

2. 会議出席者リスト

1 月 16 日 (木)

Meeting at FQCD, MOH

10:30 AM-12:30 PM

	Name	Position
1	Dato' Dr. Tee Ah Sian	Deputy Director General of Health (Public Health) /Chairperson
2	Dato' Dr. Harrison Aziz	Project Manager, Director of FQCD
3	Dr. Arumugam Lingam a/l Seradurai	Director, National Pubic Health Laboratory, Sungai Buloh
4	Dr. Yahya Baba	Deputy Director, FQCD
5	Dr. A'aisah bt. Senin	Principal Assistant Director, Enforcement Section, FQCD
6	Mr. Jamal Khair Hashim	Principal Assistant Director, Research and Monitoring Section, FQCD
7	Mr. Chin Cheow Keat	Principal Assistant Director, Laboratory Section, FQCD
8	Ms. Norrani Eksan	Principal Assistant Director, Regulation Section (Label), Secretariat, FQCD
9	Mr. Salim Dulatti	Principal Assistant Director, Industry Section, FQCD
10	Ms. Zawiyar Shariff	Food Technologist, NPHL, Sungai Buloh
11	Mr. Haw	Health Inspector, Kedah
12	Dr. Mitsuhiro Ushio	Consultation Team Leader
13	Dr. Sadao Uchiyama	Consultation Team (Physics and Chemistry)
14	Mr. Takuya Kondo	Consultation Team (Food Import Control System)
15	Ms. Yukako Matsuura	Consultation Team (Cooperation Planning)
16	Ms. Reiko Azezumi	JICA Malaysia Office
17	Dr. Ikuo Tsukamoto	JICA Project Chief Advisor
18	Dr. Yashima Hodate	JICA Project Long-term Expert (Microbiology)
19	Ms. Yoko Kanagae	JICA Project Coordinator

# Luncheon

Invited by Japanese Consultation Team

Date: 16<sup>th</sup> January 2003

Time: 12:30~14:00

Venue : Saloma Theater Restaurant  
Pusat Pelancongan Malaysia (MTC)

139, Jalan Ampang, 50450 KL

Tel:03-21610122

	Name	Position
1	Dato' Dr. Tee Ah Sian	Deputy Director General of Health (Public Health)
2	Dato' Dr. Harrison Aziz	Project Manager, Director of FQCD
3	Dr. Arumugam Lingam a/l Seradurai	Director, National Public Health Laboratory, Sungai Buloh
4	Dr. Yahya Baba	Deputy Director, FQCD
5	Dr. A'aisah bt. Senin	Principal Assistant Director, Enforcement Section, FQCD
6	Mr. Jamal Khair Hashim	Principal Assistant Director, Research and Monitoring Section, FQCD
7	Mr. Chin Cheow Keat	Principal Assistant Director, Laboratory Section, FQCD
8	Ms. Norrani Eksan	Principal Assistant Director, Regulation Section (Label), Secretariat, FQCD
9	Mr. Salim Dulatti	Principal Assistant Director, Industry Section, FQCD
10	Ms. Zawiyar Shariff	Food Technologist, NPHL, Sungai Buloh
11	Mr. Mohamad Idris	JICA Project Assistant
12	Dr. Mitsuhiro Ushio	Consultation Team Leader
13	Dr. Sadao Uchiyama	Consultation Team (Physics and Chemistry)
14	Mr. Takuya Kondo	Consultation Team (Food Import Control System)
15	Ms. Yukako Matsuura	Consultation Team (Cooperation Planning)
16	Ms. Reiko Azezumi	JICA Malaysia Office
17	Dr. Ikuo Tsukamoto	JICA Project Chief Advisor
18	Dr. Yashima Hodate	JICA Project Long-term Expert (Microbiology)
19	Ms. Yoko Kanagae	JICA Project Coordinator

1 月 17 日 (金)

(1) Bukit Kayu Hitam Entry Point

- Dr. Norida Hanafiah..... Medical Officer of Health, Kedah State Health Department,
- Mr. Hj. Abd. Rahim Said.....Chief Health Inspector, Kedah
- Mr. Saleh Md Isa, .....Health Inspector, Kedah

