## **CHAPTER 3**

## PROJECT EVALUATION

#### 3.1 Introduction

The project evaluation adopted a system model evaluation technique, which comprised of input, process and outcome evaluations.

## 3.2 Purpose

To evaluate the input, the process, and the outcomes of the project operation according to the 7 procedural steps.

## 3.3 Evaluation design

The project was evaluated using a system model evaluation technique, which comprised of input, process and outcome evaluations.

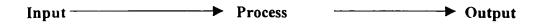
#### 3.4 Data collection method

Two methods were employed in collecting of data for this project including:

- 1. Data collection using forms and questionnaires determined by experts.
- 2. Collection of qualitative data by the project team members by recording each work done according to the plan by the project team.

Figure 3.1 showed the conceptual framework of the project evaluation

Figure 3.1 Conceptual framework of the project evaluation



- 1. Advice from experts
- 2. Forms for work procedure
- 3. Operational handbook
- 4. Budget

#### 7 operational steps

- 1. Vision determination
- 2. Determination of responsibilities
- 3. Responsibility categorization
- 4. Determination of weight scores
- Determination of key indicators and scoring methods
- 6. Evaluation of current situation of the sector
- 7. Establishment of development plans

# Outcomes of procedural operation

- 1. Outcomes of vision determination
- 2. Outcomes of responsibility determination
- 3. Outcomes of responsibility categorization
- 4. Outcomes of weight score determination
- Outcomes of determination of key indicators and scoring methods
- 6. Outcomes of current situation evaluation of the sector
- 7. Outcomes of establishment of development plans

## 3.5 Results

The Project of Thailand International Public Sector Standard Management System and Outcomes of the Roi-Et Provincial Public Health Office was operated to develop the information system to the standards. The process evaluation and outcomes were as the followings:

#### 3.5.1 Vision determination

#### 3.5.1.1 Evaluation questions

- 1. Who involves in the process of vision determination?
- 2. What method is used for vision determination? How?

3. What is the outcome of vision determination process?

#### 3.5.1.2 Process outcomes

After the advisors had provided advice on vision determination, the Provincial Public Health Office appointed the Committee and encouraged participation of all staff and employees in expressing their opinions with the details as follows:

- 1. Appointment of the Committee, which comprised of:
- 1.1 The Committee for Supervision of Thailand International Public Sector Standard

Management System and Outcomes comprised of:

Medical doctors of the Roi-Et Provincial Public Health Office Director

Medical doctor 9, of medical prevention 1 Deputy Director

Medical doctor 9, of medical prevention 2 Committee

Public Health Technical Officer 9 (Development Promotion) Committee

Public Health Administrative Officer 8 Committee

All sub-section heads Committee

The Head of Planning Division Committee and Secretary

1.2 The project team for management of Thailand International Public Sector

Standard Management System and Outcomes comprised of:

Medical doctor 9, of medical prevention 2

Director

Three Technical Officers from each department

Committee

2. Organizing meetings for all staff, the first meeting on the 2<sup>nd</sup> of May 2001 and the second meeting on the 7<sup>th</sup> of May 2001 to determine visions with several revisions obtaining the final vision of the sector as "Being a public health information center with effective operation management and development of service system to the professional standards".

#### 3.5.1.3 Conclusion

The vision determination process adopted participatory approaches by allowing involvement of personnel ranging from the top executive levels to the casual employment levels. The process involved small group meetings from which the outcomes were presented and discussed at the main meeting. Every person helped shaping the words with revision prior to proposition to the advisors. The vision was then revised and proved to obtain the final vision with satisfaction of all related parties as "Being a public health information center with effective operation management and development of service system to the professional standards".

#### 3.5.2 Determination of responsibilities

#### 3.5.2.1 Evaluation questions

- 1. Who involves in the process of responsibility determination?
- 2. What method is adopted in responsibility determination?
- 3. What is the outcome of the responsibility determination process?

#### 3.5.2.2 Process outcomes

After the vision of the organization was determined, a meeting was conducted for the project team to examine what tasks the sector needed to complete to achieve the goal vision set previously. In the first meeting, each sub-section was assigned to investigate the tasks under its responsibilities. The second meeting was conducted for all staff to take part in analysis and determination of responsibilities. The imposed responsibilities of the Roi-Et Provincial Public Health Office were as the followings:

#### Primary responsibilities

- 1. Operation of public health information system
- 2. Public Health Development and Planning
- 3. Operation of communicable disease control
- 4. Operation of Public Health Regulations
- 5. Auditing, controlling, supervising, and evaluating public health work of the subsectors at all levels.

