INTERNSHIP IMPACT ASSESSMENT REPORT



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EXECUTIVE SUMMARY

The findings of this survey demonstrated a strong positive impact of the internship program on the graduates' employment. A graduate who attended this program has 2.7 times more chance to get an employment than the graduate who did not.

Other variables explaining the graduates' employment are sex, the field of studies and the number of years that a graduate spent seeking for an employment.

A graduate male has 1.7 times more chance than a graduate female to get an employment, and a graduate of a given year has 1.6 times more chance to get a job than a graduate of the following year.

The findings also highlighted the relevance of the field of studies. The graduates from law, social science and veterinary are less likely to find an employment than their counterparts from engineering, economics, agriculture, management and ICT.

The gender was respected in placement with 54.4% of male and 45.6% of female. More than two thirds of interns lived in Kigali city. Moreover, 64.1% were placed in Kigali City.

The bulk proportion of interns had a Bachelor's degree (92.8%) and attended public (47.6%) and private institutions (45.6%). Only 6.0% and 0.8% attended respectively African and Asian institutions.

However, it seems that the public institutions train the technicians (veterinarians, agronomists, engineers) while the private institutions train managers, lawyers and economists. Social science and ICT are found as well as in public and private institutions.

The best ways to learn about the existence of internship program are by channel of friends and relatives (78.0%) and the website (38.0%). After getting the information from friends and relatives, the graduates consult the RDB website to check its accuracy.

About 80.9% of interns acquired the technical knowledge related to their field of studies and 95.8% were supervised by qualified persons. So, the interns were very satisfied with the internship and 78.3% of them rated the program for more than 70 points per cent.

Furthermore, the supervisors declared the interns met the requirements of the institution as well as in practical knowledge (87.8%) and qualitative skills (90.4%), even though they recommended them to build their skills in ICT, technical knowledge and language, especially English.

In addition, 17.7% of interns were offered an employment by the host institution, mainly in the public sector (97.7%).

After the internship, 62.0% of interns, found an employment. 16.0% in a permanent employment. Respectively 15.2% of interns got an employment before the end of the internship and 28.6% within one month.

While the proportion of interns who worked before internship program (44.8%) was inferior to the non-interns after graduation (59.1%), the internship program increased that proportion to 62.0%.

During the survey period, 39.2% of interns were employed, 17.2% in permanent employment. However, only 14.7% of the interns worked in the field matching with their field of studies. The public and private sector recruited respectively 67.7% and 24.0% of them. Only 3.2% have created a small business even though they were still looking for a wage employment.

In addition, since their working age, 78.4% of the interns have at least once worked either in a temporary or a permanent employment against 59.1% for the non-interns. In other words, 21.6% of interns never worked in their life against 40.9% of non-interns.

Among the factors contributing to the job, the interns cited the technical skills (86.3%), the internship program (80.3%), commitment in seeking a job (54.7%), experience (44.2%) and qualitative skills (43.2%) to be helpful.

After graduation, 59.1% of non-interns got an employment. 10.0% of them in permanent employment. 6.3% and 13.0% got an employment respectively before graduation and within one month after graduation. 34.8% of them worked in an employment matching with their area of qualification.

During the survey period, 26.1% of non-interns were employed, 12.5% in permanent employment. 4.6% held a small business while continuing seeking for a wage employment. Among the non-interns employed, 46.7% and 40.0% worked respectively in private and public sector.

About the factors contributing to the recruitment, the non-interns declared technical skills (86.7%), commitment in job seeking (43.3%), network (34.4%) and qualitative skills (32.2%) to be helpful.

Since 2009, the Rwanda Development Board (RDB), through its Department of Human Capital and Institutional Development (HCID), with the collaboration of the Youth Employment Steering Committee, has initiated the internship program destined to the University and TVET graduates.

The objectives of this program are to provide the graduates with the capacity reinforcement by joining the theory to the practice, the professionalism development, the effective work competencies and employability skills creation. This survey aimed to assess the impact of the program on the graduates' employment. It was conducted in the five provinces of the country.

1.1 Objectives

The main objectives of this study are to:

- Evaluate the intern satisfaction in regard to the program;
- Assess the acquired and needed practical and qualitative skills;
- Collect the intern propositions to improve the program;
- Collect the appreciation of the supervisors on the intern performances;
- Identify the employers of the graduates;
- Determine the factors that contribute to the graduates' employment;
- Determine the impact of the internship program on the graduates' employment.

1.2 The survey methodology

To carry out a comprehensive and reliable survey, the databases of the interns and non-interns were used to select the sample. The key respondents were the interns, the non-interns and the supervisors of the interns of the last phase (February-August 2012). The interns and non-interns were selected randomly from the databases. So, the respondents were located countrywide.

The survey included three questionnaires:

- Questionnaire related to interns (experimental group);
- Questionnaire destined to non-interns (control group: this group is composed by graduates that applied for the internship, but are waiting to be placed);
- Questionnaire to gather the supervisor opinion on the intern performances.

