

PILOT STUDY REPORT FOR THEME 2.2

**IMPACT OF APPRENTICESHIP, INTERNSHIP AND MENTORSHIP PROGRAMMES
ON EMPLOYMENT OF YOUNG WOMEN IN KENYA**

**PRIMARY OUTCOME: INCREASE EXPOSURE OF YOUNG WOMEN TO WORK
READINESS PROGRAMMES TO 20% BY 2025 TO ENHANCE THEIR
EMPLOYABILITY**

SUBMITTED ON 23RD JANUARY 2022

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Abbreviations and Acronyms

AIM	Apprenticeship, Internship and Mentorship
KYEOP	Kenya Youth Employment Opportunities Project
MoE	Ministry of Education
STEM	Science, Technology, Engineering and Mathematics
SWT	School to Work Transition
WEE	Women’s Economic Empowerment

A brief summary of the report

The report is derived from a pilot study which was carried out in Kiambu and Nairobi counties to establish the accuracy and effectiveness of the research tools which were designed to carry out the actual study. The tools used consisted of a questionnaire and Key informant interview schedule. The questionnaire was to collect data from respondents who had gone through Apprenticeship, Internship and Mentorship (AIM) programs. The same tool was used to collect data from those respondents who had applied to join the programs but were unsuccessful. This was to be used as a control group to establish whether the programs were yielding the envisaged results. The Key informant schedule was to collect in-depth data from the policy formulators and implementers. The data from the two tools was to be triangulated according to the study objectives.

Apprenticeship, Internship and Mentorship (AIM) programs are considered as pathways through which individuals enhance their work readiness and chances of employment. However this was not the case for most of the participants in the study since most had not secured employment and those who had were still earning low wages which were not commensurate with their skills. The youths interviewed felt that the programme did not have plans for transition from internship to employment. According to them, this was major flaw in the design and implementation of the policy since most of them reverted to unemployment even after successfully completing the internship programme. Furthermore, they also complained that the government did not issue them with certificates as anticipated and hence had nothing to show that they attended and completed the programme successfully. According to the preliminary findings from the pilot study, the youth unemployment continues to be a major challenge despite the AIM programs which were designed to alleviate the situation. We hope the main study will yield more positive results.

For the study tools, they were proved to be feasible and hence were adopted with few amendments which made them more respondent friendly in preparation for the study.

1.1 Introduction

Work readiness has been defined as the extent to which a person is considered to possess the acceptable attitudes and attributes that render him or her ready for success in the work environment. (Caballero & Walker, 2010; Caballero, Walker, & Fuller-Tyszkiewicz, 2011). Apprenticeship, Internship and Mentorship (AIM) programs are considered as pathways through which individuals enhance their work readiness and chances of employment. These programs have the potential to impart practical skills, foster right work attitudes, and help new graduates affirm their career choices. Most of the studies done globally on work-readiness show that there is need for and development of employability skills for graduates as they are unable to explore their career due to skills deficiencies (Bilal, Rohani, Mumtaz and Haryanni, 2015), This is the context in which the need to carry out a similar study in Kenya is anchored.

In Kenya, different AIM programs have been in existence both in the informal and formal sectors. Further, they are found in both private and government sector. For example, to solve the challenge

of the increasing number of unemployment of the unskilled youths without the requisite skills, World Bank initiated an apprenticeship program called Kenya Youth Employment Opportunities Project (KYEOP) in collaboration with the government of Kenya in 2016.. The aim was to reach over 280,000 male and female youths aged 18-29 years by 2021. It aims at The purpose was to improve productivity,enhance job creation potential of existing micro-enterprises among self-employed youth and support innovative approaches to improve job and earning capacity for the youth.

