## PANAFRIC HOTEL, NAIROBI 19<sup>TH</sup> JANUARY 2017



3<sup>RD</sup> FORUM ON EMPLOYMENT CREATION IN HORTICULTURE SECTOR IN KENYA AND THE ROLE OF UTAFITI SERA (RESEARCH-POLICY COMMUNITY)







## Contents

Acknowledgments
Acronyms4
Executive summary
1. Introduction
2. The Nature of Employment Creation in the Horticulture Sector in Kenya
3. Adopting a Value Chain Approach with a Focus on Technology and Innovation
4. Interventions for Small Holder Farmers to be Competitive and have Access to Markets 10
5. Repositioning Large Holder Farmers to Maximise Land and Create Employment1
6. Mitigating the Perils of Climate Change in the Horticulture Sector
7. Agri-business: The New Strategy to Engage the Youth in Agriculture12
8. Synthesis of Outcomes and Recommendations12
9. Way forward1
Annex1 Programme of the day1
Annex2: List of Participants16

### Acknowledgments

We would like to express our gratitude to the Partnership for African Social and Governance Research (PASGR) for organising the *Utafiti Sera* (Research-Policy Community) forum, which brought together experts and key stakeholders in the horticulture sector. *Utafiti Sera* was made possible by the generous support of INCLUDE, UKAID and IDRC. Special thanks to the Centre for African Bio-Entrepreneurship for facilitating *Utafiti Sera* workshop.

We would also like to acknowledge the various presenters: Prof. Tade Aina, Executive Director PASGR; Research Team, Joshua Kivuva Lecturer IDS, University of Nairobi; Ms. Anne Githongo, Horticultural Crops Directorate; Mr. Goudian Gwademba, Business Advisor TechnoServe (Tana River); and Ms. Jane Ngige Director, Kenya Flower Council. The panelists: Anne Gikonyo, Manager, Market Research and Production Development, Agriculture and Food Authority; Anthony Mutiso Director, FPEAK; Lusike Wasilwa, Director Crops Systems, KALRO; Violet Nyando, General Manager Policy and Advocacy, KENAFF; Agatha Thuo, CECM Agriculture, Nyandarua County; Olufunso Somorin, Senior Policy Officer, African Development Bank; and Mr. Kenneth Ayuko, Lead Expert AgRisk Research and Advisory, for the informative presentations during the forum.

This forum would not have been a success without the invaluable participation of the members of the *Utafiti Sera* house who shared their experiences and suggestions. Special mention goes to Pamellah Lidaywa of PASGR for managing the logistics, to Hannington Odame, Executive Director CABE, for moderating the discussion during the forum and to Lucy Adoyo, Research Associate CABE; for preparing this report.

### Acronyms

ADB	-	African Development Bank	
AFA	-	Agriculture and Food Authority	
CABE	-	Centre for African Bio-Entrepreneurship	
CECM	-	County Executive Committee Member	
FPEAK	-	Fresh Produce Exporters Association of Kenya	
HCD	-	Horticultural Crops Directorate	
IDRC	-	International Development Research Centre	
IDS	-	Institute for Development Studies	
INCLUDE	-	Knowledge Platform on Inclusive Development Policies	
KALRO	-	Kenya Agriculture and Livestock Research Organization	
KENAFF	-	Kenya National Farmers Federation	
KEPHIS	-	Kenya Plant Health Inspection Services	
MoA	-	Ministry of Agriculture	
PASGR	-	Partnership for African Social and Governance Research	
PCPB	-	Pest Control products Board	

### **Executive summary**

The third *Utafiti Sera* forum on wage employment creation in agriculture and agroprocessing held on 19<sup>th</sup> January, 2017 at the PanAfric Hotel, Nairobi, Kenya. The forum organised by The Partnership for African Social and Governance Research (PASGR) and the Centre for African Bio-Entrepreneurship (CABE) focused on the horticulture sector in Kenya and was informed by findings from the study on employment creation potentials and the challenges of the horticulture sector in Kenya. The forum brought together 42 stakeholders from Ministry of Agriculture (MoA), Agriculture and Food Authority (AFA), Horticultural Crops Directorate (HCD), Kenya Agriculture and Livestock Research Organization (KALRO), Institute of Development Studies (IDS), University of Nairobi, Flower Council of Kenya, FPEAK, KENAFF, the academia, the private sector and the media

The aim was to present and discuss findings and implications of a study on employment creation in the sugar sector by the Institute of Development Studies (IDS - University of Nairobi). The study revealed that employment policies over the years have been anchored on the agricultural sector but the potentials of the sector to promote wage employment have not been fully realized because of a number of blockages including; political interference, low application of technology at the lower end of the value chain, weak institutional framework for supporting the industry, unhealthy competition arising from commodity imports, and the existence of cartels that are able to influence policies in the sector for their private interest.

