

A MONTHLY PUBLICATION OF THE TROPICAL LEGUMES II PROJECT

About the Bulletin

The Bulletin of Tropical Legumes is a monthly publication of the Tropical Legumes II (TL II) project, funded by the Bill and Melinda Gates Foundation, and jointly implemented by the International Crops Research Institute in the Semi-Arid Tropics (ICRISAT), the International Center for Tropical Agriculture (CIAT) and the International Institute of Tropical Agriculture (IITA) in close collaboration with partners in the National Agricultural Research Systems of target countries in Sub-Saharan Africa and in India. TL II aims to improve the livelihoods of smallholder farmers in drought-prone areas of the two regions through enhanced grain legumes productivity and production.



Exposing Farmers to New Technologies

The lack of awareness has often been cited as one of the major constraints to adoption of improved crop varieties in Africa and South Asia. The Tropical Legumes II (TL II) project has taken on board awareness creation as an important vehicle for getting round this challenge. Exposing farmers, extension staff, research technicians and scientists to new crop production technologies was done through participation in Farmers Participatory Variety Selection trials, field days, farmers' fairs, and short course sessions. Large numbers of copies of literature in local languages, English and French have also been prepared and distributed to farmers across different regions. Farmer exposure programs also included the use of media – radio, television, and newspapers.

TL II work on awareness creation in Phase 1 (September 2007 – August 2011) was conducted in nine target countries that included Mali and Niger (cowpea and groundnut); Nigeria (cowpea, groundnut and soybean); Ethiopia (chickpea and common bean); Kenya (chickpea, common bean,

and soybean); Malawi (cowpea, groundnut, pigeonpea, and soybean); Mozambique (cowpea, groundnut and soybean); Tanzania (chickpea, cowpea, groundnut, pigeonpea and soybean) and India (chickpea, groundnut and pigeonpea).

Numbers of participating farmers and other stakeholders

A total of 241,104 farmers, extension staff, research technicians and researchers participated in the TL II awareness creation activities during Phase I. Approximately 98% (235,761) of these were farmers (Table 1). The largest numbers of farmers were in Kenya, India, Ethiopia, Nigeria, Tanzania, and Mozambique, followed by Mali, Niger, and Malawi. The largest numbers of farmers for crops were common bean, followed by groundnut, chickpea, pigeonpea, cowpea and soybean. The common bean team had reached a total of 1,099,736 smallholder households in Kenya (634,905) and Ethiopia (464,831) using small pack seed.

A total of 5,047 government and NGO extension staff; 234 research technicians; and 62 researchers also received short term training, lasting from one day to one month. The largest number of extension staff trained was in India (3,453); followed by Ethiopia (577); Kenya (225); Nigeria (218); Niger (216); Mozambique (210); Tanzania (103); and Malawi (45). Information for Mali is unavailable. The number of technicians for Ethiopia, India, Malawi, Mozambique and Tanzania was 96, 11, 3, 2, and 2, respectively. The total number of researchers trained was 32 for India, 18 for Ethiopia, 6 for Tanzania, 4 for Kenya, and 1 each for Malawi and Mozambique.

Participation of women

Participation of women (where given) varied by country and crop; there have been regional differences within some countries. Approximately 61%, 44%, 36%, 31%, and 20% of farmers participating in cowpea production in Tanzania, Mozambique, Niger, Mali, and Nigeria, respectively, were women (Figure 1). This suggests that women play a major role in the production of cowpea in Eastern and Southern Africa, where it is not a major crop. By contrast men have a much larger role in cowpea production in Western and Central Africa, where it is a major grain legume. Women accounted for an overall average of 38.8% of total participation

in cowpea production across the five target countries.

On the other hand, soybean production was dominated by women across the countries. For example, approximately 84%, 66%, 64%, 63% and 51% of smallholder farmers participating in soybean technologies in Nigeria, Mozambique, Kenya, Malawi and Tanzania, respectively, were women (Fig. 2).

In Malawi, 39.4% of 6,000 participants in groundnut technologies were women. Approximately 22% of farmers (range: 8.7% - 46.0%) participating in groundnut production in Maharashtra state of India were women whereas their participation in Tamil Nadu accounted for 30.3% (range: 24.4% - 54.3%). About 18% of a total of 626 farmers receiving small pack seed (10 kg/ha) of groundnut in Tamil Nadu during the 2009 and 2010 seasons were women. About 22.4% of farmers participating in pigeonpea production in Andhra Pradesh state of India were women; by contrast women's participation in the same crop production in Maharashtra was approximately 0.4%. Furthermore, all of the 533 pigeonpea traders and dahl mill operators trained in both states were men.

In Ethiopia, participation by women in common bean production technologies was 13.9%, compared to 56.7% for Kenya.