1.3 Sampling framework

During the 2009/2012 period, there were 40 211 graduates. Among them, more than 4 000 attended the RDB internship program.

The number of interns and non-interns to be selected was calculated based on Yamane's formula (Yamane, 1967)

Where N = Population size;

n = sample size $n = N/(1 + N^*(e)^2)$

e= level of precision. A precision of 5% was assumed for this survey.

To ensure all sample estimates reflect the population parameters, weights for the different strata against the respective sample sizes were calculated. The weights were computed using w = p/P, which was used to weight the sample results;

Where P = the strata size

P = the population size.

Table 1: Sampling Framework

STRATA	STRATA SIZE	RESULTS OF SAMPLING	REAL SAMPLE SIZE
INTERNS	4 000	40	250
NON-INTERNS	36 211	356	350
SUPERVISORS	555	232	187

The experimental group sample (interns), which was initially 40, was oversampled by 525% to ensure comprehensive results of graduates who attended the internship.

1.4 Data collection

Given the respondents were located countrywide and to ensure the need that as many as possible individuals were included in the study, face to face and telephone interviews were deemed to be the most appropriate and cost effective methods.

So, the data of experimental and control groups were collected in 3 phases:

- An enumerator called each of the respondent selected;
- If the respondent lived in Kigali city, an enumerator took an appointment to administrate him/ her the questionnaire face to face at home;
- Otherwise the telephone interview was conducted.

In addition to the experimental and control groups, the intern supervisors were questioned face to face to collect their opinion on intern performances.

1.5 Report structure

After the data entry cleaning processes, the data were analyzed. The report is composed by the findings in four modules and the assessment of the impact of internship program.

The first two modules present the profiles of the interns and non-interns. It provides the insights into their characteristics such as sex, age, the place of living, the field of studies and the status of training institution.

The third module describes the internship program. It evaluates the technical knowledge and on job training skills acquired, the appreciation of the supervisors on interns' performances and the suggestions to improve the program.

The fourth module of the findings covers the employment of interns and non-interns. It analyzes their employment in all aspects, ranging from the time needed to get the first employment, the duration of the employment contract to the status of employers.

The last chapter of this report covers the Assessment of the impact of internship program. It has the purpose of determining the impact of the program on the graduates' employment. It also determines the variables contributing to the graduates' employment.

2.1 INTERN PROFILE

Table 2: Interns by age and sex (%)

AGE	FEMALE	MALE	TOTAL
23-27	13.2	22.0	35.2
28-32	26.4	24.0	50.4
33-37	4.8	6.8	11.6
38-43	1.2	1.6	2.8
Total	45.6	54.4	100.0

85.6% of interns are between 23 and 32 years old. Female and male represent respectively 45.6% and 54.4%. (see table 2 and figure 1).

Figure 1: Interns by sex (%)



More than two thirds of the interns lived in Kigali City (69.2%). According to the 2012 population and housing census, Kigali city has increased by 48.4% its population during the last 10 years.

It is the second province to do so after Eastern province (53.0%), and the young graduates are the most likely to migrate in Kigali City due to the opportunities it presents in terms of employment.





Figure 3 shows that 92.8% of interns have a Bachelor's degree, what is consistent with the reality on the ground. According to the survey report released in August-September 2010 by the National Council of High Education, 74.1% of the graduates had a Bachelor's degree, 24.0% a Diploma degree and 1.9% a Master's degree.

Figure 3: Interns by level of qualification (%)



In terms of field of studies, the public institutions mainly train in technical skills (veterinary, agriculture and engineering) while the private institutions train in management, law and economics.

The graduates from management, ICT, law and economics are mainly placed in Kigali City thanks to its opportunities. However, those from agriculture and engineering are placed countrywide, because it is possible to find the host institutions in rural areas, especially the agriculture projects.

In general, the interns have been placed in the department related to their field of studies and supervised by qualified persons. The Interns from agriculture and ICT are the best placed thanks to the clear definition of their responsibilities. However, the interns from management and economics had a lot of choices and are then placed accordingly



Figure 4: Interns by channel to know the existence of the internship program (%)

2.2 NON-INTERN PROFILE

The main objective of this study was to assess the impact of the internship program. For the purpose of comparing the interns and non-interns in terms of employment, 350 graduates were sampled from the applicants for internship who were still waiting for their placement. As like for interns 82.2% of non-interns are between 23 and 29 years old. Female and male represent respectively 44.4% and 55.6% (see figure 5).

Table 3: Non-interns by age and sex

	٢	1ALE	FEMALE		FEMALE TOTAL		TAL
Age	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
23 - 27	89	55.3	72	44.7	161	100.0	
28 - 32	73	54.5	61	45.5	134	100.0	
33 - 37	23	63.9	13	36.1	36	100.0	
38 - 45	10	50.0	10	50.0	20	100.0	
Total	195	55.6	156	44.4	351	100.0	

Figure 5: Non-interns by sex (%)



Figure 6: Non-interns by education level (%)



90.9% of non-interns have a Bachelor degree. Some diploma from veterinary and agriculture (TVET) also applied for the internship.