(2) Food Quality Control Laboratory, Perlis

- Mr. Abdul Ghani .....Chief of Food Quality Laboratory, Perlis
- Mr. Mohamad Sukor Serapi ..... Chief of Chemical Section, FQC Lab., Perlis
- Ms. Rokiah Mehad ..... Chief of Microbiology Section, FQC Lab., Perlis

(3) Dinner Reception

- Dr. Hj Azmi b. Hashim..... Director, Perlis State Health Department
- Datin Dr. Diljit Kaur ..... District Medical Officer, Perlis State Health Department

1 月 20 日 (月)

Meeting at FQCD, MOH

9:30AM-12:00PM

	Name	Position
1	Dr. Yahya Baba	Deputy Director, FQCD
2	Dr. A'aisah bt. Senin	Principal Assistant Director, Enforcement Section, FQCD
3	Mr. Jamal Khair Hashim	Principal Assistant Director, Research and Monitoring Section, FQCD
4	Mr. Chin Cheow Keat	Principal Assistant Director, Laboratory Section, FQCD
5	Ms. Norrani Eksan	Principal Assistant Director, Regulation Section (Label), Secretariat, FQCD
6	Mr. Salim Dulatti	Principal Assistant Director, Industry Section, FQCD
7	Mr. Teoh Tiong Hok	Health Inspector, FQCD
8	Ms. Nik Shabnam bt. Nik Mohd Salleh	Principal Assistant Director, Standard Section, FQCD
9	Dr. Mitsuhiro Ushio	Consultation Team Leader
10	Dr. Tsutomu Maruyama	Consultation Team (Microbiology)
11	Dr. Sadao Uchiyama	Consultation Team (Physics and Chemistry)
12	Mr. Takuya Kondo	Consultation Team (Food Import Control System)
13	Ms. Yukako Matsuura	Consultation Team (Cooperation Planning)
14	Dr. Ikuo Tsukamoto	JICA Project Chief Advisor
15	Dr. Yashima Hodate	JICA Project Long-term Expert (Microbiology)
16	Ms. Yoko Kanagae	JICA Project Coordinator

1 月 21 日 (火)

(1) Port Kelang

- Dr. Param, Jeeth Singh-----Port Health Officer, Port Kelang
- Ms. Wee Bee Wah,-----Food Technologist, Selangor State Health Department
- Mr. Sugumar-----Senior Health Inspector, Port Kelang
- Mr. Boo Ming-----Health Inspector, Port Kelang
- Dr. A'aisah bt. Senin----- Principal Assistant Director, Enforcement Section,  
FQCD

(2) National Public Health Laboratory, Sungai Buloh

- Dr. Arumugam Lingam a/l Seradurai----- Director, National Pubic Health Laboratory,  
Sungai. Buloh
- Ms. Toshia bt. Abdullah,-----Food Technologist (GMO)
- Mr. Mazlan Isa-----Chief of Section/ Food Technologist (Pesticide Residues and  
GMO)
- Ms. Zalilah Nasir-----Food Technologist (Veterinary Drug Residues)
- Mr. Chin Cheow Keat----- Principal Assistant Director, Laboratory Section, FQCD
- Dr. Yashima Hodate----- JICA Long-term Expert (Microbiology), NPHL, Sg. Buloh

1 月 22 日 (水)

