

RESEARCH PROGRAM ON Grain Legumes



www.grainlegumes.cgiar.org

Leveraging legumes to combat poverty, hunger, malnutrition and environmental degradation.

PABRA in the era of the CGIAR Research Program on Grain Legumes

Eastern and Central Africa Bean Research Network Annual Steering Committee Review and Planning Meeting

Kampala Uganda 3rd – 7th February 2014 *By Ellis Noel*

IN PARTNERSHIP WITH



ICARDA



and public and private institutes and organizations, governments, and farmers worldwide

Vision

Health, food security, environmental sustainability and increased smallholder income

Mission

LED BY

research program on **Grain Legu<u>mes</u>**

Leveraging legumes to combat poverty, hunger, malnutrition and environmental degradation.



Our goal is to enhance the **food security**, **income** and **health** of resource-poor farmers in Africa through research on beans. To achieve this goal, we work in partnership with farmers and rural communities, Non-Government Organizations.

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In collaboration with:

Generation Challenge Program (GCP) Brazilian Agricultural Research Corporation (EMBRAPA) Ethiopian Institute of Agricultural Research (EIAR) Indian Council of Agricultural Research (ICAR) Turkish General Directorate of Agricultural Research (GDAR) Feed the Future Innovation Lab for Collaborative Research on: Grain Legumes Peanut and Mycotoxin

National agricultural research and extension systems in Africa, Asia and Latin America

National and international public and private sector research and development partners



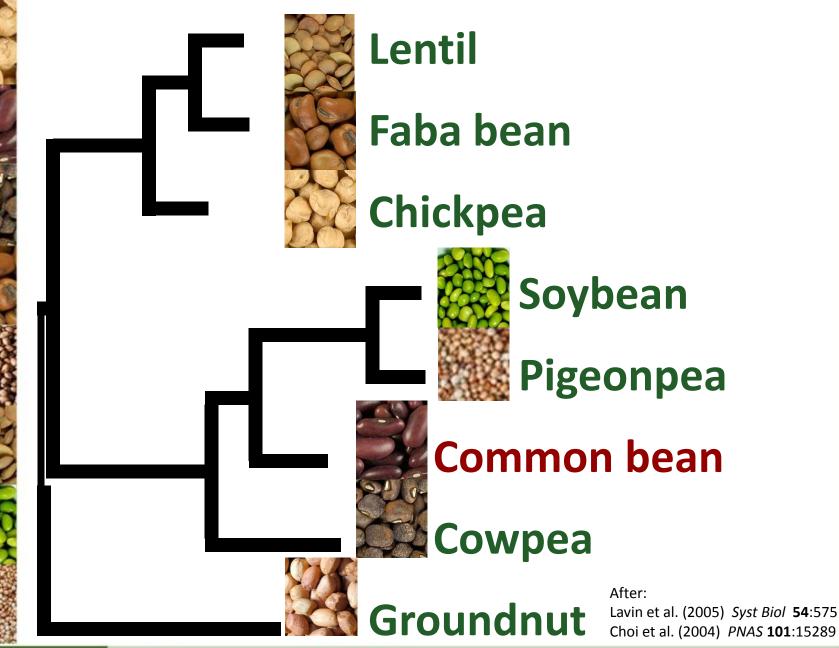
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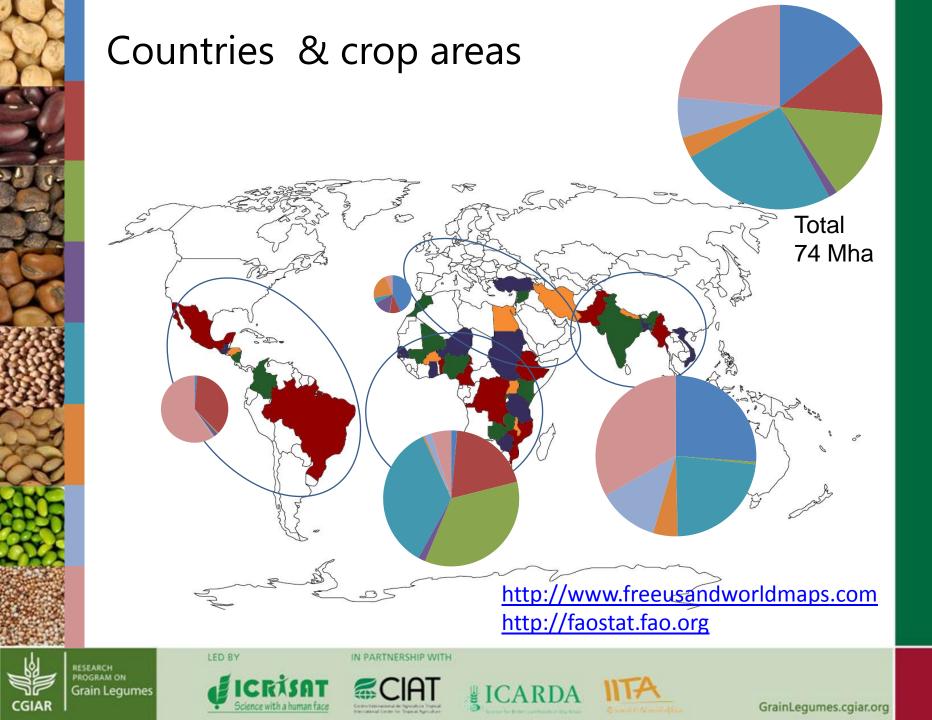
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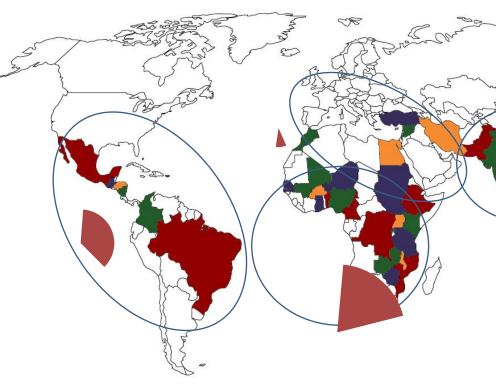
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DA IITA