Despite the benefits that students gain from work readiness programs like apprenticeship, internship and mentorship programmes (AIM), many of them especially females still lag behind as far as uptake of these programmes is concerned. Apart from imparting an individual with the practical skills needed to excel in a particular field or profession, they also help foster the right attitude needed to excel in their work. A host of cultural, social, and economic factors have in the past limited the exposure of girls and women to AIM programs. The result is that women and girls in Kenya continue to lag behind their male counterparts in work readiness and competitiveness in the job market. Further, Kenyan employers have raised concerns on work relevance of the skills possessed by young men and women. Data in Kenya shows that women are the most affected in this regard. Female participation in the Kenyan job market is 29.5 per cent compared to males at 36 per cent (Owino *et al.*, 2016). This gender disparity is more apparent in STEM related fields. Despite the fact that AIM programs have been implemented in Kenya, there is limited empirical evidence to show whether they work (or not) for women's economic empowerment. The proposed study aims at evaluating the effectiveness of AIM programs in enhancing young women's employment. Since AIM programs are meant to solve the challenge of non-readiness, unpreparedness for absorption to the labour market the study hopes to evaluate the effectiveness of these programs in promoting young women's employment by securing formal and non-formal career opportunities.. It also seeks to assess the impact of how mentorship programme designed to encourage female students to pursue STEM fields facilitate school to work transitions for young women and girls. Before undertaking the study, a pilot phase was undertaken in Kiambu and Nairobi counties in preparation for the actual study which is currently being undertaken in Kisumu, Mombasa and Nairobi counties and their environs.

The purpose of the pilot study was to establish the accuracy and effectiveness of the research tools selected for the actual study specifically the questionnaires and the interview schedules and to make observations which would inform the data collection process. The pilot phase also enabled the research team to have a feel of the research environment and informed the researchers and their assistants on how to build rapport with the target respondents.

1.2 Methodology

The pilot study collected a variety of data sets that were used to generate descriptive and inferential evidence on the linkages between work readiness programs on employability of young women and

men. Longitudinal research design was adopted. Data collection instruments included tracer surveys, administrative, individual and firm level questionnaires, and interview schedules. The study sample comprised a group of young women and men that were exposed to work readiness programs and another group which was not. Snowballing method was also used to net more beneficiaries of the target programmes. The data collected will be used to establish the impact of the work readiness programmes on women employment and income levels and career progression. Quantitative data analysis was conducted using STATA while NVIVO software was used in qualitative data analysis. Finally, to assess the impact of the Public Service Internship Policy 2016 on women’s employment in Kenya, the study used the retrospective survey methodology. Below are the findings of the pilot study.

1.2.1 Sample Statistics

Sample statistics for key variables in the study are presented in table 1.

Table 1: Sample Statistics for Key Variables (N=74)

Variable	Employed			Not Employed			TOTAL
	Total	Female	Male	Total	Female	Male	
Participation in AIMS Programme	40	27 (68%)	13 (32%)	21	13 (62%)	8 (38%)	61
Programme							
Internship	11	4 (36%)	7 (64%)	9	3 (33%)	6 (67%)	20
Apprenticeship	17	11 (65%)	6 (35%)	4	2 (50%)	2 (50%)	21
Mentorship	12	12 (100%)	-	8	8 (100%)	-	20
Age							
Below 20 Years	1	1 (100%)	-	1	1 (100%)	-	2
20 - 30 Years	49	33 (67%)	16 (33%)	21	13 (62%)	8 (38%)	70
31 - 40 years	0	-	-	2	1 (50%)	1 (50%)	2
Marital Status							
Single	40	27 (68%)	13 (32%)	19	14 (74%)	5 (26%)	59
Never Married	3	1 (33%)	2 (67%)	-	-	-	3
Married	7	6 (86%)	1 (14%)	5	1 (20%)	4 (80%)	12
AIM Period							
1 - 6 Months							
7 - 12 Months							
Involvement in Extracurricular Activities	49	33 (67%)	16 (33%)	18	11 (61%)	7 (39%)	67
Sector of Employment							
Financial Services	1	1 (100%)	-	0	-	-	1
Productive	4	2 (100%)	2 (100%)	3	-	3 (100%)	7
Education	5	4 (80%)	1 (20%)	1	-	1 (100%)	6
Services	29	20 (69%)	9 (31%)	4	2 (50%)	2 (50%)	33

