# Role of International Higher Education in Developing Employability: Limitations and Opportunities

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Abstract: Employability of graduates is one of the current policy concerns emerging in higher education developments and the implementation of Bologna process. It calls for a continued proactive role of universities and other higher education institutions toward developing lasting employability. The research was conducted to evaluate the performance of the MSc Programme Land Management and Land Tenure at Technische Universitaet Muenchen, Germany in developing better employability of their students. 39 alumni took part in questionnaire survey and focus group discussion. The survey results showed high levels of graduates' satisfaction concerning studies in MSc Programme Land Management and Land Tenure as a whole. During interview the alumni also confirmed that different aspects of the academic programme (e.g. curriculum, international experience, alumni networks) had the highest influence on their career development. However, some factors were identified which hinder the employability opportunity of alumni.

Key words: higher education, employability, job satisfaction, employment

#### 1. Introduction

Education is a key part of strategies to improve individuals' well-being and societies' economic and social development. During the last couple of years much emphasis has been put on the relationship between higher education and the world of work (Teichler, 1999, 2000; Kellermann & Sagmeister, 2000; Kivinen et al., 2000; Woodley & Brennan, 2000 quoted in Maharasoa and Hay 2001, p. 139). At the Rio Summit, the role of education in promoting sustainable development was made explicit by Agenda 21, the global action plan for the 21st century:

"Education ... should be recognised as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address the environment and development issues".

Millennium Development Goals also have emphasized education's essential role in creating a foundation for sustainable economic growth as education contributes directly to the growth of national income by improving the productive capacities of the labour force. The OECD Report "Education at a Glance 2008" provides evidence in favour of that. According to the report, employment rates rise with educational attainment and unemployment rates are generally lower for higher-educated individuals. It found that unemployment rate for those aged between 25-64 with tertiary education was only 3.5 percent in 2006. Therefore, education is an inevitable vehicle to achieve the sustainability in society.

'Higher education' and 'higher education system' became popular terms in the second half of the twentieth century (Teichler 2004, p. 3). The term 'higher' suggests a specific quality, e.g. a certain degree of cognitive rigour, an expectation that students learn to question prevailing rules and tools and understand theories, methods and substance of 'academic' knowledge (ibid). During the final decades of the twentieth century, terms such as 'post-secondary', 'tertiary' and 'third-level' gained popularity (OECD, 1998) also as synonymous words of higher education. On the other hand, 'employability' often seems to refer to 'workreadiness', that is, possession of the skills, knowledge, attitudes and commercial understanding that will enable new graduates to make productive contributions to organisational objectives soon after commencing employment (Mason, Williams and Cranmer, 2009). In an extended discussion of the employability concept,

Hillage and Pollard (1998, p. 11) put more emphasis on individuals possessing the capability 'to move self-sufficiently within the labour market to realise potential through sustainable employment'. In some instances, the ability of an institution to ensure employability has become an indicator of institutional quality and is depicted as a notion of quality (Maharasoa and Hay 2001, p. 139).

The term 'employability' is being used since 2001 in the framework of the Bologna Process. It has had a strong and positive effect on the debate about the relationship between higher education and professional life, in particular concerning the preparation of the graduates for the labour market (Haug and Tauch, 2001). In its action programme the role of European higher education institutions in enhancing employability has been also indicated as a clearly defined common goal. However, though apparently education has positive correlation with employability and employment, regional and social disparities often bring an affect on this relationship. Further more, work experience has emerged from the long-term studies as one of the key determinants of graduates finding suitable employment. Higher education and employment relationship varies by the countries and fields of study also. Therefore, to have only higher education does not confirm always employability. One can be highly educated but not employed.

Against this background the main objective of the study is to identify the realities between higher education and employability. The study took a detailed look at education opportunities in the Master's Programme Land Management and Land Tenure at Technische Universitaet Muenchen (TUM), Germany in development of professionals' employability in land related fields.

#### 2. Literature Review

The research highlighted the significance of developing employability, in addition to required competence. Therefore, this section gives a critical account of current debate in the literature on employability.

## 2.1 Employability as a concept

Literature review revealed that the concept of employability was initially formulated during 1950s but did not have a real impact until the end of the 1990. Yorke (2006a, p. 8) defined employability as a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. Employability is suitability for employment, not the same as employment rate. And therefore, employment rate cannot be an indicator of employability.