Figure 7: Non-interns to learn of the existence of internship program (%)



2.3 INTERNSHIP PROGRAM

2.3.1 Technical knowledge acquired

This section aims at evaluating the daily activities of the intern and the interaction with his/her supervisor and the RDB representative.

Administrative responsibilities are those which are not related to the field of studies of the interns. They include responsibilities such as receiving the public, digitalization, scanning and photocopies.

The interns who had administrative responsibilities are mostly from the field of studies of social science, management and law. Different courts were indeed proceeding to the scanning and digitalizing the verdicts. It was the task of the interns, even though they would like to assist to the audiences. In addition the ICT interns were most of the time supporting the staff of the host institution in terms of ICT.

The interns with technical training (veterinary, agriculture, ICT and engineering) were more likely to have responsibilities matching with their field of studies. This is because their knowledge was oriented to a specified area and most of the time they worked on the field not in the office.



Figure 8: Interns by knowledge acquired (%)

In general, more than two thirds of interns had the schedule of their responsibilities at the beginning of the internship. The interns from the social science education were more likely to have a schedule and those from veterinary the least. Those who did not get the schedule were given responsibilities daily.

Nevertheless, the interns were well supervised, especially those placed in departments of veterinary and management. 90.6% of interns had at least two planning meetings a month with the supervisor.

The interns placed in the ICT department mainly played a role of supporting the staff in terms of ICT. As there was not new knowledge, the host institution probably deemed the supervision was not necessary.

This explains partly why only 20.0% of them received a supervisor.

Moreover, about two thirds of interns did not receive a visit of the RDB representative while it was their strong desire.

2.3.2 On-job training skills acquired

The objective of the internship program is to enable the interns not only to acquire the necessary experience required by the employers to occupy an employment but also to provide them with on-job training skills. This objective has been achieved by acquiring various skills related to their field of studies, such as using a computer, writing a report and speaking before a public.

The interns working in the office (social science, ICT, management, economics, engineering and law) got many opportunities to use a computer while those working on the field (veterinary and agriculture) got the knowledge of writing report and public speaking.

Engineers, agronomists and economists did report their daily work. That's why many of them wrote a report. Moreover, the interns working on the field (agriculture, veterinary, social science) got the opportunities to speak before a public when they had to explain procedures and instructions to the team they were working with. Some interns got an opportunities to do research (agriculture and engineering), to audit companies (management) and to be trained in team working and customer care.



Figure 9: Interns by the on-job-training skills acquired (%)

2.3.3 Duration of the internship program

The internship is scheduled to last 6 months and 88.3% of interns completed. Only 11.7%, stopped before 6 months, mainly because they had found an employment. Other reasons were illness and the placement far from home.



Figure 10: Interns by duration of internship (%)

Among the interns who did not complete 6 months about 60% stopped the program before 3 months. Social science, ICT, agriculture and engineering form the highest number of those who did not complete.

2.3.4 Interns' ratings on internship program

The interns rated the internship program out of 100 points by comparing their expectations before integrating the program with the results they achieved. The following ratings were used: disappointed (below 50%), satisfied (50-70%), very satisfied (70-80%) and beyond expectations (more than 80%). The outcomes are showed in figure 11.



Figure 11: Interns by level of satisfaction (%)

In general, 78.3% of the interns are at least very satisfied with the internship program. The most satisfied are those who exercised the technical responsibilities (veterinary, agriculture and management). They got opportunities to implement the theory on the ground, to acquire more practical knowledge and experience.

89.7% of those who got employment in the host institution after the internship or elsewhere admited the role of internship in getting employment and were very satisified with the program.

2.3.5 Supervisors' opinion on the intern performances

The supervisors of the interns gave their opinion on the interns' performances in as far as meeting their expectations were concerned. The items evaluated include practical knowledge and qualitative and soft skills.

The ratings used were as follow: 4= exceeds an expectation; 3= meets an expectation; 2= below an expectation and 1= unsatisfactory.

According to figure 12, most of interns (88.9%) met the host institution expectations with 33.1% performing beyond the expectations. Working in a team, meeting technical skills requirements and understanding job procedures are their strengths.

However, 55.1% of Agronomists performed below expectations. This could be partly explained by the fact that some of them worked from upcountry, in marshlands, in difficult conditions coupled with the small amount of facilitation allowance.

RATING	1	2	3	4	TOTAL
ITEM					
Meeting technical skills requirements		7.1	51.6	41.3	100.0
Managing and leading a work team		11.3	53.6	35.1	100.0
Running activities	0.5	15.2	53.8	30.5	100.0
Running a project/study	1.9	14.0	60.5	23.6	100.0
Working in a team	1.1	4.9	44.3	49.7	100.0
Writing report	3.4	12.6	56.9	27.1	100.0
Public speech		13.9	58.3	27.8	100.0
Understanding job procedures	1.6	5.4	53.5	39.5	100.0
Recognizing problem situations		10.7	67.9	21.4	100.0
Carrying out own initiatives	1.6	10.9	56.5	31.0	100.0
Providing exemplary quality service	0.5	11.7	48.8	39.0	100.0

Table 4: Interns by practical knowledge and ratings obtained (%)

Figure 12: Interns by appreciation of the supervisors (%)



About qualitative and soft skills, the interns demonstrated weakness in starting and living work on time, responding to criticism and balancing work and personal life.

