

CHAPTER IV

DATA EXERCISE ON PRELIMINARY STUDY

4.1 Introduction

Objectives of the data exercise on the preliminary study are:

1. To evaluate changes in knowledge and attitudes of the BMA Health Officers before and after the training program.
2. To test instrument in order to justify questionnaires.

In the data exercise I collected data from many sources. They are as follows:

1. Making self-administered questionnaires to 56 BMA Food Inspectors.
2. Focus group interview of 10 BMA Food Inspectors.
3. Exploration on secondary data from Inspection Division, FDA, MOPH.

On theory of focus group interview, Morgan (1988) reported that:

As a form of qualitative research, focus groups are basically group interviews, although not in the sense of an alternation between the researcher's questions and the research participants' responses. Instead, the reliance is on interaction within the group, based on topics that are supplied by the researcher, who typically takes the role of a moderator. The fundamental data that focus groups produce are transcripts of the group discussion. From a social science point of view, focus groups are useful either as a self-contained means of collecting data or as a supplement to both quantitative and other qualitative methods. The value of combining focus groups with other techniques will receive attention here, but the emphasis will be on the value of self-contained focus groups. The main advantage focus groups

offer is the opportunity to observe a large amount of interaction on a topic in a limited period of time. The key to this ability is the observer's control over the assembly and running of the focus group sessions. (p. 9)

4.2. Data from Self-Administered Questionnaires.

According to the data from self-administered questionnaires, general information of the respondents was as follows: Results of data exercise on knowledge and attitude in training program.

Table 4.1

Sex distribution of trainees

Characteristic	frequency	%
Sex		
1. Male	23	41.8
2. Female	33	58.9
Age		
1. 21-30 years old	26	46.4
2. 31-40 years old	25	44.6
3. 41-50 years old	3	5.4
4. 51-60 years old	2	3.6
Job		
1. Technical Sanitation Officers	44	78.6
2. Health Officers	12	21.4

Continuation Table 4.1		
Characteristic	frequency	%
<u>Year of service</u>		
1. < 5 years	38	67.9
2. 6-10 years	7	12.5
3. > 10 years	11	19.6
<u>Level of education</u>		
1. High school	2	3.6
2. Bachelor degree	48	85.7
3. Master degree	1	1.8
4. Certificate of Practical Nurse/ Health Officer	5	8.9

Note. Most (58.9%) trainees are females. The majority are in the 21-30 years age group (46.4 % of all the trainees). Most job of trainees are Technical Sanitation Officers (78.6 % of all the trainees). The majority has less than 5 years of service (67.9 %). The majority has a bachelor degree (85.7 % of all the trainees).

Table 4.2

Knowledge of trainees

Characteristic	freq.	Mean pre-test	SD. pre-test	Mean post-test	SD. post-test	% change	Sig. Stat.
Sex							
1.Male	23	10.913	2.087	13.739	1.839	25.90	7.560
2.Female	33	11.515	1.955	13.576	1.921	17.90	6.025
Age							
1. 21-30 years old	26	11.615	2.155	13.885	1.705	19.54	4.212.
2. 31-40 years old	25	11.080	1.935	13.640	2.039	23.10	4.553.
3. 41-50 years old	3	11.000	1.000	12.000	1.000	90.9	1.225
4. 51-60 years old	2	9.500	2.121	13.000	2.828	36.84	1.829
Job							
1.Technical Sanitation Officers	44	11.432	1.981	13.932	1.822	21.87	6.173
2. Health Officers	12	10.667	2.103	12.583	1.730	17.96	2.437

Continuation Table 4.2

Characteristic	freq.	Mean pre-test	SD. pre-test	Mean post-test	SD. post-test	% change	Sig. Stat.
<u>Year of service</u>							
1. < 5 years	38	11.132	2.042	13.868	1.727	24.58	6.310
2. 6-10 years	7	13.429	1.272	13.571	2.637	1.06	0.123
3. > 10 years	11	10.364	1.286	12.909	1.814	24.56	3.798
<u>Level of education</u>							
1. High school	2	11.000	0.000	12.500	0.770	13.64	2.755
2. Bachelor degree	48	11.250	1.907	13.813	1.818	22.78	6.876
3. Master degree	1	14.000	0.000	16.000	0.000	14.29	-
4. Certificate of Practical Nurse/ Health Officer	5	11.000	3.317	12.000	1.871	9.09	0.587