### Employability is not employment

As mentioned earlier, employability is not same as employment. Rather it refers to achievement and potentials. Hillage and Pollard (1998, p. 11, quoted in Knight and Yorke 2004, p. 22) argued that employability is not just about what people need to get and keep a job, but should take explicit account of the level of demand for employment and the way employers articulate their demand. They also captured something of this in their four elements description of employability (quoted in Knight and Yorke 2004, p. 22) as

- What people have to offer employers i.e. their assets in terms of knowledge, skills and attitudes
- The extent to which they are aware of what they have got and they choose to use it -Deployment
- How they present themselves to employers and
- The context in which they seek employment

# Employability: Is it only about higher education?

According to Harvey (2005) there is no true connection between being employable and actually getting a job as too many other variables are involved also. Brown and Hesketh (2004 quoted in Johnston and Watson 2006, p. 236) analysed employability in their research with graduate recruiters and fast track applicants and described the experience of learning in terms of a process of social construction of personal capital – in other words, who you are and what you know. They offered a useful breakdown of personal capital expressed as:

- Hard currencies: credentials, work experience and sporting achievement
- Soft currencies: interpersonal skills, charisma, appearance and accent

In this account personal capital evidently amounts to more than academic credentials, plus key skills and offers a goal for complex personal development (ibid). Employability is possession of skills which is not only limited into the skills gained from the higher education. Key skills (i.e. communication, team working, problem solving and own learning and performance) are the most important elements in making graduates employable and higher education not necessarily refers to developing all skills always.

## Curriculum development has implications on employability

According to Yorke (2006b) curriculum design offers opportunity for students to develop employability. Employability is a slow growing crop which is not ideally served by short term curricular intervention. Co-curricular and extra curricular activities are important vehicles also to develop generic characteristics.

# Unemployment does not show low employability

Low rate of employment does not necessarily reflect the low level of employability. Mismatch between limited supply of workforce and demand for labour market is not caused merely by lack of appropriate skill and knowledge of the graduates. The mismatch in the field of study and profile and lack of 'suitable jobs' (in terms of salary, responsibility and job location) are the reasons behind being unemployed in spite of having employability. Wide and complex conditions including cultural and racial factors also decrease employment rate across many fields and qualifications.

### 2.2 How to measure employability?

Employability outcomes can be measured in terms of 'hard' outcomes, such as movement into jobs (LSC 2008, p. 16). HEFCE (2001) measured employability in terms of graduates getting 'any jobs'. Little (2001) argued in different way. He suggested that one of the measures of 'output' from higher education is the quality of graduates, and from this notion graduate employability has emerged. If getting 'any job' is used as a measure of success, it calls into question the notion of 'quality'. In this respect the question of job satisfaction comes which has been defined as a measure of employability by Harvey (1999). Graduates' proceeding to further education can be also considered as an indicator of employability as it enhances further the graduates' attributes.

# 3. Conceptual Framework

Operationalization is the process of going from a theoretical concept to a measurable index (Harvey and MacDonald, 1993). Based on the theory of operationalization, Harvey (1999) identified the following stages of operationalization in employability of higher education institutions:

- To define the theoretical concept
- To break it down into dimensions that cover the meaning of the concept
- To identify a range of indicators for each dimension
- To select one or more indicators for each dimension
- To design instruments to collect information on each indicator
- To decide whether to have a multi-dimensional set of indicators, an array of indices or a single index
- Where appropriate, to combine indicators into an index

Based on above noted stages and theories discussed earlier the research adapted the following operationalization of employability:

Theoretical definition	Employability is the ability of graduates to get a job
Dimension	i.e. Nature of employment and further study
Indicators	i.e. i) Level of job satisfaction in terms of
	income and position
	ii) Prospect of self employment/ business
	iii) Prospect of further study
	iv) How the graduation degree helped
	academic/ professional career
	v) Nature of problems they face in job market

**Table 1.** Operationalization of employability

# 4. Background information of the MSc Programme Land Management and Land Tenure

Though the importance of land management is a widely recognized and a crucial issue at all national and international policy, decision making and discussion levels, still many developing countries are not able to exercise it properly due to serious lack of professional capacity. As land and its management is a complex issue and takes place under different contextual situation, the individuals and institutions need to respond its challenges effectively with proper knowledge and skills. Hence, capacity building through academic programmes in land management cannot be viewed in isolation. Against this background MSc Land Management and Land Tenure (LMLT) at Technische Universitaet Muenchen in Germany was officially started in 2001 to support the professionals from developing countries in land related fields. The Master's Programme aims to qualify students in interdisciplinary approaches to land management and land tenure in an international context. The first batch graduated in 2003. As this programme intends to improve expertise of the professionals, for admission to this degree programme at least two years professional experience at relevant fields is required. By this time 9 batches have graduated and presently the programme has a total of 106 alumni covering 38 countries.

