

MATERIALS AND METHODS

Several materials were used for data collection, namely letter for assistance, structured interview questionnaire and observation form. And certain methods were chosen for sampling and data analysis.

I. Planning a sample

A. Population : Thai kitchen in hotel of regular member of Thai Hotels Association. To be a member, one needs to meet the standards of qualification set by the Association. At the time of this study, there were 342 hotels (Thai Hotels Association, 2002).

B. Sample: Proportion sampling (Multi-stage sampling) is used for selecting samples from total population of 342 hotels, divided by status into 2 categories:

1. Singles (unchained) hotels, selecting 65 hotels (26% of the total of 253 singles hotels) from six regions . Of which 22 hotels (34%) were in Bangkok and central region, 7 hotels (10 %) in Eastern region, 11 hotels (16 %) in Northern region, 15 hotels (24%) in Southern region, 5 hotels (8 %) in Northeastern region and 5 hotels (8%) in Western region . From each region, select province with highest number of hotels to be the representative. After which select the sample group in the province by way of simple random sampling to get the set of hotels for each region.

2. Chained Hotels selecting 1 hotel of each of 18 chains (there were altogether 89 hotels) by way of simple random sampling.

C. Scope of research, this research involved study on management and production systems in kitchens hotel samples in order to propose on ideal Thai kitchen for hotel business and large quantity foodservices.

II. Documentary survey

Information on food management and production systems were collected from relevant documents. Such information included the following:

- Several important processes in quantity food management and production systems.
- Factors influencing quantity food management and production systems.
- Factors involving design and work flow of the kitchen.
- Categories and characteristic of Thai food.
- Regulations and sanitation standards for Thai restaurants.

III. Basic data survey

Collection of relevant information on sample group of personnel in selected hotel kitchens by using data collection materials interview questionnaire and observation form.

IV. Construction of data collection materials

A. Interview questionnaire and observation form.

1. Interview questionnaire: The schedule consisted of 5 sections:
 - Section 1: General data on sample groups
 - Section 2: Personnel Structure of production unit in Thai kitchen
 - Section 3: General data of staff in Thai kitchen
 - Section 4: Management and production systems of Thai kitchen
 - Section 5: Problems, limitations and solving guidelines in management and production system of Thai kitchen

2. Environment observation form: included size, layout, functional areas, furniture, equipment, construction materials, and photographs of the kitchens.

B. Pre-test and correction of interview schedule and observation form. Four steps of the pre-test were undergone according statistical format, ie.

1. The interview schedule and observation form must be approved by the advisory committee.

2. The interview schedule and observation form must be re-examined by experts in order that the precise and accurate context and the objectives were achieved.

a) The corrected interview schedule and observation form were pretested in 10 hotels restaurants which were not actual selected sample groups.

b) The pretested interview schedule and observation form were corrected accordingly.

V. Actual collection of data, the procedures as the follows:

A. The letter from Tropical Agriculture International Program, Graduate school, Kasetsart University to President of Thai Hotels Association requesting the co-operation from selected hotels.

B. Actual interview and observation on the sample groups by researcher.

VI. Analysis of data, the analysis steps were as follows :

A. Data sorting, collected data is categorized into sections and objectives as the following:

- General data of Thai kitchen namely location, layout or area plan and internal environment management.

- Personnel structure data, management and production systems namely menu planning , purchasing, receiving, storage and issuing of Thai kitchen.

- Problems, limitations and solving guidelines in management process and production.

B. Data analysis, as the following :

1. Descriptive statistics by computer program was used and the data was divided into two groups:

a) Categorical data such as nominal and ordinal scale in the pattern of frequency distribution, percentage and graphical method.

b) Quantitative data presented in statistic values such as mean, median, mode, range, and standard deviation.

2. Measure of association for nominal and ordinal data using statistical chi-square (χ^2).

3. Qualitative analysis using both typological analysis and analyzing by constant comparison (Jamonman,1994; Chuto, 2002; Juntavanit, 2002). Interpret the content of all data from document section, journals, or texts as well as the data from interviewing and observation.

C. Overall conceptual analysis, An ideal model for Thai kitchen was proposed taking into account the analyzed data from documentary survey, interviewing, and environment observation as the guideline, with emphasis on management and production aspects. Moreover, sanitation was also considered to be a vital aspect that should not be overlooked.

VII. Site and Duration

Site : Thai kitchens which located in hotel of regular members of Thai Hotels Association in Thailand.

Duration : October, 2003 to April, 2007