Note. Knowledge of trainees: In the pre-test, female got more scores than male. But there is no statistically significant score difference. In post-test, male got more scores than female. There is also no statistically significant difference. Scores of both male and female on post-test are more than pre-test. There is a statistically significant difference between pre-test and post-test (both male and female $P < 0.05$). Trainees in 21-30 years age group got highest scores in pre-test and post-test. The Technical Sanitation Officers got more scores than Health Officers both in pre-test and post-test. There is a statistically significant different scores in post-test between Technical Sanitation Officers and Health Officers ($P < 0.05$). Although there is no difference in pre-test. There is a significant difference in pre-test and post-test in both group. ($P < 0.05$). In pre-test, people with 6-10 years got the highest mean scores but in post-test, year of service less than 5 years got highest mean scores. Score achievement is significantly different in pre-test and post-test in less than 5 years of service ($P < 0.05$). Also there is a significant difference in pre-test and post-test in more than 10 years of service ($P < 0.05$). But there is no significant difference in 6-10 years of service. One person with master degree got highest scores in both pre-test and post-test. Persons with bachelor degree also got high scores, there are 48 persons. There is a significant change in scores of people with bachelor degree between pre-test and post-test ($P < 0.05$). Mean scores of all 4 groups found to be increased in post-test.

Table 4.3

Attitude of food inspectors

Characteristic	Frequency	Mean Pre- Attitude	SD. Pre- Attitude	Mean post- Attitude	SD. post- Attitude	% change	Sig. Stat.
Sex							
1.Male	23	3.593	0.381	3.593	0.422	-	-
2.Female	33	3.587	0.385	3.583	0.396	0.11	0.042
Age							
1. 21-30 years old	26	3.605	0.251	3.667	0.293	1.72	0.820
2. 31-40 years old	25	3.629	0.447	3.552	0.360	2.12	0.671
3. 41-50 years old	3	3.217	0.577	3.970	0.341	23.41	2.096
4. 51-60 years old	2	3.455	0.643	2.410	0.198	30.25	2.197

Continuation Table 4.3

Characteristic	Frequency	Mean Pre- Attitude	SD. Pre- Attitude	Mean post- Attitude	SD. post- Attitude	% change	Sig. Stat.
Year of service							
1. < 5 years	38	3.582	0.288	3.619	0.280	1.03	0.568
2. 6-10 years	7	3.507	0.390	3.491	0.702	0.46	0.145
3. > 10 years	11	3.669	0.621	3.536	0.544	3.62	0.534
Level of education							
1. High school	2	3.365	1.153	3.955	0.191	17.53	0.714
2. Bachelor degree	48	3.587	0.365	3.552	0.354	0.98	0.477
3. Master degree	1	3.820	0.000	4.450	0.000	16.49	-
4. Certificate of Practical Nurse/ Health Officer	5	3.656	0.218	3.600	0.697	1.53	0.172

Note. Attitude of food inspectors: Male have more attitude scores than females in both pre-training and post-training. There is no statistically different scores between male and female in both pre-training and post-training. Male have the same attitude in pre-training and post-training. Female got less good attitude score than male in pre-training. Trainees who are in the 31-40 years age group got highest good attitude in pre-training. In post-training 41-50 years age group got highest attitude scores. In trainees 31-40 years age group and 51-60 years age group got lower attitude scores in post-training than in pre-training. There is no difference found between pre-training and post-training in attitude scores of both Technical Sanitation Officers and Health officers. In pre-training, service more than 10 years got highest good attitude but in post-training, service less than 5 years got highest attitude scores. Service more than 6 years were found decrease in attitude scores towards roles and tasks owing to Food Acts 1979. There is no difference in attitude scores between pre-training and post-training in other age groups. In both tests, people with higher education got good attitude scores towards roles and tasks owing to Food Acts 1979. In pre-test, Practical Nurses and Health Officers got higher attitude scores than bachelor degree and high school levels. However, in post-test, High school graduates got higher attitude scores than other people.