Some interns didn't consider themselves as workers and were amazed when the supervisors demanded them to behave accordingly. So, they were also always looking at job opportunities and were diverted from

their work.

However, personal and work hygiene, sharing information and knowledge and interacting with colleagues and supervisors are their strengths. Once again, lawyers and veterinarians outperformed others.

RATING	1	2	3	4	TOTAL
ITEM					
Starting and leaving work at time	1.1	14.6	37.2	46.8	100.0
Interacting with colleagues and supervisors		9.6	43.1	47.3	100.0
Sharing information and knowledge	0.5	7.9	59.7	31.9	100.0
Balancing work and personal life	1.1	10.8	57.0	31.1	100.0
Personal and work hygiene		3.7	46.3	50.0	100.0
Responding to the direction and criticism		12.2	59.1	28.7	100.0
Confidence		9.6	55.3	35.1	100.0

Table 5: Interns by qualitative and soft skills and ratings obtained (%)

Despite weaknesses observed in some of the interns, 97.2% of the supervisors were ready to consider the intern for employment if a position was available. They nevertheless demanded them to have some additional knowledge such as ICT skills (46.5%), job specific technical skills (44.9%) and language skills (32.6%), especially English.

2.3.6 Impact of Akazi kanoze training

Some of interns received training of Akazi Kanoze before the internship. This program covers various items related to the behaviors in working place. This section aims at assessing if its beneficiaries outperformed others during the internship. The assessment is based on the supervisors' ratings on the interns' performances. It is worth reminding the supervisor could not distinguish the two groups.

A multivariate analysis (Manova without intercept) was performed using 2 groups (interns who went through Akazi Kanoze training and interns who did not) as independent variable and the 18 items as dependent variables.

That training plays a critical role in internship program and the test demonstrates the difference between the two groups (P = 0.000). In other words, the interns who received the Akazi Kanoze training behaved differently from others during the internship in regard to the 18 items.

By descending order, the interns who attended Akazi Kanoze training outperformed others in personal and working hygiene; recognizing problem situations and identifying issues, generating alternative solutions and making changes as needed; meeting technical skills requirements and implementing the theory courses; working in a team; sharing information and knowledge; managing and leading a work team; confidence; interacting with colleagues and supervisors; understanding job procedures, policies and responsibilities; responding to the direction and criticism; speaking before a public; balancing work and personal life; running project/study; providing exemplary quality service in his/her daily activities; carrying out own initiatives; running activities; starting and leaving work on time; writing report.

2.3.7 Suggestions from interns and their supervisors

The interns and their supervisors gave the suggestions susceptible to improve the internship program.

As shown by the table 6 below, most of the interns would like to benefit from the follow up of RDB representative in their host institutions (50.4%), to see the amount of facilitation allowance being increased

(23.2%), to be placed in proximity venues of their birth place and given the activities useful to their capacity building (19.6%).

Some interns, indeed, abandoned the program because they were placed far from their birth place, where they didn't have relatives to accommodate them. Some others worked as messengers, data entry clerks (cases of the courts where the interns digitalized the verdicts) or ICT supports.

However, most of them deemed internship program helpful in getting an employment. Some interns expressed concerns about the "after internship", because when they don't find an employment rapidly, they forget the skills acquired and the program becomes useless. That's why they wished an additional program to maintain the momentum. Some of them are not paid on time because of administrative procedures.

Table 6: Intern Suggestions (%)

SUGGESTION	PERCENTAGE
Increase follow up	50.4
Increase facilitation allowances	23.2
Consider proximity placement	19.6
Training session before internship	7.6
Increase the internship period	6.8
Report after the internship	5.6
Payment on time	3.2
Increase capacity building activities	2.0
Additional program	1.2
Other	4.4

The supervisors suggested that the internship program be extended to one year (see table 7).

Table 7: Supervisor suggestions (%)

SUGGESTION	PERCENTAGE
Increase facilitation allowances	6.9
Increase the internship period	3.2
Consider proximity placement	1.1
Advisory session before internship	0.6
Intern evaluation	0.6

Furthermore, 66.1% of the supervisors had a positive opinion of the interns. They appreciated their behaviors such as eager for work, quick learning, good future employee, politeness, cautious on job and would be ready to recommend some for job. Some supervisors however advised the interns to have more skills (especially in ICT), to learn how to interact with people and to gain self-awareness.

The supervisors further suggested that the interns should be evaluated after the internship and given the certificate according to the outcomes of that evaluation.

2.4 EMPLOYMENT

The interns and non-interns were compared in regard to the employment. They were asked the time needed to get the first employment after internship or graduation, its duration and their employment situation during the survey period. If someone was employed, the factors that contributed to get an employment were asked.