## Joint Coordinating Committee at FQCD, MOH

9:30-11:30 AM

	Name	Position
1	<b>Dato' Dr. Harrison Aziz</b>	Project Manager, Director of FQCD/Chairperson
2	<b>Ms. Hidah Wisran</b>	External Assistance Section, Economic Planning Unit
3	<b>Ms. Daisy Rajoo</b>	Social Services Section, Economic Planning Unit
4	<b>Dr. Arumugam Lingam a/l Seradurai</b>	Director, National Public Health Laboratory, Sungai Buloh
5	<b>Dr. Nirmala Amplavanar</b>	Director of Disease Control Division, MOH
6	<b>Dr. Yahya Baba</b>	Deputy Director, FQCD
7	<b>Dr. A'aisah bt. Senin</b>	Principal Assistant Director, Enforcement Section, FQCD
8	<b>Mr. Jamal Khair Hashim</b>	Principal Assistant Director, Research and Monitoring Section, FQCD
9	<b>Mr. Chin Cheow Keat</b>	Principal Assistant Director, Laboratory Section, FQCD
10	<b>Ms. Norrani Eksan</b>	Principal Assistant Director, Regulation Section (Label), Secretariat, FQCD
11	<b>Ms. Tosiah bt. Abdullah</b>	Food Technologist, NPHL, Sungai Buloh
12	<b>Dr. Param Jeeth Singh</b>	Port Health Officer, Port Kelang
13	<b>Dr. Mitsuhiro Ushio</b>	Consultation Team Leader
14	<b>Dr. Tsutomu Naruyama</b>	Consultation Team (Microbiology)
15	<b>Dr. Sadao Uchiyama</b>	Consultation Team (Physics and Chemistry)
16	<b>Mr. Takuya Kondo</b>	Consultation Team (Food Import Control System)
17	<b>Ms. Yukako Matsuura</b>	Consultation Team (Cooperation Planning)
18	<b>Mr. Kazutoshi Aikawa</b>	Councilor, Embassy of Japan
19	<b>Mr. Takashi Yamazaki</b>	Second Secretary (Economic Section), Embassy of Japan
20	<b>Mr. Junichiro Sasaki</b>	Deputy Resident Representative, JICA Malaysia Office
21	<b>Ms. Reiko Akezumi</b>	Assistant Resident Representative, JICA Malaysia Office
22	<b>Dr. Ikuo Tsukamoto</b>	JICA Project Chief Advisor
23	<b>Dr. Yashima Hodate</b>	JICA Project Long-term Expert (Microbiology)
24	<b>Mr. Shinji Iizuka</b>	JICA Project Short-term Expert (PCR)
25	<b>Ms. Yoko Kanagae</b>	JICA Project Coordinator

3. NPHL 作成 プレゼンテーション資料

**PROJECT ON  
STRENGTHENING OF THE  
FOOD SAFETY PROGRAMME  
IN MALAYSIA**

Strengthening and Improvement  
in Capability of Food Analysis

**Laboratory involved:**

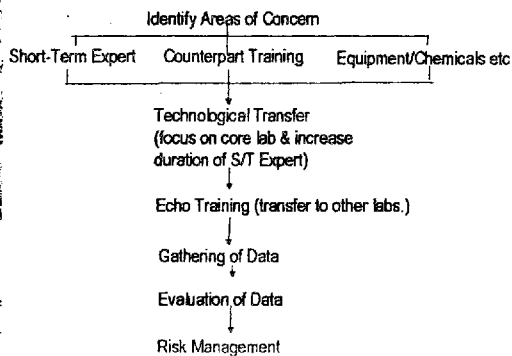
Concentrated at

- National Public Health Laboratory, Sungai Buloh

Other Core Laboratories

- Johor Bharu Public Health Laboratory
- Food Quality Control Laboratory Perlis
- Food Quality Control Laboratory Sarawak

**JICA Project: Approach on Strengthening Laboratory Capability**



**Equipment Provided by JICA:**

- GCMS
- LCMS
- HPLC (DAD)
- Others.....
  - Centrifuge
  - Sample concentrator
  - Vertical Shaker
  - Rotary evaporator
  - Rocking shaker
  - Vortex
- Other relevant equipment and chemicals/medias/glassware provided by MOH Malaysia

**Areas of Concern Involved**

- Pesticide
- Drug residue
- Genetically Modified Organism
- Microbiology

**JICA EXPERT**

- Dr Yashima Hodate (Microbiology)
- Dr Susumu Ishimitsu (Pesticide)
- Mr Kamihiko Yoshi (Pesticide)
- Mr Taigo Endo (Pesticide)
- Mr Nouno (Veterinary Drugs)
- Ms Kayo Otaki (GMO)
- Dr Aoki (Microbiology – PCR)

