



Pulses – East Africa







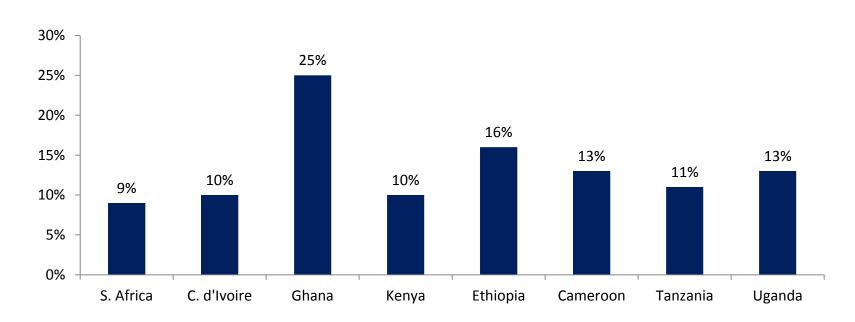
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Africa: Macro Snapshot

- Agriculture is the key economic sector in most African countries :
 - Continent has ~60% of the world's potentially available arable land
 - More than 60% of Africa's population is employed in Agriculture sector.
 - Agricultural output in 2010 was estimated at \$280 billion,~25% of continent's GDP vs. 3% ROW-Rest of the World.

Exports of Agri Products (CAGR 2000-2010)



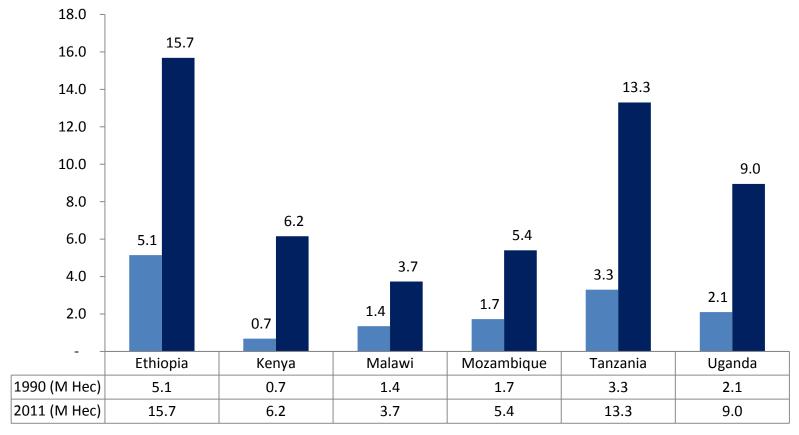






Africa: Change in area of Cultivation

Area of Cultivation for Key countries producing Pulses



■ 1990 (M Hec) ■ 2011 (M Hec)

Sources: FAOSTAT3 (http://faostat3.fao.org/home/index.html) for columns 1-3; Millennium Challenge Corporation. 2012. 2012 Country Scorebook, Washington DC

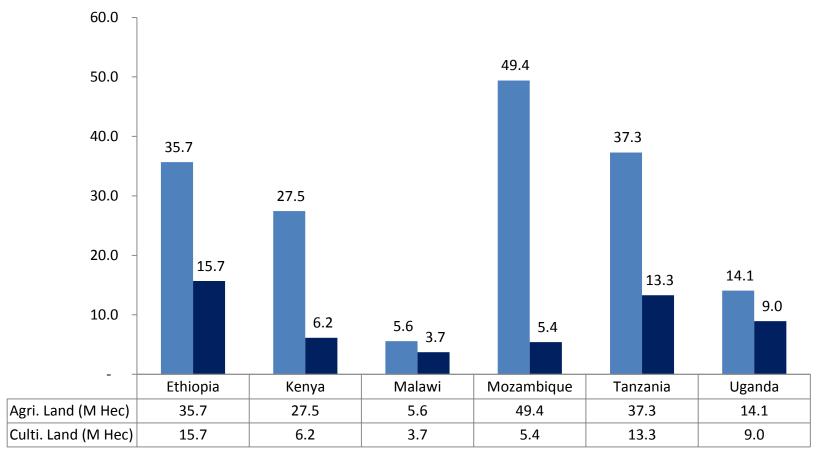






Africa: Total Agricultural land and area of Cultivation

Total Agricultural land and cultivated for Key countries producing Pulses



■ Agri. Land (M Hec) ■ Culti. Land (M Hec)