Table 1: Total number of farmers reached by the TL II project during Phase 1

Country	Crop						Total
	Chickpea	Common bean	Cowpea	Groundnut	Pigeonpea	Soybean	
Mali	- ¹	-	640	7,817	-	-	8,457
Niger	-	-	1,062	6,419	-	-	7,481
Nigeria	-	-	11,973	5,505	-	4,013	21,491
Ethiopia	8,746	22,690	-	-	-	-	31,436
Kenya	2,350	67,906	-	-	-	3,483	73,739
Malawi	-	-	349	-	4,155	-	4,504
Mozambique	-	-	3,889	4,000	-	6,374	14,263
Tanzania	1,844	-	987	6,000	5,689	3,559	18,079
India	12,095	-	-	30,801	13,415	-	56,311
Total	25,035	90,596	18,900	60,542	23,259	17,429	235,761

1 - Not applicable (crop not included in those countries)

Approximately 31.2% of all extension staff trained was women; women accounted for about 25.3% of technicians and 23.7% of researchers.

Awareness creation for TL II crops has been also promoted through radio and television programs, newspapers, journals, pamphlets, flyers, and manuals. For example, the groundnut team in Malawi produced and distributed 3,500 flyers on variety description both in Chichewa and English; they have also produced and distributed 450 copies of a pigeonpea production manual. The common bean and chickpea teams in Ethiopia have produced variety descriptions and production guidelines in Amharic, Oromifa and English for their respective crops and distributed to farmers and other stakeholders. The groundnut team in India produced and distributed 19,436 copies of farmer-friendly literature and got seven television and three radio programs aired, in addition to 11 appearances in the print media.

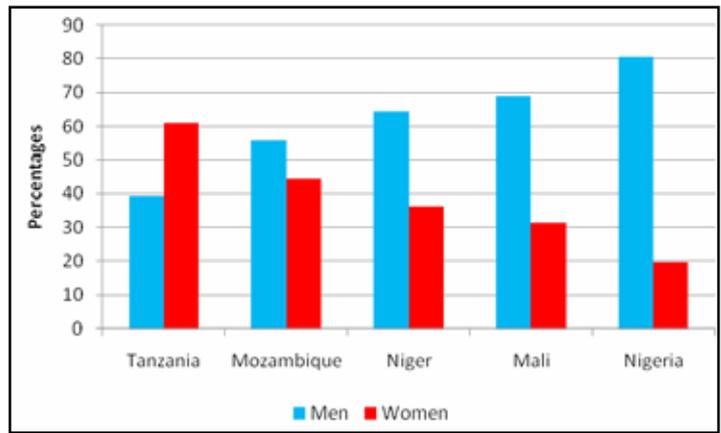


Figure 1: Participation of men and women in cowpea production technologies

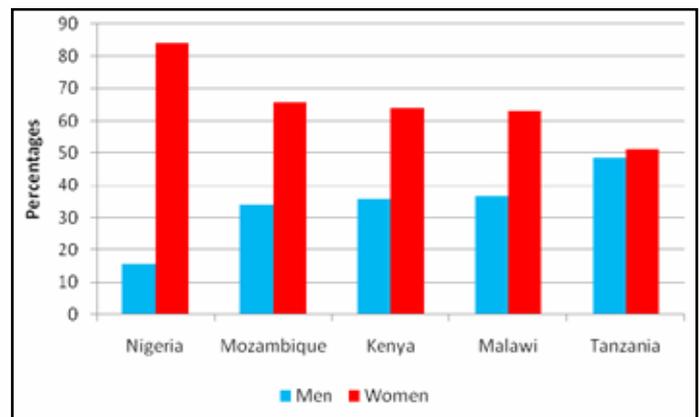


Figure 2: Participation of men and women in soybean production technologies

News and Events

TL II hosts a special guest

Mrs. Sylvia Matthews Burwell, President of Global Development, Bill and Melinda Gates Foundation (BMGF), visited progress of common bean and chickpea research at Melkassa and Debre Zeit research centers of the Ethiopian Institute of Agricultural Research (EIAR), respectively, on 17 July 2011. She held discussions with officials and researchers of respective research centers, the TL II Project Coordinator, and interacted with farmers from the vicinities of the research centers who have benefited from the work carried out under the TL II project. Her visits at the two research centers focused on seed stores and laboratories at both centers, and on off-season common



Listening to common bean researchers at EIAR-Melkassa

bean basic seed production at Melkassa. The visit at Debre Zeit also included the wheat rust research project. She expressed her satisfaction about the progress the two projects are making. Her visit also included the Lume-Adama Farmers' Cooperative Union at Mojo where she met with officials and members of the union. Research leaders, researchers, and farmers all extended their appreciations to Mrs. Burwell for taking her precious time off to visit their work, and the BMGF for the support provided to improve the livelihoods of smallholder farmers.

Mrs. Burwell was accompanied by Dr. David Bergvinson, Senior Program Officer overseeing TL II, and Ms. Elspeth Williams, Research Analyst, Office of the President.



At a common bean seed cleaning area, EIAR-Melkassa



Interacting with common bean seed growers near EIAR-Melkassa



With a chickpea seed grower with his family at Ude village, near Debre Zeit



Being briefed at the Lume-Adama Farmers' Cooperatives Union, Mojo



Appreciating recently released rust resistant wheat varieties at EIAR-Debre Zeit



With chickpea and wheat researchers at EIAR-Debre Zeit

Chickpea workshop in India

The TL II Project Review and Planning Workshop for chickpea in India is scheduled for the week beginning on 5 September 2011. It will be held at the ICRISAT-Patancheru campus, Hyderabad, India.