Specific to the Horticulture sector, the study finds the nature of Kenya's political settlements as a key hindrance to the promotion of the full potentials of the horticulture industry to create jobs. In the horticulture sector, political settlement involving the so called "quartet"—foreign MNCs, international investors as producers, key state bureaucrats and a powerful group of political elites has evolved. The latter two key actors that are supposed to support employment creation have interests of maximizing their profits; hence have diverted state policy away from job creation and worker's welfare to rent seeking as personal rewards, and foreign exchange for the state. Government has not involved itself with the sector beyond mere policy pronouncements.

Women form the majority of the employees in the flower production because of the so called 'nibble fingers' that is needed in the industry. Though the wages they receive are above the government minimum wage (they also receive better working conditions than many private sector organization that are not well regulated because of the numerous labour codes associated with the flower industry), about 33% of the workers are casual labourers. The strict labour codes have also deprived smallholder producers the opportunity to export their flowers, forcing them to sell to middlemen that underpay them.

From these findings, the issues discussed were structured around the areas below:

- Employment creation potentials in agriculture and agro-industries and the role of Utafiti Sera (Research Policy Community)
- Analysis of employment creation in the Kenya flower sector: Policy issues, challenges and prospects.
- Creating wage employment in horticulture sector in Kenya: Government perspective
- Governing horticultural value chains value chains for employment creation in Kenya.

 Creating wage employment in floriculture sector in Kenya: Industry perspective

These discussions highlighted the need to take a critical look at the value chain with a focus on technology and innovation if the horticulture sector was to improve productivity and create jobs. It highlighted the employment creation potential that exists amongst small and large holder farms in the horticulture sector. On the one hand, it was suggested that the way forward for small holder farmers was to get them organised. While of the other hand, it was also important to begin to think about broad ideas on how to make large holder farmers maximise land as well as have them commit to employment creation on an incremental basis.

Furthermore, the meeting underscored the need to facilitate a fundamental shift in attitudes not just amongst the youth, but across board. This is to be achieved by creating space for agri-business in the value chain. The meeting further emphasised that Africa cannot survive on agriculture, hence, the need to make the shift towards agri-business – moving from the practice of livelihoods to the business of life.

Following from the presentations, three key policy messages were synthesized into issues for immediate action, issues for further research and issues for policy review. They include:

- (i) Labor productivity;
- (ii) Contract farming; and
- (iii) Market Access.

### i. Labor Productivity

It was noted that there exists great potential in various stages of the value chain to create employment. Various actors are using technological innovations to increase labor productivity, both at production and agro-processing levels, with a positive influence in creating employment. The entry point of the renewed look at the value chain should have a technological lens, with an attempt to knit agri-business and farming technology in the value chain while also deliberately creating opportunities for young people to operate and engage these processes.

### ii. Governance of Contract Farming

Accessing markets in the midst of cartels and largely competitive markets will require small holder farmers to organise themselves into well-structured groups to supply consistent demand market volumes and to win supply contracts. There is the need to support small holder farmers to get organised to consolidate adequate quantities and quality to attract and sustain supply contracts.

### iii. Market access

The biggest problem with small scale holders is how to get them organised. They must be ready to aggregate, have a common vision and standards as well as develop systems to ensure compliance if they will be competitive and have access to markets. Similarly, enhanced access to information will enable farmers to negotiate prices effectively and with increased innovation, there is need to explore and promote open and virtual markets with counties together with existing market information platforms.

### 1. Introduction

Dr. Hannington Odame the Executive Director of CABE and a co-convener of *Utafiti Sera* Forum, welcomed the participants to the meeting. He acknowledged the representation of the various stakeholders including the Ministry of Agriculture (MoA), Horticultural Crops Directorate (HCD), Kenya Agriculture and Livestock Research Organization (KALRO), Institute of Development Studies (IDS)-University of Nairobi, Flower Council, The Fresh Produce Exporters Association of Kenya (FPEAK), Kenya National Farmers Federation (KENAFF), the academia, private sector and media.

