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Kenya Agricultural Productivity and Agribusiness Project (KAPAP) and the Technical University of Kenya (TUK) Entrepreneurship and Business Plan Development Training Report, September 2015

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Abstract

Kenya Agricultural Productivity and Agribusiness Project (KAPAP) is one of the government's initiatives to implement the Agriculture Sector Development Strategy (ASDS) and is designed around the key pillars of the ASDS. KAPAP aims to consolidate and up-scale the achievements in the sector and in addition support agribusiness development. The project's development objective is 'to increase agricultural productivity and incomes of participating smallholder farmers in the Project area. The project is implemented in 20 areas namely Kilifi, Kwale, Tana River, Taita Taveta, Garissa, Wajir, Makueni, Embu, Meru, Nyeri, Nakuru, Nyandarua, Siaya, Busia, Homabay, Butere-Mumias, Gucha, Kakamega, Trans Nzoia and West Pokot. The project areas include 27 counties in Mombasa, Nyeri, Nakuru and Kisumu Regions.

KAPAP also supports the implementation of the National Agricultural Research System (NARS) Policy which provides a National framework that fosters effective collaboration among a broad range of individuals and organizations in order to contribute to the national agricultural knowledge and innovation system. It is committed towards mobilizing resources in order to continue building capacity of farmers, youth, farmer organizations (cooperatives and groups) and stakeholders across different agricultural value chains to entrench agribusiness so that farming becomes a viable business enterprise across the board. This background culminated into collaborative efforts between KAPAP and Technical University of Kenya (TUK) to develop a market driven curricular in Entrepreneurship and Business planning to build the capacity of service providers who deal directly with farmers.

Key Words: *Productivity, Agribusiness, Project, government's initiatives, Agriculture Development, Strategy*

1.1 Background of the Study

According to the Kenya Agricultural Research Institute annual reports, the agricultural sector remains the mainstay of the Kenya's economy. The sector directly contributes 24% of the Gross Domestic Product (GDP) and 27% indirectly through linkages with agribusinesses in manufacturing, distribution and other service related sectors. Approximately 45% of the government revenue is derived from Agriculture.

In line with the significance of Agribusiness, the Government of Kenya (GOK) formulated the National Agribusiness Strategy. The Strategy identifies analyses and overcomes the systemic bottlenecks that stand in the way of realizing Kenya's enormous agribusiness potential. It proposed concrete and strategic actions that if pursued, would enable Kenya's resourceful agropreneurs to take advantage of the local, national, regional and international opportunities to enable the nation achieve its development plans. The strategy proposed how to introduce the systems and structures required to bring about a dynamic and competitive agribusiness sector in Kenya. It aims to make existing systems work more flexibly and adaptively to suit changing conditions and in a way that can exploit new market opportunities. The strategy recognizes the importance of the agribusiness sector and the key role it could play in realizing Kenya's vision 2030. The strategy, if exhausted, will deliver wealth creation, job creation and food security within national borders, even in a context of rapidly changing climate and environmental degradation (Republic of Kenya, 2012).

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1.2 Purpose of Collaboration between KAPAP and TUK

The main purpose of the collaboration between KAPAP and TUK was to build capacity of participating smallholder farmers, farmer's organizations, and service providers across different agribusinesses value chains. KAPAP fosters effective collaboration among a broad range of individuals and organizations in order to contribute to the national agricultural knowledge and innovative system. The aim is to trigger agribusiness growth. In pursuance of this, therefore, a Memorandum of Understanding (MOU) was signed between the two institutions with the following as the key objectives:

- i. To identify business planning training needs
- ii. To develop curriculum, a training manual and a workbook on entrepreneurship and business plan development
- iii. To train service providers in entrepreneurship, business plan writing and application
- iv. To evaluate training outcomes/impact via a comprehensive follow-up exercise

Technical University undertook the training responsibility with the following as the expected project deliverables:

- i. Gap analysis/training needs assessment report
- ii. Business plans and entrepreneurship draft curriculum documents (training manual and a workbook)
- iii. Finalised Business plans and entrepreneurship curriculum documents
- iv. Monitoring and Evaluation framework
- v. The whole process report

1.3 Implementation of the Training Assignment

The training was implemented as follows:

Objective 1: To identify business planning training needs

Farmers' sample business plans provided by KAPAP were reviewed and their weaknesses identified as: unconventional format; complicated format that did not reflect the needs of the

farmer; standards did not reflect the knowledge and level of participants. There was need to use a training approach that would provide an opportunity for the service providers and farmers to learn by doing. A workbook was designed to meet this goal and the same was used during training as a guide to business plan development.

Objective 2: To Develop Curriculum, a Training Manual and a Workbook on Entrepreneurship and Business Plan Development

A curriculum to facilitate training in Entrepreneurship and Business planning was developed. The content was partly based on the identified needs during the above exercise (*refer to objective 1*) and partly based on KAPAP experience. The curricula were approved by both institutions from which the following areas were derived:

Table 1: Summary of Course Structure and Duration

S/No.	Course Name	Hours
1	Overview of Entrepreneurship	2 hrs
2	Entrepreneurial Process	1 hr
3	The Agribusiness Environment	2 hrs
4	Agribusiness resources	2 hrs
5	Types of Legal Business Ownership in Agriculture	2 hrs
6	Identification and Assessment of Agribusiness Opportunities	2 hrs
7	Agribusiness Start-Ups	4 hrs
8	Managing Agri-business Operations	2 hrs
9	Marketing of Agricultural Products and Services	2 hrs
10	Business Incubation Process	2 hrs
11	Gender mainstreaming in Agriculture	2 hrs
12	Business Plan development: Concept	12 hrs
13	*Practices	16 hrs

Key: *Practices - Practices denote actual business plan writing. All the participants were accorded 16 hours to develop business plans based on the value chains they promoted. These were collected and assessed by facilitators. The evaluation criteria was based on presentation skills and viability of the agribusiness idea, which was measured by product demand; growth

potential, competitive advantage; the team; sustainability; and return on investment. This facilitation approach is based on TUK's Motto: *Education and Training for the real world.*

The following are the University's implementation Team:

Dr. Jane Mputhia -	:Project Coordinator
Dorcas D. Mutemi	:Field Expert
Martha Achieng	:Trainer
Dr. Elyjoy M. Micheni	:Data Analyst

Objective 3: To train service providers in entrepreneurship, business plan writing and application

- i. Four training venues were set up for this purpose, namely: Mombasa, Nyeri, Nakuru and Kisumu.
- ii. Mombasa housed service providers from Wajir county, Kwale county; Kilifi county; Mandera; Tana River and Garissa.
- iii. Nyeri housed service providers from Meru, Embu, Nyeri, Muranga, Makueni and TaitaTaveta.Nakuru had service providers from Nakuru, Nyandarua, TransNzoia, West Pokot, Turkana and Uasin-Gishu..
- iv. Kisumu had service providers from Siaya, Homa Bay, Busia, Kakamega, Migori counties.