#### Secondary responsibilities

- 1. Personnel development within the Provincial Public Health Office and within other sub-sectors.
- 2. Coordination with related organizations from both governmental and private sectors.
- 3. Providing services to support related governmental and private organizations.
- 4. Operation of health education and promotion.

## Support responsibilities

- 1. Financial and supplies management
- 2. Office and administrative management
- 3. Personnel management

#### 3.5.2.3 Conclusion

Determination of responsibilities was done by the project team members under the authority of relevant regulations and policies by looking at future trend of the organization. The outcomes of responsibility determination obtained 5 major responsibilities, 4 secondary responsibilities, and 3 support responsibilities.

#### 3.5.3 Categorization of responsibilities

#### 3.5.3.1 Evaluation question

1. What is the outcome of the responsibility categorization process?

#### 3.5.3.2 Process outcomes

The responsibilities were categorized with reference to the relevant regulations and policies as detailed follows:

## Roles and responsibilities of the sector

Table 3.1 Primary responsibilities.

Primary responsibility 1	Relevant regulations/ policies	
1. Operation of public health	- The Thai Constitution, B.E. 2540.	
information system	- The Public Sector Classification Decree, the	
	Permanent Secretary Office, Ministry of Public	
	Health, B.E. 2536.	
	- The Public Sector Information Act, B.E. 2540.	
	- The Office of Prime Minister Regulations on	
	Establishment of Proper Social and Political	
	Management System, B.E. 2542.	
	- The policies of the Roi-Et Provincial Public	
	Health Office, B.E. 2544.	
2. Public health technical	- The Office of Prime Minister's Regulations on	
information sources	public service provision of the public organization	
2.1 Occupational and	B.E. 2542.	
environmental health work	- The 8 <sup>th</sup> Public Health Development Plan	
2.2 Health insurances	- The Public Health Act, B.E. 2535	
2.3 Health education and	- The Clean and Organized City Act. B.E. 2535.	
behavioral health development	- The Factory Act, B.E. 2535	
2.4 Dental healting	- The Environmental Quality Enhancement and	
2.5 AJDS prevention and control	Conservation Act, B.E. 2535.	
2.6 Fundamental public health	- The Hotel Act, B.E. 2478.	
2.7 General communicable disease	- The Service Business Act, B.E. 2509.	
control		
2.8 Public health consumer		
protection		
2.9 Health and medical promotion		

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 2	Relevant regulations/ policies
Public Health Development and Planning	
1. Plan and set up public health development plans.	
2. Conduct study, analysis and researches on	
problem trend and status, factors, and various	
components to establish public health development	O.
plans in general for the province in corresponding	
with circumstances and limited resources.	
3. Analyze the policies, strategies, methodologies,	
and resources received from the central sector and	
construct into absolute strategies, methodologies,	
and work procedure available for the project	
operation.	

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 3	Relevant regulations/ policies
1. Communicable disease control	1. The Communicable Disease Act, B.E.
operation	2523.
1. Communicable diseases that can be	2. The Plan for Communicable Disease
prevented by vaccination.	Prevention and Control, the 8th National
- Diphtheria	Social and Economic Development Plan
- Whooping cough	(B.E. 2540-2544).
- Infant tetanus	3. The Mad Dog Disease Control Act, B.E.
- Poliomyelitis	2535.
- Measles	4. The Constitution, B.E. 2540, imposed
- Hepatitis B	the health as the issue of human rights.

- Mumps
- German measles
- Encephalitis J.E.
- 2. General communicable diseases
- Diarrhea
- Leptospirosis
- Intestinal worms/ parasites
- Mad dog diseases
- 3. Communicable diseases with insect carriers.
- Hemorrhagic rever
- 4. Communicable diseases by contacts.
- ARIC
- Leprosy
- Tuberculosis control
- 5. Controlling and monitoring of 78 other communicable diseases

That is, people should not be ill, disabled or dead without proper reasons. If illness or disability is inevitable, they shall occur with minimal severity. The disabled shall live with high degree of freedom possible.

5. Section 62 imposed dangerous disease control to be the responsibilities of public sectors to effectively and rapidly prevent and control the dangerous communicable diseases with free services.