2.4.1 Intern employment before internship program

The study found that 44.8% worked before the internship. Two thirds of those contracts had a duration which was inferior to one year. Most of the contracts lasted 1 and 2 years.



Figure 13: Interns by duration of the contract (%)

The fields of studies which had the favor of employers were management (20.5%), law (17.8%), agriculture (17.0%), economics (14.3%), ICT (12.5%) and engineering (10.7%).



Figure 14: Interns by area of qualification (%)

2.4.2 Intern employment in the host institution

Some host institutions offered their interns an employment after the internship. 17.7% of the interns got direct employment from the host institution after the internship. Agronomists (34.0%) and veterinary (20.0%) were luckier than computer engineers (3.4%), lawyers (10.9%) and social science (13.3%). The public institutions were more likely to offer an employment after the internship than private institutions.

The public institutions employed 18.0% of their interns against 5.9% for the private institutions. Out of 17 interns placed in the private institutions, only one was retained as employee, while in the public institutions 42 interns out of 233 were retained as employees. However, 90.2% of the employments offered by the public institutions were temporary. The average of the contract duration was 147 days (see table 8).

STATUS OF THE HOST INSTITUTION	PRIVATE	PUBLIC
DURATION OF THE CONTRACT		
15 days		2.4
30 days		4.9
60 days		12.2
90 days		26.8
150 days		4.9
180 days		26.8
360 days		12.2
Permanent	100.0	9.8
Total	100.0	100.0

Table 8: Duration of employment contract (%)

2.4.3 Intern employment after the internship program

The main objective of the internship program is to provide the recipient with the capacity reinforcement by applying the theory to the practice, the professionalism development, the effective work competencies and employability skills. After the internship, the intern uses the knowledge acquired to seek for employment. The table 9 below shows that 62.1% of the interns found an employment. The fields of studies which have the favor of the employers are economics (76.5%), Agriculture (73.1%) and engineering (69.0%).

EMPLOYMENT YES TOTAL NO AREA OF QUALIFICATION Social science 40.0 100.0 60.0 Law 42.6 57.4 100.0 40.0 60.0 100.0 Veterinary Management 56.8 43.2 100.0 ICT 62.1 37.9 100.0 76.5 23.5 100.0 Economics 73.1 26.9 100.0 Agriculture Engineering 69.0 31.0 100.0 62.1 37.9 100.0 Total

Table 9: Intern situation of employment (%)





15.2% of the interns found the first employment before the end of internship, 13.6% within one month and 48.8% within 4 months (see figure 15).



Figure 16: Interns by time needed to get the first employment (%)

Moreover, 16.0% of the interns got a permanent employment (see table 10). The temporary contracts have an average and median durations of 188 days and 120 days respectively. In addition, 80.3% of the employed interns declared the internship program helpful in finding the employment.

CONTRACT DURATION (IN DAYS)	FREQUENCY	PERCENTAGE
1 - 30	14	5.6
31 - 90	37	14.8
91 - 150	8	3.2
151 - 240	24	9.6
241 - 360	25	10.0
361 - 1080	6	2.4
Permanent	40	16.0
TOTAL	154	61.6

Table 10: Interns by the contract duration of the first employment (%)

After the internship, 16.0% of interns found a permanent employment, 14.8% a temporary contract between 1 and 3 months, 10.0% between 8 and 12 months and 9.6% between 5 and 8 months. Furthermore, 28.4% of interns got an employment with a contract duration superior to 8 months (see table 10).

Agriculture (14.8%), economics (10.4%) and management (8.8%) are the fields of studies which had the favor of employers.



Figure 17: The contract duration of the first employment (%)

80.3% of interns stated that the internship was helpful in finding a job.



Figure 18: The role of internship program in getting employment (%)

2.4.4 Intern employment situation during the survey period

The interns were asked their employment situation during the period in which the survey was being conducted. The outcomes show that 39.4% were employed (see figure 18). Moreover, 16.8% were in permanent employment. 67.7% worked in public institutions and 24.0% in private institutions (see figure 20).

The least field of study to be demanded on labor market was veterinary and the most demanded are ICT, agriculture, engineering and economics. The latter fields of studies are also likely to have a permanent employment. However, only 14.7% worked in the area which matches with their fields of studies. This could be explained by the fact that three quarters of the employment contracts were temporary. The young graduates accept any employment hoping not only the best is yet to come, but also to gain more experience.



For the interns who were seeking for an employment, they thought increasing the technical skills by additional studies and trainings would be the solution to unemployment. They also declared, nowadays,

ICT as well as English are the compulsory skills to have. Among the interns who were job seekers, only

18 16 14 12 10 8 6 4 2 Ö 1 - 30 31 - 90 151 - 240 241 - 360 360 - 1080 Permanent

about 50% received the training on entrepreneurship, mainly at university.