Dr. Odame then gave an overview of CABE as the current host of *Utafiti Sera* House on Employment Creation. He indicated that the vision and mission of Utafiti Sera are well aligned with the mandate of CABE being a knowledge sharing and learning organisation. CABE utilizes policy dialogues as a platform for engaging stakeholders on topical issues. Dr. Odame noted that the horticulture sector forum would focus on employment opportunities for creating wage employment in the sector in five ways:

- Employment creation potentials in agriculture and agro-industries and the role of Utafiti Sera (Research Policy Community)
- Analysis of employment creation in the Kenya flower sector: Policy issues, challenges and prospects.
- Creating wage employment in horticulture sector in Kenya: Government perspective
- Governing horticultural value chains for employment creation in Kenya.
- Creating wage employment in floriculture sector in Kenya: Industry perspective



Prof. Tade Aina, Executive Director PAGR

Prof. Tade Aina - Executive Director PASGR. gave an overview of PASGR and the basis for establishing Utafiti Sera house. He stated that social research at PASGR was development and problem oriented to advance public policy and that the organisation was founded to enhance excellence in social sciences and social research policy. Prof. Tade concluded by saving that the community of Utafiti Sera (Research-policy Community) needed to integrate and develop a sustained

engagement beyond two years. He also coined the day's popular mantra *'horticulture is beautiful and sustaining'*.

### 2. The Nature of Employment Creation in the Horticulture Sector in Kenya

In her presentation, Anne Gikonyo (Manager at AFA) noted that Agriculture contributes 24% to Kenya's GDP, 33% of which is contributed by the Horticulture sector, making the horticulture sector one of the leading foreign exchange earners for Kenya. The sector has grown at about 10% - 20% over the last decade, although, growth rates in the 90's appears to be higher than recent growth rates. In 2015, the value of the Horticulture sector was about KES 211 billion, 90.5 billion of which was

earned from exports. While the sector derives its largest earnings from local consumption (KES 120 billion), the biggest export market for the horticulture sector is the EU which takes up 80% of total exports. Export horticulture is essentially a private driven industry, which is commercially-oriented with keenness in compliance with policy and regulation. Thus, high levels of self-driven compliance is key. A number of parastatals – such as KEPHIS, PCPB and KALRO - are at the fore front of mainstreaming issues of compliance to market standards.

The horticulture sector employs about 10 million people directly and indirectly predominantly women and youth. About 6 million people are directly involved in production, processing and marketing, while about 3.5 million people benefit through other related activities along the value chain. For instance, clearing agents, government institutions (pest control board), and other entrepreneurs. Due to the intensity of labour involved, the continues create sector to more employment opportunities compared to other agricultural sectors along the value from production, chain packaging, storage, processing distribution, as well as within the marketing segment. The

#### Horticulture Industry in Kenya

- The leading sub-sector in agriculture with sustained growth of between 10-20 % over the last 10 years
- Value of domestic horticulture (2015) KES 211 Billion
- Area under production is Ha 719,158, producing 12.6 Million Tons (Annual averages)
- Employs over 10 million people directly and indirectly with concentration on Women and Youth
- Exports : Flowers 70% , Vegetables 23%, Fruits 7%
- European Union (EU) the major destination accounting for over 80% of total exports.

sector also shows promise for the transition of small holder farming into commercial farming. Despite this continued growth, there were questions around the quality of wage/jobs and the extent to which they contribute towards outcomes such as poverty alleviation, food security and healthcare.

Dr. Kivuva in his presentation on Employment Creation in Kenyan Flower Sector, noted that the flower sector pays more than double compared to what other agricultural sector offers in terms of wages. Working conditions are also relatively favourable, particularly for women. For instance, it was noted that a number of the farms offer women maternity leave with pay, and are required to work half day for another three months with full pay when they return. Furthermore, each aspect of the flower value chain is a specialised role; people employed in this sector become permanent employees after 6 months. This is because producers are afraid of losing their employees due to the cost of training. Similarly, there is a rigid division of labour in the flower sector such that, the more sophistication the final product taken to the market is, the more women you find, and the more rigorous the work is, the more men you find. This means that there is a significant feminization of the flower industry such that the composition of women in the 6 farms studied ranged from 60% - 70%.

From the study, it was noted that there was need to provide evidence of jobs available viz-a-viz the value chain, and the number of people and the gender of persons employed within each segment of the value chain. This would provide a clearer understanding of the gender dynamics within the sector in terms of why the sector is dominated by women. Moreover, in terms of productivity, there is a need to know how many hours is being put to work and how much workers are being paid, and their contributions towards the overall profit of the farms where they work. This information will be useful in assessing the actual competitiveness of the industry, and help make sure that the sector is fertile for investments to create new jobs.

The favorable agro-climatic conditions allow growing quality horticultural produce throughout the year. There has been massive investment by both local and foreign investors in the industry thus providing an avenue for employment creation. The subsector is dynamic and engages highly qualified persons to drive its investments and marketing strategies. Nonetheless, the sector faces challenges which include rural urban migration, limiting the would-be impact on employment.

