa on the 10th of August 2011 between Dr. Mulugetta Mekuia, SIMLESA Program Coordinator and a team from ARC-SA comprising of Dr Shadreck Moephuli, president and CEO of ARC, Dr Mohammed Jeenah, the ARC-SA Director, and Dr Yolisa Pakela-Jezile, Senior Manager, Training and Advisory Services. The meeting appointed Dr Pakela-Jezile the SIMLESA-ARC focal person. It was also agreed that Drs. Jeenah and Yolisa and two scientists from ARC Institutes - Gugu Zuma-Netshiukhwi and Annelie de Beer - attend the review and planning meetings in Malawi and Mozambique to get an update of on-going SIMLESA activities in Southern Africa. Dr Yolisa Pakela-Jezile also attended the review and planning meetings in Tanzania and Kenya while Dr Annelie de Beer only attended the Tanzania meeting.

At another high level meeting was held in Gaborone, Botswana attended by the Permanent Secretary of Agriculture Dr. Mosupi and other Ministry officials from Botswana, Dr Mekuia had the opportunity to give an overview of activities of CIMMYT Southern Africa Regional Office. He pointed out the level of investment and commitment of CIMMYT in supporting the Southern African Development Community (SADC) objectives of enhancing food security. He welcomed the opportunity to partner with the new Centre for the coordination of Agricultural Research and Development in Southern Africa (CCARDESA).

In 2010, the President of Botswana, Sir Seretse Khama Ian Khama visited Australia where he held fruitful discussions with ACIAR to establish Botswana-SIMLESA linkages and undertake a spill over study. ACIAR allocated start-up grant of AU\$300,000 spread over four to five countries for 2011/2012.

SIMLESA Spillover Dialogue bears fruit

A SIMLESA spillover dialogue was held from 24 to 26th Of October 2011 in Kigali, Rwanda with participants drawn from Botswana, Zambia, Uganda, South Sudan and Rwanda (the host). Other participants included representatives from IFPRI, ASARECA, ACIAR, CIMMYT, AusAID and CSIRO. The main objective of the dialogue was to explore the demand side mechanisms for spill overs for and among invited countries of Botswana, Zambia, Uganda, South Sudan and Rwanda. The dialogue also focused on drawing lessons from the on-going SIMLESA activities in Ethiopia, Kenya, Malawi, Mozambique and Tanzania. The dialogue also sought

to understand the maize legume systems and identify potentials for intensification and sustainability through country specific presentations. Out of the meeting it was agreed that spillover of technologies generated from on-going projects of SIMLESA and other technologies generated from national programs are necessary for up scaling though it is not necessary to reinvent the wheel. ASARECA will help in promoting the sharing of the information. To be effective, analysis of value chain and platform innovations strategies are necessary to create impact. The meeting was informed that Australia had provided 300,000 dollars available to fund project proposals for the five spill over countries namely: Botswana, South Sudan, Uganda, Rwanda and Zambia.

SIMLESA Showcases at the World Congress on Conservation Agriculture, Brisbane, Australia

A two session showcase for SIMLESA Program work in Africa and Australia was conducted parallel to the 5th WCCA and 3rd Farming Systems Design Conference (FSD) conferences in Brisbane, Australia from 26-27 September 2011. This was organized to showcase the on-going SIMLESA activities to congress participants. The SIMLESA showcase sessions attracted a wide range of WCCA participants. SIMLESA Programme Coordinator, Mulugetta Mekuria gave a brief on the status of SIMLESA and workshop objectives. The objectives of the sessions was to introduce SIMLESA and share our initial experience with 5th WCCA participants; to create and enhance collaboration and integration with Australian Partners and to document and get feedback on selected CA related SIMLESA activities

SIMLESA partners from National Agricultural Research Stations (NARS) in Ethiopia, Kenya, Tanzania, Malawi and Mozambique, QAAFI, Murdoch University, ICRISAT, ACIAR, CIMMYT, and SIMLESA 2011 PhD students attended the congress. ACIAR and SIMLESA supported the participation of many African NARS leaders and SIMLESA PSC members from Kenya, Tanzania and Mozambique. Six researchers from SIMLESA spillover countries (Botswana, Rwanda, Uganda and Zambia) participated in the WCCA Congress under the theme "Resilient Food Systems for a changing World" in Brisbane, Australia from 26th to 29th of September 2011. The conference was sponsored by ACIAR, Grain Research Development Corporation and FSD.