Trade	11	7 (64%)	4 (36%)	6	6 (100%)	-	17
Others	0	-	-	2	2 (100%)	-	2
Highest Level of Education							
Secondary School Education	14	11 (79%)	3 (21%)	9	9 (100%)	-	23
Post-Secondary Certificate	7	5 (71%)	2 (29%)	1	-	1 (100%)	8
Diploma	5	3 (60%)	2 (40%)	2	2 (100%)	-	7
Degree	23	15 (65%)	8 (35%)	11	4 (36%)	7 (64%)	34
Masters	1	-	1 (100%)	1	-	1 (100%)	2

The figures are given in actual number of respondents and those in (brackets) are in percentages.

The data presented in table 1 captures a sample of young people (women and men) aged below 40 years. It captures a combination of young people; those who went through an AIM program (82%) and those who did not (18%). For those who went through an AIM programme, 40 (66%) were employed while 21 (34%) were not employed. A majority of those in the sample (95%) were aged between 20 and 30 years. In terms of marital status, 62 (84%) were not married while 12 (16%) were married. This can be explained by the age group (20 to 30 years) that was targeted in the pilot study. It could also be construed that the primary focus of this group is to get means of sustaining their livelihoods. For the female respondents they opined that their primary agenda was to get a means of livelihood while the men said that marriage was not an option for them since they were not in a position to support families.

The table also indicates that a majority of the respondents (91%) were involved in extracurricular activities in their years of studying. It was noteworthy that the interns who had participated in extra curricula activities had better opportunities of getting employment in comparison with their counterparts. Most of the respondents worked in the services sector (50%) followed by Trade (26%), then productive (11%) and Education (9%) sectors. Respondents who held a university degree were 46% while those with secondary school education as their highest level of academics were 31%. This implies that the rest (those who held post-secondary certificate, diploma and master’s degrees) were 23%. Generally, there were more young women (66%) in the sample than the young men (34%). This was expected given that the policy design was to attract more women than men since they are underrepresented in employment as shown by the literature review.

1.2.2 Descriptive Analysis

The total sample size for the pilot was 74, where 66 percent were females and 34 per cent were males. As can be observed in figure 1, young women who were employed were 69 percent of all sampled young women while 31 percent of sampled young women did not hold an employment position