## Counterpart/Core Personnel

- Pesticide
  - Mr. Mazlan Isa (trained in Japan)
  - Ms. Zawiyah Sharif
  - Ms. Hamanyza Abdul Halim
- Veterinary Drug
  - En. Khairuddin (trained in Japan)
  - Ms. Zalliah Nasir
  - Mrs. Zailina
- GMO
  - Mr. Mazlan Isa (trained in Japan)
  - Mrs. Tosiah Abdullah
  - Mrs. Laina
- Microbiology
  - Mr. Zainazor
  - Mrs. Ramlah

## Inhouse- training

- 19/2/02 – in house training for simultaneous pesticide residue in food
- July 2001 – in house training for pesticide residue in food (HPLC)
- Ogos 2001 – in house training for pesticide residue in food (GCMS)
- Sept 2002 – chloramphenicol analysis
- Nov 2002 – Tetracycline analysis

## Echo- training

- Training in analysis for pesticide residue in food – HPLC (16-20 July 2001)
- Training in analysis for pesticide residue in food – GCMS (13-17 August 2001)
- Training for simultaneous pesticide residue in food (GC/GCMS) – (25-28 Feb) & (4 – 9 March 2001)
- Training for simultaneous pesticide ( 11-14 Mac. 2002 held in FQCL Perlis)
- Vet drugs analysis in food ( 4 labs involved) – (9-14 Sept. 2002)

## Inhouse- training

- July 2002 – Quantitative analysis on GMO products
- Sept 2002 – Quantitative analysis on GMO products
- Sept 2002 – *V. cholerae* detection
- October 2002 – PCR method for *V. cholerae*

## Echo- training

- Vet drugs analysis in foods ( 7 labs involved) – (28/10 – 2/11/2002)
- Training on GMO analysis – (25-27 March 2002)
- Training on Detection *V. cholerae* (5-10 Aug. 2002)
- Detection of *V. cholerae* O1 & CT toxin using PCR methods (30 Sep – 4 Oct 2002)

## Improvement in Capability

- Pesticide Residue
  - Increased in parameters screened to 51, an increase in coverage of the residues in the Malaysian Food Regulation from 12% to 26%
- Veterinary Drug Residue
  - Increased from 3 parameters to 24 parameters, covering 32% of veterinary drug residues in the Malaysian Food Regulation
- GMO
  - Qualitative and quantitative analysis
- Microbiology
  - Detection of cholerae enterotoxin by RPLA and CT gene by PCR

**List of SOP  
(Std. Operational Procedures)**

**Pesticide**

- 1. SOP for common Fruits & Vegetables
- 2. SOP for frozen fruits & Vegetables
- 3. SOP for Tea
- 4. Sop for Standard Preparation
- 5. SOP for instrument maintenance

**List of SOP  
(Std. Operational Procedures)**

**Microbiology**

- Detection of *V. cholera* during outbreak
- Detection of *Vibrios sp.*

**List of SOP  
(Std. Operational Procedures)**

**Drugs Residue**

- 1. Analysis of tetracycline in foods
- 2. Screening of 11 drugs in foods
- 3. Analysis of spiramycine in foods
- 4. Analysis of anthelmintics in foods
- 5. Confirmation analysis of drugs using LCMS
- 6. Maintenance of HPLC

**Samples analysed (2002)**

- Pesticide : >1000 samples with 54 parameters
- Drugs residue: >400 samples with 24 parameters
- GMO: >500 samples
- Microbiology: >1600 samples

**List of SOP  
(Std. Operational Procedures)**

**Biotechnology (GMO)**

- Detection of CBH351 in corn kernels and soybeans (Qualitative methods)
- Detection of New Leaf Y in Potato (Qualitative methods)
- Detection of CBH351 in Tarcos tortillas (Qualitative methods)
- Detection of P35S (screening for Event 176, Bt11, T25, and Mon 810) and GA21 in corn kernels) – Qualitative Methods

**Current Monitoring/Surveys**

- Monitoring fruits & Veg. For pesticides residues from entry points
- Tetracycline in local meat & poultry
- Chloramphenicol in imported honey
- Monitoring of vet. Drugs in imported meat & poultry
- Chloramphenicol in dairy products
- Monitoring on GMO in imported products
- Detection of *V. cholerae* from oily foods
- Microbiological profile in RTE (Nasi Lemak & kuih)
- Microbiological profile at school hostel kitchen