The first session of the workshop entitled "CA for sustainable maize legume farming systems intensification in Africa: Design for 3Is - Integration, Innovation and Impact" had selected presentations on Integration design and operational framework. Dr John Dixon of ACIAR gave a welcome address which was followed by Pat Wall former Director of Global Conservation Agriculture Program (GCAP), CIMMYT and Program Management Committee (PMC) member who explained why SIMLESA's field activities are anchored on the CA principles. Dr Bekele Shiferaw, Socio-Economic Program Director and PMC chair gave a presentation on SIMLESA Pathways to impact. QAAFI team members, Dr Daniel Rodriguez, Dr John Dimes and Dr Solomon Fekyebelul highlighted the SIMLESA Australian - Africa integration and Varietal x CA effects in Queensland.

Session two, entitled "SIMLESA One Year Later: Initial findings" was chaired by Bruno Gerard, the Global Conservation Agriculture Program Director and SIMLESA PMC member. Four technical papers were presented based on results from the first year of implementation of the SIMLESA program: 1) Baseline Survey finding: Implications on CA Adoption; 2) Towards Sustainable Intensification of Maize-Legume Cropping Systems: Kenya Experience Towards Sustainable; 3) Intensification of Maize-Legume Cropping Systems-Ethiopian Experience; 4) Towards Sustainable Intensification of Maize-Legume Cropping Systems-Mozambique.



Dr Mulugetta Mekuria, SIMLESA Program Coordinator addressing participants at the CA Congress



John Dixon ACIAR Advisor, opening SIMLESA Symposia at WCCA

Malawi and Mozambique Hold Successful Review and Planning Meetings

SIMLESA Program successfully held the second In-Country Review and Planning workshops for Malawi and Mozambique that drew participants from partner institutions in Africa and Australia.

From 29 August to 01 September 2011, the combined Malawi SIMLESA and International Fund for Agriculture Development Program (IFAD) Review and Planning workshops took place at the Sunbird Lilongwe Hotel, Lilongwe, Malawi. The workshops were attended by more than 80 participants drawn from Agriculture Research Council-South Africa (ARC-SA), Association for Strengthening Agriculture Research in Eastern and Central Africa (ASARECA), IFAD, Murdoch University, QAAFI, ICRISAT and Zambia Agriculture Research Institute (ZARI).

The SIMLESA Program Coordinator, Dr Mekuria Mulugetta gave an overview of the SIMLESA program and achievements over the first year of implementation in both workshops. On the other hand the IFAD and USAID funded programs team leader, Dr. Christian Theirfielder also gave presentations on the IFAD funded CA program in Malawi and USAID funded program in Mozambique respectively.

The meeting was officially opened by Dr. Alfred Mtukuso, the Director of Department of Agriculture Research Services (DARS). In his welcoming address, Dr. Mtukuso reiterated the importance of maize hybrids in improving livelihoods of smallholder farmers in Malawi hence the need to invest more to come up with drought tolerant varieties. He noted that Malawi consumes the highest quantity of maize products per capita with the current figure pegged at 150kg/person/year. Dr. Mtukuso also noted that legumes play a very critical role in the diet of the majority of the smallholder families in Malawi in as far as protein supply is concerned. He challenged participants to come up with practical solutions to some operational challenges.

ARC-SA who recently signed an MOU with SIMLESA pointed out areas of potential linkages with Malawi NARS: Agricultural Production Systems Simulator (APSIM), short term training for extension staff, agro-climatology, agronomy and conservation agriculture, breeding; climate change and adaption; agricultural mechanization; postgraduate training of SIMLESA-NARS scientists.

Mr Mwendo Phiri of World Vision International, Zwide P.Jere, Managing Director and Soil & Water Conservation Specialist for Total Land Care and Anđex Makungwa of Agriculture Sector Wide Approach (ASWAP) were some members of the local innovation platform who participated in the Malawi review and planning workshop.

The Mozambique in-country meeting combined SIMLESA and USAID review and planning meetings that were conducted from 4th to 7th, September 2011 at Rufaro showgrounds in Chimoio. International participants from ARC-SA, ASARECA, IFAD, Murdoch University, QAAFI, International Centre for Tropical Agriculture (CIAT), ICRISAT, University of Tennessee and Department of Research (Botswana) participated in the review and planning meeting. Members of the local innovation platform - Initiative for Development and Equity in Africa Agriculture (IDEAA-CA), Instituto Superior Politécnico de Manica (Chimoio- Mozambique) (ISPM) and Dengo Commercial actively participated in the meeting.

