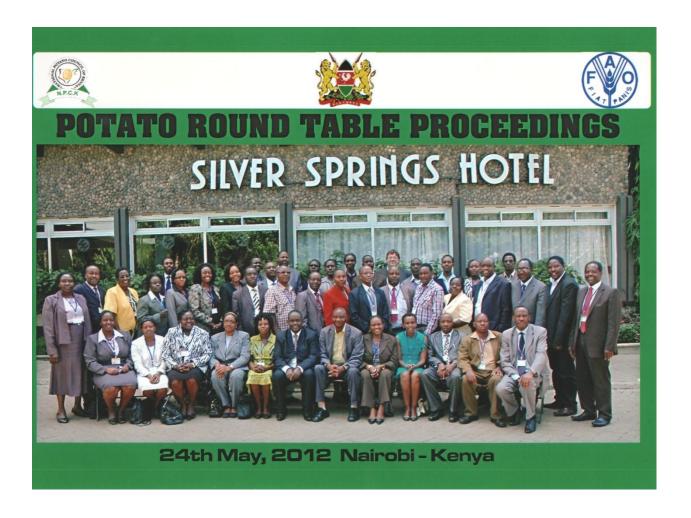
# PROCEEDINGS OF POTATO ROUND TABLE MEETING



**DATE:** 24<sup>th</sup> March 2012

**VENUE:** Silver Springs Hotel

FACILITATOR: Dr. Lusike Wasilwa- Deputy Director, KARI
OFFICIAL OPENING: Dr.Wilson Songa – Agricultural Secretary, MoA
PRESENTERS: Ms. Anne Onyango – Director Policy, MoA

Mr. Wachira Kaguongo-C.E.O., NPCK

**GROUP DISCUSSION:** Dr. Johnson Irungu- Director of crops management, MoA CLOSSING REMARKS: Mr. Henry Ndege- Deputy Director, Agribusiness, MoA

### List of Abbreviation

ADC Agricultural Development Corporation

CDF Community Development Fund

CIP International Potato Centre

FAO Food and Agricultural Organization

GTZ Deutsche Gesellchschaft fuer technische Zusammenarbeit

KACE Kenya Agricultural Commodity Exchange

KARI Kenya Agricultural Research Institute

KEBS Kenya Bureau of Standard

KENAPOFA Kenya National Potato Farmers Association

KENFAP Kenya National Federation of Agricultural Produces

KEPHIS Kenya Plant Health inspectorate Services

KIRDI Kenya industrial Research and Development Institute

KRA Kenya Revenue Authority

NEMA National Environment management Authority

NCST National Council for Science and Technology

MDG Millennium Development Goal

MoA Ministry of Agriculture

NPCK National Potato Council of Kenya

MoF Ministry of Finance

MoLG Ministry of Local Government

MoYS Ministry of Youths and Sports

PSDA Promotion of private sector development in Agriculture

SHOMAP Smallholder Horticulture marketing programme

STAK Seed Traders Association of Kenya

TOT Training of Trainers

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Many thanks also go to the FAO potato policy study team that comprised Wachira Kaguongo (NPCK), Alice Nyangweso (NPCK), Nancy Nganga (KARI-Tigoni), Charles Lunghaho (KARI-Tigoni), David Kipkoech (KARI-Tigoni) and Dinah Borus (CIP) for their contribution of the current and targeted status of Potato subsector which formed the background of the Potato Round Table meeting. We also highly acknowledge and thank all the participants for their time and their valuable contribution to this important exercise.

### Proceedings of Potato Round Table meeting

### Introduction

The NPCK in collaboration with CIP, KARI and MOA conducted an FAO funded study titled "Review study on policy-makers' information needs on smallholder crop diversification: The case of potato subsector in Kenya" between 2011 and 2012. The finding of the study revealed that in existence were policy documents, seed master plan, taskforce report, strategy papers, legal notices and other documents which clearly stipulate what needed to be done for the potato subsector to take off. However, most of recommendations and road maps in these documents have not been translated into actions. During the review workshop held on 4th April 2012 at KARI headquarters it was observed that what is stipulated in these documents can only be achievable if relevant government departments, stakeholders and development partners commit to partake specific roles, interventions and support identified as necessary to transform the subsector into a robust, competitive and self-regulatory industry. It was also noted that some issues, such as bottlenecks in seed and varieties, are key to unlocking the subsector's potential yet the solutions offered come with high challenges which need to be addressed with urgency. In line with this the study team and the review workshop recommended for a Round Table meeting to address specific issues necessary to unlock the potential of the subsector. After consultations with FAO representative and ministry of Agriculture team it was agreed that a Round Table meeting would be very valuable in informing the study further, expanding ownership of the recommendations and developing the industry. Towards this end, the Agricultural Secretary, Dr. Wilson Songa appointed a Task force to plan for the round table meeting to address critical issues, come up with practical action plans and elicit commitment from key government ministries and stakeholders that will translate to achievement of the identified milestones.

This report focuses on the proceedings of the round table which was held on 24<sup>th</sup> March 2012 in Silver Springs Hotel, Nairobi. The objective of the meeting was:

- To engage relevant government departments, stakeholders and development partners to commit to specific roles, interventions and support of identified activities that will transform the potato sub-sector into a robust, competitive and self-regulatory industry.
- To link interventions identified in various documents with appropriate action



Figure 1: Dr. Lusike Wasilwa, Assistant director, horticultural and industrial crops, KARI

#### Phases of Round table discussions

The roundtable was conducted with three phases including:

- 1. **Opening** comprised of official opening and two presentations highlighting the importance of potato, the current and targeted status of potato subsector. General discussions and question and answer sessions clarified some arising issues.
- 2. **Group Discussion** information was gathered and organized in tabular form thus reducing duplication of ideas, combining similar ideas, or evaluating options.
- 3. **Closing** summaries of roundtable group discussions were presented, priorities and strategic interventions presented.

# Official Opening by Dr. Wilson Songa, the Agriculture Secretary, Ministry of Agriculture

#### **Opening speech**

There is a need to push potato to the right place. Recently, more funding to the Agricultural Sector has been awarded to address issues of food insecurity. The potato sub-sector in Kenya appreciates continuous support from FAO. Because potato is important cash and food crop in sub-Saharan Africa, this crop needs to be promoted for food, nutrition and income security as it

contributes towards reduction of poverty. Moreover, potato has a short cropping cycle and high production per unit area and time making it the smallholder's cash crop for the future for densely populated East and Central Africa highlands with a high potential to improving livelihoods.



Figure 2: Dr. Wilson Songa, Agricultural Secretary, MOA

In Kenya, potato is the second most important food crop after maize. The crop is cultivated by 800,000 growers for food and income generation. Kenya's population is growing at an increment of 1 million annually. The country is grateful to development partners in commercialization of this sub-sector. Although potato is worth KES 46 billion, Kenya can do much better to optimize production, processing and utilization of this crop. Agriculture is a major contributor to Vision 2030 and thus all interventions undertaken contribute towards its achievement are warranted. Indeed potato is one of the strategic enterprises with the potential towards realization of the set objectives of Vision 2030 to reduce hunger and poverty by increasing households' incomes through promotion of manufacturing and agribusiness. Furthermore, potato can provide a cheap but nutritionally rich staple food required in fast growing cities by contributing to the daily diet requirement for protein, Vitamin C, Zinc and Iron. Increased potato productivity will play a buffer role to increasing food prices and will contribute to enhance household incomes. Based on current development, Kenya will meet the proposed targets to become a middle income economy. To achieve this, she must increase potato productivity. Seed is an area that has been very elusive and requires a team work and partnership with the private sector to produce planting material that benefits farmers.