Table 4.4

Summary of knowledge scores

Scores knowledge (20 mark)	Frequency of Pre-test	% Pre-test	Frequency Post-test	% Post-test
1. < 10	19	33.9	4	7.1
2. 11-15	36	64.3	42	75.0
3. 16-20	1	1.8	10	17.9

Note. Summary of knowledge scores: The most frequent scores are 11-15 (64.3 %) in pre-test and about 7.1 % of trainees who got less than 10 scores in post-test are less than pre-test and increase in 16-20 mark in post-test.

Table 4.5

Summary mean of attitude

Mean Attitude	Frequency Pre-training	% Pre-training	Frequency Post-training	% Post-training
1. Good Attitude (3.51-5.00)	34	60.7	30	53.6
2. Moderate Attitude (2.51-3.50)	22	39.3	25	44.6
3. Low Attitude (1.00-2.50)	-	-	1	1.8

Note. Summary of attitude scores: Most trainees got 3.51-5.00 scores that are good attitude scores (34 person in pre-training and 30 person in post-training). But some trainees in good attitude scores decrease in attitude scores. It became a general tendency that trainees had a moderate attitude after training.

Table 4.6

Summary scores of knowledge and attitude

Variables	Mean Pre- training	SD. Pre- training	Mean Post- training	SD. Post- training	% change	Sig. Stat.
1. Knowledge	11.268	2.014	13.643	1.873	21.08	6.429
2. Attitude	3.589	0.380	3.587	0.403	0.06	0.027

Note. Summary scores of knowledge and attitude: Mean scores of knowledge in post-test are more than pre-test. There is a statistically significant difference in knowledge between pre-test and post-test. ($P < 0.05$). There is no difference in attitude in both tests. The level of knowledge of trainees became higher after training.

Table 4.7

Frequency of attitude towards roles and tasks for the Food Act of 1979

Questions	Strongly agree		Agree		Un- decided		Dis- agree		Strongly disagree		No answer	
	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%
1. Post-marketing surveillance in quality and safety of food is useful for consumer.	Pre-	37.0	66.1	19.0	33.9	-	-	-	-	-	-	-
	Post-	38.0	67.9	18.0	32.1	-	-	-	-	-	-	-
2. Food inspection is essential for consumer.	Pre-	35.0	62.0	20.0	35.7	-	-	-	-	-	1.0	1.8
	Post-	33.0	58.9	22.0	39.3	-	-	-	-	-	1.0	1.8
3. Decentralization of quality standard surveillance at distribution to The officers of BMA can increase more coverage of consumer protection	Pre-	14.0	25.0	32.0	57.1	9.0	16.1	-	-	1.0	1.8	1.8
	Post-	15.0	26.8	30.0	53.6	5.0	8.9	4.0	7.1	1.0	1.8	1.8

Continuation Table 4.7

Questions	Strongly agree		Agree		Un- decided		Dis- agree		Strongly disagree		No answer		
	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%	
4. Inspection of quality of food for Food Act 1979 must have knowledge and understanding in inspection.	Pre-	33.0	58.9	22.0	39.3	1.0	1.8	-	-	-	-	-	-
	Post-	34.0	60.7	21.0	37.5	1.0	1.8	-	-	-	-	-	-
5. You understand and have knowledge in your new roles and tasks for Food Acts 1979.	Pre-	3.0	5.4	32.0	57.1	15.0	26.8	6.0	10.7	-	-	-	-
	Post-	5.0	8.9	41.0	73.2	8.0	14.3	1.0	1.8	1.0	1.8	-	-