The meeting was officially opened by the Director General of the Ministry of Agriculture, Mozambique and SIMLESA Programme Steering Committee (PSC) member, Dr. Calisto Bias who thanked CIMMYT for the innovative ideas that it is bringing to Mozambique.

The Director for CIAT, Nelson Mango gave an insightful presentation on local innovation platforms using CIAT's experiences from Mozambique. ISPM, a key partner for SIMLESA in terms of long term trials was also represented by their director, Dr. Rafael Massinga and Mrs Angela Manjichi. The meeting was officially closed by Dr. David Mariote, the Zonal Director for Instituto de Investigacao Agraria de Mozambique (IIAM).

In both workshops key operational challenges were highlighted and participants agreed on actions to address these operational challenges. Of concern was the issue of local innovation platforms that participants felt needs a lot of effort and attention.



Mozambique Review and Planning Meeting, Chimoio

Tanzania and Kenya SIMLESA Country Review and Planning Meetings

The second SIMLESA Program in-country review and planning meetings for Tanzania and Kenya were conducted back to back between 4th and 10th of December 2011 in Dar Es' Salaam and Embu, respectively. The two meetings were attended by researchers and scientists from national government research institutions and partner institutions from Africa and Australia. The SIMLESA Program Coordinator, Mekuria Mulugetta, gave a summary of the SIMLESA Program objectives and achievements of the program in both countries in the first year of implementation.

From the 4th to the 6th of December 2011, the Tanzania SIMLESA review and planning meeting took place at the Golden Tulip Hotel in Dar es Salaam. The meeting was attended by 40 participants including international participants from Agriculture Research Council-South Africa (ARC-SA), Queensland Alliance for Agriculture and Food Innovation (QAAFI), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Australian Centre for International Agriculture Research (ACIAR), Department of Research and development (Tanzania) and Department of Research, Botswana. Two members from the Department of Research, Botswana attended the review and planning meeting as spillover country through special funding from ACIAR.

ARC-SA who recently signed an MOU with SIMLESA gave a detailed presentation on areas for potential linkages with Tanzania NARS (short term training for extension staff



Dr. Mekuria Mulugetta, SIMLESA Program Coordinator (left), Dr. Felister Makini, KARI Deputy Director in charge of Partnerships, and Dr. Bekele Shiferaw, Director, Socio-Economics Program follow proceedings during the Kenya Planning and Review Meeting, Embu. The meeting was officially opened by Dr Makini.

and technicians, MSc and PhD training). ARC informed the meeting that they were currently recruiting candidates for scholarships programs for PhD in Agriculture Economics in collaboration with the University of Pretoria. They highly encouraged SIMLESA researchers to apply for the scholarships.

The meeting was officially opened by Mr Lema who was representing Dr Myaka, the PS for DRD, who had travelled on official business. Mr Lemu noted the contribution that SIMLESA program is making in the lives of smallholder farmers in Tanzania in terms of improving their livelihoods.

The Kenya in-country SIMLESA review and planning meeting was conducted from 8th to 10th, December 2011 at Izaak Walton Inn in Embu. International researchers from ARC-SA, QAAFI, ICRISAT, ACIAR and Government of Australia participated in the review and planning meeting.

Dr Bekele Shiferaw, Director, Socio-Economics Program, CIMMYT and Dr Bruno Gerard, the Global Conservation Agriculture Program Director and SIMLESA PMC member participated in both the Tanzania and Kenya meetings.

Members of the local innovation platform (One Acre Fund, Wakala Africa and Kenya Seeds Company) actively participated in the Kenya review meeting.

The meeting was officially opened by the KARI Deputy Director in charge of Partnerships, Dr Felister Makini who highlighted the need for promoting partnerships as a way of promoting impact and scaling up in the field. Dr Makini urged members present to actively participate in all the deliberations for the benefit of smallholder farmers in the country. The ACIAR consultant on innovation platforms, George Mburathi gave an insightful presentation on Local innovation platforms.

In both workshops the key challenges raised included poor quality of data collected, poor coordination among SIMLESA objectives; inadequate transport for field activities; and poor reporting. Other critical issues that were raised as dogging both programmes on the ground comprised not very clear scaling out strategies for current initiatives; limited coordination between partners and limited participation by key players in local innovation platforms.