Several projects have been implemented to support potato commercialization in Kenya including "Wealth Creation through Integrated Development of Potato Production and Marketing Sector in Kenya" funded by CFC under leadership of the International Potato Centre (CIP); the 3G (three generation) project on enhancing adoption of rapid seed multiplication methods lead by CIP in collaboration with MoA and KARI and funded by USAID; several GIZ-PSDA projects on revitalization of the potato sub-sector and the development of the potato master plan and development of draft policy on potato; and FAO funding on study of the potato sub-sector leading to the development of guidelines on "Policy Makes Information Needs on Smallholder Crop Diversification: The Case of the Potato sub-Sector in Kenya".

Achievements towards commercialization of the potato sub-sector in Kenya include:

- rapid seed production technologies; attract private sector participation in seed production (this area is weak and the Government should support the private sector to move activities in the sector after critical capacity is awarded);
- Private sector to take a lead in development of standards for production of high yielding varieties for processing.

Research in still underfunded and but with proper support, we can produce results that contribute to development. A good example of private sector involvement is the case of floriculture that regulates and coordinates itself with minimal support from the government. The government formed the NPCK to advance potato commercialization in collaboration with the private sector. Several strategic documents including policies have involved the private sector in their formulation which is very beneficial. All must commit to take up specific roles and interventions to transform the sub-sector to realize what we want today. Develop practical action plans that elicit commitment from key government departments and institutions. Stakeholders are key towards the realization of these objectives. Effective team work and coordination of different players is necessitated.

This will be done through the leadership of a potato task force in a roundtable to address specific issues necessary to unlock the potential of the sub-sector. Thus deliberations from the roundtable meeting will produce practical action plans that elicit commitment from key government ministries and stakeholders to translate achievements of identified milestones that unlock the potential of the potato sub-sector.

The Ministry of Agriculture appreciates collaboration from industry stakeholders and development partners towards development and promotion of the potato sub-sector.

After the opening speech the Agriculture Secretary officially opened the roundtable meeting.

# An Overview of the Potato sub-sector by Ms. Anne Onyango, Director of Policy (MoA)

Potato should be categorized as a high value crop in comparison to fruits and vegetables when both production (yields) and products (what is consumed) is valued. Agriculture is expected to play the key role in Vision 2030 in support of the 3 strategic pillars. Potato also plays a social role for those cultivating the crop and also supports the Agriculture Sector Development Strategy (ASDS 2009-2020) and Millennium Development Goal (MDG) No. 1 on food security. Contribution of potato in food, nutrition and income security is a key factor for development in Kenya. There is however need to use irrigation for potato production to not only optimize yields but also increase area under cultivation. Another critical area is to study the current KES 46 billion realized by the potato sub-sector and put it into appropriate action by determining who controls this money and how is it distributed. The roundtable meeting today will discuss this bringing out gaps that should be addressed and areas that should be supported.



Figure 3: MS Ann Onyango, Director Policy, MOA

Potato is produced above 1,500 m above sea level thus warranting the sub-sector to open up new areas for cultivation. The area has flat lined; the value has stagnated and production is decreasing. Constraints include low yields, high disease severity and inadequate suitable varieties whereby Kenya produces 5-10 tons ha<sup>-1</sup>; Egypt 26 tons ha<sup>-1</sup>; and South Africa 36 tons ha<sup>-1</sup>; actors are fragmented and players perform uncoordinated activities; low value addition and limited agri-business activities; poor enforcement of regulations and standards. Challenges

have been addressed in potato variety development; seed multiplication extension legal framework; and potato marketing. Although they are several new varieties including Nyayo, Tigoni, Asante, Desiree, Kenya Baraka, Ngure, Kerr's pink, Dutch Robyn, Roslyn Tana, Roselyn Eburu and Annet majority do know what variety they are eating. Supermarkets and local marketers should be encouraged to label the varieties sold and avoid mixing potato like in developed countries.

Improving availability of quality seed is necessitated because only 5% of potato farmers use high quality seed and 95% depend on farm-saved seed. Because seed produced by commercial multipliers is limited, in 2009, the Ministry of Agriculture embarked on seed potato multiplication programme so as to improve the seed potato availability in the country. Seven hundred acres were procured for Agricultural Development Corporation (ADC)-Asante Farm to multiply seed potato. The MoA also facilitated rehabilitation of potato cold stores; construction and equipping of potato tissue culture laboratories; and construction of potato seed screen houses at ADC Molo. The MoA provided KARI funding for rehabilitation of the micropropagation laboratory at KARI-Tigoni to fasten multiplication of basic potato seed. Although the government of Kenya has continued to provide extension services in all potato growing areas, the staff to farmer ratio is still low. Another constraint ailing the potato sub-sector is the underdeveloped marketing and processing segments of the value chain. Marketing channels are poorly structured and farmers generally get low returns. Main challenges that lower the returns to farmers include high perishability of potato forcing them to sell their produce early; inadequate storage facilities; bulkiness of both seed and ware potatoes; poor access roads and poor marketing infrastructure; insufficient quality standards; inadequate access to market information; and poor adherence to standards i.e. use of extended bags.

The policy, legal and regulatory framework governing the potato sub-sector are in place including a draft Roots and Tuber Crops Policy; Legal Notice No. 44 (2005), that governs ware potato package size and weight in Kenya, among other attributes, checks and balances within the potato value chain; Legal Notice No.113 (2008), of 5th September 2008 (The Local Government (Adoptive By-laws) (Agricultural Produce) (Standard Weight Of Packages) Order, 2008) and which came to force in support of the implementation of some aspects of the Legal Notice No. 44; and the Seed Potato Master Plan (2010). In spite of the existing framework, some of the regulatory and policy documents are either not yet completed or implementation is poor.

The challenges facing the potato Industry that will be discussed in this roundtable meeting under four thematic areas including - Seed systems and variety development; Ware potato production; Potato marketing and processing, and Policy, Legal and Regulatory issues. Several interventions and action plans necessary to unlock the potential of this sub-sector have been suggested in each of the four thematic areas. Thus this roundtable encourages participation of all in order to unlock the potential that the potato has for this country.

# Current and Targeted Sub-sector Status and Action Plans by Thematic Areas, by Wachira Kaguongo, Chief Executive Officer (NPCK)

The National Potato Council of Kenya (NPCK) is a multi-stakeholder and a PPP (public-private-partnership) organization, with the responsibility of planning, organizing and coordinating activities of the value chains in potato industry. The Council aims at engaging all actors and stakeholders to develop potato sub-sector into a robust, competitive and self-regulating industry by drawing synergies from a wide membership including farmers, researchers, extension providers (public), traders, processors, regulatory bodies and development partners.

