

Overview of potato sector in Rwanda

By

Dr. Rukundo Placide

**Head of RAB Roots and Tubers Research and
Technology Transfer Programme**

15th August 2019

Importance of potato in Rwanda



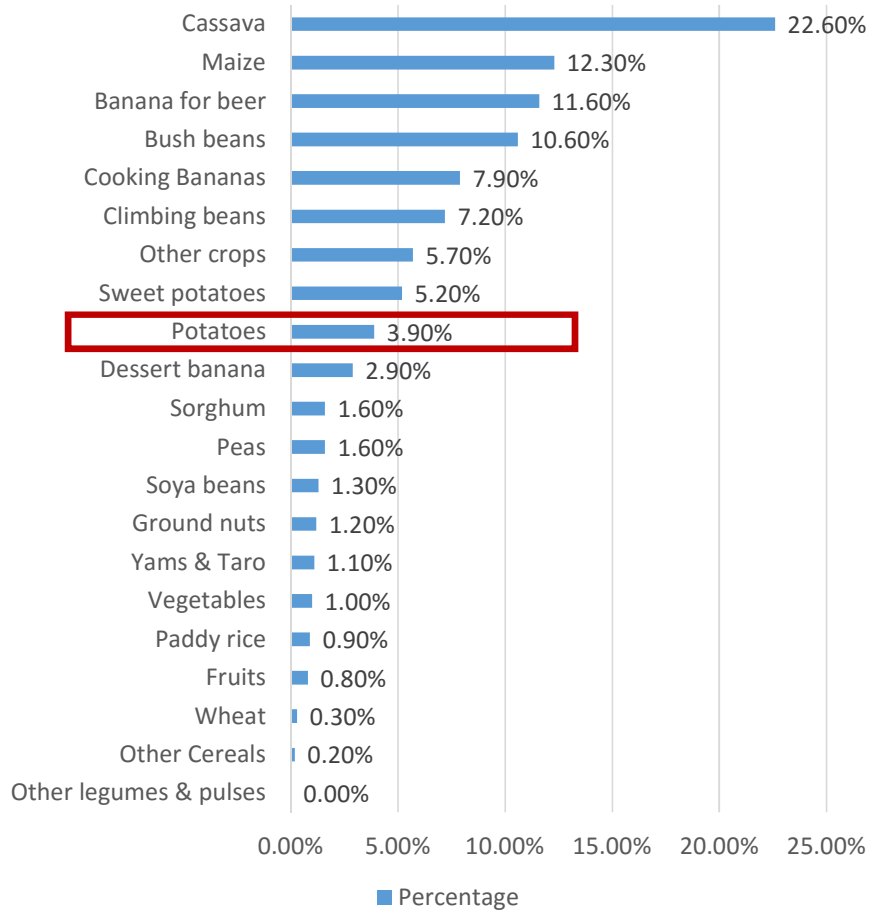
1. *Importance of potato in Rwanda*
2. *Constraints of potato production*
3. *Way forwards*

