Research Papers/Extended Abstracts

Employability Status and Employer Satisfaction of Faculty of Fisheries and Marine Sciences & Technology (FoFMST) Graduates

K. Radampola¹, R. D. N. Wijesinghe^{1*}, J. M. S. N. Rathnapala¹, M. H. R. Subhanu¹, E. G. K. Y. C. Bandara¹, R. G. Sanuja¹, S. S. Herath¹, and H. B. Asanthi²

Department of Fisheries and Aquaculture¹, Department of Limnology and Water Technology²

Faculty of Fisheries and Marine Sciences & Technology, University of Ruhuna, Matara, Sri Lanka

*Corresponding author: dilani@fish.ruh.ac.lk

Abstract

The concept of employability has become one of the key concepts in higher education sector worldwide. Graduate employability is used to measure the success of the mission of the Faculty of Fisheries and Marine Sciences & Technology (FoFMST), University of Ruhuna. The present study was undertaken to explore the present employability rates, employability by gender, employability by sectors and to identify the higher education status of the graduates of FoFMST who graduated between 2011 and 2022. A closed ended questionnaire prepared using Google form was circulated among the graduates in July 2022 to obtain the information. Out of 441 graduates, 396 (89.79%) responded to the survey. Further, an employer satisfaction survey on FMST graduates using eleven employers from both government and private sectors was also incorporated into this study to identify the gap between the quality of graduates produced and the industry requirements. The survey revealed that 60% of the employed graduates are females and 40% are males. The engagement of the graduates in higher education is observed with a similar proportion irrespective of gender (male 49.95% and female 50.05%). Considering the batch-wise data, the employment status of the FoFMST graduates showed that there is a clear trend of increasing the number of students associated with the private sector and the self-employment compared to the government sector over time. The results revealed that the employers are highly satisfied (100%) with the performance of graduates of FoFMST with respect to adaptability, application of subject knowledge, punctuality, use of new technology, and teamwork. Additionally, it can be observed that 84% of the employers are satisfied with the resource management ability of the graduates of FoFMST. Further, it is obvious that most of the graduates of FoFMST are employed in the institutes (such as aquatic environmental related authorities, educational sector, fish processing factories and farms, waste management and water treatment facilities etc.) which are directly related to their academic disciplines.

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Introduction

The concept of employability has become one of the key concepts in the higher education sector worldwide. Higher education institutions such as universities are intended to provide facilities for intellectual needs for the community by providing both academic knowledge and professional training (Ariyawansa, 2008). In Sri Lanka, there is a high competition to enter the university and many students who get the opportunity to enter the university encounter challenges after graduation in seeking suitable employments. Therefore, graduate employability has been identified as one of the central issues that drive the mission of the Faculty of Fisheries and Marine Sciences & Technology (FoFMST), University of Ruhuna. The FoFMST which commenced its academic activities in 2006, is a unique faculty in higher education system in Sri Lanka, which produces graduates in the fields of Fisheries, Aquaculture, Limnology, Oceanography and Marine Geology. From its inception, 12 batches graduated from the faculty by the end of year 2022. The faculty catered for four-year degree programmes and in addition to the theoretical knowledge, students get hands-on experience on practical applications of various disciplines. Further, the students get opportunities to develop their soft-skills such as communication skills, decision making & problem-solving skills, teamwork, report writing etc. alongside the technical skills during their academic life. After completing all the courses in the degree program, it is a requirement to successfully complete the industrial training relevant to their specialization area.

The present study aims to explore the present employability rates, employability by gender, employability by sectors and to identify the higher education status of the graduates. Further, an employer satisfaction survey on FoFMST graduates was also incorporated into this study to identify the gaps between the quality of graduates produced and the industry requirements.

Methodology

The study was conducted to explore the employability of the graduates and the satisfaction of the employer on the performance of graduates of FoFMST who graduated between 2011 and 2022. A closed ended questionnaire prepared using Google form was circulated among the graduates in July 2022 to obtain the information of employability and their higher educational status. Out of 441 graduates, 396 (89.79%) responded to the survey. The following facts were used to prepare the closed ended questionnaire.

The information on year of graduation, gender, involvement in jobs and higher studies and the status of employment sector (government /private/self-employment) was collected for analysis.

Employer satisfaction survey (ESS) was conducted to evaluate how well graduates from FoFMST meet the requirements of employers. It was carried out by drawing a sample from the population of employers which employ FoFMST graduates who graduated between 2011 and 2022. Eleven employers from both government and private sectors responded to the survey. ESS was conducted by sending a closed ended questionnaire to direct supervisors of the graduates to give feedback on the following attributes of the graduates employed in their workplace. The information on subject knowledge, adaptability, punctuality, use of new technology, use of relevant language, good governance, special achievements, resource management, teamwork, and new implementations was collected through the survey.

Upon the completion of primary data collection, the data was documented in MS Excel spreadsheet. Percentage values were calculated, and graphs were plotted accordingly.

Results and Discussion

The overall employment status of the respondents who passed out between 2011 and 2022 showed that 60% are males and 40% are female graduates. Further, a similar contribution of male (49.95%) and female (50.5%) ratio is observed in those who are engaged in higher education.

Considering the batch-wise data, the employment and higher education status of FoFMST graduates passed out during 2011 and 2022 period revealed that the graduates from 2011 to 2016 period are mostly engaged in job related activities while a lower number of graduates are involved in their higher education. While collecting the data, it was observed that most of the graduates completed their higher studies before their employment. However, in contrast, a higher number of graduates who passed out after 2017 are involved in their higher education. In the first half of the total sample, it is obvious that the males have mostly been engaged in jobs rather than higher education. In the second half, nearly a similar proportion of males and females are engaged in the higher education sector.