Growth and development strategy for Kenya will be achieved through sub-sectors with high potential to develop Kenya including potato. According to CAADP, ASDS (2010-2020) and Vision 2030 growth and development of the Kenyan economy will be achieved mainly through identification and exploiting potential of sub-sectors that have a large production base; the potential to drive growth and reduce poverty. Potato yields have been decreasing by 11% annually until recent reports whereby 50 tons ha<sup>-1</sup> have been achieved under intensive farming at Kisima Farm which is comparable to Egypt 26 tons ha<sup>-1</sup> and South Africa at 36 tons ha<sup>-1</sup>. Some regions of Kenya can produce up to three crops per year with appropriate varieties and sufficient water. Thus Kenya can expand potato production in low areas by adopting best-production practices.



Figure 4: Mr. Wachira Kaguongo, CEO, NPCK

Potato is a strategic crop for poverty alleviation because it provides income and employment in production to consumption continuum; produces more starch per unit land and time; and it can be cultivated in low lying areas. Potato is also good for horizontal and vertical product diversification while enhancing food security by stabilizing farmer incomes; helps shield poor

farmers from unstable international prices since it is not highly traded; good in mitigating effects of climate change. Moreover this crop is nutritious and has higher protein and vitamin C than cereals. It is also a "safe" crop as it is not currently internationally traded like maize and thus no political influences. Thus the potential of potato for food, nutrition and income potential has not been fully realized in Kenya.

Currently the potato sub-sector is semi commercialized and characterized by low productivity (yields < 10 ton ha<sup>-1</sup>); low agribusiness (< 10%); moderate employment (3.3 million directly); moderate income (KES 46 billion); and low product diversification. The NPCK hopes to transform this sub-sector to become robust, competitive and self regulating industry with high yields (over 25 tons ha<sup>-1</sup>); high agribusiness (> 80%); high employment (6.6 million); high income (150 billion); vertical and horizontal product diversification while enhancing food and nutrition security.

#### Causes of the current status and drivers to the targeted status of potato sub-sector include

- Low quality seed (used by 90% of farmers) that could be resolved by production of high quality seed (certified, clean and positively selected seed used by over 50% of farmers).
- Limited suitable varieties (particularly for processing) where there is only one variety Dutch Robins that is low yielding and highly susceptible to diseases. This could be resolved by introducing and/or developing specialized varieties for processing consultatively.
- Low input use for a crop that has intensive production procedures.
- Low awareness and lack of information on use of high quality seed (farmer select small tubers for seed that could be diseased) there is need to provide production, processing and marketing information to end users.
- Poor marketing infrastructure there is need to improve infrastructure including access roads; establish collection centers to store ware potato to reduce glut and establish appropriate marketing structures.
- Limited technologies and know how. Kenya should learn from successful countries e.g. Egypt, South Africa and Netherlands.
- Low value addition need to encourage value addition
- Inadequate implementation of regulatory and policy framework i.e. need support from local government to manage the recommended size and weight of potato bag.
- Low private sector involvement there is need to promote private sector involvement.
- Limited expertise there is a need to capacity build experts
- Lack of development plans there is need to formulate a sub-sector development plan that defines the role of all stakeholders.
- Low budgetary support and is slightly increasing and more is warranted to develop this sub-sector.
- There are limited and uncoordinated research and development activities. There is need for market driven research and well coordinated development activities.

The purpose of the roundtable meeting is to link interventions identified in various documents with appropriate actions. For example processing is affected by poor quality potato, high postharvest looses; use of the extended bag for marketing potato that can be addressed by implement Legal Notices 44 and 113. When these laws are broken, who should be jailed and what should be done to implement the law. Another example is how to increase use of quality seed from 1.5% to 10% by creating awareness on the benefits and use of this seed. What should be done to increase delivery of key players in the seed system? There is need to develop the solution on inspection of seed that is dependable by including more partners in certification of seed by accredited bodies. How can stakeholders contribute to appropriate surveillance on pests and diseases to protect potato? Clear policy guidelines on import and export seed for ware potato are missing and policy guidelines should be developed. Kenya should develop standards and guidelines for seed and minitubers production and potato stakeholders should contribute to the finalization of the root and tuber crop policy by including issues presented in several potato documents. The potato roundtable thus has interventions grouped into 4 thematic areas including seed systems and variety development; ware production; marketing and processing; and policy, legal and regulatory framework.

# Causes of current status

# Drivers to targeted status

- 1. Low quality seed (>90%)
- 2. Limited number of suitable varieties
  - 3. Low input use
- 4. Low awareness & lack of information
  - 5. Poor marketing infrastructure
  - 6. Limited technologies & knowhow
    - 7. Low value addition
  - 8. Poor post harvest mgt practices
- 9. Inadequate regulatory and policy framework
  - 10. Low private sector involvement
    - 11. Limited expertise
    - 12. Lack of development plan
    - 13. Low budgetary support
- 14. Limited and uncoordinated research & devp activities

- 1. High quality seed-certified, clean, positively selected seeds (>50%)
  - 2. Specialized varieties- Processing, low land
    - 3. Intensive potato farming
  - 4. Informed farmers-prodn & marketing info
- 5. Improved infrastructure –good access roads, collection centers, appropriate marketing structures
  - 6. High level technologies & knowhow
- 7. High value addition-value capture and transformation
- 8. Good postharvest mgt practices-Kenya-GAP, EA standards, traceability,
- Supportive regulatory and policy framework in placeadherence to contract farming, standards etc
  - 10. High private sector involvement
  - 11. More expertise at different levels of subsector
    - 12. Subsector development plan
  - 13. Adequate budgetary and institutional support
  - 14. Market driven research, well coordinated devpactivities

Figure 5: Current and targeted Subsector Status

# Roundtable Thematic Group Discussion by Dr. Johnson Irungu, Director of Crops management, MOA

The participants were directed on how they would participate in the four thematic areas. The participants were grouped based on the institutional and personal interests. The group activities were completion of tables under four thematic areas.

- 1. Seed system and variety development
- 2. Ware potato production
- 3. Potato marketing and processing
- 4. Policy, legal and regulatory framework



Figure 6: Dr. Johnson Irungu, Director of Crops Management, MOA

### Thematic groups

1. Select the group chair and rapporteur List thematic group members including the organizations they represent and their roles

			Thematic member	ers
Roundtable	Thematic	Name	Institution	Role in Institution

Gro	up			
1	Seed system and variety development	Dr. Abed Kagundo	KEPHIS	Head Phytosanitary Services
		Mr. Peterson Kamau	Kisima Farm	Production
		Ms. Wanjiku Gathoga	Midlands Limited	Marketing
		Mrs. Gladys Maingi	GIZ-PSDA	Deputy Programme Manager
		Mr. Joepe Kery	MoA, Bomet	Technical capacity building/ information dissemination
		Dr. Elmar Shulte- Geldermann	CIP-SSA	Seed system, ICM
		Dr. Charles Lung'aho	KARI-Tigoni	National Potato Research Coordinator
		Mr. Damaris Mwangi	NPCK	Volunteer
		Mr. Paul Njuguna	ADC	Regional Manager
		Dr. Jackson Kabila	KARI-Tigoni	Centre Director and
2	Ware potato	Florence Kariuki	Equity Bank	potato researcher Credit Manager
_	production	TIOTOTICC Kariaki	Lquity bank	Agriculture
	p. caaciicii	Grace J. Chirchir	MoA	DDA Horticulture
		Agnes Kyalo	MoA	SADA Extension and Training
		David K. N. Maingi	NPCK	Board Member
		Patrick Nyuru	MoA	D/DAO
		Patrick Njogu	KENAPOFA	Chairman
		Joseph Maina	MoA	Potato Section Horticulture Division
		Dr. John K. Mutunga	MoA	NPCK Vice Chairman
3	Potato marketing and processing	Elijah N. Mwangi	Ministry of Trade	Assistant Director
		G. N. Mjonya	MoCD&M	Senior Coop Officer
		Daphne Muchai	KENFAP	Communication and knowledge management
		Grace Mbuthia	HCDA	Horticultural Officer
		Junghae Wainaina	Midlands	?
		David Kipkoech	KARI-Tigoni	Agribusiness
		Joseph K. Mutuma	MoA	District Agricultural Officer
		Richard O. Ochieng	MoA	Agro-structures Engineering