## 3. Adopting a Value Chain Approach with a Focus on Technology and Innovation

There was consensus that the horticulture sector had great potentials in improving the economy as well as creating employment beyond its current performance. Goudian Gwadembe, a business advisor at TechnoServe Kenya noted the need to take a critical look at the value chain if the sector was to improve, since every segment of the value chain holds an opportunity for employment creation. He however warned that the value chain approach can only thrive when there is a common goal and shared market objective amongst players along the value chain. Market systems that are structured like the tea sector are successful because the

actors know each other and communicate right from the point of growing tea to the point where it reaches the consumer. They are able to consider issues broadly, because they have adopted a value chain approach. Thus, one can properly articulate issues using the value chain if approach. recommendations would be useful for public policy.

The horticultural value chains includes several segments: inputs, production, packing and storage, processing, as well as distribution and marketing. The chain is buyer-driven; the lead export firms are large

Employment Opportunities in the Horticultural Value Chains			
Value Chain Se gment	Employment Opportunities	Challenges	
Inputs	Input distribution, transpor tation, regulation	Infrastructure, taxation, legislation	
Production	Harvesting, extension, land preparation machinery ope rators, weeding, pesticide h andlers, irrigation technicia ns ,quality controllers		
Packing and St orage	Packing, labeling, fork lift d rivers, shift supervisors, qu ality assurance, record kee ping clerks, warehousing	Technology, skills, stan dards and specification	
Distribution an d Marketing	Bookkeeping/finance/acco unting, drivers, supplies ma rketing, warehousing, Clear ing and forwarding	Information system, tra de barriers, taxation, ex port restrictions, infrast ructure, restrictive glob al standard, policies	
Processing	Line workers, machinery te chnicians, production super visors, quality assurance	availability of raw mate rials, power, infrastruct ure, global certification standards	

supermarkets in key export markets. The value chain is governed by public and private standards, which control sanitary and phytosanitary conditions, quality, quantity, traceability, pesticide use among other issues. Through these standards, lead import countries and firms dictate which products are produced, how, and when, often shaping access to end markets.

While responding to the presentation, Lusike Wasilwa (Director Crops Systems, KALRO) argued that the potential to create new jobs within the value chain also exists if technology and innovation are considered. She suggested that the value

chain approach should begin with technology in mind. This she argued will aid employment creation for the youth. For instance, the absence of pollinators is, in part, responsible for the huge losses in potential yields, having direct impact on employment and productivity. Thus, creating a segment for generating pollinators within the value chain is a huge opportunity for employment creation. Similarly, with the high rate of people dying from cancer, it would be useful to research the nutritional benefits of wild fruits like guava which are very helpful for men's prostrate health. Furthermore, it was noted that land conservation is another area that is missing in the value chain. Soil health management can create jobs. These are technologies that can be rolled out to help production yield as well as create employment. In this regard, it would be useful to train plant/soil doctors and nurses.

While technology plays a key role in improving the value chain to create employment, Jane Ngige, CEO, at the Kenya Flower Council informed the forum that a huge aspect of employment to be generated from technology was out sourced. She noted that Kenya imports the technology for almost all aspects of the production process in the flower sector, unlike Columbia for instance, whose production process is engineered from within. Kenya imports all the technology for green-houses, irrigation, and infrastructure. Given the number of engineering students that graduate from the universities in Kenya, the engineering process of production is a potential area for job creation. . Furthermore, she observed that it was unfortunate that 80% of the 2000 green houses in Kenya are not functioning yet they cost a lot to put up. This is because Kenyan's do not understand the technology. If the trend must change she highlighted a number of questions that need to be answered:

- 1. Why is it more expensive to build a green-house in Kenya?
- 2. Where is Kenya drawing innovation from?
- 3. Who is it targeting?
- 4. Does it benefit the Kenyan climate?
- 5. Is Kenya participating in the development of these innovations?

# 4. Interventions for Small Holder Farmers to be Competitive and have Access to Markets

Data from the research on the Analysis of Employment Creation in Kenyan Flower Sector: Policy Issues, challenges and prospects indicated that of the 2650 horticulture farms in Kenya, 2500 of them are small holder farms. Many of these cannot competitively produce or sell, having limited access to markets (local and export), and are unable to keep up with evolving standards to remain competitive. This revelation challenged the prospects of small holder farmers transitioning into commercial farming. It therefore means that small holder farms will require government intervention if they are to become self-sustaining.

Gwademba noted that Sessional papers No, 3 of 2013 on National Productivity Policy; No, 1 of 1986 on Economic Management for Renewed Growth in Kenya; and No. 10 of 2012 on Kenya Vision 2030 and the National Horticulture Policy of June 2012 all attempt to address some of the issues affecting small holder farmers. But while Kenya appears to have sound policies, implementation has remained the gap between policy and reality. Hence the question; what can be done to ensure that existing policies support the small holder farmers?