Continuation Table 4.7

Questions	Strongly agree		Agree		Un- decided		Dis- agree		Strongly disagree		No answer		
	freq.	%	freq.	%	freq	%	freq.	%	freq.	%	freq.	%	
6. You can perform your new task	Pre-	5.0	8.9	34.0	60.7	14.0	25.0	1.0	1.8	-	-	2.0	3.6
	Post-	3.0	5.4	39.0	69.6	8.0	14.3	2.0	3.6	1.0	1.8	3.0	5.4
7. New roles and tasks for Food Acts relevant to your own tasks.	Pre-	4.0	7.1	34.0	60.7	12.0	21.4	6.0	10.7	-	-	-	-
	Post-	4.0	7.1	36.0	64.3	11.0	19.6	3.0	5.4	2.0	3.6	-	-
8. You satisfy in new roles and tasks for Food Acts 1979.	Pre-	4.0	7.1	26.0	46.4	20.0	35.7	2.0	3.6	2.0	3.6	2.0	3.6
	Post-	3.0	5.4	24.0	42.9	21.0	37.5	4	7.1	3.0	5.4	1.0	1.8

Continuation Table 4.7

Questions	Strongly agree		Agree		Un- decided		Dis- agree		Strongly disagree		No answer		
	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%	freq.	%	
9. Your own responsible tasks before delegation are work-load.	Pre-	12.0	21.4	33.0	58.9	8.0	14.3	3.0	5.4	-	-	-	-
	Post-	20.0	35.7	25.0	44.6	7.0	12.5	3.0	5.4	1.0	1.8	-	-
10. New roles and tasks owing to Food Acts 1979 increase a lot of burden of work to you.	Pre-	5.0	8.9	12.0	21.4	25.0	44.6	14.0	25.0	-	-	-	-
	Post-	8.0	14.3	18.0	32.1	22.0	39.3	6.0	10.7	2.0	3.6	-	-

Continuation Table 4.7

Questions	Strongly agree		Agree		Un- decided		Dis- agree		Strongly disagree		No answer		
	freq.	%	freq.	%	freq	%	freq.	%	freq.	%	freq.	%	
11. Excluding of FDA and BMA 's officers , you think that there are other group of person who can inspect standard quality of food at distribution.	Pre-	6.0	10.7	23.0	41.1	22.0	39.3	5.0	8.9	-	-	-	-
	Post-	11.0	20.0	30.0	54.5	12.0	21.8	2.0	3.6	-	-	-	-

Note. Frequency of attitude towards roles and tasks for the Food Act of 1979: In both pre-training and post-training, trainees strongly agreed that Post - marketing surveillance in quality and safety of food is useful for consumers. There are no statistically different scores in both pre-training and post-training. They also agreed that food inspection is essential for consumers. There are no statistically different scores in both pre-training and post-training. They agreed both in pre- and post-training that decentralization of quality standard surveillance by deploying job to the officers of BMA can increase more coverage of consumer protection. There is no statistically different scores in both pre-training and post-training. Most trainees strongly agreed that inspection of quality of food owing to the Food Act of 1979 needs good knowledge in inspection. There is no statistically different scores in both pre-training and post-training. I also found they agreed that having knowledge in their own new roles and tasks is necessary to perform their new tasks. There is a statistically different score in both pre-training and post-training ($P < 0.05$). Most trainees agree in both pre- and post-training that new roles and tasks owing to the Food Act of 1979 are relevant to their own tasks. There is no statistically different score in both pre-training and post-training. Most trainees in both pre- and post-training stated that they were satisfied in their new roles and tasks owing to the Food Act of 1979. There is no statistically different score in both pre-training and post-training. Most trainees agree in both pre- and post-training that they have their own responsible tasks before being assigned an additional work-load. There is no statistically different score in both pre-training and post-training. Most trainees are un-decided in both pre-and post-training about the fact that new roles and tasks increase a lot the burden of work to them. There is no statistically different score in both pre-training and post-training. Most trainees agree in both pre- and post-training that there are other groups of persons who can inspect standard quality of

food at distribution. There is no statistically different score in both pre-training and post-training.