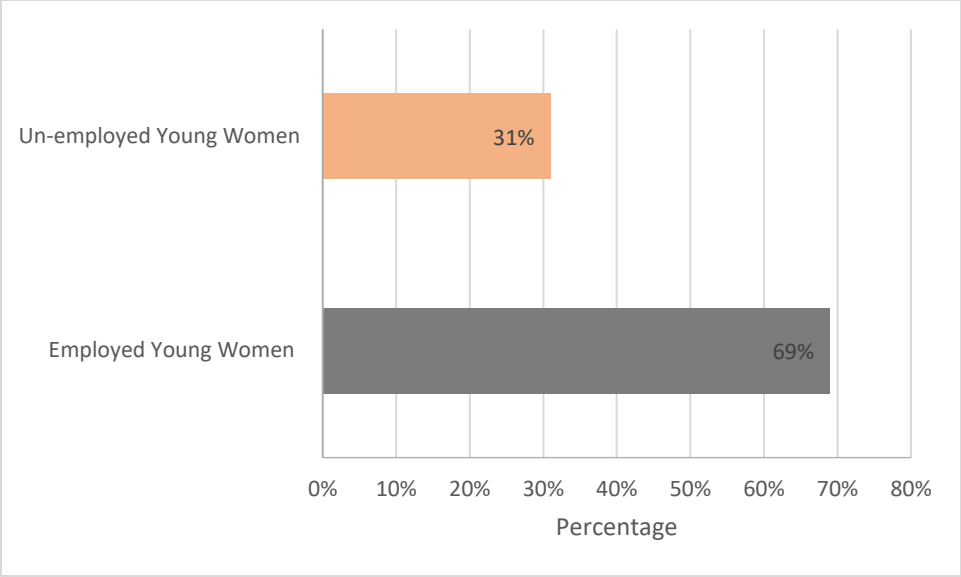


Figure 1: Employed/Unemployed Young Women

Data Source: Pilot Data collected from Kiambu and Nairobi

From the sample, those who had participated in any of the three AIMS programme were 82 per cent with 33 per cent having gone through the internship programme, 34 per cent through the apprenticeship and 33 per cent through mentorship programme.

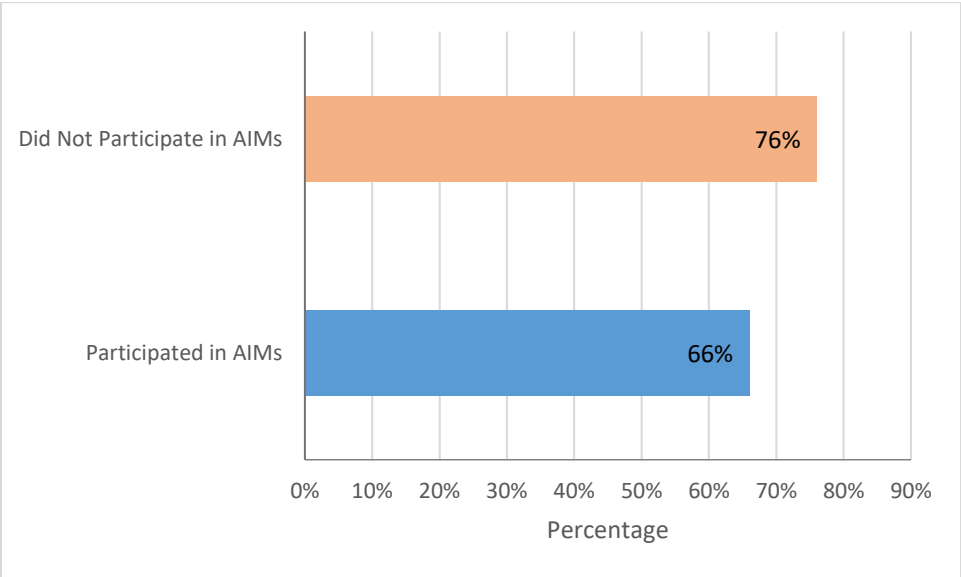


Figure 2: Employment Status: Programme Participants Vs Non-Participants

As demonstrated in figure 2, 66 per cent of those who had gone through the AIMs programmes were employed while 34 per cent were unemployed. For those who did not participate, 10 out of 13 were employed (76 per cent). The employment status was dis-aggregated per programme; the results are displayed in figure 3.