# 5. Research Methodology

### 5.1 Respondents

Total 39 alumni (male-female ratio is 59:41) of the master's programme from 26 different countries participated in the study which accounted 37 percent of total alumni. Respondents' ethnic origins were ranged from South and South-East Asian to African to Latin American.

#### 5.2 Data collection instruments

The research relied on two types of data sources:

# Secondary data

- A literature review to set the context for the term 'employability' and its indicators
- Official records on alumni to know their present job status
- Records of strategic management of the MSc programme

## Primary data

To get comprehensive data on graduate employability from alumni the primary data was collected through two different methods – questionnaire survey with two different sets of questions and focus group discussion.

## 6. Findings and Discussion

### 6.1 Career destinations of alumni

It is important for the programme to know the destinations of its graduates. The data for the study collected from alumni records provided present occupational status of alumni. The data showed that alumni achieved success at the top level in a variety of sectors. The researcher categorized the career destinations of the graduates into 7 major sectors:

- Core land management related fields like land administration, land valuation, land acquisition and distribution, land surveying
- Education sector including teaching, research and programme management
- Urban development and planning, civil engineering and architecture
- Environment, agriculture, rural development and forestry
- International organizations (e.g. GIZ<sup>1</sup>, USAID<sup>2</sup>, UN Habitat, ADB<sup>3</sup>)
- Other land related fields (e.g. GIS<sup>4</sup>, LIS<sup>5</sup>, cartography, real estate etc.)
- Further study (i.e. doctoral research)

The data further showed that 29 percent of the alumni are working in core land management fields and are holding good positions in relevant ministries/ agencies in respective countries. 15 percent are involved in education sector. There is also a high degree of professional employment in environment, agriculture, rural development and forestry sector and urban development and planning sector which accounts 12 and 10 percent respectively. For employed graduates working in other land related fields the figure is over 11 percent with many of them working in the field of GIS and LIS. Presently 8 percent of the alumni are working in international organizations either in their home countries or abroad. 11 percent of the alumni are engaged in fulltime further studies. The percentage would be almost double if part time doctoral study is being considered.

<sup>&</sup>lt;sup>1</sup> Deutsche Gesellschaft für Internationale Zusammenarbeit - German Society for International Cooperation

<sup>&</sup>lt;sup>2</sup> United States Agency for International Development

<sup>&</sup>lt;sup>3</sup> Asian Development Bank

<sup>&</sup>lt;sup>4</sup> Geographic Information System

<sup>&</sup>lt;sup>5</sup> Land Information System

# 6.2 Overall job satisfaction of alumni

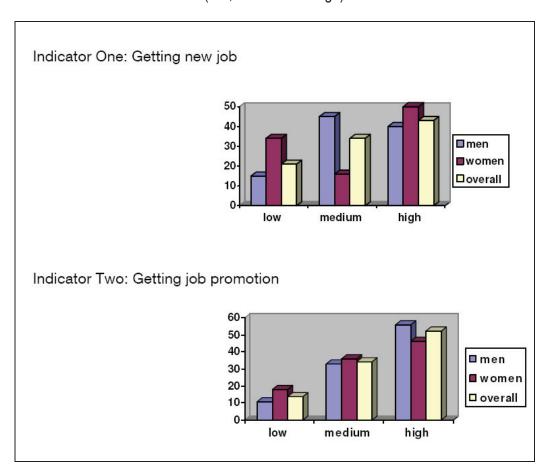
The term job satisfaction is difficult to define. According to Locke (1983) there is no real consensus developed in the thousands of studies on job satisfaction, and Rainey (2003) noted that it can be measured in a number of unique ways. According to Spector (1997) job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs. Harvard professional group (1998) sees job satisfaction as a key radiant that leads to recognition, income, promotion, and achievement of other goals that lead to general feeling of fulfilment.

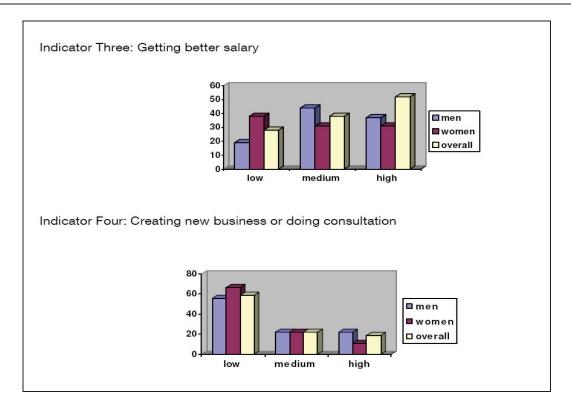
Other theorists (e.g. Rose 2001, quoted in Eurofound 2007) viewed job satisfaction as a bi-dimensional concept consisting of intrinsic and extrinsic satisfaction dimensions. Intrinsic sources of satisfaction depend on the individual characteristics of the person, such as the ability to use initiative, relations with supervisors, or the work that the person actually performs; these are symbolic or qualitative facets of the job. Extrinsic sources of satisfaction are situational and depend on the environment, such as pay, promotion, or job security; these are financial and other material rewards or advantages of a job (p. 4).