## POTATO ROUND TABLE MEETING HELD ON $24^{TH}$ MAY 2012

			Emily Osena	MoA	Agribusiness
			Jackson Muchoki	GIZ-PSDA	Value Chain Advisor
4	Policy, legal	and	Stephen Karimi	NCST	Policy Advisor
	regulatory		William Cheriyot	MoA	Extentionist
	framework		Nancy M. Ng'anga'	KARI	Researcher
			Edwards Mwamba	KENAPOFA	Farmer
			Margaret	MoLD	Agribusiness
					Coordinator
			Kibet Ngetich	Egerton	Researcher
				University	
			Vincent S. Mahiva	NEMA	Researcher
			Evans O. Sikinyi	STAK	Seed Producer and
					Marketer
			Charles Kaguora	MoYAS	Youth Development
			Wahiu		
			Winnie Adhiambo	MoF	Economist
			Nyambei		
			Phyllis Njane	MoA – Policy	Policy Analyst

### **GROUP DISCUSSIONS TABLES**

### Seed system and variety development



Figure 7: Section of seed systems and variety development thematic group

Current status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
1. Low usage of quality seed	1. Use of high quality seed increased (>50%-	Increased certified seed production	Create awareness and education on the benefits of	MOA, NPCK, KENAPOFA, and CIP, KARI, KEPHIS, ADC,	Intensify training and demonstration (MoA), Information on availability of good quality seed (MoA),	Immediate Immediate (Maina)
(less than 5%)	certified, clean & positively selected seed)	and distributio n from 1.5% to 10%	use of quality seed	private sector, other partners	Domesticate available manuals (NPCK)	Immediate
			Increase quantities of breeder /basic seed	KARI, MOA, CIP, ADC, KEPHIS & Public and private Seed Producers	Increase minituber production capacity, Improved testing methods of quality disease to shorten the time period  Strengthen partnerships for breeder seed multiplication between public and private sector	Short term
					Make provision for seed potato reserve (funding) Gene banking (National back-up) systems for varieties (improve cold storage, ADC & private sector), on farm seed storage	Long term
			Increase number of cert. seed	NPCK MOA ADC	Train more multipliers Decentralize seed producers over wide counties,	Short term

<b>Current</b> status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			multipliers in counties	KARI, KENAPOFA, KEPHIS, STAK,	ADC to create satellite centers in major potato growing area, Council to map out where producers are and disseminate information	Short term (Sept 2012)
			Enhance certified seed distribution system	MoA, STAK, Private sector NPCK, STAK	Same like certified seed, involving other partners e.g. agro vets	Short term
		Timely and effective regulator y and advisory services	Increased role of partners in regulatory and advisory services	KEPHIS NPCK STAK MOA	Test and adopt improve disease detection methods, Partners coordinated by NPCK to follow finalization of Bill, Push for policy in support of QDS, Advocacy for passing of bill NPCK, STAK	
			Hasten seed certification process	KEPHIS Seed producers	same above	
			Include use of more confirmatory tests (e.g., PCR method)	KEPHIS	Kephis to open lab. At Hqts,  KEPHIS to Send communication advising confirmatory test to be done upon request and payment (BW)	
			Authorization/ Accreditation of private	KEPHIS NPCK STAK	Follow up bill, Authorization of labs	Immediate

<b>Current</b> status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			sector in seed inspection	MOA		
			Systematic pest and diseases surveillance	KARI,ADC, NPCK, Universities Private producers	Centralizing data on pests and diseases. Coordination by NPCK & KEPHIS, NPCK to source for funds	Long term
		Increased production, distributio n and use of quality declared (clean) seed to 25%	Recognition of quality declared seed as tradable seed and development of its standards	KEPHIS, MOA, KARI, NPCK	Change policy,	Short term
			Recruitment and training of quality declared seed producers in each potato growing county	MOA, KEPHIS, KARI, NPCK, KENAPOFA	As above	
			Create awareness on use of quality declared seed	MOA, KARI, KENAPOFA, NPCK	NPCK to customize QDS protocols and share it, Apply GAPs (NPCK, KENAPOFA)	

<b>Current</b> status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
		Increased production and use of positively selected (PS) seed to 30%	Awareness creation and training on PS seed	MOA, KARI, KENAPOFA, NPCK, plus other partners	Continuous training	Short term
		Improved technical and infrastruct ural research capacity for potato seed production	Avail new lands	KARI, MOA, NPCK, ADC Private producers	increased minituber production, facilities, Increase staff, Equipment, laboratory, better coordination with university, establishment of revolving funds, establishment of diagnostic labs, provision of diagnostic kits, e.g. geraniums Establishment of disease research lab.	
			Enhance capacity and infrastructure for development and uptake of new technologies	KARI MOA, NPCK Private sector, universities, STAK	Continue communication between PPP coordinate by NPCK, Stakeholder meetings on a quarterly basis, Mobilize resources e.g. CGA, strengthen potato research by universities Formalize partnership	
			Promote public-private	MOA, KARI, ADC, NPCK		

Current status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			sector partnerships in research, extension and seed production	Private sector, KENAPOFA		
		Create seed informatio n desk	Collect, process, & disseminate seed & variety supply and demand information	NPCK, KARI, MOA, KEPHIS, Seed producers, farmers	NPCK to map out seed grower	
			Empower seed potato committee/pla tform	KEPHIS, MOA STAK NPCK All players	Present request for funding as a platform	
			Develop seed value chain interaction platform	NPCK, KEPHIS, MOA STAK, NCST All players	as above	Immediate
		Promote storage of seed at farm level Increase	Promote DLS  Investor	MoA, KARI, NPCK, MKU NCST	Develop promotional material to extension Find out which variety can keep  AS the PPP system	Short term

<b>Current</b> status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
		involveme nt of private sector in seed production at county levels	forum for potential seed potato growers	KENAPOFA, KENFAP, KARI,		
			Avail credit	Equity, cooperative bank, MOA	Approach financiers and develop models for credit, Organize farmers into groups, Document MOU	
2. Limited varieties for specializ ed uses (e.g. processin g, lowland productio n)	Market demanded varieties introduced/dev eloped (e.g. processing, lowland	Identify & introduce processing and low land varieties	Acquire/devel op varieties, evaluate (NPT, DUS), bulk and release	KARI KEPHIS STAK NPCK, CIP	Establish contacts with university e.g. sandwich program in breeding e.g. wageningen,Short term training of breeders (e.g. CIP, Scotland, China, etc)  Carry out more extensive evaluations, Look for partners to conserve materials	
			Provide platforms for engaging all value chain	NPCK, KEPHIS, MOA STAK, CIP	participatory variety evaluations, as the seed ises	Immediate