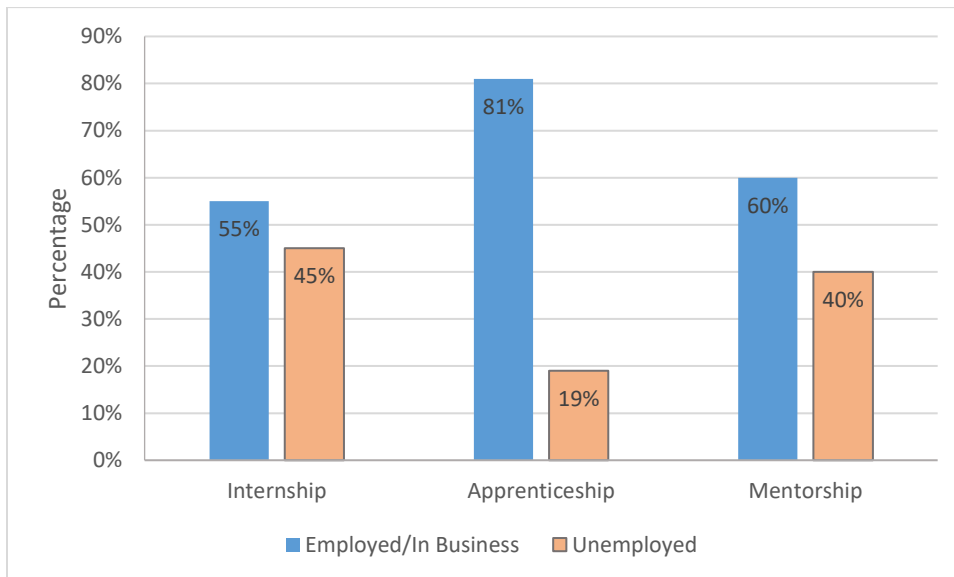


Figure 3: Employment Status per Programme Attended

For all the programs, the percentage of respondents that were either employed or in business was higher than those who were unemployed. For those who had gone through the internship programme, 55 per cent were employed/in business compared to 81 per cent and 60 per cent of those who had gone through apprenticeship and mentorship respectively. The unemployment rate was lower for those who had gone through apprenticeship (19 per cent) compared to those who had gone through internship (45 per cent) and mentorship (40 per cent) programmes.

Regarding education status, four categories were considered, that is, those who had secondary education, certificate, diploma and those who had an undergraduate degree. Table 1 shows the results of the employment status for the four categories dis-aggregated by gender.

Table 2: Employment Status of Participants by Highest Education attained.

	Secondary School Education.	Certificate	Diploma	Degree
Female	50%	100%	50%	81%
Male	67%	100%	50%	50%
ALL	52%	100%	75%	68%

Table 2 shows that 100 per cent of the participants who had a post-secondary certificate were employed. For the female who had participated in the AIMS programme, 81 per cent of those who had a degree were employed while only 50 per cent of those who had secondary school education or diploma were employed. For males who had participated in the AIMS programme, 67 per cent of those who had secondary school education were employed compared to 50 per cent who had diploma or degree level of education. This implies that education at the degree level gave young women a better chance of employment compared to diploma or secondary. This is not the case for the young men.

Involvement in extracurricular activities also had different employment outcomes for the two gender categories as demonstrated in figure 4.

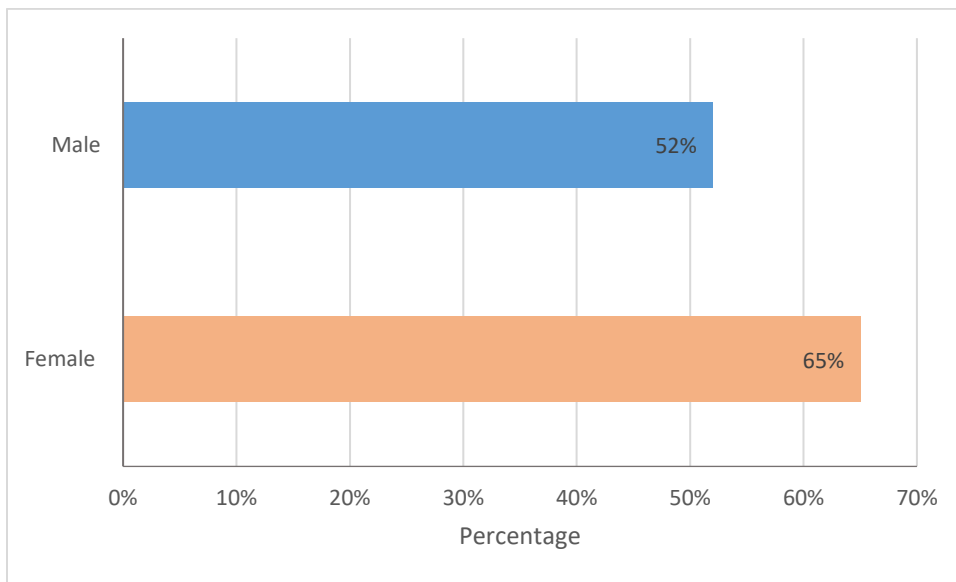


Figure 4: Employment Status per Gender for those who participated in Extracurricular Activities