Training Methodologies

The following training methods were employed: Introduction of training areas through lecture methods, group discussions and presentations and Case studies and practical business plan writing

Training Approach

Each venue was given 6 days of training, 8 hours per day. In all training venues, the following steps were custom:

a) *Registration of Participants:* Participants were registered using two forms - one from KAPAP and another designed by TUK.

b) *Opening ceremony:* The opening ceremony was presided over by alternate professors from Technical University of Kenya, who acted as lead facilitators/consultants and KAPAP Coordinator:

Mombasa Region - Professor A. Amadi - Directorate of Enterprise and Consultancy Services and Dr. Andrew Dibo for KAPAP National Coordinator assisted by Mrs Priscilla Muiruri (KAPAP Secretariat) Logistics and preparations by Mr. Leonard Nderi - Area KAPAP Monitoring & Evaluation Officer.

Nyeri Region - Professor A. Amadi (TUK) and Dr. Andrew Dibo for KAPAP National Coordinator assisted by Mrs Priscilla Muiruri (KAPAP Secretariat) Logistics and preparations by Ms Jane Ndungu - Area KAPAP Coordinator.

Nakuru Region - Professor Wilson Ogola - Professor of Mechanical/Mechatronics Engineering Technology and Director of University Industry Partnerships, Prof A. Amadi, Directorate of Enterprise and Consultancy Services, assisted by Mrs Priscilla Muiruri (KAPAP Secretariat) Logistics and preparations by Mr. Peter Kimani - Area KAPAP Coordinator.

Kisumu Region - Professor Wilson Ogola (TUK) and Dr. Andrew Dibo for KAPAP National Coordinator assisted by Mrs. Priscilla Muiruri (KAPAP Secretariat) Logistics and preparations by Mrs. Phoebe Muchele - Area KAPAP Coordinator.

The role of the Lead facilitators was to give an overview of curricula, its implications and the roles of the two collaborating institutions. Emphasis was on application of strategies highlighted during the learning experiences with the aim of transforming farming activities into sustainable businesses. They explained the role of the university in capacity building of farmers in its outreach agenda: they challenged the participants to utilize the available opportunities at the university to enrich their competencies. The lead consultants introduced the facilitators and opened the training.

a) *Introductions of participants*: This was guided by one of the facilitators. Participants' introduced themselves including the value chains they promoted and roles they played in the service provision.

b) *Housekeeping*: Participants were introduced to housekeeping norms by the secretariat to ensure order. Housekeeping involved identifying the group chairman, setting group norms in terms of session breaks, effective participation use of available facilities, and respect to each other's opinion.

c) *Levelling of expectations*: Participants were requested to document their expectations based on the main objectives of the training. The expectations were used by facilitators to evaluate the curricula content and also to ensure that individual needs were taken into account during facilitation. They were also used to understand the needs of individual Counties.

d) In each venue, a pre-planned program was followed to the letter by all the facilitators save for the adjustments to meet unavoidable contingencies.

e) At the end, participants completed a comprehensive evaluation form provided by the facilitators. This was meant to receive feedback on such areas as: appropriateness of the content, materials used during training; ease of delivery and training methods.

1.4 Institutional Benefits Derived From the Partnerships

The partnership between KAPAP and TUK and their collaboration in the training experience described in this report generated several benefits for Industry (KAPAP), Academia (TUK) and the participating Communities as represented by the participants directly or indirectly. The immediate benefits of this training for the trio can be identified as:

a) To KAPAP as an organization, representing the Agricultural Industry

- Identified committed service providers as evaluated by a neutral body.
- KAPAP officers appreciated the difference between training carried out by an institution of higher learning and that done by private organization. Reports from the value chain leaders participating in the training allude to this, and this we believe will assist KAPAP in related future decisions.
- Was exposed to a different perspective of technical thinking, new research trends, and practical approach to training, emerging trends and issues in agribusiness techniques and innovations.
- Dialogues with facilitators from the academia also provided a way to test the validity of the way industry thinks about issues affecting them and the community.
- Met their goal to enhance entrepreneurial and business planning skills of the service providers who will advise farmers in different value chains, hence improvement of agribusinesses through improved marketing and production methods.

b) To the Technical University of Kenya representing the Academia

- The University cemented ties for future collaborations on innovative activities and industrial funding; lending legitimacy to academic research and associated support from policy-makers and society.
- Strengthened new areas of research that could help the country develop innovations that could further unlock youth entrepreneurship in the agricultural sector.
- Allowed the university to better prepare students to enter the industrial work force by indulging in Industrial - academic collaboration.
- The staff gained greater exposure by working on industry - funded projects, in such areas as marketing, manufacturing, business processes, and environmental concerns -factors that are of great importance to industry and community. These experiences will facilitate the transition from academia to industry and increase productivity because university students will be better prepared to join the agribusiness sector as employees or investors.
- Enhanced perspective to address industry's research and training needs and priorities, facilitate the productive use of knowledge through partnership projects, and build a critical mass of expertise through collaborated training research and training programs.

c) To the Community

- Collaboration between the university and KAPAP helped develop products that affect community lives directly. The participants in their business plans proposed to start businesses that will put these products and services on the market.
- New Technologies, business processes were introduced during the training sessions, new ideas emerged that can lead to new products, better business operation and efficiency which will lead to lower costs of production and lower prices of those products in the market.
- Participants were encouraged to think creatively and openly exchange ideas that would not be individually attributed; which led to Identification of viable business ideas and

opportunities within the East African region as illustrated by the business plans they developed; besides having an integrated global perspective.

- Since service providers were exposed to strategies for networking availed by devolution by providing market for products from different counties, they would transfer the same knowledge to farmers, leading to market development and branding of products for competitiveness.
- Business incubation strategies and models would enhance the survival of newly established businesses in the agribusiness sector.
- Market for food products and conference facilities and services was created in the areas where the workshops were held.