## General Findings

- Proficiency in analytical skills need continuous hands-on practice
- Basic skill on maintenance of equipment is necessary
- Specialist back-up maintenance service in case of break-down
- Adequate supportive spare parts, apparatus and chemicals are crucial
- Adequate human and financial resources is necessary for sustainability

THANK YOU



## Technical Staff at NPHL

	Before Project	Year 2002
No. of vacancies	13	28
No. of vacancies filled	10	15

New Staff are currently being recruited

## Specific Findings

- **GMO Analysis**
  - Japanese quantitative PCR method is 5% GM, while Malaysia's proposed draft regulation is 3%
  - Patent for the reagents used in the Japanese method
- **Pesticide Analysis**
  - Some pesticides cannot be measured using multiple residue method (MRM) i.e. selective/single residue method is required (SRM)
  - List of pesticide residue screened using MRM need to be reviewed based on monitoring data (Malaysian needs)

## **Main activities for the project**

**Yashima Hodate**

### **I. Technical transfer of V.cholerae detection**

(Hands-on training to the persons in charge of microbiology lab. whole Malaysia)

1. Isolation of V.cholerae O1 and O139 from various kinds of sample
  - a. from cooked food sample
  - b. from fish and shellfishes
  - c. from sea water
  - d. from river water
  - e. from well water
2. Agglutination test using antiserum of each type of V.cholerae O1 and O139
3. Agglutination test using monochronal antibody of each sero type of V.cholerae O1
4. CT detection method by RPLA
5. Gene detection of V.cholerae O1, O139 and CT by PCR

(Lecture)

1. General knowledge on cholera
  - a. History of cholera in the world and in Japan
  - b. Serological classification of Genus Vibrio
  - c. Biological classification of Cholera
  - d. CT gene
  - e. DNA of monocaryote and eucaryote
  - f. Protein synthesis
  - g. DNA replication
  - h. Others

### **II. Bacterial survey for school hostel's kitchen in Malaysia for establishment of Food Handling Manual**

1. Preparation of the survey protocol
2. Preparation of questionnaire to the kitchen when sampling
3. Data collection and analysis

### **III. Activity plan for 2003-2004**

1. Data collection and analysis for 88 school hostel's kitchens and kitchen workers
2. Preparation of Food Handling Manual
3. V.parahaemolyticus distribution survey whole Malaysia
4. Cholera control when outbroke
5. Visit to each laboratory to observe the laboratory work

## Results of Bacterial survey for school hostel's kitchen

	T P C	Coliform	E.coli	St.aureus	Sal.spp.	B.cereus
1. Cooked food	29/193 15.0%	44/193 22.8%	17/193 8.8%	4/193 2.1%	0/193 0.0%	5/193 2.6%
2. Eaten vegetables	3/11 27.7%	8/11 72.7%	4/11 36.4%	0/11 0.0%	1/11 9.1%	3/11 27.3%
3. Fruits	3/33 9.1%	16/33 48.5%	5/33 15.2%	3/33 9.1%	1/33 3.0%	0/33 0.0%
4. Drinks	0/35 0.0%	4/35 11.4%	1/35 2.9%	0/35 0.0%	0/35 0.0%	0/35 0.0%
5. Chopping Board -Meats	33/63 52.4%	54/63 85.7%	42/63 66.7%	11/63 17.5%	2/63 3.2%	1/63 1.6%
-Vegetables	15/37 40.5%	31/37 83.8%	12/37 32.4%	2/37 5.4%	2/37 5.4%	1/37 2.7%
-Fruits	4/17 23.5%	9/17 52.9%	3/17 17.6%	1/17 5.9%	0/17 0.0%	1/17 5.9%
-Veg.+ Fruits	7/9 77.8%	7/9 77.8%	6/9 66.7%	3/9 33.3%	0/9 0.0%	0/9 0.0%
6. Chopping knife -Meats	15/48 31.3%	35/48 72.9%	22/48 45.8%	5/48 10.4%	1/48 2.1%	2/48 4.2%
-Vegetables	9/47 19.1%	36/47 76.6%	7/47 14.9%	5/47 10.6%	1/47 2.1%	1/47 2.1%
-Fruits	8/48 16.7%	37/48 77.1%	14/48 29.2%	3/48 6.3%	0/48 0.0%	1/48 2.1%

