Evolution of the Demand for Human Resources in the Food Industry

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INTRODUCTION

The Korean economy has developed remarkably but has also experienced the rearrangement of industrial structures since the economic crisis of 1997. Radical changes in Korea’s economic situation have been anticipated after the agreement of FTA (Free trade agreement)/FTA fulfillment. From the macro point of view, labor market demand always exceeded labor supply before IMF (International Monetary Fund) in 1997. However, the labor system has changed since IMF (Kim ST 2006). Moreover, companies have tried to hire personnel who satisfy a company's needs, such as those with technological skills, higher educational background, etc. Under such circumstances of industrial change, the demand for high-level manpower has gradually increased while the demand for low-level manpower has decreased (Chun et al. 2007; William et al. 1987). The food industry has been no exception, and students having food science degrees have increased but they often lack any higher educational background or skill. Consequently, the food industry wants to hire manpower that has experience or training courses (Imungi et al. 1986). A survey conducted by an industrial resource committee showed that the shortage of industrial manpower was 6.77% in 2004 and 5.88% in 2005, respectively. Although many universities in Korea annually provide thousands of graduated students, the industrial sector is still experiencing a shortage of adequate and immediately available manpower (Hong et al. 2008). Therefore, recently universities and companies have cooperated to cover common needs. Because of the improvements in everyday life and the use of the internet, universities...
have experienced changes in consumer patterns and the distribution of goods together with the food industry.

The educational programs at universities have been reprogrammed to meet the demands of Korean companies, i.e., (Baik MY 2008; Chang KS 2005; Wongo L 1999). These are classified into three categories, i.e., food processing and engineering, food life science and biological engineering, and food industries and distribution. This also suggests that those who are involved in the food industry need certifications. However, until now, the food industrial requirements for manpower and academic programs for better education toward job related programs had not been surveyed. Therefore, the purpose of this research was to study the mutual relationships between academic and industrial aspects pertaining to human resources with the hope of providing qualified manpower to the food industry by improving academic programs. This work may also offer a path for students who want to find careers in the food industry.

METHODS

1. Research Subjects

The research subjects were divided into the following five groups by business classification: food manufacture/processing and food sales, distribution industry and import sales, consigned institutional feeding, food service industry and hotel service industry, and public organizations, based on the Act of Food Sanitation and Health Functional Foods (Health Functional Food Law 2010).

The respondents (n=249, Seoul, Gyunggi, Chungnam area, Aug. 01. 2011–Aug. 31. 2011) were restricted to individuals with hands-on experience or administrators. Namely, the respondents were composed of individuals from food manufacture/processing (n=58), health functional food manufacture/processing (n=52), food sales (n=60), catering (n=46), and public organizations (n=33).

2. Survey Items

The survey items included the current status of the respondent and company (business type, annual sales, gender, age, working periods, department, and position), suitability of college department names, capability, majors, and wage premium for food sectors licenses. The choices for department names in the survey were the most frequently used names in Korea. The variables with specific influence on recruitment into a company or public organization were education background, major, license, linguistic ability (focusing on English and Japanese), personality (activeness and manner), and OA ability (MS Word, Hangul, Excel, and PowerPoint) (Martin HJC 2001). A 5 point scoring method was used (Parameshwaran et al. 2009). A score of 1 indicated that the respondent felt it was less than important, 2 indicated it was of little importance, 3 meant that it was of average importance, 4 indicated it had significant importance, and 5 meant it was extremely important. The limit of application of various majors was assessed by dividing them into six groups. The first group was basic subjects that included nutrition, biochemistry, food chemistry, food science, and food microbiology. The second group was food processing subjects that included food processing, food preservation, food engineering, food operating units, and food packing. The third group was regulations and hygiene that included food sanitation acts, laws for health functional foods, food hygiene, and public health. The forth group was marketing and circulation, which included food distribution and marketing, institutional food service and nutrition, food service industry, and cost management. The final group pertained to cooking such as cooking principles, cooking practices, sauce making, and flavor enhancers. Food sector related licenses included nutritionist, food industry engineer, cook, and hygienist.

3. Statistical Analysis

The results are expressed as mean±S.D. Group comparisons were performed using Student’s t test. Analysis of variance (ANOVA) was performed for comparisons among groups, and differences among samples were examined using Duncan’s multiple range tests using SAS (version 9.13, SAS Institute, Cary, NC). P<0.05 were considered significant (Lee et al. 1998).

RESULTS AND DISCUSSION

1. Statistics for Sociology of the Population

Basic statistics for variables of the survey population are shown in Table 1. Among the 249 respondents, three persons were excluded because of insufficient answers. The number of male respondents was 163 and the number of females was 83. The average male respondent was in his thirties and the average length of work experience was 10.78 years. Figure 1 shows the job departments and positions of the respondents. The majority worked in marketing or planning areas and institutions as well as sales and personnel management, in sequence. The positions of the respondents included assistant manager, manager, general