1.5 Results of written Business Plans

Participants were given 16 hours to write business plans using a workbook as a guide. They were grouped according to the value chains. Each team was to identify an agribusiness idea, compile a business plan and present to a panel comprising of university facilitators and KAPAP officials. Assessment criteria included viability of the idea (evaluated on the basis of return on investment, stability of demand, and market scope) and growth potential. Facilitators also assessed presentation skills of participants based on their ability to articulate the feasibility of the business and to convince investors to buy into the idea. The following are the results.

Table 2: Business Plan Assessment Results April 2015

Group/Value Chain	Station	Written Business plan (/80)	Viability of the proposed business (/20)	Total Marks (/100)
Horticulture - Citrus fruits value chain	Mombasa	54	15	69
		44	13	57
		49	14	63%
Livestock - Beef Value Chain	Mombasa	58	15	73
		52	12	64
		55	13.5	68.5%
NRM - Bee Keeping Value Chain	Mombasa	54	16	70
		58	16	74
		56	16	72%
Livestock - Dairy Value Chain	Mombasa	50	15	65
		52	14	66
		51	14.5	65,5

Group/Value Chain	Station	Written Business plan (/80)	Viability of the proposed business (/20)	Total Marks (/100)
Livestock - Local Poultry Value Chain	Mombasa	52	17	69
		52	19	71
		52	18	70
Horticulture - Fruits and Vegetables Value chain	Nakuru	6258	15	77
		60	16	84
			15.5	75.5
Livestock - Dairy Value Chain	Nakuru	56	17	73%
		52	16	68
		54	16.5	70.5%
Livestock - Meats Value Chain	Nakuru	46	16	62
		38	16	54
		42	16	58
NRM - Grain Value Chain	Nakuru	58	16	74
		62	17	79
		60	16.5	76.5
Livestock - Dairy Value Chain	Nyeri	66	16	82%
		60	15	75
		63	15.5	78.5
NRM - Mango Value Chain	Nyeri	70	16	86%
		74	17	91%
		72	16.5	88.5%
NRM - Dairy Value Chain	Kisumu	70	17	87
		74	16	90
		72	16.5	88.5%

Summary

1. All groups from Mombasa did not get a chance to present their business plans due to shortage of time.
2. Groups that scored below 70% did not complete some sections.
3. Only one group from Kisumu did not hand in their business plans for assessment.
4. These results reflect an average mark from two assessments.
5. Overall, the groups demonstrated that they are able to prepare business plans, except the cash flow projections. All groups had problems preparing a cash flow statement and ratio analysis. They also had issues identifying risk factors and demonstrating ability to

develop mitigation strategies. Since the agricultural sector is risk prone, it is imperative that service providers develop the ability to assess risks and identify innovations that can minimise losses emanating from such risks. Consequently additional supervised exercises were given in the areas in which the farmers had been found weak.

Objective 4: To evaluate training outcomes/impact through a comprehensive follow-up exercise

Evaluation was done at two levels: Participants evaluation, and impact evaluation through a follow-up exercise which used questionnaires and focus group discussions and observation to evaluate the extent to which the training affected the operations of farmer groups.

Feedback from participants using training evaluation questionnaire

Feedback was sought about the effectiveness of the training from the participants' perspective was gained using an evaluation form. The following is the participants' feedback.

Data on Number of Service Providers Trained

From the evaluation forms, Table 3 below presents analysis of the participants, 27.7% of whom were trained in Nyeri, 26.9% in Kisumu, 24.6% in Nakuru and 20.8% in Mombasa.

Table 3: Number of Participants

Programme Venue	Frequency	Percent (%)
Red Court (Boma) - Nyeri	36	27.7
Ukweli Pastoral Dev. Center - Kisumu	35	26.9
Jumuia Guest Resort - Nakuru	32	24.6
Probation Centre (Shanzu Boys Probation School) - Mombasa	27	20.8
Total	130	100.0

Table 4: Module/Unit: Importance of Units as Prioritized by the Participants

Module/Unit	Frequency	Percentage
Business planning & Entrepreneurship skills	11	22.9
Agribusiness marketing	9	18.8
Business incubation	8	16.7
Managing agribusinesses	7	14.6
Agribusiness environment	4	8.3
Identification of agribusiness opportunities	3	6.2
Gender mainstreaming	2	4.2
Legal forms of agribusinesses	1	2.1
Entrepreneurial process	1	2.1
Agribusiness start-ups	1	2.1
One Unit	1	2.1
Total	48	100.0

Participants' Views on Facilitation

Participants were requested to give feedback on the delivery of the content by facilitators and the following are the results as shown in Table 5 below:

Table 5: Participants' Views on Facilitation

	Disagree		Neutral		Agree	Strongly Agree		
	F	%	F	%	%	F	F	%
The training team was well prepared	0	.0%	1	35.4%	.8%	46	82	63.1%
The topics covered in the course were appropriate	0	.0%	0	23.1%	.0%	30	99	76.2%
The methods used for training were appropriate	1	.8%	0	43.1%	.0%	56	72	55.4%
The content was organized and easy to follow	1	.8%	1	42.3%	.8%	55	66	50.8%

On the statement that the training team was well prepared 63.1% responded strongly agree, 35.4% responded agree while 0.8% responded neutral meaning that 98.5% agreed that the training team was well prepared. 76.2% indicated strongly agree on whether the topics covered in the course were appropriate and 23.1% responded agree. On whether the methods used for training were appropriate 55.4% responded strongly agree, 43.1% responded agree and 0.8% responded neutral. 50.8% responded strongly agree on whether the content was organized and easy to follow, 42.3% responded agree, while 0.8% responded neutral and another 0.8% responded disagree. We can therefore conclude that the training programme was well planned and well managed to a successful conclusion.