Violet Nyando, General Manager at KENAFF noted that the biggest problem with small scale holders is how to get them organised. They have had opportunities to get orders from foreign buyers but they cannot meet up the demand, and are also

unsupportive of each other because of greed. Ms Nyando argued that small scale holders must be ready to aggregate, have a common vision and standards, as well as develop systems to ensure compliance if they will be competitive and have access to markets. She also emphasised the need to improve access to information for small holder farmers, which she described as the 5<sup>th</sup> factor of production. This is because, cartels take advantage of the farmer's ignorance. If farmers have access to information about the market, they can negotiate effectively.

This claim, conflicted with the findings in Dr. Kikuva's study that the horticulture sector is devoid of cartels. Jane Ngige noted that there is a need to find out the truth about the industry with regards to cartels. She explained that foreign markets only purchase from the foreign producers operating in Kenya and asked how many small holder farmers or indigenous farmers are supplying foreign markets? She also noted that these cartels operate at the airports, hence, it would be useful for research to look into this from a policy perspective.

It was also noted that small holder farmers are not able to engage favourably in agribusiness if there are no access roads to markets. Discussants emphasized that in addition to policies and regulations to improve the sector, efforts should be made to establish trust, without which progress will remain a distant prospect.

# 5. Repositioning Large Holder Farmers to Maximise Land and Create Employment

One of the surprising findings of the research presentations by Dr. Kivuva was that many/most of the large holder farmers only make use of less than 20% of their total land, resulting in a lot of idle land. Perhaps this explains why the government is not committed to providing additional land for farmers. But the smaller producers have little land with little or no opportunities for expansion.

Members at the forum noted that it would be useful to know what accounts for this trend amongst large farmers, because it has implications for employment creation. However, Olufunsho Somorin, Senior Policy Officer at the ADB suggested that one way of committing large holder farmers to create employment is by requiring farmers to provide records of progressive employment of locals over time before farming licenses are renewed. This he explained, might act as an incentive for large farmers to begin to think about how to maximise land and increase produce. It was also suggested that large holder farmers need to partner with research institutions and universities to develop and engage local technologies to engineer their production processes.

### 6. Mitigating the Perils of Climate Change in the Horticulture Sector

Anne noted that climatic conditions are favourable for the horticulture sector, allowing for all year round production. Concerns were raised about recent challenges with regards to climate change and the potential threats it poses to the sector. It was explained that while climate change is yet to impact on production levels, it may pose a challenge in the near future. Therefore, it would be useful to encourage the uptake of climate friendly technologies through partners to mitigate risks as well as postharvest waste.

### 7. Agri-business: The New Strategy to Engage the Youth in Agriculture

Discussants emphasised the need for a shift in mentality across Africa regarding Agriculture and that Africa cannot survive on Agriculture alone. Hence, there is a need to move towards agri-business and this is fundamental to development as a continent. It was explained that the conversation around agriculture is still very much around farming and traditional methods of production. There is a need to knit agribusiness and new farming technology into the value chain. The emphasis on research and development in agriculture should lead towards agribusiness. Thus, when we create space for business in the value chain, you create value at the end of the chain which then creates employment for the youth, profit for businesses and revenue for government. This allows for crowding in the opportunities in research and development as well as investments from the private sector.

Similar to this, Violet Nyando, noted that not all farmers can be commercial farmers, and not everyone can be a farmer. However, there is a space for engagement, if the value chain approach is adopted. She also debunked the idea that owning land was a reason for the none-involvement of the youth in Agriculture. She explained that young people do not need to own land to be involved in agriculture, they can get involved in agri-business.

Furthermore, there was an emphasis on the need to change the narrative that 'Agriculture is the back bone of the Nation'. It was described as a slavery narrative. Academic institutions, in part, are responsible for the attitude the youth have towards agriculture. Young people are being socialised to think that they are being educated to get into formal employment. Hence, there is the need to reframe this narrative by encouraging young people to engage their technological skills and energies towards transforming the agricultural sector. They should be made to think about how to solve problems within the sector, particularly the value chain. Contrary to this, it was noted that young people are already operating along a virtual market, and there is a need to generate data in this area to be sure if young people are not beginning to take interest in agri-business.

### 8. Synthesis of Outcomes and Recommendations

The following is a summary of the key emerging issues from the presentations and plenary discussions. The synthesis outlines the issues on policy, issues that require immediate action and policy review issues. A summary table at the end of this section provides a snapshot of the three key policy issues which include:

- i. Labor productivity;
- ii. Contract governance and;
- iii. Market access.