Figure 20: Interns by contract duration in days (%)

Figure 19: Interns by employment situation (%)

Figure 21: Interns by the status of employer (%)



For the interns who were employed, "technical skills" was the most important factor in finding an employment, because their recruitment was based on the outcomes of the written and oral tests. The figure 22 shows also they found an employment after many applications (54.7 % of the employed interns declared the commitment in seeking job, one of the main factor to find an employment).

Although they declared not easy to assess the qualitative skills, they thought it is necessary to have them even though it is not the sufficient condition to get a job. Contrary to the people belief, some employers accepted to recruit a no experienced candidate if he/she had the technical skills they needed. Considering the current labor market situation, some interns deemed themselves lucky to have been recruited.



Figure 22: Interns by factors contributing to the employment (%)

Finally, during the survey period, only 3.2% of the interns were entrepreneurs (see figure 19). They had invested in various activities related to services such as trade, computer training, construction, lawyer, livestock, wedding organization, restaurant, tailoring and taxi driver.

However, they needed some skills like business management, accounting, project study and customer care. Other skills needed are database, network, management and capacity building. Many of the job seeker would like to create their own business, but they were waiting for securing the necessary investment.





2.4.5 Non-intern employment after graduation

Likewise to the interns, the non-interns were asked about their employment, the time needed to get the first employment after graduation, the duration of the contract, their employment during the survey period and the factors contributing to find an employment.

58.9% of non-interns found an employment after graduation. Among them, 6.3% got an employment before graduation and 7.7% within one month period after graduation. Economics (13.1%), agriculture (11.4%), engineering (8.0%) and Social science (8.0%) had the favor of the employers.



Figure 24: Non-interns by the situation of employment after graduation (%)

Table 11: Non-interns by time needed to get the first employment (%)

TIME NEEDED (IN DAYS)	FREQUENCY	PERCENTAGE
0	22	6.3
1 - 30	27	7.7
31 - 90	43	12.3
91 - 180	44	12.5
181 - 360	53	15.1
361 - 720	14	4.0
More than 720	4	1.1
Total	207	59.0

Although 10.0% of the employments are permanent, most of the employment contract doesn't extend over 1 year (41.8%), and about two thirds of non-interns worked in an area which did not match with their field of studies. As the contracts were short, the non-interns accept to work in any area while they were looking for a convenient employment, like for interns.





The employed non-interns were 34.8% to work in area matching with the field of studies against 14.7% for the interns. This is because the internship program takes into account the graduates who are not working.

Since the technical skills are the main factor contributing to employment, the best graduates are rapidly hired, in their field of studies.



Figure 26: Matching of the employment with the field of qualification (%)

2.4.6 Non-intern employment during the survey period

During the survey period, 26.1% of non-interns were working (see table 12). All fields of studies, except agriculture, had the same rate of employed. The veterinarians had the highest rate, but their number was too few to be generalized.

Table 12: Non-interns b	by employment situation	(%)

EMPLOYMENT SITUATION	EMPLOYED	JOB SEEKER	ENTREPRENEUR
AREA OF QUALIFICATION			
Social science	30.0	67.5	5.0
Law	30.0	70.0	
Veterinary	44.4	55.6	
Management	29.8	68.1	6.4
ICT	23.1	77.0	5.2
Economics	27.3	70.1	2.6
Agriculture	16.4	83.6	6.8
Engineering	30.2	69.7	6.9
Total	26.1	72.7	4.6

During the survey period, 12.5% of non-interns had permanent contract (see table 13). Agronomists and managers are likely to have a permanent employment.

Table 13: Non-interns by contract duration (%)

CONTRACT DURATION	FREQUENCY	PERCENTAGE
1-30	2	0.6
31 - 90	9	2.6
91 - 180	13	3.7
181 - 360	16	4.6
361 - 1080	6	1.7
Permanent	44	12.5
Total	90	25.6

The private companies and the public sector are the main employers with respectively 46.7% and 40.0% of the employments (see table 14).

Table 14: Non-interns by the status of employer (%)

STATUS OF THE EMPLOYER	FREQUENCY	PERCENTAGE
Private	42	46.7
Public	36	40.0
Mixed society	7	7.8
Civil society	4	4.4
NGO'S	1	1.1
Total	90	100.0

Nowadays, all employers use written tests and oral interviews to recruit a new employee. So, as far as the factors contributing to the employment are concerned, the non-interns stated the technical skills are more important than experience.

Only 16.5% of the respondents thought that they got an employment due to their experience

(see figure 27).

They also declared to have placed many applications before getting an employment and the network of friends was the better channel to get the information about the institutions that were recruiting.

About one third of the respondents admitted the qualitative skills were the added advantage.

About one fifth declared to have accepted a position demanding less than their skills while waiting for a better position.





Most of the non-interns who were job seekers would like to increase their technical skills by attending schools to get a Master's degree (89.2%). They also recognized that the ICT skills are nowadays a must in all types of positions, as well as the language skills, especially English.

Other skills needed are related to the experience to have in their fields of studies, such as accounting, auditing, communication and marketing (see figure 28).