Quality of Materials Used

Table 6: Participants' Views on Training Materials

	Fair		Good		Very Good		Excellent	
	F	%	F	F	%	%	F	%
Quality of course materials (work-books)	2	1.5%	25	41	31.5%	19.2%	60	46.2%
Quality of course materials (Handouts)	2	1.5%	35	31	23.8%	26.9%	54	41.5%
Potential value as future reference material	4	3.1%	20	54	41.5%	15.4%	48	36.9%
Adequacy of materials	5	3.8%	32	41	31.5%	24.6%	47	36.2%
Materials - Appropriateness of equipment used	5	3.8%	20	43	33.1%	15.4%	55	42.3%

On quality of course materials specifically workbooks, 31.5% indicated they were excellent, 46.2% indicated they were very good, 19.2% indicated they were good and 1.5% indicated they were fair. 23.8% indicated the handouts were excellent, 41.5% indicated that handouts were very good, 26.9% indicated good for the handouts while 1,5% indicated fair for the same. Regarding the potential value of materials as future reference material, 41.5% indicated the material was excellent for future reference, 36.9% indicated very good, 24.6% indicated good while 3.1% indicated the material as fair for future reference. On the potential value of the handouts being used as future reference material 41,5% indicated they were excellent, 36.9%indicated handouts were very good, 15.4% indicated they were good and 3.1% indicated the handouts were fair. On adequacy of the materials 31.5% of the service providers responded excellent, 36.2% responded very good, 24.6% responded good while 3.8% responded fair. Thus we can conclusively say the quality of course materials provided was generally very good.

Aspects of Training That May be Improved

Participants were asked to enumerate aspects of training they felt required improvement.

Table 7: Aspects of Training That May be Improved

What aspects of training could be improved	Frequency	Percentage
Extension of Time frame	42	52.5
Train in a more conducive environment	13	16.2
Use of successful entrepreneurs	4	5.0
Extend time for Business plan preparation	3	3.8
Encourage group discussion/Work	3	3.8
Improve on PDM	3	3.8
Improve Legal forms of agribusinesses	3	3.8
Pay PDM upfront	3	3.8
Agribusiness environment and climate change	2	2.5
Business Incubation	2	2.5
Simplify content	2	2.5
Total	80	100.0

Participants Recommendations

Participants were asked to highlight any recommendations they felt the organizers should consider in future. The following were their responses.

Table 8: Recommendations

Recommendations	Frequency	Percent (%)
More time allocation	27	31.4
Accommodation / food arrangement	8	9.3
Emphasise practice	8	9.3
Access of Amenities e.g. Mpesa	7	8.1
Business plan perfection	5	5.8
Field trips	5	5.8
Good Communication with KAPAP	5	5.8
Inviting a successful Agri-preneur	4	4.7
Financial plan in business plan be taught again	2	2.3
Project Proposal Writing	1	1.2
Resource Mobilization	1	1.2
Total	86	100.0

In order of prominence more time allocation led with 31.4% followed by accommodation / food arrangement and practical each with 9.3% while Access of Amenities e.g. Mpesa had a recommendation of 8.1%.

Training Topics Participants Felt Should be Handled in Future

A summary of Issues and training topics that should be handled in future according to participants are presented in Table 9.

Table 9: Issues and Training Topics That Should be handled in Future

Issues and Training topics that should be handled in future	Frequency	Percentage
Financial Management	19	28.4
Management of Co-operatives	8	11.9
Project Proposal Writing	7	10.4
Business Planning - Cash flow statements	6	9.0
Marketing	6	9.0
Entrepreneurship & Business Enterprise up scaling strategies	4	6.0
Legal issues/KEBS	3	4.5
Procurement Procedure and systems	3	4.5
Resources Mobilization Networks	3	4.5
Incubation of agribusinesses	2	3.0
Layout of farms and business to be considered	2	3.0
Organization and management	2	3.0
Practical Technologies	2	3.0
Total	67	100.0

Issues and topics and their order of prominence were Financial Management 28.4%, Management Co-operatives 11.9%, Project Proposal Writing 10.4%, Business Planning 9.0%, Market and Marketing 9.0%, Entrepreneurship & Business Enterprise up scaling strategies 6.0%, Legal issues 4.5%, Procurement Procedure and systems 4.5%, Resources Mobilization Network 4.5%, Incubation of agribusiness 3.0%, Layout of farms and business to be considered 3.0%, Organization and management 3.0% and Practical Technologies 3.0%.

Table 10: Other Comments by Participants

Other comments	Frequency	Percentage
Good work	30	60.0
Catering services and food was of very poor quality (BOMAS and MOMBASA)	9	18.0
More time - to avoid overstraining	8	16.0
More frequently/continuous training	3	6.0
Total	50	100.0

Table 10 presents a summary of other comments. 60% of the respondents indicated that the training programme and trainers could be described as "good work". 18 indicated that Catering Services and food were of very poor quality. 16% indicated that there should be more time - avoid overstraining in terms of training duration. 6% indicated that they would like see training held more frequently/continuous.

1.6 Follow-Up Exercise

The university conducted a follow-up exercise in all the centres where training took place. The key objectives of the exercise were:

- i. To find out the entrepreneurial skills service providers acquired during training, specifically the ones they understood better and were therefore able to transfer the knowledge.
- ii. To establish the extent to which the service providers transferred the acquired knowledge to farmers.
- iii. To find out the level of understanding by service providers of the business plan components

Role of Service Providers/Respondents in KAPAP

Service providers were asked about their role in the project. From the responses, the respondents were service providers of various value chains as indicated by Table 11.

Table 11: Role of Service Providers/Respondents in KAPAP

What is your role in KAPAP?	Frequency	Percent	Valid Percent	Cumulative Percent
Agribusiness Service Provider	1	5.9	5.9	5.9
Coordinate farmer group trainings and offer business advisory to cooperatives and groups in value addition	1	5.9	5.9	11.8
Marketing director in my firm	1	5.9	5.9	17.6
Provide services on marketing and Value addition in the Citrus Value chain	1	5.9	5.9	23.5
Provision of agricultural production and marketing services to potato farmers in Nyeri County	1	5.9	5.9	29.4
Service providers for Commercial Peas and Indigenous Poultry	1	5.9	5.9	35.3
Service Provider for Natural Resource component-Bee Keeping	1	5.9	5.9	41.2
Service provider for passion fruit farming	1	5.9	5.9	47.1
Service provider in banana value chain	1	5.9	5.9	52.9
Service provider in the dairy value chain	2	11.8	11.8	64.7
Service provider to mango farmers	1	5.9	5.9	70.6
Service provider to support rabbit farmers	1	5.9	5.9	76.5
Service Provider working under AREMS-Agriculture Research Extension and Marketing Services	1	5.9	5.9	82.4
Train and link farmers to various markets e.g. input suppliers and micro finance institutions	1	5.9	5.9	88.2
Train farmers on ABEC husbandry and disseminating information, link farmers to buyers	1	5.9	5.9	94.1
Training farmers on the best/modern methods of farming	1	5.9	5.9	100.0
Total	17	100.0	100.0	

Data on Training Participation/Attendance on the Entrepreneurship and Business Planning Training Organized by KAPAP and TUK per Region

The responses indicate that 11.8% of the respondents were trained at Jumuia, Nakuru, 47.1% at Red Court Hotel, Nyeri, 29.4% at Shanzu probation Center, Kilifi and 11.8% at Ukweli Pastoral Centre Kisumu. This information presented by Table 12 below.