### iv. Labor Productivity

There is great potential in various stages of the value chain to create employment. Various actors are using technological innovations to increase labor productivity, both at production and agro-processing levels, which could have a positive influence in creating employment. It would be useful to map out actors along the commodity value chain with the aim of establishing a platform of service providers, to identify productive areas of the value chain where there is an opportunity to improve productivity and create employment. The entry point of the renewed look at the value chain should have a technological lens, with an attempt to knit agri-business and farming technology in the value chain, while also deliberately creating opportunities for young people to operate and engage these processes. A lesson worth sharing is

the Egerton University initiative of student apprenticeship where students are attached to farms and asked to apply knowledge learnt to problems encountered to improve productivity.

### v. Contract Farming Governance

Accessing markets in the midst of cartels and largely competitive markets will require small holder farmers to organise themselves into well-structured groups to supply consistent demand market volumes and to win supply contracts. There is the need to support small holder farmers to get organised to consolidate adequate quantities and quality to attract and sustain supply contracts.

### vi. Market access

Small holder farmers have limited ability to consolidate adequate and consistent volumes required by the market. There is weak compliance of quality in the domestic markets yet products sold in the local markets require quality standards just like products targeted for export. This could be addressed through establishing mandatory requirements for every producer to comply with, complemented with proper training of small holder farmers on compliance for markets for farmers to supply accepted quality that will attract buyers.

Enhanced access to information can enable farmers to negotiate prices effectively and with increased innovation, there is need to explore and promote open and virtual markets with counties together with existing market information platforms. This includes exploring a model of market service center's as promoted by TechnoServe in Tana River.

### 9. Way forward

Based on the presentations and the plenary discussions it was agree that Utafiti Sera shares proceeding of the meeting and synthesize precise policy issues to engage with parliamentarians and technocrats in breakfast meetings. This includes policy briefs, infographics, two feature articles for sugar and horticulture. Table 1 provides a summary of policy issues for research and policy review. The closing remarks were offered by Ms. Pauline Ngimwa (Programme Manager, Professional Development and Training PASGR) who re-emphasized the importance of promoting research for policy uptake and practice, revisiting value chains to identify specific potential for potential for productivity and creating employment.

Policy Issues	Action			
	Issue for immediate action		Policy Review	
Labor productivity	Promote establishment of platform of service providers along commodity value chains in both rural and (peri) urban regions Organize forum to identify opportunities for establishing a platform for service providers and promote student apprenticeship.	Conduct service provider mapping for participation in the forum (interests, motivation, power and capacity are parameters for service provider mapping) Desk study for student apprenticeship at Universities and how this could be standardized.		
Contract Governance	Promote Kenya GAP enforcement in the counties to include domestic markets Organise forum to tease out issues for study on third party contract enforcement	Conduct a study an contract enforcement: Issues, prospects and challenges	Explore formulation and enforcement of third party contract enforcement bill.	
Market access	Promote Market Service Centres (with TNS Tana River) Promote open and virtual markets with counties and existing market information platforms	Short study of Market service center: history, structure and functioning for purposes of replication		

 Table 1: Summary of policy issues for research and policy review.

### Annex1 Programme of the day

08:30 - 09:00	Registration:			
09:00 – 09:10	Welcome Remarks: Hannington Odame, Executive Director, CABE			
	Prof. Tade Aina, Executive Director, PASGR			
09:10 - 09:30	Employment Creation Potentials in Agriculture & agro industries: The			
	Role of Utafiti Sera (Research Policy Community)			
	Presenter: Prof. Tade Aina, Executive Director, PASGR			
09:30 – 09.50	Keynote Address: Policy considerations for wage employment			
	creation in the Horticulture Sector in Kenya Presenter: Richard Lesiyampe, Principal Secretary, State Department of			
	Agriculture			
	nnigton Odame, Executive Director, CABE			
09:50 – 10:40	Analysis of Employment Creation in the Kenyan Flower Sector: Policy Issues, Challenges and Prospects			
	Presenter: Joshua Kivuva, IDS, University of Nairobi			
	Floor Discussion			
10:40 – 11:10	Health Break			
11:10 – 11:50	Creating Wage Employment in Horticulture Sector in Kenya:			
	Government Perspective Presenter: Mr. Zakayo Magara, Agricultural Food Authority (AFA)			
	Floor Discussion			
11:5012.30	Governing Horticultural Value Chains for Employment Creation in			
	Kenya			
	Presenter: Goudian Gwademba, TechnoServe, , Hola, Tana River Floor Discussion			
12:30 13:10	Creating Wage Employment in Floriculture Sector in Kenya: Industry			
12.000	Perspective Presenter: Jane Ngige, Kenya Flower Council			
	Floor Discussion			
13:10 – 14:10	Lunch break			
14:10 – 16:10				
	creation in the Horticulture Sector in Kenya Moderator: Kenneth Ayuko, Lead Expert, AgRisk Research and Advisory			
	Panellists:			
	I. Zakayo Magara, Director, Horticulture Directorate, AFA			
	II. Anthony Mutiso, Director, FPEAK			
	III. Lusike Wasilwa, Director, Crops Systems, KALRO IV. Violet Nyando, General Manager, External Relations, Policy,			
	Lobbying and Advocacy, KENAFF			
	V. Agatha Thuo, County Executive Committee Agriculture, Nyandarua			
	County			
16:10 – 16:30	Way Forward and Closing Remarks			
	Hannington Odame, Executive Director, CABE Pauline Ngimwa, Programme Manager, PDT, PASGR			
	Fauille Nulliwa. Fluulallille Wallauel, FDT, FAGUN			