46.5% of non-interns who were seeking for a job declared to have received entrepreneurship training and 6.5% created a small business in various areas such trade, restaurant, agriculture, livestock and consultancy. However, the entrepreneurs were facing an insufficient investment to develop their business and therefore were still looking for a wage employment. They also needed skills in business management and accounting.



Figure 28: Job seeker non-interns by skills needs (%)

3.1 Statistical model of graduates' employment

This survey aims at evaluating if the internship program has achieved its main objective which is to provide the recipients with the necessary practical knowledge and soft skills to reinforce their employability. In other words, the study aims at determining whether an intern is more likely to get an employment than a non-intern. It is in this regard, 250 beneficiaries of the program and 350 no beneficiaries have been sampled. The two groups were compared in terms of their employment.

The binary logistic model was used considering salary employment as dependent variable and internship program, age, sex, the field of studies, training institution, level of education, grade, specialization and number of years spent looking for an employment after graduation as independent variables.

According to the test outcomes, the internship program has a strong impact on the graduates' employment. A graduate who attended an internship program has 2.7 times more chance to get an employment than someone who did not.

The sex, the field of studies and the number of years a graduate spent seeking for an employment are other variables which determine the graduates' employment.

A graduate male has 1.7 times more chance to get an employment than his sister and a graduate increases by 1.6 times his chance to get an employment whenever he/she spends one additional year seeking for it.

The field of studies also plays important role in finding employment. The graduates from law, social science and veterinary are less likely to find employment than those from engineering, economics, management, agriculture and ICT.

These data did not, however, show the impact of age, level of education, grade, specialization and training institution on the graduates' employment.

Nevertheless, it is worth highlighting that this statistical model explains only between 13.0% and 18.6% of the graduates' employment. It is therefore important to undertake other studies to discover the employment determinants in Rwanda, in general, and those for the graduates in particular.

3.2 Comparison of the intern and non-intern employment

To ensure more comparisons of the employment of interns and non-interns, other tests have been undertaken in regard of the time needed to get first employment after internship or graduation respectively, the duration contract of the first employment, the duration contract during the survey period and their employment since they have reached the legal age for work.

The table 15 indicates that interns got an employment more rapidly after the internship than the non-interns after graduation.

This proves the added value of the internship program. While 6.3% and 7.7% of non-interns got an employment respectively before graduation and within 1 month after graduation, 15.2% and 13.6% of interns got an employment respectively before the end of the internship and within 1 month after the internship.

Moreover, when 5.6% of interns waited between 6 months and 1 year to get the first employment, they were 15.1% of non-interns.

Table 15: Time needed to get the first employment (%)

TIME NEEDED (IN DAYS)	INTERNS		NON-INTERNS	
	Frequency	Percentage	Frequency	Percentage
0	38	15.2	22	6.3
1 - 30	34	13.6	27	7.7
31 - 60	20	8.0	22	6.3
61 - 120	30	12.0	33	9.4
121 - 180	10	4.0	32	9.1
181 - 360	14	5.6	53	15.1
More than 360	5	2.0	18	5.1
Total	151	60.4	207	59.0

Figure 29: Time needed to get the first employment (%)



The table 16 demonstrates once again the impact of internship program on the graduates' employment. Considering the weights, the proportions of working and non-working for the respective groups are statistically different (p-value = 0.000). Indeed, 62.0% of interns and 58.4% of non-interns found an employment respectively after the internship and the graduation.

Table 16: Contract duration of the first employment (%)

	INTERNS		NON-INTERNS	
CONTRACT DURATION (IN DAYS)	Frequency	Percentage	Frequency	Percentage
1 - 30	14	5.6	32	9.1
31 - 60	9	3.6	15	4.3
61 - 120	34	13.6	31	8.9
121 - 180	21	8.4	29	8.3
181 - 360	30	12.0	40	11.4
361 - 1080	6	2.4	24	6.9
Permanent	40	16.0	35	10.0
Total	154	61.6	206	58.9

Besides, the big difference between the interns and the non-interns is found in the structure of the employment contracts obtained by the two groups. The interns are more likely to get longer employment contracts than the non-interns (16.0% of permanent contracts against 10.0%).



Figure 30: Contract duration (in days) for the first employment (%)

It is also worth remembering that the interns were only 44.8% to be employed before internship. So, the program has shifted that proportion to 62.0%, increasing their employability by 17.2 point.

	INTERNS		NON-INTERNS	
CONTRACT DURATION (IN DATS)	Frequency	Percentage	Frequency	Percentage
1 - 30	7	2.8	2	0.6
31 - 60	6	2.4	2	0.6
61 - 120	12	4.8	10	2.8
121 - 180	8	3.2	10	2.8
181 - 360	19	7.6	16	4.6
361 - 1080	3	1.2	6	1.7
Permanent	43	17.2	44	12.5
Total	98	39.2	90	25.6

Table 17: The contract duration during the survey period (%)

During the survey period, 39.2% of interns against 25.6% of non-interns were employed. After taking into account the weights, a statistically significant test (p-value = 0.000) confirmed the impact of internship on employment.