Table 12: Data on Training Participation/Attendance per Region

Where participants attended training	Frequency	Percent
Jumuia, Nakuru	2	11.8
Red Court Hotel, Nyeri	8	47.1
Shanzu Probation Center, Kilifi	5	29.4
Ukweli Pastoral Centre, Kisumu	2	11.8
Total	17	100.0

Sessions Attended During Training

On attendance of all the training sessions, 94.1% indicated they had attended all the training sessions while 5.9% indicated they did not attend all the training sessions as shown in Figure 1 below.

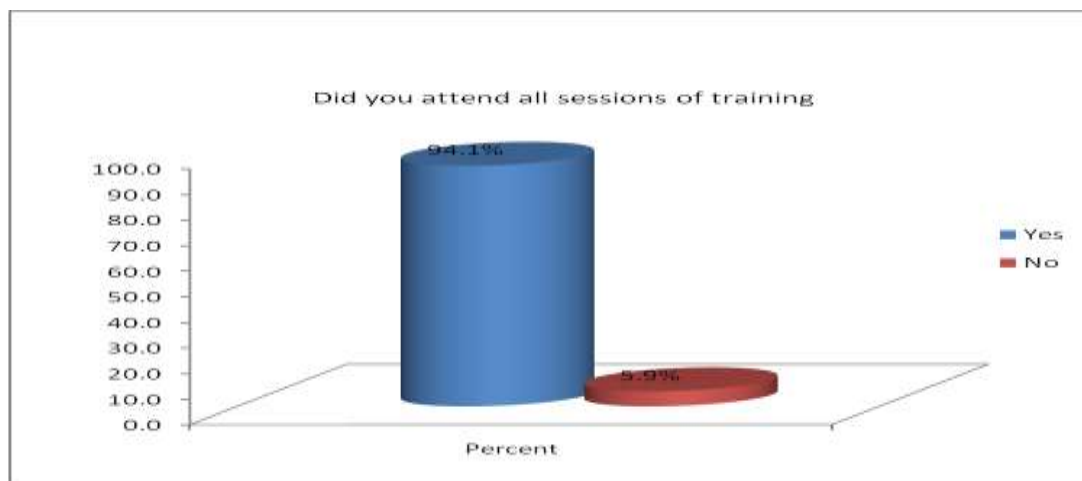


Figure 1: Sessions Attended During Training

Participation in the Group Business Plan Development

100% of the respondents indicated they had participated in the group business plan development. This information is shown in Table 13 below.

Table 13: Participation in the Group Business Plan Development

Did you participate in the group bus plan development?	
Frequency	Cumulative Percent
17	100.0

Sample Groups of Value Chains That Developed Business Plans after Training

Participants were asked to what extent they transferred knowledge acquired to farmers after training in terms of business planning.

From the responses, the respondents wrote business plans on a variety of value chains such as dairy, fruits and fish. The dairy value chain had the highest preference as indicated by 29.4% in Table 14, followed by mango value chain with 11.8% while bee keeping, fish value chain and poultry value had a response rate of 5.9% each. This information is shown in Table 15 below.

Table 14: Sample Groups of Value Chains That Developed Business Plans After Training

If yes, which value chain did your group write a business plan on?	Frequency	Percent	Valid Percent	Cumulative Percent
Banana value chain	1	5.9	5.9	5.9
Bee Keeping Value Chain	1	5.9	5.9	11.8
Chicken Value	1	5.9	5.9	17.6
Dairy Value Chain	5	29.4	29.4	47.1
Fish value chain	1	5.9	5.9	52.9
Fruits value chain	1	5.9	5.9	58.8
Grains Processing And Marketing	1	5.9	5.9	64.7
Group C on ABEC	1	5.9	5.9	70.6
Mango Value Chain	2	11.8	11.8	82.4
Passion fruit value chain	1	5.9	5.9	88.2
Rabbit meat value chain	1	5.9	5.9	94.1
Vegetables	1	5.9	5.9	100.0
Total	17	100.0	100.0	

Extent to Which Service Providers is able to Transfer the Business Plan Skills Learnt to others:

The respondents gave a wide range of responses, none of which was dominant as indicated by Table 15 below.

Table 15: Extent to Which Participants Can Transfer the Business Plan Skills Learnt to others

To what extent can you transfer the bus plan skills learnt to others?	Frequency	Percent	Valid Percent	Cumulative Percent
No response	1	5.9	5.9	5.9
50%	1	5.9	5.9	11.8
I am able to train, guide and assist others on the development of business plans	1	5.9	5.9	17.6
Assisted farmers in marketing	1	5.9	5.9	23.5
I have been able to train farmers to write business plan	1	5.9	5.9	29.4
Can guide process in business plan development and financial costs projection	1	5.9	5.9	35.3
Faced financial challenges	1	5.9	5.9	41.2
Facing challenges transferring development skills particularly financial projections and plan	1	5.9	5.9	47.1
I can guide farmers and business owners or aspiring to own business on business plan development	1	5.9	5.9	58.8
I have already done a business plan for one group	1	5.9	5.9	64.7
In business planning and training my GRPs i.e. Grass root partners.	1	5.9	5.9	70.6
To a relatively large extent	1	5.9	5.9	82.4
To co-operatives to source for funds; assisting farmers improve their quality and quantity	1	5.9	5.9	88.2
Trained farmers on issues of marketing plan, production and operational plans	1	5.9	5.9	94.1
Training Farmers to apply entrepreneurial skills especially in running their co-operatives	1	5.9	5.9	100.0

Number of Farmers Trained by Service Providers after the Training

Majority of service providers indicated they have trained beneficiaries. According to the responses, the least number of beneficiaries by a single respondent was 8 while the highest number of beneficiaries was 130 as shown in figure 2 below.