Importance of potato in Rwanda

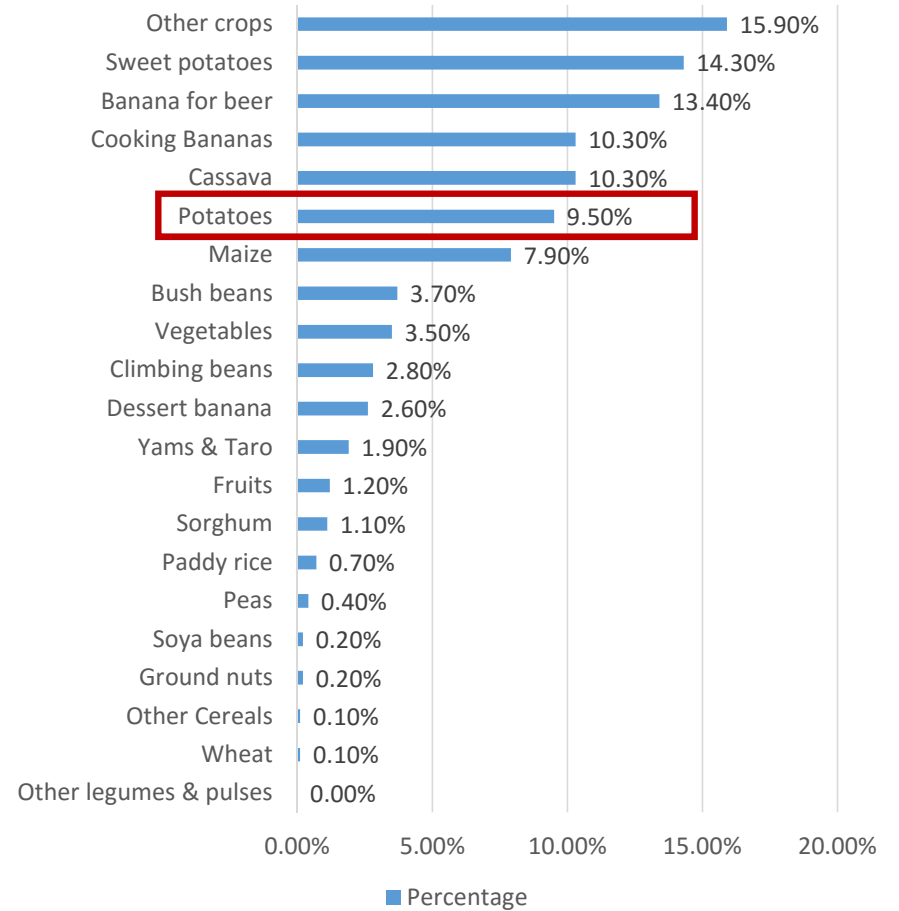


- Potato is one of the most important food and cash crops in Rwanda.
- It covers 50,000-60,000 ha, estimated at 3.9% of total cultivated land per each season
- Its contribution to total main crop production in Rwanda is estimated at 9.5%
- Its annual consumption per capita is estimated at 145 kg

Share of Agriculture Land by crop (%)



Share of production by main crops (%)



Year	Area (ha)	Production (tons)	Productivity (ton/ha)
2000	108,983	957,202	8.78
2001	117,403	1,012,269	8.62
2002	124,972	1,038,931	8.31
2003	133,954	1,099,549	8.21
2004	133,418	1,072,770	8.04
2005	135,622	1,314,050	9.69
2006	139,043	1,275,585	9.17
2007	124,621	967,283	7.76
2008	127,226	1,161,943	9.13
2009	126,167	1,289,623	10.22
2010	150,777	1,789,404	11.87
2011	130,000	1,171,500	9.01
2012	120,000	1,337,700	11.15
2013	95,000	1,240,700	13.06
2014	62,156	719,006	11.57
2015	75,342	742,626	9.86
2016	106,236	751,284	7.07
2017	93,991	846,184	9.00
Average	123,818	1,163,977	10.03

Challenges of potato industry in Rwanda

1. Limited number of improved, adapted and end users preferred varieties

No	Variety name	Maintainer	Release year	Yield (t/ha)
1	Cruza	RAB	1985	30
2	Gahinga	RAB	1972	40
3	Gasore	RAB	1983	30
4	Gikungu	RAB	1992	35
5	Kigega	RAB	1992	40
6	Kinigi	RAB	1993	30
7	Kirundo	RAB	1988	30
8	Mabondo	RAB	1992	35
9	Marirahinda	RAB	1983	40
10	Mizero	RAB	1992	40
11	Mugogo	RAB	1992	30
12	Nderera	RAB	1992	35
13	Ngunda	RAB	1992	50
14	Nseko	RAB	1983	30
15	Sangema	RAB	1983	25
16	Victoria	NARO	1996	25