The young women who had participated in an AIMS programme and had also participated in extracurricular activities performed better in securing employment than the young men who had similar attributes. This demonstrates the fact that extracurricular activities, in addition to attending an AIMS programme, boosted the employment chances for young women.

Table 3 shows the employment status for both young women and young men in terms of the sector of employment.

Table 3: Employment Status by Sector of Employment

Sector	Female	Male
Financial Services	4%	0%

Productive	0%	15%
Education	11%	0%
Services	67%	62%
Trade	18%	23%

None of the interviewed young women worked in the productive sector (Manufacturing, Real Estate, Energy, Agriculture, Tourism, Mining etc.) while none of the young men worked in the financial services and the education sectors. The sectors that have the highest employment for both young women and young men are services sector (ICT, Advisory, Research, Hygiene, HR, Security etc.) and Trade (Retail, Wholesale, Distributorship, Exports etc.)

1.2.3 Econometric Analysis

We subjected our data to parametric estimations. Since our dependent variable is binary in nature (employment status), a binary choice model was considered. In this case, a logit model was found suitable. For robustness checks, probit and linear regression models were estimated; the results are in the appendices. The estimated model dropped data for those who did not participate in an AIM programme since there were only a few observations for this category. Table 4 presents the results of the Logit estimation.

Table 4: Logit Estimation Results

Logistic Regression	Number of Observations = 61	
	Wald chi2(7) = 16.52	
	Prob> chi2 = 0.0208	
Log pseudolikelihood = -26.958143	Pseudo R2 = 0.3136	
Dependent Variable	Employment Status (1=employed)	
	Coefficient	z
Program		
Apprenticeship	5.502***	3.58
Mentorship	2.176*	1.96
Highest Level of Education		
Certificate and Diploma	4.133*	1.77
Bachelor's Degree	4.542***	3.52
Gender	0.590	0.75
Marital Status		
Married (Yes)	0.814	1.00
Membership to a Professional Org	1.476	1.63

Constant	-5.568	-3.44
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Source: Authors' Estimations

*, **, *** Significant at 10, 5 and 1 per cent level respectively.

The coefficients of a logit model cannot be interpreted directly. Therefore, as is the norm, we estimated the marginal effects of the model whose coefficients are interpretable. The results are presented in table 5.

Table 5: Marginal Effects

	dy/dx	z
Program		
Apprenticeship	0.554***	4.76
Mentorship	0.263*	2.21
Highest Level of Education		
Certificate and Diploma	0.491*	2.18
Bachelor's Degree	0.532***	7.25
Gender	0.085	0.77
Marital Status		
Married (Yes)	0.118	1.03
Membership to a Professional Org	0.213*	1.75

Note: dy/dx for factor is from the base level.

Source: Authors' Computations

*, **, *** Significant at 10 per cent, 5 per cent, and 1 per cent level

Due to the consideration of participants only, self-selection bias was suspected to be present. We tested for self-selection bias using the inverse mills ration (IMR) which confirmed its presence. In this case, the two stage approach where the IMR was introduced in the second model was adopted. However, as can be seen in appendix (x), the IMR variable was dropped indicating that it was omitted and therefore not significant.