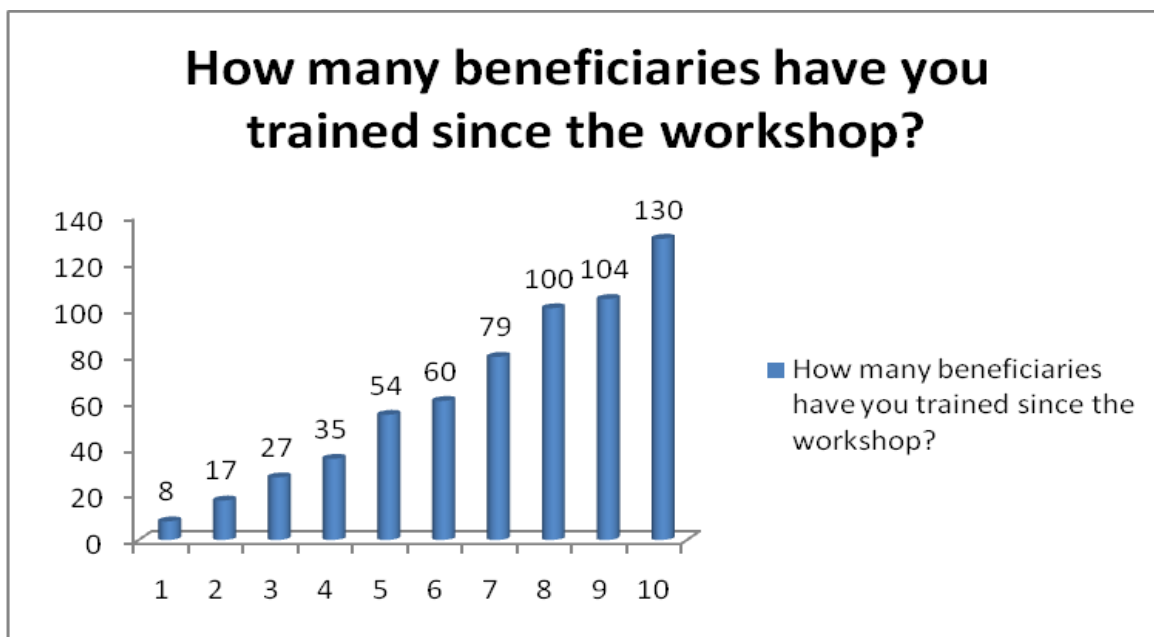


Figure 2: Number of Beneficiaries Trained by Individual Respondents

Service Providers' Experience in the business plan development

64.7% of the respondents indicated that the business planning process is not easy while 35.3% indicated that it is easy. This information is shown in Table 16 below.

Table 16: Experience in the Business Plan Development

What is your experience of the business planning process	Frequency	Percent
Not Easy	11	64.7
Easy	6	35.3
Total	17	100.0

Suitability of the Business Plan Format Learnt During Training

The respondents generally indicated that the format of the business plan learnt was suitable with 70.6% indicating it was suitable and 29.4% indicating it was most suitable as shown by Table 17 below.

Table 17: Format of the Business Plan Proposed During Training

Format of the Business Plan proposed during Training	Frequency	Percent
Suitable	12	70.6
Most suitable	5	29.4
Total	17	100.0

The areas that the farmers understood better during training by Service Providers

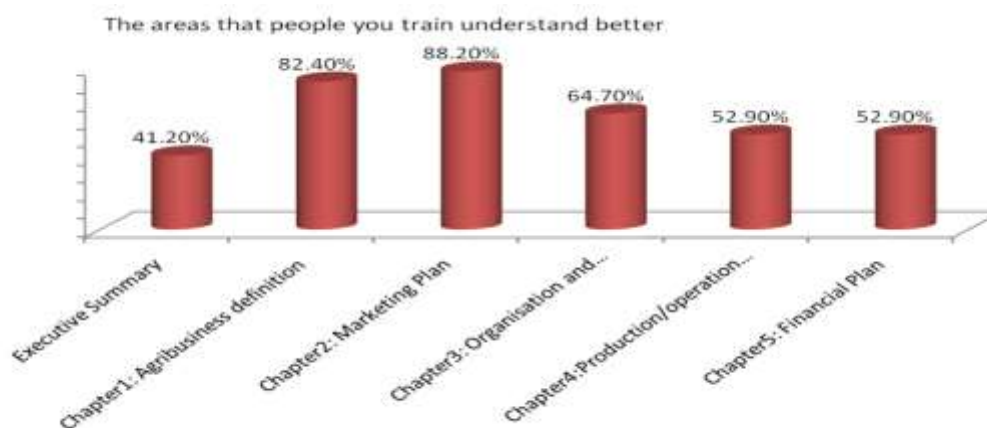


Figure 3: Areas People You Train Understand Better

On the areas that the people trained understand better the service providers responded as follows, 41.2% indicated people they trained understood Executive Summary better, 82.4% indicated people they trained understood Chapter1: Agribusiness definition better, 88.2% indicated people they trained understood chapter3:Marketing Plan better, 64.7% indicated people they trained understood Organisation and Management Plan better, 52.9% indicated people they trained understood Production/Operations plan better and 52.9% indicated the people they trained understood Financial plan better. This information is shown in Figure 3 above.

If Skills Learnt Have Improved the Way I Work as an Agribusiness Service Provider

The inference that can be drawn from the responses on whether skills learnt have improved their work as agribusiness service provider is that the skills learnt have actually had a positive impact on their work. 64.7% of the respondents indicated strongly agree and 35.3% indicated agree

regarding the skills learnt having improved the way they work as agribusiness service providers. This is shown in Table 18 below.

Table 18: Whether Skills Learnt Have Improved Work

The Skills I learnt have improved the way I work as an agribusiness service provider	Frequency	Percent
Strongly Agree	11	64.7
Agree	6	35.3
Total	17	100.0

Do Service Providers find it Necessary to Transfer Skills to Clients?

All the respondents agreed that was necessary to transfer skills learnt at the training to their clients. This means that the respondents are in favour of transferring the skills learnt to their target groups as presented in Table 19.

