

Turning the tide on pulses production in Ethiopia

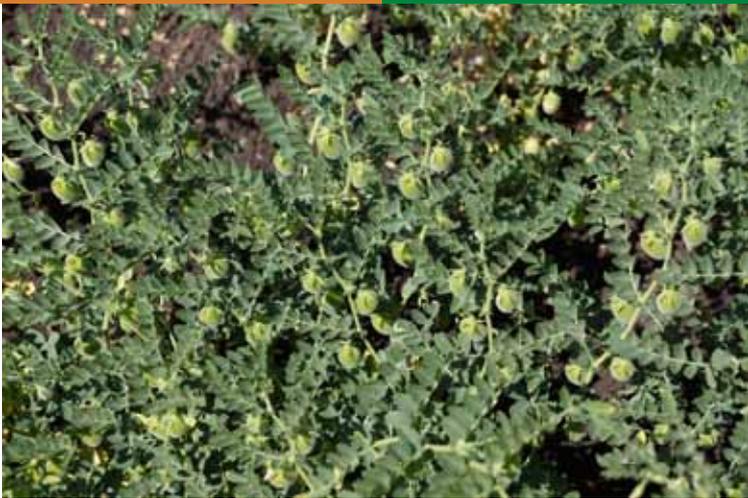
From imports to exports



Chickpea

Chickpea crop is the third most widely grown legume crop (after soybean and bean) and of particular significance in developing countries, as providing an important source of farmer income and nutrition to poor farmers. ICARDA holds the largest chickpea collections (12,448 cultivated accessions and 268 representing 10 wild *Cicer* spp.), and recently a new collection of wild chickpea from South East Turkey has been included to the genebank pool. ICARDA has established chickpea breeding program since 1977, and provided thousands of chickpea breeding materials (through annual distribution of international nurseries) to national agricultural research centers (NARS) in many countries around the world including Ethiopia (such as Arerti, Habru, Ejere, Teji, Dembi), where many varieties have been released and used by small holder farmers.





Ethiopia is the largest producer of chickpea in Africa (Figure 1). Ethiopian chickpea production is expected to continue growing and the number of smallholder farmers growing chickpea in Ethiopia has increased from 154,281 Ha (2003) to 239,512 Ha (2012) and the production has increased from 210,000 MT in 2006 to over 409,733 MT in 2012 (Figure 2).

Within chickpea varieties, a recent analysis of production costs and market opportunities of Desi and Kabuli chickpeas in Ethiopia demonstrated that farmers would yield more income by switching from the production of traditional desi chickpeas to the production of high yielding Kabuli chickpeas. The switch from the use of low input, low output to input intensive production technologies, while requiring a higher initial investment, provides higher returns, thereby justifying the additional costs.

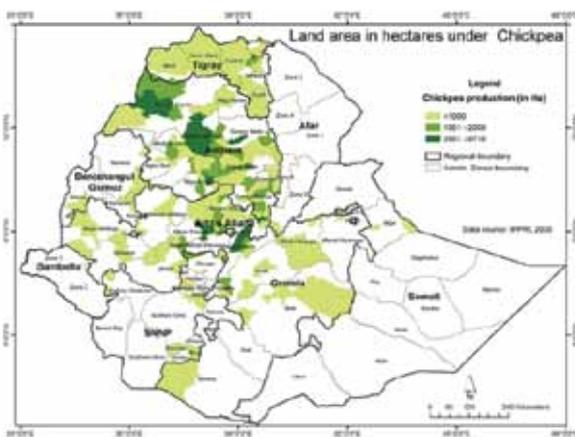


Figure 1: Geographic distribution of chickpeas (Source: Alemu et. al, 2009)

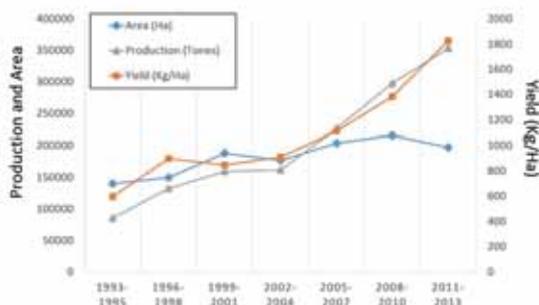


Figure 2. Chickpea production (Tonnes) and yield (kg/ha) in Ethiopia through ten years 2003-2013. (<http://faostat.fao.org/>)

In partnership with the Ethiopian Institute of Agricultural Research, improved chickpea varieties using ICARDA germplasm are being adapted to local environmental conditions, where farmers are reaping improved yields by as much as 60% over the traditional varieties. The Kabuli chickpea is expanding in Central Highlands and Ethiopia is now exporting 54,000 t of chickpea.