Kenyan Review and Planning Meeting, Embu

Highlights of Program Achievements

Five country baseline surveys that covered 4,600 randomly selected households from 29 districts located in two agro-ecological zones and maize-pigeonpea, maize-beans, maize-groundnuts, and maize-soya beans cropping systems covering more than 580 villages in five countries were conducted. Two drafts reports from baseline surveys from Tanzania and Kenya are ready for sharing with stakeholders. Community survey data is also being collected from these targeted villages. A draft community survey report has been produced for Tanzania. For Malawi the agribusiness opportunities survey has been completed and data analysis is in progress.

A total of 215 on-farm exploratory and 13 researcher-managed trials were initiated during the first year in the five countries. In eastern Africa the teams are currently busy with their second crop with promising results anticipated while in southern Africa the teams are busy with their second crop with some good results also being anticipated. Local innovation platforms to promote stakeholder buy-in initiated during the first year in the five countries will be strengthened and enhanced. More players would be incorporated into the platforms.

SIMLESA held field days in Embu and Siaya in Kenya and Hawassa and Pawe in Ethiopia. The aim of the field days was to showcase SIMLESA work and promote and up-scaling of activities in neighboring communities.

A lot of promising pre-release maize and legume varieties have been identified in the five SIMLESA participating countries. Only Mozambique had four pre-release varieties of cowpea that were identified as promising for national multiplication.

Twenty three NARS researchers attended an ASARECA

M&E framework development workshop in Nairobi where gender issues were incorporated. SIMLESA national coordinators and PMC members met from 18-19 July 2011 to finalize on program indicators and discuss implementation challenges. ICRISAT, TLII and Bill Melinda Gates Foundation attended the meeting. Two scientists from Tanzania and Mozambique participated in the Social Sciences Concepts and Tools for Technology Evaluation and Impact assessment training workshop in Manila coordinated by ACIAR and IRRI (25 July-5 August 2011). Two breeders from Ethiopia and Malawi participated in the Inoculants and Quality control course in Nairobi, Kenya coordinated by Murdoch University and N2Africa (11-15 July 2011). Twenty three SIMLESA NARS staff members participated in a Gender Mainstreaming workshop in Tanzania organized and facilitated by ASARECA between 26 and 29 July 2011. Eighteen NARS researchers and two CIMMYT scientists participated in the Crawford Foundation funded regional climate risk analysis training in Morogoro, Tanzania (28 Nov-02 Dec).

4WD all-terrain vehicles for Mozambique (1) and Tanzania (2) SIMLESA country teams were finally cleared by the respective revenue authorities. Various pieces of research equipment have been procured for the country teams and more are being procured. Thirteen applications for the ACIAR/Albright scholarships were submitted from Mozambique, Ethiopia, Tanzania and Kenya. From the selection two Mozambican candidates were successfully awarded PhD scholarships. The final list is yet to be released. One additional 4 WD double cabin vehicle was purchased for SIMLESA Mozambique team.

Through SIMLESA funds allocated for local capacity building efforts, three SIMLESA participating researchers from Kenya have enrolled for PhD studies while one enrolled for MSc; in Ethiopia 12 candidates have been identified for local MSc; in Mozambique five BSc holders have been identified for MSc training while in Tanzania four have enrolled for MSc and one for PhD training.

Pre-release varieties identified under SIMLESA-Legumes

Crop	Ethiopia	Malawi	Mozambique	Kenya	Tanzania
Beans	Awash Melka, Nasir, Awash-1, Hawassa Dumea, Ibado	-	Sugar 131, NUA 45, VTTT 923/10-3, VTTT 924/4-4	B 9, Embean 118, KK 8, K 071	-
Soybean	Belessa- 95, New variety 1, New variety 2	Makwacha, Tikolore, Ocepara-4, Nasoko	Sana, Zamboane, H 7, H 17	SB 19, SB 3	-
Groundnut	-	Chitala, Kakoma, Chalimbana 2005, Nsinjiro, CG7	Nametil, ICGV SM 99541, Mamane	ICGV 99568, ICGV 90701	ICGV 99568, ICG 12991
Pigeonpea	-	Mwaiwathualimi, ICEAP 01514/15	ICEAP 00557, ICEAP 00554, ICEAP 00040	ICEAP 00 554, ICEAP 00040, ICEAP 00557	ICEAP 00040, ICEAP 00932, ICEAP 00554, ICEAP 00557
Cowpea	-	-	IT 16, IT 18, IT 1069, IT 1263	-	-