Sources: FAOSTAT3 (http://faostat3.fao.org/home/index.html) for columns 1-3; Millennium Challenge Corporation. 2012. 2012 Country Scorebook, Washington DC







East Africa and India Trade - Pulses

- Export Oriented
 - Pigeon Peas
 - Yellow Gram (Desi Chick Peas)
 - Green Gram (Mung beans)
- Local Consumptions
 - Various Edible beans (Red Kidney, BEB, White Pea beans etc).
 - Cow Peas

Major Sources of Imports for India

Type of Pulses	Top Imported Source
Pigeon Peas (Tur)	Myanmar (52%), Tanzania (21%), Mozambique (15%), Malawi (8%), Sudan (3%)
Moong/Urad	Myanmar (86%), Tanzania (6%), Uzbekistan (2%), Mozambique (2%), Kenya (2%)
Chickpeas (Garbanzos)	Australia (46%), Russia (39%), Tanzania (5%), Myanmar (3%), USA (2%)

Source: Department of Commerce

Africa's Contribution

Particulars	Pigeon Peas (Tur)	Moong / Urad	Gram / Chick Peas
India's Production	2,750	3,000	8,280
Import by India	575	623	419
Africa's contribution	270	53	20
Africa's share in India's import	47%	9%	5%

 India, will continue to be import dependent and its reliance on Africa will continue to grow as there is lack of land in other places.







(MT: '000)

East Africa - Detail Narrative - Tanzania

- Tanzania has an area of 94.5 million hectares of which about 43 million hectares is suitable for agriculture.
- Currently only about 23 % of arable land is cultivated and mostly by small holder farmers.
- Tanzanian economy is heavily based on agriculture, which accounts for 24.5% of GDP employs 78% of the population and provides 85% of exports
- Maize (5.17 Million MT) is the largest food crop and Sugarcane (296,679 MT) is the largest cash crop on the Tanzania mainland.



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Pigeon Peas	75,000-95,000	70,000
Green Gram	30,000-50,000	40,000
Chick Peas	30,000-50,000	45,000

- Key challenges
 - Regulatory challenges.
 - Quality is not consistent.







East Africa - Detail Narrative - Kenya

- The sector contributes about 26 percent of the country's GDP and employs about 75 percent of the population
- The sector is a major source of revenue with agricultural produce exports accounting for nearly two thirds of total domestic export.
- Maize, Wheat, Rice, Coffee, Tea, Cut Flowers, Fruits and Sugar cane are key crops.



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Pigeon Peas	15,000-20,000	18,000
Green Gram	14,000-35,000	30,000

- Key challenges
 - Very volatile currency and forex management challenges.
 - Increase in the local consumption, is reducing the available export market.
 - Poor environmental factors impacts the crops.







East Africa - Detail Narrative - Ethiopia

- Agro-ecology: Ethiopia is endowed with different kinds of agroclimates. Sixteen agro-ecological zones have been identified, hence there is ample chance growth in wide array of crops.
- Agriculture accounts for approx. 41.5% of total GDP.
- Major crops grown are Cereals (Teff, Maize, Sorghum, Wheat), Oilseeds: Sesame, Niger Seed, Lin seed, Ground Nut, Pulses: Chick Peas, Lentils, Red Kidney, White Pea Beans, Green Mung, Horse Beans, Grass Peas



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Red Kidney Beans	68,000-97,000	100,000
White Peas Beans	40,000-82,000	50,000
Red Lentils	80,000-160,000	180,000
Desi Chick Peas and Kabuli	200,000-500,000	450,000
Green Mung Beans	10,000-25,000	22,000

- Key challenges
 - Increased consumption for Desi Chick Peas and Red Lentils leaving very little for the export.
 - Volatile productions of Crop.
 - Local regulations Export / Import Forex restrictions.