Limitation of the study

I tried to collect data by questionnaire method from all trainees (72 persons from all districts), but some came late and I could not perform the pre-test. Therefore, I could collect only 56 persons. Some people came early on pre-test day but they did not reach the training room in time because of the lack of information about the place. Others answered incompletely, and some trainees answered the questionnaire completely, but they did not write their names on the questionnaire. Therefore, identification of the persons was done by their job, district and age etc.

4.3. Focus group interview to 10 BMA Food Inspectors.

The aim of the focus group interview was the attitude towards roles and tasks according to the Food Act of 1979. Our target groups were Technical Sanitation Officers and Health Officers in district offices. First, I random sampled District Offices. If there were 2 persons in that District Office I took one person. Second, I prepared a tape recorder to record the conversation of the focus group interview and my colleague helped me to record the conversation. I asked all the questions one by one and I let everybody answer the different questions. My colleague recorded the answers and took notes. Finally, I transcribed the recordings and summarized the data.

Results of focus group interview on attitude toward roles and tasks according to the Food Act of 1979:

1. Randomly selected District Officers are as follows :

Name	District Offices
1. Mrs.Wilaporn Pornpoempoon	Phrakhanong
2. Mrs. Patcharee Kaewkanok	Pathumwan
3. Mr. Weerasak Sinpru	Ladkrabung
4. Mr. Sophon Photharamik	Buengkoom
5. Ms.Suree Pruksapradubkool	Nongkham
6. Mrs.Pornphan Chaiworasilpa	Talingchun
7. Ms. Suchira prasarnphan	Phaseecharoen
8. Ms. Thanasri Seehaboot	Bangkoknoi
9. Ms. Ratchanok Chaimueng	Nongchok
10. Mr.Wirat Tanchanapradit	Pomprab

2. Attitude toward roles and tasks according to the Food Act of 1979.

Question 1: Post-marketing surveillance in quality and safety of food is useful for consumers.

Result: 5 trainees strongly agreed and 5 persons agreed. Nobody un-decided, disagreed or strongly disagreed.

Reason found were:

1. It is useful for consumers.
2. Food is essential: everybody has to take it everyday so that officers should inspect regularly in order to protect the consumers.
3. It upgrades the quality of food.

4. It protect health of consumers.

Question 2: Food inspection is essential for consumers.

Results: Out of ten persons, 4 persons strongly agreed and 6 persons agreed.

Their reasons are:

1. It is essential for consumers.
2. Food is essential: everybody has to take it everyday so that officers should inspect regularly in order to protect the consumer.
3. It upgrades standard quality of food.
4. It protects the health of consumers by surveillance and control.

Question 3: Decentralization of surveillance work at distribution to BMA can increase more coverage of consumer protection.

Result: Nine persons agreed and one strongly agreed.

Reasons are:

1. There are 1-2 Technical Sanitation Officers in each District Office.

Technical Sanitation Officers are only responsible for sub-districts in that district so there will be Health Officers responsible for other area of sub-districts. Technical Sanitation Officers did not take care for the whole area in that district. In each district office, there are 12-15 Health officers level 1 that will be responsible for other areas in that district. There are about 500 shops per district so Technical Sanitation Officers can inspect 1 shop per day. Even if they inspect one shop a day, they cannot cover all the shops in one year. They all agreed that only Technical Sanitation Officers can not cover the whole area in the district. They would like FDA to appoint Health Officers level 1 to perform these tasks in order to increase number of officers and cover all area in that district.

Question 4: Inspectors for quality of food (Food Act 1979) must have knowledge and understanding in inspection.

Result: All trainees strongly agreed.

Reason: In order to inspect correctly the food for the consumers.

Question 5: Knowledge and understanding in new roles and tasks regarding the Food Act of 1979.

Result: All trainees are un-decided.