Current status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			actors and players for identification and introduction of market demanded varieties	Processor, All players		
			Hasten introduction and release of varieties	KARI KEPHIS	Testing more materials in NPTs, Use other data to shorten period to two seasons If DUS data available can release, avail this information to NPCK	
3. Unregula ted and uncontrol led cross border seed trade (ware used as seed)	3. Cross border ware trade monitored for pest and disease control	Guidelines on pest and disease surveillanc e cross border developed	Develop guidelines on monitoring of pest and disease on ware potatoes	MoA, KARI, KEPHIS, NPCK, Ministry of trade	Ensure through existing mechanisms that material coming into the country is ''clean'', awareness creation, Intensify surveillance	
4. Unclear Policy guideline	Comprehensiv e policy on importation and export of	Policy guidelines and protocols	Undertake economics, environmental and risk	MoA, KARI, KEPHIS, NPCK, Private sector, STAK		

<b>Current</b> status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
s on import and export of seed, and ware potato lacking	potato tissues (ware, seed, minitubers, tissue culture, et) developed	on import and export of all potato parts/ tissues developed	analysis to inform the development of regulation and guidelines for trade in potato			
Morring			Develop clear guidelines for export and import of all type of seeds	MoA, KARI, KEPHIS, NPCK, STAK		
		Regulation s for movement of invitro plantlets, minitubers, (i.e. standards) developed	Develop regulations for invitro plantlets, minitubers, and other innovations (i.e. standards etc.)	MoA, KARI, KEPHIS, NPCK, STAK		
4. Seed master plan develope	Master plan being fully utilized	Seed potato master plan	Constitute review team and TORs	MoA, KARI, NPCK, CIP, KEPHIS, STAK	Synthesis the master plan into a policy document, Prepare 10 year strategic paper for potatoes (10-15 pages) with target	Immediate

Current status	Targeted status	Interventi ons	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
d but not fully impleme nted		reviewed, adopted and fully implement ed			mentioning key actors. Seek for support. Also include private sector	

## Ware potato production

Current status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
1. Inadequate transfer of knowledge and skills on potato production, husbandry and storage	Empower farmers and extension staff in knowledge and skills on potato production, husbandry	Train extension staff and farmers on quality seed, fertilizers, diseases and pest control and post	- Update training materials - Carry out TOT - Train farmers on potato management Map out. potato growing areas -Identify TOT and groom them	MoA, PSDA- GTZ, KARI CIP, NPCK AAK KENAPOFA KENFAP	-Need a coordination team to develop a communication strategy for the potato -Resources -inventory of existing potato technologies from research -Identify TOT and groom them	Immediate Immediate Immediate Immediate Immediate Immediate
	and storage	harvest managemen t	-Farmer friendly material -Sequence training (release of information)			
			<ul> <li>Field days and demonstrations on potato management</li> <li>Carry out educational tours, trade fairs and field visits</li> </ul>	MoA KEPHIS, KARI,, KENFAP, NPCK KENAPOFA AAK	Model farmer in a centralized location and promotion of the demonstration in collaboration with ppp(private farmers, agro chemical companies) -Tours on cost sharing basis	Immediate continuous
			- Information dissemination through media programs	NPCK, MoA, KENAPOFA KENFAP	-Develop a communication strategy -Engage other players -Use local FM radio to disseminate -Develop package for farmers and extension	immediate

Current status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
					-sequence and popularize the information and harmonize the release	
			- Carry out supervision and backstopping of all actors driving the identified actions	MoA, PSDA- GTZ KARI KENAPOFA		
2. Low adoption of officially	Promote use of officially released	Develop technology packages for	<ul><li>Hold workshops and sensitization meetings</li><li>Carry out field days</li></ul>	KARI, MoA, GIZ-PSDA, CIP, NPCK	Incorporate the potato variety release in the communication strategy.	Immediate
released potato varieties.	potato varieties that	the released potato	and demonstrations in the various appropriate	KENAPOFA MoA	-Use of ICT(sms-eg KEPHIS) -Tie variety release with quantities	Short-term
	are high yielding,	varieties for delivery to	agro-ecological zones	KENFAP, KARI	of seeds available, Distribution points &Cost	Immediate
	resistant to diseases and suitable for various	farmers in promotion campaigns -Awareness			-Moderate cost through Subsidized financing mechanism -use of opinion leaders and lead farmers	Short term
	utilization demands	- Availability and			-An elaborate distribution structure e.g. KFA to be revived	Immediate &continuous
		multiplicati on Distribution points			-ADC to Contract seed production	Immediate
		-Cost -Attitude				Short term
<b>3. Inadequate</b> Research on	Research on possible	Acquisition, introduction	- Varieties acquired, introduced, breed and	- KARI, CIP, NPCK	-Increase funding for potato research	Immediate

# POTATO ROUND TABLE MEETING HELD ON $24^{TH}$ MAY 2012

Current status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium
possible superior varieties for various regions  Underfunding research -Inadequate recruitment of researchers -Donor driven research not addressing farmer needs -Diminishing land for research -poor dissemination of research	superior varieties and their introduction in the appropriate regions	, breeding and selection for specific attributes e.g. disease resistance, yields, drought and heat tolerance (low agro ecological zones), niche markets (starch, frozen chips etc) and shelf life	selected for the various attributes - National performance trials (NPTs) and on farm trials done in all the important production areas	KEPHIS	-Industry to fund research -Proportion of local govt cess to be directed to the potato industry development (25%) -Donor research should be aligned to the national agenda -Reclaim grabbed land -Purchase of land for potato research purpose -Address PBR benefit sharing -Declaration of research findings(Sourcing, packaging &dissemination) -Form linkages with ppp -Funding research institutions to Acquire the needed potato germplasmEstablish protocol for germplasm exchange	Medium term Short Term  Medium Continuous Long-term Immediate Immediate &continuous Continuous Continuous
findings					-Collaborate with other international research bodies to acquire germplasm e.g. CIP	Immediate
			- Variety release with sufficient quantities of seed	KEPHIS, KARI CIP	Implement the rules of variety release	Immediate

# POTATO ROUND TABLE MEETING HELD ON $24^{TH}$ MAY 2012

Current status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			- Multiplication of seed of variety/varieties released	KEPHIS - KARI, ADC MoA, NPCK	Involve all players into seed multiplication especially private	Medium
			Update agronomic practices to be more effective and specific	MoA, PSDA- GTZ KARI, NPCK	Update the already available technical material	Immediate
4. Little or no expansion of the production of potato into new and non-traditional production areas	To expand the production of potato into non-traditional production and new areas	Identify the varieties that can be grown in non traditional areas and introduce them to the new areas	- Identify non traditional areas and the varieties grown	MoA, KARI, CIP KENAPOFA SEED COMPANIES	-Map non traditional areas  -Research to develop on the varieties	Immediate  Long term
			<ul> <li>Mobilize farmers in these non traditional areas into production groups</li> <li>Train farmers on potato production</li> </ul>	NPCK MoA, KENAPOFA	Implement	Long term
			- Demonstrations and field days on potato production	MoA, KARI, CIP MOA, KENAPOFA	Model farms	Longterm