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 4	Relevant regulations/ policies
Operation in compliance with public	The 8th Public Health Development Plan
health regulations	- The Public Health Act, B.E. 2535
	- The Clean and Organized City Act. B.E.
1. Environmental health work	2535.
1. Develop system for monitoring	- The Factory Act, B.E. 2535
environmental health status in community	- The Environmental Quality Enhancement
and promote building of good	and Conservation Act, B.E. 2535.
environments in community.	- The Hotel Act, B.E. 2478.
2. Support acquirement of clean water	- The Service Business Act, B.E. 2509.
supply for the people.	
3. Develop, promote, and support with	
occupational and environmental health	
technology.	
4. Promote and support occupational and	
environmental health development within	
important areas with highly potential risks.	
5. Promote occupational health services by	
private and governmental sectors.	
6. Develop and extend occupational disease	
surveillance and control.	
7. Develop awareness of the dangers that	
threaten the health and importance in self-	
prevention as well as access to	
occupational health services of working	
people.	
8. Promote and develop implementation of	
legal codes in development of occupational	
and environmental health work.	

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 4	Relevant regulations/ policies
2. Health insurance	
1. Management of public health	1. The Regulations of the Ministry of Finance on
welfare and health insurance.	financial funding for the project of medical treatments
	for low-income people and for people who need help
	from society, B.E. 2541.
	2. Announcement of the Board Managing Public
	Welfare for Provincial Medical Treatments.
	3. The Regulations of the Ministry of Public Health on
	Health Insurance Cards, B.E. 2538, Amendment #2,
	(B.E. 2542).
2. Circulated budget	1. The Regulations of the Ministry of Public Health on
management for health	Health Insurance Cards, B.E. 2538, Amendment #2
insurance card	(B.E. 2542).
3. Medical welfare for low-	1. The Regulations of the Office of the Prime Minister
income populations and for the	on public welfare in medical treatment, B.E. 2537.
people who need helps from	2. Announcement of the Board Managing Public
society.	Welfare for Central Medical Treatments.
	3. Announcement of the Board Managing Public
	Welfare for Provincial Medical Treatments.
4. Public health service	1. The Regulations of the Office of the Prime Minister
coordination	on public welfare in medical treatment, B.E. 2537.
	2. Announcement of the Board Managing Public
	Welfare for Central Medical Treatments,
	Amendment#10, B.E. 2543.
	3. The Social Insurance Act, B.E. 2533, Amendment
	#2, B.E. 2537, Amendment#3, B.E. 2542.
	4. The Vehicle Accident Protection Act, B.E. 2535

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 4	Relevant regulations/ policies
3. Consumer protection and pharmaceutical health	
<ol> <li>Permission and renewal of licenses for businesses in compliance with the laws.</li> <li>Drug businesses</li> <li>Food businesses</li> <li>Hazardous substance businesses</li> <li>Private clinics</li> </ol>	<ol> <li>The Drug Act, B.E. 2510</li> <li>The Food Act, B.E. 2522</li> <li>The Hazardous Substance Act, B.E. 2536</li> <li>The Medical Clinic Act, B.E. 2531</li> </ol>
2. Audit and surveillance of business venues.	Audit of business venues is authorized by: 1. Authority of governmental officials in accordance with the given Act. 2. Operation in accordance with collaborative policies to solve problems (e.g. Compliance policies of the Food and Drug Administration).
2 1 Drug businesses - Drug stores - Drug manufacturers/factories	1. The Drug Act, B.E. 2510 2. The Act controlling substances that are effective to mind and nervous system. 3. The Illegal Drug Act. 4. The Medical Instrument Act, B.E. 2531
2.2 Food businesses - Food preparation venues - Food distribution stores e.g. groceries.	1. The Food Act, B.E. 2522.
2.3 Hazardous substance businesses - Distribution stores e.g. Groceries, supermarkets, and mini-marts Pest control companies	i. The Hazardous Substance Act, B.E. 2536.
2.4 Private clinics - Medical clinics - Dental clinics - Midwifery clinics, level 1 and 2 Traditional medicine practice	<ol> <li>The Medical Clinic Act, B.E. 2541</li> <li>The Professional Practice Control Act.</li> </ol>

Table 3.1 Primary responsibilities (Continued).