Reason:

They want more authority since they begin to inspect and follow up these cases. The shop owners want to be informed about the different steps of the procedure and also concerning legal actions involved.

Question 6: Ability to perform the new task.

Result: All trainees disagreed.

Reason:

To advise the shop owners is not difficult, but to confiscate or take legal action is a problem. They are not confident because they do not know the law properly. If they would be informed they could do their task well.

Question 7: New roles and tasks regarding Food Act 1979 relevant to your own tasks.

Result: 9 trainees agreed but 1 trainee disagreed.

Reason for agreement:

Relevant but increase in workload.

Reason for disagreement:

They have to go to the same places but performance is different. Previously, they went for checking, but with the new job description they have to perform much more extensive work.

Question 8: Are you satisfied with the new roles and tasks regarding the Food Act of 1979?

Result: 4 trainees agreed and 6 trainees were un-decided.

Reason for agreement:

1. Increase in coverage can protect consumers better.
2. Essential for consumers.

Reason for being un-decided:

1. They are not willing to take more responsibility although they know how to do it.
2. Increase of burden for them.

Question 9: Your main burden before delegation of work-load.

Result: 7 trainees strongly agreed and 2 trainees agreed.

Reason for strong agreement and agreement are as follows:

They have to perform many tasks from many ministries. There are few officers to perform these tasks and no incentive is given for the extra work.

They have no career ladder.

Question 10: New roles and tasks have increased the workload a lot.

Result: 2 trainees strongly agreed and 8 trainees agreed.

Reason for strong agreement and agreement:

There are many job descriptions for them to do, like checking petroleum gas of

the Department of Civil, children labor control, the health of non-smoking people, etc. The sanitation of place. There are about 500-1,000 shops per district in their responsible area.

Question 11: Excluding of FDA and BMA's Officers, some other persons can inspect standard quality of food at distribution.

Result: All trainees strongly disagree.

Reason for strong disagreement:

There are no officers readily trained for these task.

Conclusion and Suggestion

The possible influencing factors on attitude are that training program for 3 days is very tough for trainees. They are already busy with their work. They are responsible for many tasks from many ministries. There are only 1 or 2 Technical Sanitation Officers in Districts Offices but there are a lot of task to do. So, their motivation is low.

There is only one trainee who strongly disagreed in decentralization of quality standard surveillance.

There should be on the job training program and close supervision for the BMA Health Officers in order to review knowledge and skill every year and train the new officers too.

In future recruitment, we have to select people who are particularly interested in this kind of job for over a long time.

An incentive program is needed: rewarding or sending on study tours and provision for their career ladder. This should be planned before starting a new project.

4.4 Exploration on secondary data from Inspection Division, FDA, MOPH

The report on analysis of food in Bangkok during the fiscal year 1994, showed that:

1. The result of foods that are below standard equal 100.0 % are:
 Mineral salt (1 sample), Mineral Salt Beverage (1 sample), Distilled Vinegar (5 samples), Red sauces (1 sample), Dye food (2 samples), Meat Ball (1 sample), Dry fish (1 sample), Fermented guava (1 sample), Cream Sweets (1 sample).
2. The results of food analysis that are below standard > 80.0 % are:
 Beverage (16/18), Process food for cooking (34 / 37).
3. The result of food analysis that are below standard 50-80 % are:
 Honey juice (14/23), Biscuits (1/2), Sausage (1/2).
4. The result of food analysis that are below standard < 50.0 % are:
 Drinking Water in Sealed Container (4/36), Beverage with Caffeine (1/4), Bean Oil (1/10), Pasteurize Milk (2/20), Ready food for consumption (34/101), Salted Crab (12/25), Dye Candy (1/48), Wheat flour (1/3), Fresh bread (7/30), Bean Products (9/39), Pork (6/33), Thai-sausage (1/7), Semi-Processed Food 1/3, Fresh Vegetable (1/97), Non-chemical substance Vegetable (1/11).
5. The result of food analysis that are above standard 100.0 % are fruit juice in sealed bottle (2 samples), Sugar (25 samples), Fish sauce (3 samples), UHT Milk (20 samples), Powder Milk (2 samples), Monosodium glutamate (2 samples), Additive Sauces (5 samples), supplementary food (1 sample), gum (2 samples), dye Sweets (56 sample), Corn Products (26 samples), Raw Corn (20 samples), Entrails (18 samples), Ice Fish (4 samples),

North-Eastern Sausage (6 samples), Canned Food (20 samples), Fruit (10 samples), Royal jelly (1 sample), Container (Melanin) (1 sample).