	TPC	Coliform	E.coli	St.aureus	Sal.spp.	B.cereus
<b>7. Preparation table -Meats</b>	21/49 42.9%	35/49 71.4%	23/49 46.9%	7/49 14.3%	2/49 4.1%	2/49 4.1%
<b>-Vegetables</b>	20/45 44.4%	35/45 77.8%	12/45 26.7%	2/45 4.4%	1/45 2.2%	3/45 6.7%
<b>-Fruits</b>	11/43 26.2%	36/42 85.7%	13/42 31.0%	4/42 9.5%	1/42 2.4%	0/42 0.0%
<b>8. Cooking area's wall</b>	1/1 100%	1/1 100%	0/1 0.0%	0/1 0.0%	0/1 0.0%	0/1 0.0%
<b>9. Door handle -Refrigerator</b>	3/52 5.8%	34/52 65.4%	11/52 21.2%	7/52 13.5%	0/52 0.0%	0/52 0.0%
<b>-Freezer</b>	5/45 11.1%	28/45 62.2%	17/45 37.8%	6/45 13.3%	2/45 4.4%	0/45 0.0%
<b>-Entrance, Store, Cup-board</b>	8/70 2.0%	26/70 37.1%	9/70 12.9%	1/70 1.4%	0/70 0.0%	0/70 0.0%
<b>-Toilet</b>	3/24 12.5%	6/24 25.0%	1/24 4.2%	2/24 8.3%	0/24 0.0%	0/24 0.0%
<b>11. Toilet hose</b>	6/14 42.9%	6/14 42.9%	3/14 21.4%	4/14 28.6%	0/14 0.0%	0/14 0.0%
<b>12. Tap head -Kitchen sink</b>	11/59 18.6%	41/59 69.5%	16/59 27.1%	2/59 3.4%	0/59 0.0%	1/59 1.7%
<b>-Toilet sink</b>	1/21 4.8%	5/21 23.8%	3/21 14.3%	0/21 0.0%	0/21 0.0%	0/21 0.0%
<b>13. Apron</b>	14/57 24.6%	35/57 61.4%	15/57 26.3%	2/57 3.5%	5/57 8.8%	1/57 1.8%

	T P C	Coliform	E.coli	St.aureus	Sal.spp.	B.cereus
<b>14. Towel</b>	<b>9/40</b>	<b>21/40</b>	<b>10/40</b>	<b>5/40</b>	<b>3/40</b>	<b>1/40</b>
-Hands	22.5%	52.5%	25.0%	12.5%	7.5%	2.5%
-Plate/Tray	10/38 26.3%	29/38 76.3%	9/38 23.7%	1/38 2.6%	0/38 0.0%	0/38 0.0%
-Table	0/1 0.0%	1/1 100%	0/1 0.0%	1/1 100%	0/1 0.0%	1/1 100%
<b>15. Eating</b>	<b>6/65</b>	<b>28/65</b>	<b>8/65</b>	<b>3/65</b>	<b>0/65</b>	<b>1/65</b>
Plate/Tray	9.2%	43.1%	12.3%	4.6%	0.0%	1.5%
<b>16. Drinking</b>	<b>0/7</b>	<b>0/7</b>	<b>1/7</b>	<b>0/7</b>	<b>0/7</b>	<b>0/7</b>
water etc.	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%
- Ice cubes						
-Tap, Potable, Water cooler's and well water	0/54 0.0%	6/54 11.1%	4/54 7.4%	0/54 0.0%	0/54 0.0%	0/54 0.0%
<b>17. Workers'</b>						
hands	13/79	47/79	17/79	16/79	2/79	0/79
-Right	16.5%	59.5%	21.5%	20.1%	2.5%	0.0%
-Left	19/79 24.1%	45/79 57.0%	13/79 16.5%	11/79 13.9%	4/79 5.1%	1/79 1.3%
<b>18. Workers'</b>						
hands	3/12	6/12	3/12	3/12	0/12	0/12
*Before handling	25.0%	50.0%	25.0%	25.0%	0.0%	0.0%
- Right						
- Left	1/12 8.3%	6/12 50.0%	5/12 41.7%	1/12 8.3%	0/12 0.0%	0/12 0.0%
*During handl'g	3/12	6/12	4/12	2/12	0/12	1/12
- Right	25.0%	50.0%	33.3%	16.7%	0.0%	8.3%