## Annex2: List of Participants

No	Name	Position in Organisation	Institution and contact	Email Address
1.	Prof. Timothy Sulo	Dean,	Moi University School of Agriculture and Natural Resources	timothysulo@gmail.com
2.	Mrs Agatha W. Thuo		CECM Agriculture Nyandarua County, Kenya	agathathuo05@gmail.com; agathathuo05@yahoo.com
3.	Prof Winnie Mitullah	Director	IDS University of Nairobi	mitullahwinnie@gmail.com
4.	Dr. Olufunso Somorin	Senior Policy Officer	Transition Support (Fragile States) Department African Development Bank	o.somorin@afdb.org
5.	Prof. Karuti Kanyinga	Associate Professor	IDS, University of Nairobi	karuti@south.co.ke
6.	Dr. Hannington Odame	Executive Director	African Bio-Entrepreneurship Regional Hub Coordinator, APRA- East Africa, Nairobi.	hsodame@gmail.com
7.	Mr. Kenneth Ayuko	Lead Expert	AgRisk Research and Advisory Nairobi, Kenya	ayukokenneth@gmail.com
8.	Dr. Elijah N. Muange	Lecturer	Machakos University	e muange@yahoo.com
9.	Dr. Obadia Miroro	Assistant Knowledge Manager	African Economic Research Consortium	Obadia.miroro@aerc.ac.ke
10.	Mrs. Ann Wanja Njoroge	Senior Assistant Director	State Department of Agriculture Nairobi, Kenya	Wanjarogen@yahoo.com
11.	Mrs. Josephine N. Kiritu	County Director, Monitoring and Evaluation	County Monitoring and Evaluation Officer Kiambu County	josephinekiritu@yahoo.com
12.	Dr. Joshua Kivuva	Lecturer	IDS, University of Nairobi	joshuakivuva@hotmail.com
13.	Ms. Anne Gikonyo	Manager, Market Research & Production Development	Horticultural Crops Directorate of Agriculture and Food Authority Nairobi, Kenya	awggikonyo@gmail.com
14.	Ms. Elsie Kangai	Program Manager	Centre for African Bio- Entrepreneurship (CABE)	kangaielsie@gmail.com
15.	Prof. Mark Okere	Professor	Egerton University, Kenya	okeremark836@yahoo.com

No	Name	Position in Organisation	Institution and contact	Email Address
16.	Mr. Erick Ogumo	Chairperson	Society of Crop Agribusiness	eogumo@yahoo.com
17.	Dr. Lusike Wasilwa	Director Crop Systems	Advisors (SOCAA) Kenya Agricultural & Livestock	lusike.wasilwa@kalro.org
			research Organization	
18.	Ms. Lucy Adoyo	Research Associate	Centre for African Bio entrepreneurship	lucyadoyo@yahoo.com
19.	Mr. George Opiyo Amoth	Agronomist	Ocean Agriculture E. A. Ltd Naivasha	George@oceananagea.com
20.	Mr. Pius Muriithi		Simbi Roses Limited	simbi@sansora.co.ke
21.	Ms. Dorothy Otieno	Director	Miyonga Fresh Greens Enterprises	yvonne.otieno@gmail.com; dakoth.otieno@gmail.com
22.	Mr. Anthony Kyalo Mutiso	Operations Manager	Anthony Mutiso Operations Manager Fresh Produce Exporters Association of Kenya (FPEAK)	anthonymutiso@gmail.com
23.	Ms. Sheila Kilonzi	Lecturer	Karatina University, Nyeri	skilonzi@gmail.com
24.	Ms. Bernadine Mutanu	Journalist	Nation Media Group	bmutanu@ke.nationmedia.com
25.	Ms. Grace Kyallo	HCD	AFA	gracekyallo@gmail.com
26.	Dr. Grace Chirchir	Senior Assistant Director of Agriculture	Ministry of Agriculture Livestock and Fisheries, Kenya.	chirchirgrace@yahoo.com gjchirchir@gmail.com
27.	Ms. Violet Nyando	Policy and Advocacy	Kenya National Farmers Federation (KENAFF)	nyandov@gmail.com
28.	Mr. Geoffrey Nyamota	Head of Market Engagement	Farm Africa Kenya County Office	GeoffreyN@farmafrica.org
29.	Mr. Benson T. Mang'eni	Research, Monitoring and Evaluation	Youth Enterprise Development Fund	benmangeni@gmail.com/ gmangeni@youthfund.go.ke
30.	Mr. Jared N. Bichanga	Production Manager	Nairobi, Kenya	urbanuskioli@gmail.com
31.	Dr. Arnold M. Opiyo	Senior Lecturer	Faculty of Agriculture	aopiyo@hotmail.com;