Current status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
5. Inadequate supply of quality seed in all the potato producing areas	Support formal and informal seed multiplication of quality seed by both public and private sector in all the potato producing areas	- Recruit seed multipliers in both public and private sectors for formal and informal seed potato multiplicati on	- Training of recruited seed multipliers - Field surveillance of the seed multipliers - Monitor and backstop seed multipliers - Establish distribution points for basic seed in the main potato producing areas	KARI, MoA, GIZ-PSDA, CIP, KENFAP, NPCK KENAPOFA KEPHIS	-Self regulation of the private sector in potato production -contract seed production farming -subsidy -leasing of government idle land for seed multiplication	Medium term
			- Compile, publish and disseminate national directory on seed growers	KARI, MoA, NPCK KENAPOFA		
6. Very little use of irrigation in potato production	Encourage and support development of irrigation systems in potato production	-Support Installation of irrigation facilities in the seed producing areas	Research on management & agronomic practices under irrigation	MoA, KARI, CIP, GIZ- PSDA, NPCK	-Position potato crop as the suitable crop for irrigation -map target areas -encourage private sector investment	Medium term
			- Demonstrate use of simple irrigation systems and water harvesting technologies	MoA NPCK KARI MoA	Rehabilitate and construction of dams to act as water harvesting techniqueswater saving technologies e.g. drip irrigation Task force communication strategy	Long term

<b>Current</b> status	Targeted status	Interventio ns	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
			dissemination through media programs and publications on simple irrigation systems and water harvesting technologies	NPCK, KARI		

## Potato marketing and processing



Figure 8: Section of marketing and processing thematic group

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
Marketing						
1. Extended bag	1. The Legal	-standardization	- Gazettment of	-MoA-formation of	-Cess charged by weight	Immediate
still used in potato	Notice No. 44 of	of the potato	DAOs as	farmers	(Kg) at all levels of	
marketing.	2005	packaging sizes	inspectors	groups/traders	market points	
Farmers are still	implemented	and weight (Kg)	-include law	KEPHIS	-Weights and Measures	

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
unable to implement the regulations due to the broker and trader cartels that usually dismantle farmer unity	- gazettement of inspectors to implement the regulation	-use of the best packaging material -Grading of the potato (size)	enforcers like policemen -Aggressive advertisement on TV stations -encourage contracts within the chain -pricing according to grades	KENAPOFA NPCK Police MoT, Provincial Admn. KENFAP	department of MoT to reinforced the gazette notices -Although the standards recommend the 110kg, it is important to go ILO way -50Kg -Amend the standards -Create awareness -one cess payment at all levels of local authority	
2. Local government still unable to implement Legal Notice 113 of 2008 notice	2. Legal Notice no. 113 of 2008 implemented and potatoes sold by weight and maximum of 110 kg bag	Enforce the regulation of ware potato packaging size and weight	Ministry of Local Government should instruct the Department of Inspectorate to monitor and enforce provisions of Legal Notice no. 113 of 2008	-NPCK -Department of the Inspectorate and department of Social Services should foresee implementation of the regulations at the markets (Urban, County, municipal & city councils)	-Patented plastic crates of 50kg- the Midland way -strengthening produce and marketing organization-KENAPOFA -Sensitization of the need of the standards	Immediate
3. Lack of transparency in the value chain has reduced the	3. Integration of the value chain  Inventory of all players in the	-Workshops, seminars and meetings with all players - Registration of	-Regular workshops and meetings with all players -Integration of the	-NPCK -MoA -All actors -service providers KENAPOFA	-Promote and facilitate VC players interactions to enhance communication and build trust	Immediate and continuous

## POTATO ROUND TABLE MEETING HELD ON $24^{TH}$ MAY 2012

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
benefit of potato production to farmers  Varied players in this value chain	marketing chain so that it will be easier to deal and negotiate with them especially in implementation of regulations.	all traders and brokers involved in potato trade -Create an interaction forum for all potato actors	cartels into the chain and roles specified - Inventorize the actors	-Media -MoT, -MoCoop	- encourage formation of producers business groups to be linked to market-through contract farming -Revitalize KENAPOFA to represent the interest of farmers –they should be felt at farmers' level	
4. Poor storage infrastructure	4Storage facilities at all levels	-Construction of potato storage & collection centers facilities	Appropriate storage facilities identified and constructed	-NPCK -MoA Eng. & Agribus. mgt -Farmers -MoCoop -Private sector (Kisima) -KARI-R&D – good store	-Promote and set up of collection centers -develop appropriate storage technologies suitable for group of farmers /cooperatives set up -Ensure the quality and traceability of produce to the collection centers	Immediate
- Lack of collection and storage facilities	No collection centers	-Collection structures at farm level	-Construction of simple collection facilities - community collection centers identified -Training (MoA	MoCoop -Private sector (Kisima) -KARI-R&D – good store	-Promote private stores for hire -build capacity at all levels by business service providers (PSDA, MoA, KENFAP, SHoMaP)	Immediate
		Provision of good marketing	-Hygienic and well covered	MOLG /County Govt, SHoMaP,	-Enforcement of Public Health rules	Immediate

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
		facility at urban centers	marketing facilities provided -current marketing facilities upgraded	NPCK, MOA,	-Privatize the market cleaning -Strengthening consumer network	
5. Inadequate market intelligence/infor mation	5. Potato marketing information available at all actors	-Enhancing media interaction and setting up proper knowledge and information systems to support all actors.  -Proper costing of production costs to inform on minimum prices per farmers	-Monitor market average prices -validate volumes being traded -Validate production volumes from regions of origin -Use of vernacular radio stations to disseminate information	MoA KACE NPCK Kenya Agric' Commodity Exchange	-Have proper validated statistics of potato industry  -validate volume of potato traded  - update accuracy of data disseminated (volume, prices etc)	Immediate
6. Poor road infrastructure which increases cost of transportation by all actorsCosts are	6. Good road infrastructure in place	-Improvement of roads -Transparency in cess collection	-continuous grading of the roads and putting murram (Maintenance) -Use of the cess to upgrade the	-County council -CDF MoA -all actors MoR. NPCK, KENAPOFA	-Upgrade, repair and maintenance roads regularly	Immediate

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
borne by farmers (poor prices offered).			roads			
7. Difficulty in meeting and maintaining the quality of Potatoes due to poor handling -fast deterioration of the ware potato	7. High quality potatoes marketed  (Mechanical damage, contamination and microbial infestation)	-Proper handling by farmers while harvesting to avoid bruises -Proper loading and unloading of the bags	-Appropriate technology for potato handling -develop varieties with long keeping quality	-Farmer, MoA. Researchers, KENAPOFA -all actors	-promote a good storability variety -promote appropriate post harvest technology -Capacity build on post harvest handling for all players	
8. Free movement of produce across the border	-Tight check on cross border trade	-sanitary and phyto sanitary standards -traded volumes and quantities	-KEPHIS to spot checks	KEPHIS, MoT	-KEPHIS to ensure proper Phyto-sanitary surveillance, -Cross Border Trade Association to monitor the trade inflows in liaison with MoA, MoT, NCPK, and MoLG.	
Processing					,	
9. Limited suitable processing	9. At 10 varieties for various processing needs	-Identify varieties & introduced	-Introduce Specialized varieties for	-KARI, KEPHIS, NPCK, Processors,	-KARI/KEPHIS/CIP should identify and introduce the required	Short term
varieties		-Ensure continuous supply	Processing -production efficiency	-All actors	varieties-market drive - Strategic breeding for market driven varieties	Long Term
10. Inadequate research on	10. Product development	-Technology development	-Take stock of existing	-KARI -KIRDI	-Sensitization of already existing standards	Immediate