	TPC	Coliform	E.coli	St.aureus	Sal.spp.	B.cereus
- Left	3/12 25.0%	3/12 25.0%	3/12 25.0%	2/12 16.7%	1/12 8.3%	0/12 0.0%
*After handling						
- Right	2/12 16.7%	4/12 33.3%	3/12 25.0%	0/12 0.0%	0/12 0.0%	0/12 0.0%
- Left	2/12 16.7%	4/12 33.3%	3/12 25.0%	0/12 0.0%	0/12 0.0%	0/12 0.0%

**Remarks:**

1. Figure of TPC colum : Number of sample showed colony counts over  $10^6$ /g or /ml.
2. Figure of Coliform colum : Number of sample showed colony counts over  $10^2$ /g or /ml.
3. Figure of E.coli colum : Number of sample showed colony counts over  $10^8$ /g or /ml.
4. Figure of St.aureus : Number of sample showed colony counts over  $10^7$ /g or /ml.
5. Figure of Sal.spp. : Number of positive sample of Salmonella spp. in FQCD methods.
6. Figure of B.cereus colum : Number of sample showed colony counts over  $10^2$ /g or /ml.
7. Examination of the samples was basically done by simplified test kits of 3M product.

Project Design Matrix for the Project for Strengthening of the Food Safety Programme in Malaysia  
 Project Name: Project for Strengthening of the Food Safety Programme in Malaysia  
 Project Area: All of Malaysia

19 April 2001

Duration: 3 years from 2001  
 Target Group: Consumers in Malaysia

5.PDM  
 オリジナル

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<b>Overall Goal</b> 1 To reduce health hazard caused by eating food 2 To increase consumers' confidence in food safety in Malaysia	Contamination by food borne diseases is reduced to xx % Customers' satisfaction with food safety	HMIS (Health Management Questionnaire survey)	
<b>Project Purpose</b> To increase the availability of safe food for Malaysian	xx% of surveillance samples comply with the food safety standards	HMIS (Health Management)	Food safety policies of the GOM do not change greatly.
<b>Outputs</b> 1 Food hygiene management is strengthened. 2 Food, which is not in compliance with the Food Act and Regulations, is reduced in the Malaysian market. 3 Means of providing information on food safety for consumers is improved.	1-1: No. of amendments to regulations and standards 2-1: No. of analytical methods 2-2: Dietary intake of contaminants 2-3: No. of collecting food specimens from market etc. 2-4: Results of food safety monitoring 2-5: Rate of food rejected by regulations 2-6: No. of premise inspection 3-1: Results of questionnaires to the public 3-2: Amount of educational material produced on food safety	MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc..	The population of Malaysia does not greatly increase. Environmental pollution does not get worse. GAP and GAHP is maintained at present level.
<b>Activities</b>	<b>INPUT</b>		
<b>1 Strengthening of food safety administration</b> 1-1 <b>Strengthening of food hygiene regulations and food safety standards</b> (1) Review food safety standards (2) Establish new food safety standards (3) Obtain statistical data for food safety <b>2 Strengthening and improvement of capability of food analysis</b> 2-1 <b>Introduction of modern and basic laboratory</b> (1) Ensure necessary analytical equipment 2-2 <b>Reinforcement of training of personnel</b> (1) Train food analysts <b>3 Strengthening of food inspection and technical</b> 3-1 <b>Improvement of information management system on food import procedure and inspection</b> (1) Build up IT network infrastructure for food inspection (2) Improve efficiency of the existing custom clearance system 3-2 <b>Improvement of promotion on food hygiene for food industries</b> (1) Improve food hygiene technical training for food industries (2) Monitor contaminants by microbes, veterinary drug residue and pesticides residue <b>4 Development and promotion of food safety information</b> <b>5 Monitoring of the project</b>	The Government of Japan 1. Long-term experts (1) Chief Advisor (2) Coordinator Other experts as required  2. Short-term experts as required  3. Equipment Laboratory equipment Sampling, inspection and education means (vehicles, etc.)  4. C/P Training	The Government of Malaysia 1. Counterparts (1) Project Manager (2) C/P for each JICA expert as requested  2. Facilities 2-1 Office and work space 2-2 Space for installation of the 2-3 Experimentation fields, laboratories 2-4 Land, buildings, facilities and equipment necessary for the Project  3. Local Cost Project implementation and management cost	Staff members related to the food safety program continue to work for MOH organizations.  Inter-agency collaboration is established.  Manpower for the Project is ensured by MOH.