Primary responsibility 5	Relevant regulations/ policies
Auditing, controlling, supervising, and evaluating	
public health operation of the sub-sectors at all	*
levels.	
Control, supervise and evaluate general picture of	
public health operation within the provincial public	
health office.	
1. Follow up and evaluate the public health	
operation.	
1.1 Conclude the public health operation	
outcomes.	
1.2 Prepare periodical and annual reports on the	
public health operation outcomes.	
1.3 Report the project implementation process	
under the ???? System and present the	
periodical and annual outcome reports.	

Table 3.2 Secondary responsibilities

Secondary responsibility 1	Relevant regulations/ policies
Development of personnel within the Provincial	
Public Health Office and the sub-sectors.	
1. Responsible for personnel development	
2. Conduct short course training.	
3. Provision of scholarships for overseas education	
and training.	
4. Liaison with trainers.	
5. Conduct orientation of public servants and	
employees.	
6. Support operation of public health associations	
such as the Association of Public Health Professions,	
the Public Health Center Head Association, and the	
Thailand Public Health Association.	
7. Support personnel creation.	
8. Support further education of personnel.	
9. Support apprenticeship of tertiary students.	
10. Provision of research scholarship.	
11. Manage and coordinate education and training	
matters.	
12. Recruitment of ourstanding personnel and	
organizations.	
13. Coordinate development of professional nurses	
who work in public health centers.	- 30
14. Operate office library.	

Table 3.2 Secondary responsibilities (Continued).

Secondary responsibility 2	Relevant regulations/ policies
Coordinating collaboration among public and private organizations.	
<ol> <li>Coordinate with other sectors.</li> <li>Operate public work in collaboration with private sectors and coordinate with local organizations.</li> <li>AIDS Prevention and Control Center of Roi-Et province.</li> <li>Coordinate with funding groups, foundations, and NGOs.</li> </ol>	

Table 3.2 Secondary responsibilities (Continued).

Secondary responsibility 3	Relevant regulations/ policies
Providing services to support related organizations, both public and private sectors.	
<ol> <li>Be a social service network for AIDS infected people.</li> <li>Provide services to support the activities of other organizations as requested.</li> </ol>	

Table 3.2 Secondary responsibilities (Continued).

Secondary responsibility 4	Relevant regulations/ policies
Operating health education and promotion.	· ·
<ol> <li>Develop village broadcasting centers.</li> <li>Develop public relation for public health campaign.</li> </ol>	
<ul><li>3. Public relation and promotion work.</li><li>4. Media acquisition, production and development.</li></ul>	

Table 3.3 Support responsibilities

Support responsibility 1	Relevant regulations/ policies
Financial and supplies management	
Planning department  1. Determine directions and criteria for distribution and allocation of different types of resources.	The Minister of Pinesses
Financial department	support of the public health service providers, B.E. 2527 and (2 <sup>nd</sup> Amendment) B.E. 2535.  - Under the authority of Section 53, regulations on withdrawal and payment from the treasury, B.E. 2520 and the Amended edition.  - Regulations of the Permanent Secretary Office, Ministry of Public Health, on controlling of expenses of the supportive budgets.  - The Public Servant'
Financial Audit Office.  - Issue the receipts.	Accommodation Rent Decree, B.E. 2527 and the Amendment Ministerial agreements Circular letters on work

Table 3.3 Support responsibilities (Continued).

	Support responsibility 2	Relevant regulations/ policies
·	Book delivery.	- The Administrative
	Central Divisional Work and organizing	Regulations, B.E. 2526.
	various activities such as Wien-tien activities	
	on the Buddhist's Lent Day, the Coronation	
	Day, and Royal Ploughing Ceremony.	
11,-01	Information and message communication via	
	radio media and facsimiles.	
-	Audit of proposal files.	
1,00	Arrange appointments with Roi-Et provincial	
	public health medical doctors.	
	Leave form to request for permission to take	
	public service leave by the provincial public	
	health medical doctors from the Provincial	
	Governor.	
-	Coordinate with other related sectors.	
-	Control and issue the numbers for orders and	
	supplies.	
-	Control the registration for receiving and	
	dispatch of confidential documents.	

Table 3.3 Support responsibilities (Continued).