For all the types of contracts, the interns outperformed the non-interns (see table 17 and figure 31). Moreover, 17.2% of interns against 12.5% of non-interns had a permanent contract during the survey period.



Figure 31: Contract duration (in days) during the survey period (%)

Taking into consideration the weights, 79.2 % of the interns and 59.0% of non-interns have worked at least once since they have reached the legal age for work. In other words, 20.8% of the interns never worked against 41.0% for non-interns.

Since the Chi-square test is statistically significant (p-value = 0.000), the proportions of interns and noninterns employed are statistically different in favor of interns.

Table 18: Employment situation during the whole life (%)

AT LEAST ONCE EMPLOYED STRATA	YES	NO	TOTAL
Interns	78.2	21.8	100.0
Non-interns	59.0	41.0	100.0



Figure 32: Employment since working age (%)

Two figures demonstrate the difference between the interns and non-interns in terms of employment: the number of "never employed" (21.8% of interns against 41.0% of non-interns) and the number of "permanent contracts" (17.2% of interns against 12.5% of non-interns).

The internship program has proven its usefulness and a positive impact on the graduates' employment. All the graduates, those who benefited from it and those who are still waiting to be placed, have a positive opinion of it, and they wish every graduate could get a chance to attend it.

The supervisors also deemed the program is beneficial to both the interns and the host institution. The interns have indeed contributed to the smooth running of the host institutions' business and most of the supervisors are ready to consider an intern for an employment if a position is available.

Although the number of the male is superior to the female, statistically, there gender is respected in placement. The interns were mainly placed in public institutions, in the departments matching with their fields of studies and supervised by qualified persons.

However, Kigali City attracted about two thirds of interns in terms of living and placement, due to the opportunities it presents.

During the internship, the interns acquired the technical skills related to their fields of studies and qualitative skills as well. They were also very satisfied with the program and most of them completed it. Those who stopped the internship, it was because they had found an employment.

The supervisors also appreciated the quick learning of interns and the contribution they gave to the host institution. That's why both sides (interns and host institutions) would like to see the number of interns and the internship period increased.

In terms of employment, the internship program gave the interns the opportunity to get in touch with the labor market realities, to acquire practical knowledge, to approve their ability to occupy a position and to enrich their curriculum vitae and network.

The interns were also 62.0% to have either a temporary or a permanent employment after the internship against 58.4% for the non-interns after graduation. During the survey period, 39.2% of interns were employed against 26.1% for non-interns.

In other words, the interns outperformed the non-interns both in relation to the number of people who found an employed that at the structure of employment contracts. The interns are likely to get an employment of long term and they have 2.7 times more chance to get an employment than non-interns.

Among the interns who were seeking for an employment, some thought getting a higher level of education like a Master's Degree could be the solution to unemployment; others had created a small business even though the insufficient investment and skills was hampering its development.

In order to improve the internship program, the following recommendations have been put forth:

1) To strengthen the cooperation with the private sector: the number of interns placed in the private sector is still low.

2) To be more regular in following up the interns in the host institutions: this could help in making sure that both the interns and supervisors are doing their part as required.

3) To increase the amount of the facilitation allowance: the amount of facilitation allowance was fixed long time ago and it is not considered to be enough.

4) Supervisors should adequately plan and guide the interns from start to the end of the internship period.

As a conclusion, it is worth highlighting the following points:

Strengths:

- 1. The internship program exposes and prepares interns to the world of work by providing practical working experience;
- 2. The internship program increases the chance of interns to get an employment.

Weakness:

- 1. Lack of track mechanisms after internship to establish how many were employed, how many created their own business, how many are furthering their studies and how many have dropped;
- 2. The insufficient places in upcountry prevents some graduates from attending the internship program;
- 3. Mentorship is weak or not well organized in some host institutions.

Opportunities:

- 1. Contribution to the skills development;
- 2. Enhancement of service delivery.

Threats:

- 1. Failure of interns to obtain employment after attending the internship program may discourage others to attend;
- 2. The smallness of the amount of facilitation allowances will have an effect on the drop rate from the program.

Groups of field of studies

- 1. **SOCIOLOGY:** Sociology, clinical psychology, journalism and communication, psychology, political science, Geography.
- 2. LAW: Law
- 3. **VETERINARY:** Veterinary, animal health.
- 4. **MANAGEMENT:** Management, business administration, human resources, public administration, administration.
- 5. **ICT:** ICT, IT, computer science, computer engineering.
- 6. **ECONOMICS:** Economics, accounting, rural development, finance, development studies, marketing.
- 7. **AGRICULTURE:** Agriculture, food science, soil and water management, management and nature conservation, crop science, agroforestry, agribusiness, agronomy, biotechnology, horticulture.
- 8. **ENGINEERING:** Alternative energy, applied chemistry, applied statistics, electronics, electronics and system engineering, civil engineering, electronics and telecommunication, mechanical engineering, demography, applied mathematics, electrical power engineering.



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