Modified Project Design Matrix for the Project for Strengthening of the Food Safety Programme in Malaysia  
 Project Name: Project for Strengthening of the Food Safety Programme in Malaysia  
 Project Area: All of Malaysia

22 January 2003

Duration: 3 years from 2001  
 Target Group: Consumers in

6. PDM 修正版

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<b>Overall Goal</b> 1 To reduce health hazard caused by eating food 2 To increase consumers' confidence in food safety in Malaysia	Contamination by food borne diseases is reduced to xx % Customers' satisfaction with food safety	HMIS (Health Management Information Questionnaire survey)	
<b>Project Purpose</b> To increase the availability of safe food for Malaysian consumers	xx% of surveillance samples comply with the food safety	HMIS (Health Management Information	Food safety policies of the GOM do not change greatly.
<b>Outputs</b> 1 Food hygiene management is strengthened. 2 Means to prevent food in the market, which is not in compliance with the Food Act and Regulations, are strengthened.  3 Means of providing information on food safety for consumers is improved.	1-1: No. of amendments to regulations and standards 2-1: No. of Standard Operating Procedures (SOPs) including analytical methods 2-2: No. of analytical parameter 2-3: No. of food safety monitoring 2-4: No. of collecting food specimens 2-5: Implementation of food import control network system 2-6: No. of premise inspection 3-1: Results of questionnaires to the public 3-2: No. of educational materials on food safety	MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc.. MOH annual report, questionnaire, etc..	The population of Malaysia does not greatly increase. Environmental pollution does not get worse.
<b>Activities</b> 1 <b>Strengthening of food safety administration</b> 1-1 <b>Strengthening of food hygiene regulations and food safety standards</b> (1) Review food safety standards (2) Establish new food safety standards (3) Obtain statistical data for food safety  2 <b>Strengthening and improvement of capability of food analysis</b> 2-1 <b>Introduction of modern and basic laboratory technique</b> (1) Ensure necessary analytical equipment  2-2 <b>Reinforcement of training of personnel</b> (1) Train food analysts  3 <b>Strengthening of food inspection and technical guidance</b> 3-1 <b>Improvement of information management system on food import procedure and inspection</b> (1) Build up IT network infrastructure for food inspection (2) Improve efficiency of the existing custom clearance system  3-2 <b>Improvement of promotion on food hygiene for food industries</b> (1) Improve food hygiene technical training for food industries (2) Monitor contaminants by microbes, veterinary drug residue and pesticides residue  4 <b>Development and promotion of food safety information</b> 5 <b>Monitoring of the project</b>	<b>INPUT</b>		
	The Government of Japan	The Government of Malaysia	
	1. Long-term experts (1) Chief Advisor (2) Coordinator Other experts as required  2. Short-term experts as required  3. Equipment Laboratory equipment Sampling, inspection and education means (vehicles, etc.)  4. C/P Training	1. Counterparts (1) Project Manager (2) C/P for each JICA expert as requested  2. Facilities 2-1 Office and work space 2-2 Space for installation of the 2-3 Experimentation fields, laboratories 2-4 Land, buildings, facilities and equipment necessary for the Project  3. Local Cost Project implementation and management cost	Staff members related to the food safety program continue to work for MOH organizations.  Inter-agency collaboration is established.  Manpower for the Project is ensured by MOH.