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
product development		-Equipment availability -Standards for the specific products	technologies along the value chain -take stock of available equipment for processing including costs -identify available standards for processing	-MoA -NPCK -KEBS -Public Health, -Ministry of Labour	- Processors and KEBS should adhere to product specific standards - Adopt and localize modern technologies for potato processing - Processing equipments should be stainless steel - development and promotion of new potato products	
11. Unfavorable investment environment	11. Incentives for investment in place	-Availability of raw material -Highlight available incentives for investors	-Land acquisition -Cost of power -Legal entities -Financial implication	-Ken Invest Authority -MoA NPCK	-Incubation systems for local investors established -Empower Ken Invest to play a bigger role on linking potential investors -Set up a one-stop shop for investors - the issue of single business permit/ license should be clarified, - More central GOK funding-Potato attracts limited direct investments right form production to processing by	Immediate- long term

Current status	Targeted status	Interventions	Specific action	Actors & players	What is needed to achieve the action	Time frame (immediate, short, medium or long term)
101: :: 1	12 P 44		D. II. Col	D	government though it occupies a great role as a food crop. E.g. Sugar cane	
12.Limited potato processing for industrial use	12. Potato industrial use increasesopportunities exist in production and sale of starch, alcohol, flour, soaps and detergents	-Promotion of industrial use -breeding varieties for industrial use -availability of the raw materials	-Breeding of the varieties availability of the raw material	-Processors -NPCK KENAPOFA, KEBS -Ministry of Industrialization -KIRDI -Media	-develop a good variety for starch and alcohol use -limited use of potato by-products from industrial processing -Encourage central processing and creative use of potato by-product -Encourage selling of processed potato- e.g. pilled potato, -Continuous supply of ware potato throughout the year -Cost of enforcement of contracts is too high it should be simplified -develop guidelines for contract farming	Immediate- long term

## Policy, Legal and Regulatory framework



Figure 9: Section of Policy, Legal and regulation thematic group

<b>Current Status</b>	Targeted status	Interventions	Specific action	Actors and Players	What is needed to achieve the action	Time frame
1. Draft Root and	Root and Tuber	Validate root and	Calling key	MOA-lead agency	Stakeholder	July-
Tuber Crops Policy	Crops Policy in	tuber policy	stakeholders and	to convene, KARI,	validation	September
ready	use		inputting what had	NCST, NPCK,	workshop	2012
			been	GIZ-PSDA,	_	
			omitted/issues that	KEPHIS,		
			eminent	KENAPOFA		

Current Status	Targeted status	Interventions	Specific action	Actors and Players	What is needed to achieve the action	Time frame
	Potato strategy in use	Finalize strategy	Input issues raised in stakeholder workshop	MOA-lead agency to convene, KARI, NCST, NPCK, GIZ-PSDA, KEPHIS, KENAPOFA	MoA to convene team retreat	July – September 2012
		Cabinet approval	<ul><li>Seeking of Cabinet Approval</li></ul>	MoA, Cabinet Office MoA (Policy)	MoA to prepare cabinet memo and forward to cabinet	July – September 2012
		Launch of the Policy	<ul><li>Preparation for the launch</li></ul>		Launch policy	Oct- December 2012
2. Seed and Plant Varieties Act, CAP 326 limits certification to KEPHIS only and packaging to 50 Kg	Seed and Plant Varieties Act, CAP 326 reviewed to reflect current realities and demand	Increase capacity for seed inspection and certification	Follow up on the amendments	MoA, State Law Office and KEPHIS, NPCK, STAK, NEMA, NBA	Awareness creation on the new provisions	Immediate
		Act to allow seed packages of less than 50 kg (e.g. 5, 10, 25 Kg)	Legal notice on seed packaging	KEPHIS NPCK STAK MOA	MoA to do a legal notice	July- September 2012

<b>Current Status</b>	Targeted status	Interventions	Specific action	Actors and Players	What is needed to achieve the action	Time frame
		Develop certification standards/ guidelines for invitro, plantlets & minitubers	Subsidiary notice to enable certification of potato invi [tro plantlets and minitubers/	KEPHIS NPCK STAK MOA NBA	MoA to convene a committee	July- September 2012
3. Legal notices 44 and 113 have limitation and are not fully enforced	Legal Notices No. 44 and 113 reviewed, amended and enforced	Enforcement of Ware Potato Production and Marketing Standard	Harmonize the 2 Legal Notices to allow packaging of potato in 50kg and smaller bags and enforce it to conform with international labor law	MoLG and State Law Office, MoA, NPCK, local authorities	-MOLG, MoA, NPCK to sensitize local authorities, traders on legal notice 113 -MoA, Kenapofa, NPCK to sensitize farmers & traders on legal notice 44	Ongoing /continuous
			Develop GAPs for potatoes to enhance quality and traceability	KARI, MoA, NPCK, NBA, NEMA,	Sensitization	Continuous
			Develop guidelines and mechanism for traceability	KARI, MoA, NPCK, KENAPOFA	Standing potato committee to address issues in the sector	Immediate
4.KEPHIS established under legal notice	KEPHIS constitutionally independent to carry out its mandate	Get Kephis bill passed into law	Develop guidelines on accreditation as await its passing into law	MOA, KEPHIS, NPCK, STAK, NCST	MoA to appoint a committee	October- December 2012

Current Status	Targeted status	Interventions	Specific action	Actors and Players	What is needed to achieve the action	Time frame
5. Policy guidelines on import and export of seed and ware potato are not being implemented	Policy on importation and export of potato tissues (ware, seed, minitubers, tissue culture, etc) in use	Enforcement of policy guidelines and protocols on import and export of potato	MoA to ensure that regulations are followed  Transparency in policy changes	MoA, KARI, KEPHIS, NPCK, Private sector, STAK, local government, KRA	NPCK, KENAPOFA to lobby MoA	Immediate
6. Unregulated and uncontrolled cross border seed trade (ware used as seed)	Cross border ware trade monitored for pest and disease control	Guidelines on pest and disease surveillance across border developed	Enhance and enforce guidelines on monitoring of pest and disease on ware potatoes	MoA, KARI, KEPHIS, NPCK, Ministry of trade, local authority	Continual enhancement of guidelines and their enforcement	Immediate
7. Seed master plan developed but not fully implemented	Master plan being fully utilized	Seed potato master plan reviewed, adopted and fully implemented	Review seed potato master plan	MoA, KARI, NPCK, CIP, KEPHIS	Constitute review team and TORs	Immediate
8. Incomplete and partial implementation of policy documents	A consolidated subsector development plan developed and implemented	Develop a subsector development plan with a road map to a robust, competitive and self regulating sector	Review all the existing documents and compile a subsector plan	NPCK, MoA, KARI, CIP	Constitute review team with TOTs	Immediate
9. Youth not fully engaged in agriculture	Mainstreaming of gender/youth issues into potato policy	Rebrand sector to make it attractive	Develop business plans & incubation centers for various activities along the	MoA, MoYAS, Kenapofa, NPCK, NCST	Training and sensitization of youth by MoYAS & MoA	Immediate