Results in table 5 indicate that those that had gone through the apprenticeship programme were 55.4 percent more likely to get employed than those in the internship programme (internship programme is the base category). The mentorship variable was also significant indicating that those who went through the mentorship programme were 26.3 percent more likely to get employed than those in the internship programme. Table 5 also shows that those that had a Certificate and Diploma were 49.1 percent more likely to get employed than those that had a secondary school certificate (base category). Those with a Bachelor's degree were 53.2 percent more likely to get employed than those that had a secondary school certificate. Those who were members of a professional organization were 21.3 percent more likely to get employed than those who were not

members of such an organization. Finally, gender and marital status were found not to have significant effects on employment status. These results therefore indicate that participation in an AIM programme has a significant consequence on the employment status. More specifically, the programme that one does, the level of education and membership to a professional organization were significant determinants of employment status for young women.

A SUMMARY OF FINDINGS

1. Participating in an AIM programme enhanced the probability of employment for young men and women.
2. Those that had gone through the apprenticeship and mentorship programmes were more likely to get employed than those who undertook the internship programme.
3. The services sector provided most of the employment opportunities for the respondents.
4. Co-curricular activities, in addition to attending an AIM programme, boosted the employment chances for young women
5. Education level was a significant factor that influenced employment status. Those that had achieved a higher level of learning (those with a degree, diploma or certificate) had a higher probability of employment than those with a lower level of learning (secondary education).
6. Those who were members of a professional organization were more likely to get employed than those who were not members of such an organization.
7. Gender and marital status were found not to have significant effects on employment status.

1.3 Observations

Most of the youths were aged between 20-30 years of age, which is in line with the age group that need mentorship to gain career and life skill mentoring. Majority were single with a few married and majority got to know more about the program from friends.

All youths interviewed acknowledged to have engaged in co-curricular activities while in school such as sport, music and drama. This indicates that High schools in the country continue to provide students with opportunities to nurture the talents among young people and not just the academic aspect. Those with extra curriculum experience were also more likely to get employment opportunities compared to those who did not.

Apprenticeship, Internship and Mentorship (AIM) programs are considered as pathways through which individuals enhance their work readiness and chances of employment. However this was not the case for most of the participants in the study since most had not secured employment and those who had were still earning low wages which were not commensurate with their skills. From the youth, they felt that the programme did not have plans for transition from internship to employment. This they felt was major flaw in the design and implementation of the policy since most of them reverted to unemployment even after successfully completing the internship programme. Furthermore, they also complained that the government did not issue them with

certificates as anticipated and hence had nothing to show that they attended and completed the programme successfully. Thus youth unemployment continues to be rampant which limits full exploitation of the youths potential and abilities in the country.

The youths who were successful to be recruited for the AIM program acknowledged that the programs were an eye opener to their careers and gained valuable skills and knowledge on the job training that helped have opened new horizons on their career path. Specifically, the respondents offered the following insights into the benefits of the programme.

‘I gained new skills in my profession. This statement was made by 37% of of respondents. This is significant for it shows that the programme was able to meet the objectives of its initiation. Furthermore, the respondents also appreciated that they were able’ to gain new networks and even met their current employers through the programme. Additionally they also appreciated that they gained insights on how government works. To crown it all, the respondents felt that they gained experience and exposure which would be a torch in their future career path.

Further, most of the respondents were cooperative and responded to all the questions that were posed. Majority of the questions in the questionnaire were clear and unambiguous and the questionnaire takes a reasonable/comfortable time to be administered to the end.

1.4 Conclusion

The pilot study concludes that the tools can be used to meet the objectives of the survey.

They can elicit the data needed for the main study.

The preliminary findings from the study show that the youth who went through the programme were better off in securing employment compared to their counterparts who did not go through the programs. This was more so for the young women compared to the young men.

It also emerged that the Apprenticeship program was more likely to be a path to employment compared to Internship and Mentorship.

It was also evident that education level was important factor in securing employment opportunities. Degree holders had better chances than diploma and certificate holders and this was even more favourable for young women compared to the young men.

Surprisingly, young women who had participated in extra-curricular activities were more likely to secure jobs than their male counterparts. This show extra-curricular is an added advantage to young women than to young men in accessing jobs.