Potato varieties to be released in 2018

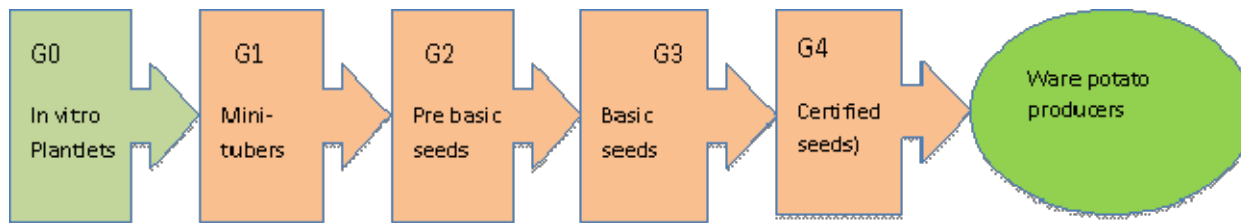
1. Nkunganire (CIP393280.64)
2. Ndeze (CIP398190.615)
3. Twihaze (CIP393371.58)
4. Kazeneza (CIP393077.159)
5. Izihirwe (CIP396018.241)



Challenges of potato industry in Rwanda

2. Limited quantity of quality seeds

More than **90% potato farmers** use farmer saved seeds with bad quality, consequently potato low potato yield compared to expected yield



Production of in vitro plantlets (G0) is carried out in tissue culture laboratory and Production of mini-tubers (G1) is carried out in screenhouses. Minitubers are planted in open fields to get pre-basic seeds (G2). After two further field multiplications (G3 and G4) you get certified seeds to be used by farmers for ware potato production.



Challenges of potato industry in Rwanda

3. High pressure of pests and diseases

Late blight



Cutworm damage to potato



Challenges of potato industry in Rwanda

4. Insufficient extension services

Extension service delivery on potato production: insufficient, not evenly distributed, not coordinated, not updated, and standardized



Challenges of potato industry in Rwanda

5. Losses due to poor post harvest handling and processing



High yield loss of potato due to shortage of appropriate and affordable post harvest handling technologies



Limited number of potato processors

Challenges of potato industry in Rwanda

6. Continuous decrease of arable land for potato production and soil fertility

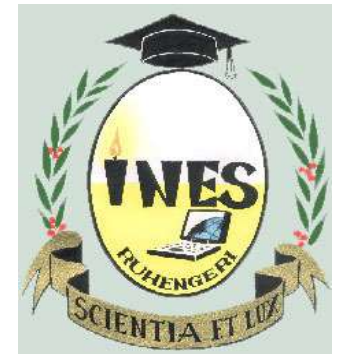


- 46% of HH own < 0.3ha
- 37% of HH own between 0.3ha-0.9ha
- 15% of HH own 0.9ha-3ha
- 2% of HH own >3ha



Challenges of potato industry in Rwanda

7. Poor coordination of potato research and shortage of funds



, and others.

Challenges of potato industry in Rwanda

8. Low farmers' power to potato market



Potato of about seven months old still in field due to market shortage, Bugeshi Sectot, February 2018

Challenges of potato industry in Rwanda

9. Poor coordination of potato value chain



Challenges of potato industry in Rwanda

1. Limited number of improved, adapted and end users preferred varieties
2. Limited quantity of quality seeds
3. High pressure of pests and diseases
4. Insufficient extension services
5. Losses due to poor post harvest handling and processing
6. Continuous decrease of arable land for potato production and soil fertility
7. Poor coordination of potato research and shortage of funds
8. Low farmers' power to potato market
9. Poor coordination of potato value chain
10. Limited knowledge on market, market standards, profitability

Way forwards

1. Strengthen and coordinate partnership among stakeholders of potato value chain
2. Stimulate ownership of stakeholders of potato value chain

Acknowledgements

- All stakeholders of potato production value chain
- Donors
- HortInvest for leading establishment of Rwanda potato Platform
- Special thanks to the Embassy of Kingdom of the Netherlands

Thank you for your attention