This research defined job satisfaction in terms of getting a desirable job or job promotion and better salary which covers extrinsic satisfaction and creating new business and doing consultancy (in relevant fields) which refers intrinsic satisfaction.

The study confirms that the overall job satisfaction level of men (in getting new job, job promotion and receiving better salary) is higher than that of women. But in case of starting a new business in both cases the satisfaction level is very low (figure 01). The results from the survey seem to confirm that extrinsic satisfaction level is higher among alumni than intrinsic satisfaction.

Figure 1: Job satisfaction level of alumni - (low, medium and high)

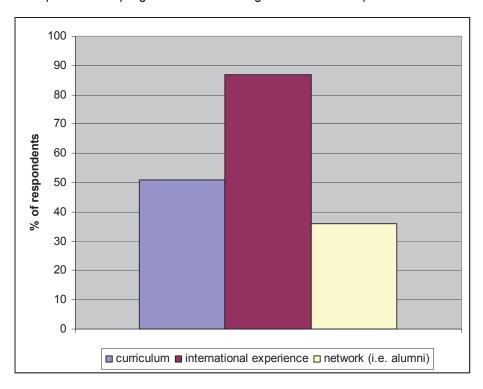




# 6.3 Aspects of Master's Programme contributing to career development

The roles of different aspects of the MSc programme in career development were readily codified into the list presented in figure 2. During interview 87 percent of the alumni confirmed the connection perceived between international experience and graduate employability. International experience provides the ability to operate in culturally diverse environment which is a critical component for jobs in international organizations.





Employability is a curriculum issue and there is a variety of ways in which curriculum can foster employability. 51 percent of the alumni confirmed that curriculum in the MSc programme contributed to their career more and this fact was applicable for the alumni who had already jobs in land related fields before they started their MSc study.

According to 36 percent of alumni, outcomes associated with forging of alumni network also contributed to career development. Cluster of alumni within a country (e.g. 13 TUM alumni in Ghana) also provided a network which had remarkable contribution in finding career opportunity.

The survey results also supported that higher education (i.e. TUM Master) can create international job opportunity. The alumni confirmed during interview that international experience and network, TUM reputation, international standard of higher education and language skills are the favourable factors to get opportunity in international job market. On the other hand, some of the alumni mentioned that applicant's performance in terms of high level of knowledge, analytical skills and relevant work experience are mostly important to get international jobs. However, the research findings showed that for 94 percent of the alumni from TUM master's education paved the way to get job abroad whereas only 6 percent did not think so.

## 6.4 Different factors affecting education-job match

The research findings showed that various factors affect the extent of matching or correspondence between educational attainment and job requirements.

Lack of relevant work experience and personal network: The role of work experience is an issue in getting employment. Almost in every case employers consider the candidates with relevant work experience as better equipped compared to a fresh graduate without having experience. Even, many international organizations (e.g. UN Habitat) accept first-level university degree in combination with qualifying experience in lieu of the advanced university degree. The situation is not different for TUM alumni also. According to 22 percent of the respondents, lack of relevant job experience is one of the barriers in getting suitable job. The present job status of the alumni shows that TUM degree has been an asset for them who had already job experience in relevant fields. The data confirmed that the relationship between employment experience and education-job matching is significant. The alumnus from Nigeria described the situation in following way:

'The alumni who had already job and took part in the programme get more benefits from the programme as they know how to use their knowledge. But for the fresh graduates who did not have any job and took part in the programme generally face problem to find a suitable job after their graduation'.

Alumnus from Uganda added that

'The programme is useful for getting job promotion. But, fresh graduate without work experience may face challenges in finding a job'.

Social ties and personal networks are also recognized as crucial to finding a job and succeeding at work (Granovetter and Marsden, 1996). 35 percent of the respondents mentioned that personal networks are important in job market. During focus group discussion the alumnus from China mentioned that

'To get a job in China, especially in private sector, personal contact with higher officials is essential. It has been more likely a cultural issue'.

The alumnus from Chad showed the same attitude. He said, 'It's almost impossible to get a job without networking'.