1.5 Challenges:

1. Some respondents were reluctant to appear for face-to-face interviews. They requested for online interviews.
2. Some respondent requested for compensation before offering an interview. For ethical reasons, such respondents were dropped from the sample.
3. Some respondents (about 30%) declined to be involved in the exercise.
4. It was difficult to find programme **non-participants** to be included in the sample.

5. Some respondents in the sample were residing outside the selected piloting areas (Nairobi and Kiambu). Online interviews were conducted for such respondents.
6. Some questions need to be added to the questionnaire - such as how the programme can be improved to better serve young women in future.
7. Participants had queries outside the mandate of the exercise (such as post-internship treatment - they had been promised jobs which were not forthcoming).
8. most of the respondent that the program failed to provide certificate as promised during the program (Internship and KYEOP)

1.6 Recommendations:

INSTRUMENTS

1. Multiple data collection approaches (online, telephone, email and face-to-face interviews) emerged as an effective approach to increase the response rate.
2. There is need to build a data base for non-participants before embarking on field work.
3. It emerged that there was need to revise the questionnaire to capture all the relevant variables and information.
4. The questionnaire also require to be separated for each to address each programme
5. The questionnaires for policy makers and implementers have been modified to be used as interview schedules.
6. It also emerged that there is need to establish a reference point to refer respondents who have questions that are outside the mandate of the project.

Recommendations on Study Findings for Mentorship Programme:-

1. Schools should be encouraged to have a database of their alumni including contacts to make it easier access.
2. A policy on tracer study should be developed to enable schools to maintain a strong network of their alumni.
3. A policy on STEM mentorship would make it easier to implement programs in a structured manner thus leading to positive outcomes.
4. The AIM project pilot aim was to cover Nairobi and Kiambu. However, with regard to the Mentorship cohort which was leveraging on the UNESCO-GoK STEM mentorship program had a different focus in terms of geographic coverage. It is therefore important to take cognizance of this dynamic that is unique to the STEM Mentorship program.
5. Sensitization of the respondents through a workshop prior to administering the tools would have helped demystify the noble initiative, thus leading to process ownership.

Recommendations on Study Findings for Internship Programme

1. Youth at all levels of education need to be encouraged to participate in extra curriculum activities while at school for this gives them a competitive edge when they seek for employment opportunities later in life.
2. Employment status for those who had gone through the internship programme was lower (55%) compared to those who had not gone through it (76%). However, it should be noted that the sample size for those who had gone through internship was higher (20) compared to those who had not gone through internship. Therefore, there is need to draw equal representative sample sizes from those who had attended internship and those who did not so as to have more accurate results.
3. Internship programme is effective in enhancing employment of young women to a certain extent .Hence the students need to be encouraged to seize internship opportunities when the are available for this will enhance their employability.
4. Employment upon completion of internship should be done in a structured way so as to make the programme more attractive. This may require policy formulation given that many interns felt that the government did not a clear path to engage the interns after completing their internship programme. This is critical given that some respondents opined that some of them committed suicide due to depression and hopelessness emerging from their unmet needs.
5. It is also important for interns to be absorbed in sectors which are in tandem with their professional careers. Some interns expressed frustration that they were placed in sectors which did not add value to them.
6. Supervisors of interns need to be sensitized on the goals of the programme to enable them to accord the interns the support they require during internship.
7. Employers should be encouraged to develop and share with training/learning institutions a database of skills they require from potential employees so as to enable teaching institutions tailor their training for the job market.

Recommendations on Study Findings for Apprenticeship Programme:

1. Respondents should be sensitized through a workshop prior to the actual application of the study tools so as to enable process ownership.
2. Participating in apprenticeship enhanced employment of young women and men to some extent. However, other factors such co-curricular activities and level of education is important and should be taken into consideration.
3. There should be policy formulation to aid employment upon completion of apprenticeship programme so as to make the programme more attractive.
4. Apprenticeship programme provides a higher probability of getting an employment upon completion and therefore should be more encouraged.

References

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