Table 19: Finding it Necessary to Transfer Skills Learnt

I have found it necessary to transfer my skills to my clients	Frequency	Percent
Strongly Agree	7	41.2
Agree	10	58.8
Total	17	100.0

How the Training Has Impacted the Profession of Service Providers

On how the training has impacted on their profession as service providers, 47.1% of the service providers indicated that the training has had an impact on their planning and documenting business plans and their implementation, 17.6% indicated the training had added confidence and more knowledge to them. The service providers also indicated that the training had made them able to develop strategies to overcome the numerous production and marketing challenges, has improved skills in agribusiness and entrepreneurship, able to promote various enterprises for farmers and handle marketing issues and generally had impacted them positively. A summary of the responses is provided in Table 20 and Table 21.

Table 20: Impact Training Has Had on Community Based Agribusiness Project

What impact do you think the training has had on your community-based agribusiness project?	Frequency	Percent	Valid Percent	Cumulative Percent
Able to link buyers to organizational groups	1	5.9	5.9	5.9
Assisted farmers change outlook of their business	1	5.9	5.9	11.8
Big Impact	1	5.9	5.9	17.6
Can undertake market research and develop market plan	1	5.9	5.9	23.5
Change in attitude of local chicken farmers	1	5.9	5.9	29.4
Eye Opener in decision making	1	5.9	5.9	35.3
Farmers have stopped mentality that farming is for illiterate	1	5.9	5.9	41.2
Group marketing as opposed to individual marketing	1	5.9	5.9	47.1
Groups have managed to organise themselves to do collective selling	1	5.9	5.9	52.9
Have facilitated similar processes outside KAPAP	1	5.9	5.9	58.8
It has assisted in alignment of the already prepared Business plans	1	5.9	5.9	64.7
On Farmers Now Can Write A business Plan	1	5.9	5.9	70.6
Production, husbandry and marketing	1	5.9	5.9	76.5
The farmers are able to own their business a lot more than previously observed	1	5.9	5.9	82.4
The project members (coop society) now understands the business plan better than before training	1	5.9	5.9	88.2
They are now taking their activities as a business and not as a way of life	1	5.9	5.9	94.1
To enable the farmers to take farming seriously and change their attitude	1	5.9	5.9	100.0
Total	17	100.0	100.0	

Table 21: How the Training Has Impacted Service Providers' Professions

How has the training Impacted your profession?	Frequency	Percent	Valid Percent	Cumulative Percent
Able to develop strategies to overcome the numerous production and marketing challenges	1	5.9	5.9	5.9
Added confidence to me and more knowledge	3	17.6	17.6	23.5
Has improved skills in agribusiness and entrepreneurship	1	5.9	5.9	29.4
Has made me more productive on entrepreneurial issues	1	5.9	5.9	35.3
I am able to promote various enterprises for farmers and handle marketing issues	1	5.9	5.9	41.2
Improved ability in planning and documenting business plans and their implementation	8	47.1	47.1	88.2
Total	17	100.0	100.0	

Areas Not Included in Current Training That Service Providers Would Like Included in Future

41.2% of the respondents indicated that they would like financial planning & management, Value addition and E-Marketing included into the training. 11.8% indicated that they would like agricultural marketing and product development included while a further 11.8% also indicated that they would like proposal writing, business planning and management included. Those who indicated that they would like to see people skills and conflict resolution included were 5.9%, and a further 5.9% also indicated that they would like to see elements of county affairs incorporated. However 23.5% of the respondents indicated that the training was well structured and all inclusive. A summary of this information is provided by Table 22 below. Thus, the conclusion that can be drawn from the responses is that there is need to enhance training to include components of financial planning and management in more details, product development and E-Marketing.

Table 22: Areas of Training Left out That They Would Like to See Included

What areas of training were left out that you would like see included?	Frequency	Percent	Valid Percent	Cumulative Percent
Agricultural marketing, Product development	2	11.8	11.8	11.8
Financial planning & management, Value addition and E-Marketing	7	41.2	41.2	52.9
Integration with county affairs	1	5.9	5.9	58.8
People skills, conflict resolution	1	5.9	5.9	64.7
Proposal writing and Business planning and management	2	11.8	11.8	76.5
Training was well structured and all inclusive	4	23.5	23.5	100.0
Total	17	100.0	100.0	

Results From Facilitators' Observation and Focus Group Discussions

Agriculture is a unique activity whose cycle is lengthy and seasonal. It may therefore be premature at this point to directly relate the activities observed to training. However, the following can be deduced:

Nakuru

Nakuru had value addition through product development in value chain; inorganic expansion through increased production capacity in their dairy value chain in Lanet. The dairy had increased in membership since the trainings were intensified by the service provider after acquiring the training. The farmer organisation visited by the follow up team from TUK indicated that they have developed a bankable business plan which has assisted in improving the quality of their products through value addition translating to improved income and rate of payment to members.

Nyandarua

Oi kalau had infrastructure development going on in apiculture farming. They had a business plan developed using TUK format. The cooperative society in Kipipiri visited by the team from TUK had developed a business plan and used it to diversify products, they now process honey in addition to the dairy value chain. In South Kinangop, the farmer organisation had also developed a business plan which they are now using to implement most of their activities; they have acquired market linkages on French beans sing the same.

Siaya

Siaya had improved branded groundnuts but had no business plan written after training.

Kakamega

Kakamega, specifically Lumakanda dairy value chain had impressive value addition through product development and had developed two business plans under the instructions of service providers. They had registered a cooperative society and set up a saving credit arm as SACCO to assist members' access credit and developed a succession plan. Fish farmers had adopted product development strategies and were in the process of adopting contract farming.

Nyeri

Dairy Value Chain:

The farmers indicated that the training had enabled them to improve the way they were conducting their agribusinesses, but cited a number of challenges, such as technical skills in improving their production levels, dealing with cooperative issues management. The follow-up team visited one farmer and observed that the milk production levels were very low to give the farmer satisfactory returns.. A cow with capacity to produce 20 litres of milk is currently producing only 5 litres during the drought season and at most 8-10 litres when weather conditions improve. The team also observed that the cooperatives that farmers belonged to provided technical support on veterinary services, animal feed with major concentration on marketing the produce. The team observed that in some instances farmers with very little training in management skills were elected as officials of the cooperatives,

Potato Value Chain

The farmers under review increased production levels of Irish Potatoes from 5-6 bags to 146 bags twice a year on the same piece of land as before their production capacity due to knowledge transfer. The team observed that one farmer in particular farmer had a lot of entrepreneurial activities going on in his farm. He had a retail shop outlet from where he sold part of his agricultural produce to the villagers around him. Besides Irish potatoes, he also grew vegetables, macadamia and bananas which also seemed to be doing well. The cooperative's activities seemed to be limited to marketing of the products only.