When comparing the employment sector, 56.97% graduates are employed in the government sector jobs having percentages of 30.66% of males and 25.91% of females. Further, 20.65% of graduates are employed in the private sector having 11.19% and 9.46% males and females, respectively. Further, 4.08% of males and 3.45 % females are engaged in self-employment activities.

With regard to the batch-wise data, the employment status of the FoFMST graduates showed that there is a clear trend of increasing the number of the students employed in the private sector and self-

employment activities compared to the government sector over the time. In the first batch of the graduates of the faculty (2011), a higher percentage (38.46%) is observed with employments in the government sector in both genders. None of the students in 2011 year of graduates are involved in self-employments. The contribution to the private sector is also considerably low pm 2011 batch having 15.38% in male and 7.69% in females, respectively. Until the 6th batch of the faculty (graduated in 2016), clear trend in increasing the employment in government sector had been observed.

In the 6th batch graduated in 2016, the contribution to the private sector increased in both male and female showing 26.92% and 3.85%, respectively. After that, an increased percentage in the private sector have been observed in both genders. These results are more obvious in the data collected from 12th batch graduated in 2022 with 40.74% and 29.63% in males and females, respectively. As recruitment is not continuously increasing in the government sector, most of the vacancies available there have been filled by the already passed out graduates. Hence, a comparative reduction of employment status in the government sector of recently passed out graduates is observed. In contrast, along with the given opportunities for industrial training provided by the faculty as a requirement of the completion of the degree, most of our graduates secure their employments in the private sector where they have completed their industrial training. This may have resulted in a significant contribution to the employability in the private sector than the government sector.

Simultaneously, we can clearly observe the increasing trend in involvement in the self-employment activities over the time. Although there is very low involvement in self-employment in the initial batches of the students, 5.55% of the recently passed out graduates have made their pathways with their own businesses (1.85% in male and 3.70% in females, respectively). Along with the applied knowledge and experience given with the theoretical, practical, and field sessions by the faculty, graduates are capable of exploring the economic gain via the utilization of the aquatic resources by themselves.

To get a clear idea of these changes in the trends in the student employment sector, the data were categorized into quarters from the total with each quarter consisting of 3 batches. After plotting the data accordingly, the graph clearly shows that the involvement of employment in the government sector is decreasing over time but involvement in both private sector and self-employment is increasing. In the first quarter, the highest contribution is observed in the government sector (85.56%) with the lowest in self-employment (2.38%) followed by the private sector (11.74%). In the 4th quarter, 68.84% is observed in the jobs in private sector followed by 25.88% in government sector and 5.28% in self-employed (Figure 1).

Employer satisfaction survey (ESS) was conducted to evaluate how well graduates from FoFMST meet the requirements of the employers. Eleven employers from both government and private sectors were selected based on the number of graduates employed.

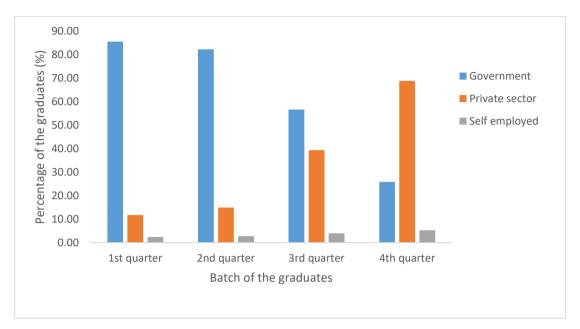


Figure 1: The Employment Status of the Graduates of FoFMST Graduated from 2011 to 2022 Categorized into Quarters. (G: Government Sector, P: Private Sector, S: Self-Employment)

ESS was conducted by asking direct supervisors to give feedback about the subject knowledge, adaptability, punctuality, use of new technology, use of relevant language, good governance, special achievements, resource management, teamwork and new implementations of the graduates employed in their office. The results revealed that the employers are highly satisfied (100%) with the performance of graduates with respect to adaptability, application of subject knowledge, punctuality, use of new technology, good governance, and teamwork. Further, it can be observed that 84% of the employers are satisfied with the resource management ability of the graduates. However, lower percentages of satisfaction were observed for the attributes of new implementation (58%) and special achievements (67%). After analyzing the ESS, we have identified that the graduates produced by the faculty are not well equipped with innovative ideas and active participation in special achievements.

Considering the overall status of the employability of our graduates for the period of 2011 to 2022, it can be observed that most of the graduates are working in the institutes which are directly related to their discipline such as aquatic environmental related authorities (NARA, NAQDA, MEPA, CEA, DFAR), educational sector (universities and other), Fish processing factories and farms, waste management and water treatment facilities etc (Table 1).

Table 1: The Overall Status of the Employability of the Graduates in Government and Private Sector

Employment sector	Employment category	Percentage of graduates
		(%)
Government sector	Aquatic environmental related authorities	28.42
	Educational sector (University and other)	26.32
	Others	3.68
	Fish Processing and Farms	16.84
Private sector		
	Waste Management and Water Treatment	9.47
	Financial	2.11
	Teaching	0.53
	Pharmaceutical sector	4.74
	Other	7.89

Conclusions

The overall results revealed that the employability of graduates in the government sector is decreasing over time while the employability in both private sector and self-employment is increasing. Further, it is obvious that most of the graduates are employed in the institutes (such as Aquatic environmental related authorities, educational sector, fish processing factories and farms, waste management and water treatment facilities etc.) which are directly related to their academic disciplines. In addition, the results of the ESS revealed that the employers are highly satisfied (100%) with the performance of graduates with respect to adaptability, application of subject knowledge, punctuality, use of new technology, good governance, and teamwork.

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