From the results of the food analysis, we should focus on the results of foods that are below standard 100.0 % and > 80.0 %. Food in these 2 groups may have a harmful effect on consumers. Therefore, we have to focus on these kinds of food and plan to inspect the place of production, advise the entrepreneurs and educate the consumers. The foods which are below standard 50-80 % and < 50.0 %, will be followed up every 3 months in order to study their quality.

MOPH data reported that acute diarrhoea cases were increasing in number: 645,902 (1987) to 868,338 (1993). During 1993, statistics showed 16,496 enteric fever cases, 78,015 dysentery cases and 70,092 food poisoning cases.

Source : Inspection Division , FDA , MOPH, 1995.

: MOPH. (1995). Division of Health Statistics. Public Health Statistics 1993.

Discussion

According to the results of the data analysis it was found that the mean of knowledge in post-test is more than pre-test. There is a statistically significant difference in knowledge between pre-test and post-test. ($P < 0.05$). There is no difference in attitude in both tests. Level of knowledge of trainees became higher after training.

Results of the food analysis in secondary data from Inspection Division, FDA, MOPH: We should focus on the result of food analysis that are below standard 100.0 % and 80.0 % because food in these 2 groups, may have harmful effect on the consumers. Therefore, we have to focus on these kinds of food and plan to inspect the place of production, advise the entrepreneurs and educate the consumer. The foods which are below standard 50-80 % and less than 50.0 %, will be

followed up every 3 months in order to study their quality. MOPH data reported that acute diarrhoea cases are increasing in number: 645,902 (1987) to 868,338 (1993). During 1993, statistics showed 16,496 enteric fever cases, 78,015 dysentery cases and 70,092 food poisoning cases.

Most trainees are female, the majority are in the 21-30 years age group, most jobs are Technical Sanitation Officers, the majority years of service are less than 5 and have a bachelor degree.

Trainees in 21-30 years age group got highest scores in pre-test and post-test. There is a significant difference in scores in post-test between Technical Sanitation Officers and Health Officers ($P < 0.05$). Knowledge scores achievement is significantly different in pre-test and post-test in less than 5 years of service ($P < 0.05$) and also there is a significant difference in pre-test and post-test in more than 10 years of service ($P < 0.05$). There is a significant change in score of people with bachelor degree between pre-test and post-test ($P < 0.05$).

There is no statistically different score of attitude between male and female in both pre-training and post-training. There is no difference found between pre-training and post-training in attitude scores of both Technical Sanitation Officers and Health Officers. Practical Nurses and Health Officers got higher attitude scores than bachelor degrees and high school levels. Training programs do not effect the attitude of trainees.

The most frequent knowledge scores are 11-15 (64.3 %) in pre-test and about 7.1% who got less than 10 scores in post-test are less than pre-test and increase in 16-20 in post-test. The training program has an effect on knowledge of trainees.

Most trainees got 3.51-5.00 attitude scores that are good attitude. Some trainees in good attitude scores decrease in attitude scores. It become a genral tnedency that trainees have a moderate attitude after training.

This project is not the 100 % answer but should be part of the overall strengthening of Pot-marketing control including consumer's education.

The project to appoint BMA Health Officers as food inspectors is necessary. We have to protect consumers in order to guarantee the quality and safety of food for consumption. This project is the first step for local government so that the FDA delegates responsibility to them. If they can perform a good job in the future, I think that it will be beneficiary for the consumers.