Pre release varieties identified under SIMLESA-Maize

Crop	Ethiopia	Malawi	Mozambique	Kenya	Tanzania
Hybrids	BH661, BH543	MH26 & MH27	CZH511 & Olipa	KH500-39E, KDH3, WH105, KH500Q, KH631Q, H624, H520, KH533A, KM0406	Selian H308, Selian H208, SAH779, SAH638, SAH636
OPVs	Melkassa 2, Melkassa 6Q, Gibe 2, Gibe 3	ZM523, ZM623, ZM309, ZM721	ZM523, Tsangano Chinaca	KDV1, Embu Synth, KKSynth2, WS303, KM0403	SA523, SA525

Successful conservation agriculture trials continue in Ethiopia and Kenya

Since last year, the SIMLESA initiative has been conducting on-farm trials for maize and bean production in western Kenya. SIMLESA is being implemented by the Kenya Agricultural Research Institute (KARI), with technical support from CIMMYT and financial assistance from the Australian Centre for International Agricultural Research (ACIAR). In Ethiopia, the SIMLESA initiative is being implemented by the Ethiopian Institute of Agricultural Research (EIAR) and the Southern Agricultural Research Institute (SARI), with technical support from CIMMYT and financial assistance from ACIAR.

Last year, SIMLESA conducted on-farm trials using conservation agriculture (CA) techniques: minimum tillage, crop residue management, intercropping/crop rotation (with maize and haricot beans) and participatory variety selection trials. These trials have been yielding impressive results in southern Ethiopia.

One of the farmers taking part in the trials was Yohanes Gudeta. He planted four CA trial plots: sole maize (BH-543), sole haricot bean (rotation), sole maize (rotation) and maize intercropped with haricot bean. In comparing these with the trial plot he farmed using traditional techniques, Gudeta observed that “the maize under CA is very robust and green, an indication of far better yields than we usually harvest.” Next planting season, Gudeta plans to increase his area under CA from trial plots to 05.ha.

The success of the trials encouraged EIAR and CIMMYT to organize a farmers’ field day to demonstrate the performance of CA technologies, which was held in the Hawassa Zuria district on 16 August 2011. Farmers from the other SIMLESA districts of Meskan and Misrak Badawacho attended, alongside agriculture officers, developments agents, seed dealers, and researchers.



Yohanes Gudeta explains to visitors at his farm in Hawassa during the farmers’ field day.

However, these positive changes are not restricted to this area; farmers in neighboring Kenya have also been reaping the benefits of adopting the new technologies of minimal tillage, application of herbicide, intercropping with desmodium and retention of crop residue. In just their third crop under CA practices, farmers in western Kenya are reporting more grain yield with less fertilizer use, and reduced labor requirements.

Christine Okola is one of the 25 members of the Liganwa Farmers Group participating in the trials. From a plot of 0.1ha, she used to harvest a maximum of one 90kg bag of maize per crop season; now, with CA practices, she harvests five bags of maize and one bag of beans from the same piece of land. John Achieng, KARI agronomist and SIMLESA Project Team Leader for western Kenya, estimates that it is possible for a farmer to harvest up to 4500kg of maize and 500kg of beans from 1ha using CA practices – a tenfold increase on the current averages. He attributes the increases to improved organic soil matter and the use of improved seed varieties. The maize used (DUMA 41) is a high-yielding and early maturing hybrid variety, whilst the bean (KK8) is resistant to bean root rot.

Like in Ethiopia, a farmers’ field day to demonstrate CA was also held in Siaya, western Kenya, with an attendance of over 1000 people. Boaz Cherutich, Siaya District Commissioner took this opportunity to thank CIMMYT and KARI for introducing CA to the region, and the Australian Government for providing financial support to the SIMLESA initiative.



Christine Okola at her CA trial plot in Siaya, Kenya

Up-Coming Events

- 12-14 March 2012: SIMLESA Ethiopia Review and Planning Meetings, Addis Ababa
- 19-23 March 2012: 2nd SIMLESA Annual Partners' and PSC Meeting-Arusha, .
- 19-30 March 2012: SIMLESA Programme Mid Term Review,

SIMLESA in pictures



Farmers at a SIMLESA Field Day in Tanzania.