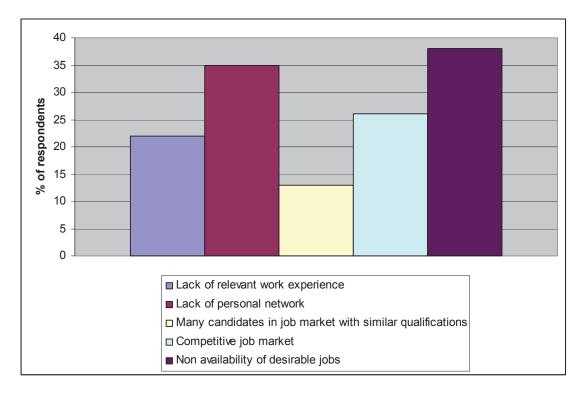


Figure 3: Problems facing in job market by the alumni

High competition and lack of jobs in job market: Lack of job in job market or high competitive job market has been stated by the respondents as one of the constraints they generally face. According to 13 percent of respondents, there are a lot of candidates in job market with similar qualifications (i.e. with higher education degree from abroad) which is one of the barriers in obtaining jobs. Similarly, 26 percent of respondents have experienced job market very competitive. Many respondents have mentioned that there is also fairly close relationship between fields of study and availability of relevant jobs. Jobs with desired position or/and salary and benefits can also be unavailable.

**Non availability of desirable jobs:** Non availability of job is somehow related with job location. The survey revealed that it is not that due to low qualification the TUM graduates fail to get their desirable jobs. The fact is that, location of job is one of the determinant factors which often limit the availability of desirable jobs.

The study clearly showed that women who are not satisfied with their job exhibits a certain type of limitation which is related with nature of job. Most of the alumnae (64 percent) replied that non availability of desirable jobs is the main hindrance they face. Suitable locations of work place play a definite role in selecting job.

During focus group discussion alumna from Turkey stated,

'I had many good job offers actually which were located outside my city (Istanbul), but I preferred to work in Istanbul so that I can stay with my family'.

Similarly, alumna from Bangladesh mentioned

'Job location is very important for me. I would not prefer to work in any country which is not safe for me. Personally, I would like to work in a developed country, though I know it will limit my job opportunity'.

The alumnus from Latin America also mentioned that

'I will not be willing to go to a place which represents dangerous position for my family. My concern is my family, especially my son. The environment is important for me in which my child will be brought up. Security is concern in general also'.

Gender and racial discrimination is often considered as a barrier to obtain employment. There is also considerable evidence from literature review that gender and racial discrimination has been assimilated well enough into the employment patterns. However, the collected data showed opposite situation. Only a male respondent mentioned racial discrimination as a barrier to get job. Surprisingly the female respondents did not mention gender or racial discrimination as barrier in obtaining commensurate employment.

# 7. Concluding Remarks

The research results confirmed that higher education has an impact on enhancing employability. The research proved that networking, pragmatic curriculum and international experience has positive effects on the alumni's career development. However, the research results showed that employability attributes are necessary for getting jobs but not always sufficient. Employment opportunities are affected to some extent by non-employability factors also. The research analysis indicated fairly obvious criterion of relevant work experience which is necessary for getting a job. Alumni confirmed that some other factors like high competition in job market, lack of personal contact, lack of desirable jobs may create problems in getting suitable job. Tie with family responsibility and safety issue in remote area also squeeze the job opportunity. But these factors are stronger for women than men.

During interview alumni were asked to give suggestions to improve the effectiveness of the programme in enhancing employability and to help their career further. Considering their failure and success factors the following suggestions have been drawn:

- To keep curriculum update and pragmatic with full involvement of stakeholders according to the current needs of job market;
- Frequent exchanges/ties with job providers (i.e. international organizations, NGOs) in knowledge sharing (i.e. lecture or/and theses supervision, internship);
- To create more opportunity for Master led PhD programme;
- To involve the alumni in different projects undertaken jointly by TUM and international organizations;
- To strengthen the alumni network. To arrange summer school, training or workshop programmes as means of lifelong learning which can offer to the alumni strategies and ways to update their own knowledge; and
- More research and investment into career opportunity.

The programme management confirmed that they have already adopted many of the above noted measures. But of course there is always opportunity to improve the performance further.

The study came up with the conclusion that though considering the present need, many European universities (like TUM Master's Programme) have now come to terms with a wide variety of professional higher education programmes, it is still a challenge to connect the objective of such programmes with employability. Knowledge based education alone is not the solution for professional development, what is required is radical re-thinking about the purpose of the professional development to fulfil the objectives of employability.

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