Common bean

http://www.freeusandworldmaps.com http://faostat.fao.org









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8.75 of

74 Mha



- PL2 Heat tolerant chickpea, common bean, faba bean & lentil
- **PL3** Short-duration, drought tolerant & aflatoxin-free groundnut
- PL4 High N-fixing chickpea, common bean, faba bean, and soybean
- **PL5** Insect-smart chickpea, cowpea, and pigeonpea prod. systems
- **PL6** Extra-early maturing chickpea and lentil varieties
- PL7 Herb. Tol. machine-harvestable chickpea, faba bean &lentil

PL8 Pigeonpea hybrid and management practices



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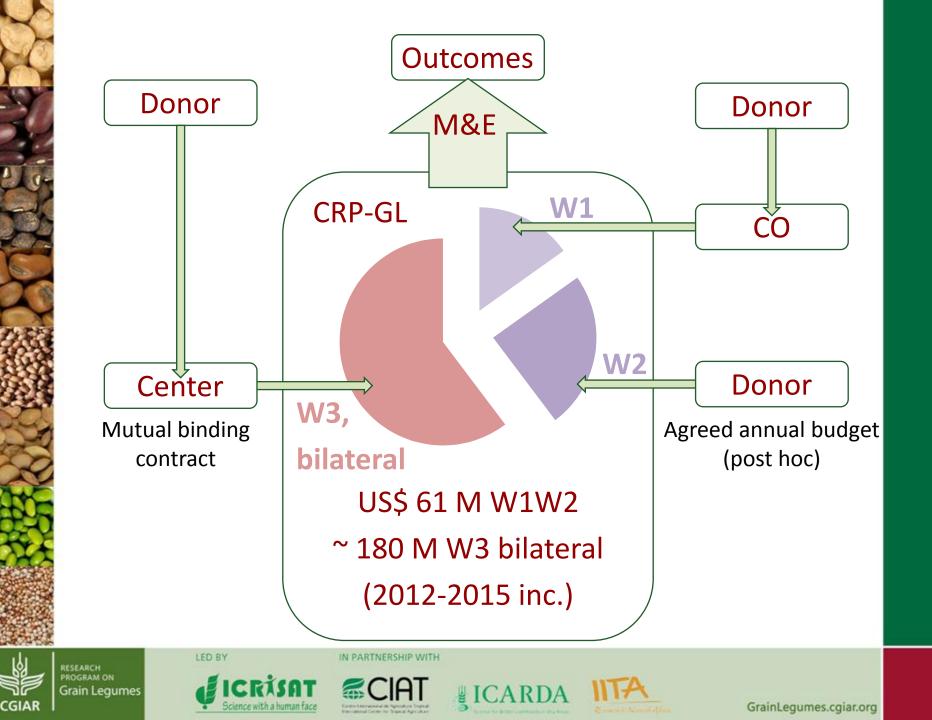