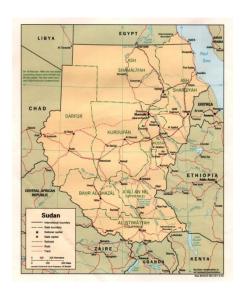






East Africa - Detail Narrative - Sudan

- In 1998 there was an estimated 16.9 million hectares (41.8 million acres) of arable land and approximately 1.9 million hectares (4.7 million acres) set aside for irrigation, primarily in the north of the country along the banks of the Nile and other rivers.
- Cotton is the principal export crop and an integral part of the country's economy and Sudan is the world's third largest producer of sesame after India and China



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Pigeon Peas	40,000-50,000	45,000

- Key challenges
 - Regulatory challenges OFAC.







East Africa - Detail Narrative - Mozambique

- It engages more than 70% of entire labor force for the country.
- Agriculture accounts for approx. 30 % of total GDP.
- Major agri products include corn, cotton, cashew nuts, coconut (copra), cow peas, cassava, green mung, peanut, pigeon peas, sugar cane, sesame seeds, soya beans, sunflower seeds, tea, tobaco & timber



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Green Gram	8,000-16,000	12,000
Pigeon Peas	55,000-75,000	75,000
Cow Peas	15,000-20,000	20,000

- Key challenges
 - Agriculture in Mozambique purely based on climate and crop can be less or more due to climatic reasons
 - Wide fluctuation of local currency







East Africa - Detail Narrative - Malawi

- Out of the current population about 84% are estimated to be living in rural regions where demand for fertilizers would be higher.
- The main agricultural products of Malawi include tobacco, sugarcane, cotton, tea, corn, potatoes, sorghum, cattle and goats.
- More than 1/3 of economy and 90% of export is from Agricultural products.



Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Pigeon Peas	60,000-90,000	70,000
Cow Peas	300-1500	1,000
Green Gram	500-2,000	1,500
Black Gram	500-2,000	1,500

- Key challenges
 - Logistic challenges being a land lock country and dependence on Mozambique ports.
 - Production is dependent on climate changes.







East Africa - Detail Narrative - Uganda

- Agricultural products supply nearly all of Uganda's foreign exchange earnings, with coffee alone (of which Uganda is Africa's leading producer) accounting for about 27% of the country's exports in 2002.
- Exports of apparel, hides, skins, vanilla, vegetables, fruits, cut flowers, and fish are growing, and cotton, tea, and tobacco continue to be mainstays



Historical Trade

Product	Historical Range (MT) (Five year)	Next year estimate (MT)
Pigeon Peas	8,000-14,000	12,000
Green Gram	8,000-14,000	10,000

- Key challenges
 - Logistic challenges being a land lock country and dependence other countries.
 - Crop size is smaller, hence high operative cost.







Africa: Opportunities / Benefits

- East Africa now a very important import origin for India specifically for pulses.
- Pigeon Peas is available in July august when India needs it most.
- Close proximity an advantage, short transit times.
- Quality is widely accepted with millers acknowledging that outturns are very attractive.
- Quantities available are increasing and dependable
- There is hardly any farming land left in Europe & the Americas, in the east industrialization is fast displacing farm land, and Africa is solution for the same as out of 25% of worlds arable land 60% is still to be developed with huge opportunity in improving the land.
- Huge investment is going into empowering Africa's small hold farmers
- Africa pulses exports expected to get double in this decade







Africa: Challenges

Macro challenges :

- Only ~25% of arable land is under cultivation
- It is dominated by subsistence farmers holding less than 5 ha land per family; assembling larger land parcels is difficult due to lack of clear land rights and political sensitivity
- There is little enabling infrastructure with poor linkages between production and the rest of the agricultural value chain
- Yield enhancing practices are the lowest in the world with only 3.6% of cropland irrigated (ROW: 18.5%), fertiliser usage is 125gm/ha (ROW:1,020gm/ha) and tractors usage is 13 per 100km² (ROW: 200 per 100km²). This results in **low land productivity** of \$18 per hectare (less than half of other emerging markets) vs. world average of \$260 per hectare

Trade challenges :

- Volatile currency movements
- Climate Changes impacts the productions and dependence on rain
- Focus on non-cash crops for own consumption
- Extremely poor infrastructure and lack of Capital for the Roads, Port, electricity etc
- Port Capacities are almost full and there are challenges for time, space and costs
- Regulation challenges and frequently changing policies







Thank you