Current Status	Targeted status	Interventions	Specific action	Actors and Players	What is needed to achieve the action	Time frame
			value chain			
10.Over reliance on maize for food security and in processing (feeds)	Diversified diet and supplementation of maize with other crops	Promote other crops for consumption and processing	Sensitization on nutritional value of other foods (potatoes)	MoA, KENAPOFA, MoH, MoF, MoLG, MoYAS	Workshops, road shows and trainings	Immediate

### Summary of Group Discussions

#### Seed system and variety development

- Close the policy gaps in DRAFT documents; review and synthesize the seed master plan; develop a 10 year strategic policy paper along the value chain
- Increase certified seed production and distribution from 1.5% to 10 %( MoA, NPCK, KENAPOFA, CIP, KARI, KEPHIS, ADC and private sector.)
- Create awareness and education on the benefits of use of quality seed (MoA, NPCK, KENAPOFA, CIP, KARI, KEPHIS, ADC and private sector.)
- Increase quantities of breeders and basic seed.(KARI,MoA,CIP,ADC,KEPHIS and Public and Private seed producers)
- Enhance certified seed distribution system(MoA,STAK,NPCK and private sector)
- Improved testing methods of quality diseases to shorten the time period.(KEPHIS)
- Fast tract accreditation improves the capacity and speed of phytosanitary inspection and certification services.(KEPHIS,NPCK,STAK,MoA)
- Strengthen partnerships for breeders' seed multiplication between public and private sector.(KEPHIS,NPCK,STAK and MoA)
- Create satellite center in the major potato growing areas.
- KEPHIS to send communication on advising confirmatory test to be done upon request and payments bill.
- **KEPHIS** to centralize data on pest and diseases.
- **NPCK** to customize QDs protocols and share it.
- NPCK, KENFAP and KENAPOFA to train on good Agricultural practices
- Develop promotional materials for extension and find out which variety are suitable where
- Approach financials and develop models for credit.
- Organize farmers into groups, revitalize and expand KENAPOFA through recruitment and revamping leadership
- Document Memorandum of Understanding
- **NPCK** to register and catalogue all varieties detailing their characteristics

#### Ware potato production -

- Train farmers and extension staff on quality seed, fertilizers, diseases and pest control. (MoA,PSDA-GTZ,KARI,CIP,NPCK,AAK,KENAPOFA,KENFAP.)
- Increased funding for research (KARI)
- Empower farmers and extension staff in knowledge and skills on potato production husbandry and storage(MoA,PSDA-GIZ,KARI,CIP,NPCK,AAK,KENAPOFA,KENFAP)
- Carry out educational tours, trade fairs and field visits

- Develop technology packages for the released potato varieties for deliveries to farmers in promotional campaigns (KARI, MoA, GIZ-PSDA, CIP, NPCK, KENAPOFA, MoA, KENFAP)
- ADC to contract seed production
- Moderate cost through subsidized financial mechanism.
- Research on possible superior varieties and their introduction in the appropriate regions (KARI, KEPHIS, NPCK, CIP, Private sector)
- Fund research institutions to acquire the needed potato germplasm (MoA)
- Update the already available technical materials (MoA, PSDA-GIZ,KARI,CIP,NPCK,AAK,KENAPOFA,KENFAP)
- To expand the production of potato into nontraditional production and new areas (MoA, STAK)
- Demonstrations and field days on potato production
- Create seed information desk (NPCK, KARI, MoA, KEPHIS, SEED PRODUCERS, FARMERS)
- Information dissemination through media programs and publications on simple irrigation systems and water harvesting technologies

#### Potato marketing and processing -

- Standards sensitize farmers and value chain actors and increase interaction along the value chain (KENAPOFA, NPCK, POLICE, MoT, PROVINCIAL ADMINISTRATOR, KENFAP)
- Collection centers for storage encourage investors to build storage facilities validation of statistics for investments need trading volumes (NPCK, SHOMAP, KENAPOFA, MoA)
- Encourage variety diversification by **KARI** to produce more processing varies
- Encourage investments along value chain by local investors to increase funding(NPCK, KENAPOFA, MoA)
- Strengthen producers and marketing organization by encouraging formation of producers' business groups that can be linked to the market through contract farming.(NPCK KENFAP, KENAPOFA, MoA, MoT)
- Promotion of industrial use and breeding of the varieties available for the raw materials(NPCK, KENAPOFA, KEBS, Mol, KIRDI, MEDIA)

#### Policy, legal and regulatory framework -

- Current status on involvement of the youth in agriculture policies that will mainstream the youth in agricultural production targeting potato (MoA, MoYAS, KENAPOFA,NPCK,NSCT)
- MoA to prepare cabinet memo and forward to cabinet
- Validate root and tuber policy through review to include current issues, technologies and innovations(MoA, KARI,NSCT,NPCK,GIZ-PSDA,KEPHIS,KENAPOFA)

- Increase capacity for seed inspection and certification through fast tracking accreditation bill(KEPHIS)
- MoLG and NPCK to harmonize the two legal Notices to allow packaging of potato in 50kgs ad smaller bags and enforce it to conform with international labour law
- Review and enforcement of policy guidelines and protocols on import and export of potato.(MoA,KARI,KEPHIS,NPCK,STAK,LOCAL GOVERNMENT,KRA)
- Enhance and enforce guidelines on monitoring of pest and diseases on ware potato(KEPHIS,MoA,NPCK,KENAPOFA)
- Review the seed potato master plan(MoA,KARI,CIP,NPCK,KEPHIS)
- Review all existing documents and compile a subsector plan(NPCK,MoA,KARI,CIP)
- Develop business plan and incubation centers for various activities along the value chain(MoA,MoYAS,KENAPOFA,NPCK,NCST)
- Diversify diet and supplementation of maize with other crops(MoA,KENAPOFA,MoH,MoF,MoLG,MoYAS)

#### Closing Remarks – Mr. Henry Ndege (representing A. Mwangi)

Acknowledge presence of various stakeholders (farmers, extensions', researchers, processors, key policy makers) to participation in the roundtable. Appreciate the contribution of resource persons and facilitators towards achieving workshop objectives. Developed important interventions, recommendations and way forward and despite lack of resources, funding we are lucky that we have the good will and spirit to move forward. Milestones have been set to address constraints along the value chain at a set time frame to meet the MDG of food security in 2015.



Figure 10: Mr. Henry Ndege, Deputy Director, Agribusiness, MoA

The mission of this forum is to make potato the food security crop number one. As the Ministry of Agriculture, the focus is on the development of medium and large scale processing to meet the challenges of the day. Need thousands of small scale processors and not hundreds.

### Way forward

A working team, possibly comprising of the task force, should be facilitated to compile the list of actions plans for each stakeholders and government department and come up with practical moves of institutionalizing the actions plans for the implementers. A contact person for each implementing institution or department should also be identified. Where necessary, resources and funding should be indentified for each action plan. Consultative and engagement meetings should be held between the working team and relevant stakeholders and government departments to come up with MOUs with agreeable action plans for each implementing institution. The working team should hold regular follow-up and review meetings with the implementers.

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