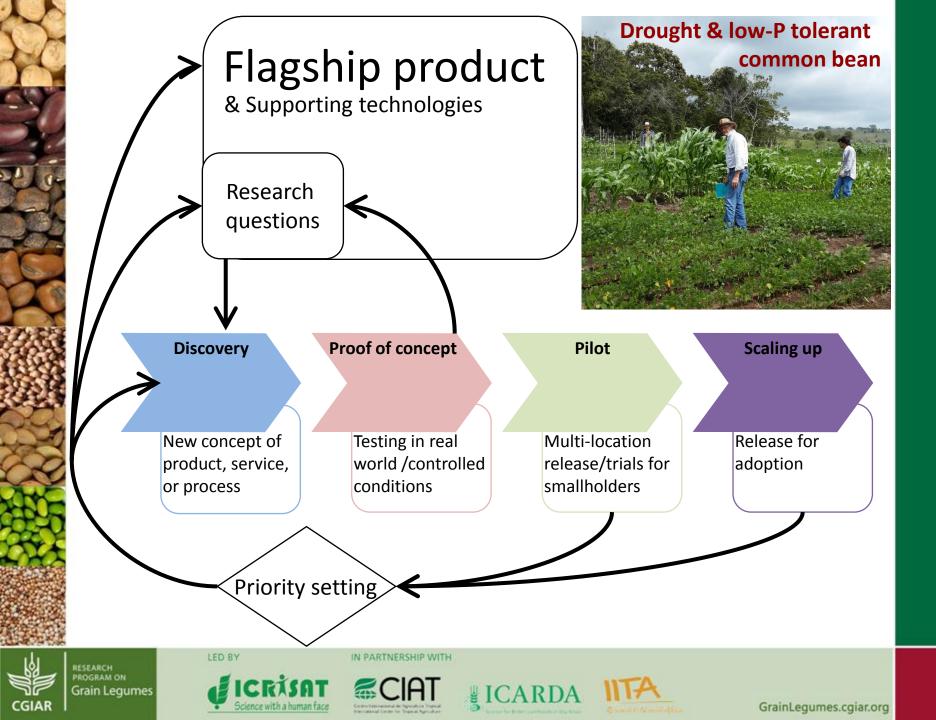






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	PL8				ICRASAT Science with a human face	
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ICRISAT Science with a human face

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Mapping populations Sequencing

- for bacterial identification in insect control (PL4)
- rhizobium strain identification (PL5)
- *Fusarium oxysporum fsp ciceris* genome & transcriptome.
- Candidate gene and whole genome for chickpea heat tolerance (PL2),
- maturity (PL6)
- and herbicide tolerance (PL7)
- NBSLRR (PL8) in chickpea, diploid and tetraploid *Arachis* (PL3)

Variety release

- for all target species and across regions
- breeders' seed bulking

Biological control agents

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- active against the pod borer *M. vitrata*
- Helicoverpa: Screening for natural & Bt mediated transgenic resistance chickpea & pigeonpea



Newly released cowpea variety also resistant (L) vs sensitive (R) to Striga gesnerioides

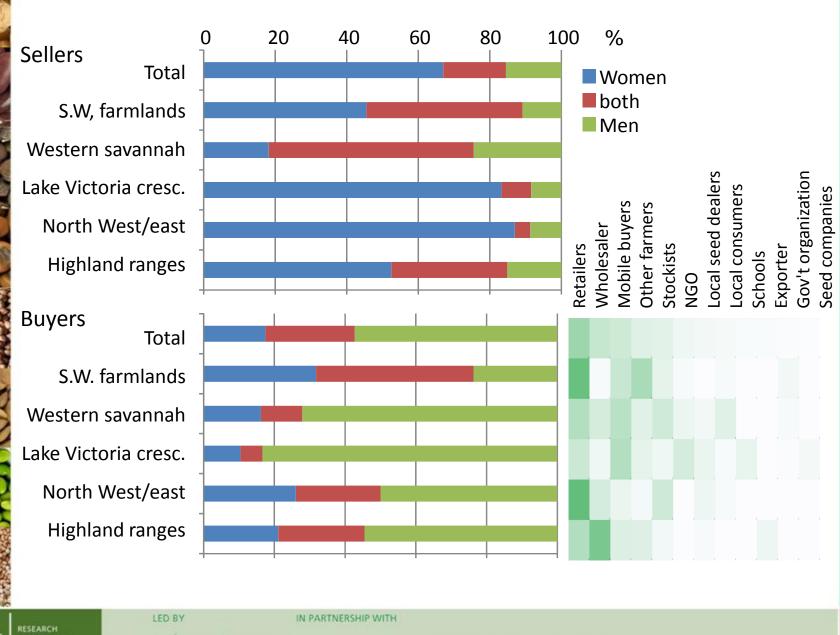
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The CGIAR Research Program on Grain Legumes is organizing a one day

Open Forum on Science in Grain Legumes

6th July 2014 This is an independent meeting organized alongside the IFLRC VI and ICLGG VII meetings in Saskatoon, Canada

http://sdrv.ms/J9PMZd



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Thanks to:

Shiv Kumar Argawal Steve Beebe Sushil Chaturvedi Pooran Gaur Michel Ghanem Sai Lakshmi Satish Nagaraji Patrick Okori Manuele Tamo Rajeev Varshney

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