Rabbits Value Chain

As a result of training, the rabbit farmer visited had converted his business from selling rabbits for meat, to breeding them and selling the young to other farmers who then reared them for meat. The team observed that this farmer was doing well; keeping more than 200 rabbits though he said he had capacity for about 300 which he was in the process of building his stocks to full capacity. Not much entrepreneurial activities were observed in this value chain, though there is potential and demand for products regionally

Embu

In Embu, the farmers the team interacted with are in mango, bananas, and passion and fish value chains. Mango value chain had made impressive progress since the training, fine-tuning their business plan, sources for funds from financiers and investors other than KAPAP grant. They had also secured a market for their product in Thika and were happy with the progress they were making. Ultimate goal is to build a juice processing factory in Embu. The passion value chains

also reported impressive production levels and revenues generated from their produce. Their biggest challenge seemed to be water for drip irrigation for the drier areas of the County, a matter that they said they were addressing with the help of the County government.

Banana and Fish Value Chains

The banana value chain was also doing well, reporting encouraging sales volumes and revenues being generated by farmers. Their business plan was complete and they were also sourcing for funds. Ultimate goal is to engage in value addition, to establish a factory where they can produce banana flour at commercial volumes.

Fish value chains also reported that they were doing well, with their focus mainly being to breed fish rather than concentrate on maturing them for sale. They breed then sale to individual farmers, who mature and sell their fish through the cooperative.

Kilifi

In Kilifi, the value chains the team followed up on were Bee keeping, local poultry, and African Bird's eye Chillies (ABEC) *Kachawawa*. In bee keeping value chain, the farmers were happy about the progress they had made since the training by KAPAP service providers. Most farmers kept between 6 and 12 beehives. The production levels were encouraging and the sales made were quite good for the farmers. The prices for honey had improved from 150/= per kg to 400/= an increase of three hundred shillings per kg. Kwale, the team followed up on Dairy goat, bee keeping, local poultry and citrus fruits value chains. The approach in this area was a combination of focus group discussion and visit to the farms.

In beekeeping, the reports were quite impressive and the farmers were excited about their production levels which they were working to increase. They were happy with the training they were getting and cooperative activities and services which had improved the prices of honey from 150/- per kg to an impressive 450/- per kg.

- Local poultry farmers were doing quite well. Their entrepreneurial skills were evident in the records they kept on their production and sales figures. Their cooperative was in the formative stages, but marketing their products together as a cooperative had improved the price of chicken meat from 200/- to 400/ per kg. Details of their production and sales figures are available in hard copy obtained from some farmers. Record keeping was a skill being taken seriously by this value chain.
- Fruits value chain was doing very well. The figures for production and sales of mangoes, oranges and passion fruits were quite impressive. Mangoes and oranges are actually considered as a cash crop in this area, with farmers doing large scale production of the two fruits.
- The team observed a very positive input by the County government of Kwale. There was a synergy between the KAPAP team on the ground with the County implementing officers, as well as the Governor's office not seen anywhere else.

1.7 Conclusion

From the foregoing analysis, the training had a positive impact on agribusiness activities based on the following:

Objective 1: Business Planning:

Each County Service Unit, except Siaya had trained farmers in business plan writing using the TUK format. The results show close to 80% service providers under review felt the TUK business planning format was instructive and easy to follow. The main challenges however were preparation of cash flow statements, risk, and ratio analysis.

Objective 2: Entrepreneurship Skills:

A number of farmers have registered their cooperatives, improved production capacity, and branded their products as witnessed in Nyeri, Embu, Siaya, Lanet and Kwale. Market development was witnessed in Lumakanda. The modules used were rated relevant and appreciated by participants as illustrated in the participants' evaluation section. The following service providers were found to have done knowledge transfer to their target groups and this resulted in value addition and improved production, marketing and resource mobilization and business planning skills:

Name	County	Value Chain
Odhiambo	Kwale	Local Poultry
Sheila Buhasio/ Protus Musoga	Kakamega	Dairy
Emily Wamalwa	Kakamega	Fish
Njue	Embu	Mango
Phoebe	Siaya	Groundnuts

1.8 Recommendations

We therefore recommend the following:

1. **Business Planning** - Training be mounted on the same but specifically for the farmers. Service providers require similar training with emphasis on cash flow projection, risk analysis and proposal writing. They need to improve their skills on how to relate content to reality. This will enable participants to improve on financial planning skills.
2. **Entrepreneurship skills** - Future training on this area should emphasise on market development skills, with focus on contract farming; succession planning; family business, global warming challenges matching innovations/value addition technologies.
3. KAPAP should integrate project activities with relevant County governments to create synergy. Kwale is a success story in this regard. To enhance entrepreneurship in farming activities, KAPAP should strengthen their monitoring and evaluation activities.
4. It was necessary to have excursions in between the theory lessons for the trainees to have hands on experience; this would help them access current and practical technologies.

5. Successful agri-preneurs should be engaged as motivational speakers during such trainings.
6. **Impact Assessment and Follow up-** Since agricultural activities are seasonal, training follow up exercise should be carried out at least half yearly.
7. It is necessary for each farmer organisation to strengthen their businesses by developing a bankable business plan and follow it as planned, this will allow them to capture value of their products and improve on market share.

1.9 References

- Kagali, R. N., Kioko, E. N., Osiemo, Z., Muya, S., & Wachera, C. (2013). Insect abundance and diversity on cultivated *Amaranthus* spp.(Amaranthaceae) in Meru County, Kenya. *American International Journal of Contemporary Research*, 3(7).
- Larsen, K., Kim, R., & Theus, F. (Eds.). (2009). *Agribusiness and innovation systems in Africa*. The World Bank.
- Ngugi, J., Muigai, S., & Muhoro, F. (2014). Transforming agriculture through contracted extension service delivery systems: the case of kenya's agricultural productivity and agribusiness project. *African Crop Science Journal*, 22, 905-915.
- Wanjala, W. B., Mputhia, J. N., Muriuri, W., & Ogola, W. O. (2017). Kenya Agricultural Productivity and Agribusiness Capacity Building Programs and Agribusiness Development. *Africa Journal of Technical and Vocational Education and Training*, 2(1), 152-162.