No	Name	Position in Organisation	Institution and contact	Email Address
			Department of Crops, Horticulture and Soils, Egerton University	arnold.opiyo@gmail.com
32.	Mr. Philip Chemeltorit	Scheme Manager	React Cert Africa	schememanager@reactcertafri ca.com
33.	Ms. Rebecca Arunga	Programme Officer	NEPAD Kenya Secretariat Nairobi, Kenya	rebecca.arunga@nepadkenya. org
34.	Mrs. Alice Githu	Youth Development Officer	Min. of Public Service, Youth & Gender Affairs	aligithinji013@gmail.com
35.	Mr. Daniel Kazungu	Programme Officer	Kilifi County	Dansafari61@gmail.com
36.	Mr. Goudian Gwademba Kilemba	Business Advisor	Horticultural Crops Technoserve Hola, Tana River County	Ggkilemba@tns.org
37.	Ms. Linah Muhonja	Horticulturist	Kenya Agricultural Research Institute, National Horticultural	<pre>mociekins2@gmail.com; mociekins@yahoo.com;</pre>
			research centre, Thika	linah.muhonja@kalro.org
38.	Ms. Mary W. Githinji	Plant Health	Phytosanitary Department KEPHIS Headquarters	mgithinji@kephis.org
39.	Ms. Nereah Anyango	Admin. Assistant	CABE	N.Anyango@future- agricultures.org
40.	Mr. Edwin W. Shisia	Programme Manager	Green Farm	edwinshisia@yahoo.com
41.	Mr. Leonard Mwasi	Program Manager	Young Innovators in Agribusiness IREN, Nairobi, Kenya	leonard@irenkenya.com
42.	Mr. Joseph Kirimi Mutuma	Agricultural Sub-County Officer	Nyandarua County	jkmutuma@yahoo.com
43.	Mr. Christopher Ojiambo		CABE	chrisojia@gmai.com
44.	Mr. Leonard Haggai Oduori		Tegemeo Institute	oduorileohaggai@gmail.com
45.	Mr. Festus Mwaka Kilee	Technical Officer	Society of Crop Agrobusiness advisors	technical@sacaa.or.ke; festus.kilee@gmail.com
46.	Mr. Pius Murimi Muriithi	HRM	Simbi Roses Ltd	simbi@sansora.co.ke; pmmurimi07@yahoo.com
47.	Mr. Bengun Muchendu Muriithi		Nyandarua County	

No	Name	Position in Organisation	Institution and contact	Email Address
48.	Mr. Micky Abachi		CABE	mickabachi@gmail.com
		PASGF	R SECRETARIAT	
49.	Prof. Omotade Akin Aina	Executive Director	Partnership for African Social and	tade.aina@pasgr.org
			Governance Research (PASGR)	
50.	Dr. Pauline Ngimwa	Programme Manager,	Partnership for African Social and	Pngimwa@pasgr.org
		PDT	Governance Research (PASGR)	
51.	Femi Balogun	Research Associate	Partnership for African Social and	femi@pasgr.org
			Governance Research (PASGR)	
52.	Pamellah Lidaywa	Programme Assistant	Partnership for African Social and	Plidaywa@pasgr.org
			Governance Research (PASGR)	
		PASGE	R OFFICE CONTACTS	1
Pa	artnership for African Social	and Governance Research (	PASGR), KMA Centre, 4th Floor PO	Box 76418-00508   Mara Road,
		Upper H	lill, Nairobi, Kenya	
	T:	+254 20 2985 000   +254 73	1000065 <u>info@pasgr.org</u> ; <u>www.pasg</u> i	r.org