Doreen Kiiza admires her maize crop under Conservation Agriculture in Bumula Bungoma. (Left) Dr Joe Acheing, an Agronomist with Kenya Agricultural Research Institute (KARI) being interviewed by Laura Poole, one of the two Australian journalists who visited Kenya to cover SIMLESA activities.

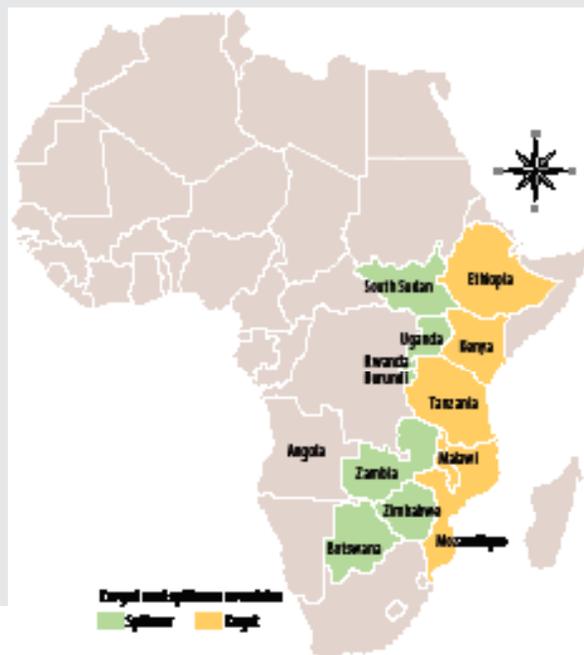


Mrs Alponkina Nyagah (in SIMLESA T-shirt) shares her experiences in conservation agriculture trials at her farm in Embu, eastern Kenya with participants of the Kenya Planning and Review Meeting.

About the Bulletin

This bulletin is a bi-annual publication of the Sustainable Intensification of Maize-Legume based Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) program, funded by Australian Centre for International Agricultural Research (ACIAR), and managed by the International Maize and Wheat Improvement Centre (CIMMYT). It is implemented by the National Agricultural Research Systems (NARS) of Ethiopia, Kenya, Tanzania, Malawi and Mozambique in collaboration with the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), International Crops Research Institute for Semi-Arid Tropics (ICRISAT), the Agricultural Research Council of South Africa (ARC), the Queensland Alliance for Agriculture and Food Innovation (QAAFI) in association with Queensland Department of Employment, Economic Development and Innovation, (QDEEDI) Queensland, and Murdoch University in Western Australia. SIMLESA aims to improve the livelihoods of smallholder farmers in drought-prone areas of Eastern and Southern Africa, through intensification of maize-legume cropping systems.

SIMLESA focuses on five countries in Africa—Ethiopia, Kenya, Malawi, Mozambique, Tanzania—and Australia, with spillovers anticipated in neighboring countries. The sustainable intensification of maize-legume cropping systems, while reducing yield variability, requires an integrated approach to the complex production and marketing system for these crops. Through participatory research and development with farmers, extension agencies, non-governmental organizations, universities and agribusinesses along the value chains, the program aims to improve maize and legume productivity by 30% and to reduce the expected downside yield risk by 30% on approximately 500,000 farms within 10 years.



Quotable Quote:

“If you give me a fish you have fed me for a day. If you teach me to fish then you have fed me until the river is contaminated or the shoreline seized for development”

Contacts: Mekuria Mulugetta-Program Coordinator, email: m.mekuria@cgiar.org; tel: +263 4 301945; +263 4 369122; mobile: +263 712 604 006
Website: www.cimmyt.org; <http://simlesa.cimmyt.org>; NARS-Dagne Wegary (EIAR Ethiopia) dagnewegary@yahoo.com; Charles Nkonge (KARI Kenya) CNkonge@kari.org; Cyprian Mwale (DRTS Malawi) cyprianmwale@yahoo.com; Domingos Dias (IAM Mozambique) djosediad@gmail.com; Lucas Mugendi (DRD Tanzania) lmugendi@yahoo.com; Sub-Grantees:- Said Silim (ICRISAT) S.Silim@cgiar.org; Daniel Rodriguez (University of Queensland (QAAFI)) d.rodriguez@uq.edu.au; Lydia Kimenyi (ASARECA) l.kimenye@asareca.org; John Howieson (Murdoch University) J.Howieson@murdoch.edu.au; Mohammed Jeenah (ARC/South Africa) Ramanoko@arc.agric.za