Support responsibility 3	Relevant regulations/ policies								
Personnel management									
- Recruitment (e.g. contract	- Resolutions of the Public Force Objective and Policy								
sign) of civil service force	Committee.								
for Ministry of Public	- The document of the Office of the Prime Minister, #OPN								
Health.	0205/5768, issued on 10 May 2000, on the criteria and								
	conditions for performing public duties.								
	- The Civil Service Act, B.E. 2535.								
	- The Order of the Office of Permanent Secretary, Ministry								
i	of Public Health, # 503/2543, issued on 9 June 2000, on								
Ý.	authorizing a departmental director general or a person of								
ļ	equivalent levels and a provincial governor to act on behal								
F	of the Permanent Secretary in signing a public service								
- Preparation of authorized	contract.								
letters to appoint "	- Notifications and policies on public force (by the Public								
officials.	Force Objective and Policy Committee)								
	- The Civil Service Act, B.E. 2535.								
	- Regulations of the OCSC, Issue No. 9 (B.F. 2538).								
	- Regulations of the OCSC, Issue No. 21 (B.E. 2542).								
	-Documents of the OCSC, #OPM 0711/W 10, issued on 14								
	September 1990.								
	- Documents of the OCSC, #OPM 0708,4/W 1, issued on								
	12 March 1993.								
	- Documents of the OCSC, #OPM 0708/W 3, issued on 21								
	October 1998.								
	- The Order of the Office of Permanent Secretary, Ministr								
	of Public Health, # 1752/2543, issued on 28 August 2000.								

Table 3.3 Support responsibilities (Continued).

Relevant regulations! policies					
- The Civil Service Act, B.E. 2535.					
- Regulations of the Office of the Prime Minister on					
amendment of date of birth in the public servant's					
biography registration, B.E. 2527 (Mutandis).					
- Regulations of the OCSC, Issue No. 21 (B.E. 2542), on					
public service probation.					
- The Civil Service Act, B.E. 2535.					
- The Order of the Office of Permanent Secretary, Ministry					
of Public Health, # 1452/2541, issued on 1 May 1998.					
- Documents of the OCSC, #OPM 0708.4/W 5, issued on					
13 May 1993.					
- Documents of the OCSC, #OPM 0708.4/W 6, issued on					
13 May 1993.					
- Documents of the OCSC, #SR 0705/W 6, issued on 31					
March 1978.					
- Documents of the OCSC, #OPM 0711/W 28, issued on					
29 December 1978.					
- Stipulations of the OCSC on position appointment					
standard criteria.					
- The Order of the Office of Permanent Secretary, Ministry					
of Public Health, # 1752/2543, issued on 28 August 2000.					

Table 3.3 Support responsibilities (Continued).

Support responsibility 3	Relevant regulations/ policies					
- In the case when professional nurses who are previously in a technical nurse position, have gained a registration of a professional license.	- The Civil Service Act, B.E. 2535 The Order of the Office of Permanent Secretary, Ministry of Public Health, # 1452/2541, issued on 1 May 1998 Documents of the OCSC, #OPM 0708.4/W 5, issued on 13 May 1993 Documents of the OCSC, #OPM 0708.4/W 6, issued on 13 May 1993 Documents of the OCSC, #SR 0705/W 6, issued on 31 March 1978 Documents of the OCSC, #OPM 0711/W 28, issued on 29 December 1978 Stipulations of the OCSC on position appointment standard criteria The Order of the Office of Permanent Secretary, Ministry of Public Health, # 1752/2543, issued on 28 August 2000.					
- Performance evaluation and positional promotion of public officials (Senior combined position).	- The Civil Service Act, B.E. 2535.  - The Order of the Office of Permanent Secretary, Ministry of Public Health, # 1452/2541, issued on 1 May 1998.  - Documents of the OCSC, #OPM 0703.4/W 5, issued on 13 May 1993.  - Documents of the OCSC, #OPM 0708.4/W 6, issued on 13 May 1993.  - Documents of the OCSC, #SR 0705/W 6, issued on 31 March 1978.  - Documents of the OCSC, #OPM 0711/W 28, issued on 29 December 1978.  - Stipulations of the OCSC on position appointment standard criteria.  - The Order of the Office of Permanent Secretary, Ministry of Public Health. # 1752/2543, issued on 28 August 2000.					

Table 3.3 Support responsibilities (Continued).

Support responsibility 3	Relevant regulations/ policies						
- Calculation of expenditures and order release for public officials and employee promotion.	- Regulations of the OCSC, Issue No. 10 (B.E. 2538) Documents of the OCSC, #OPM 070.1/W 10, issued on July 1995.						
<ul> <li>For public officials.</li> <li>For permanent employees.</li> <li>Publish of salary payment accounts for public officials (J.18).</li> </ul>	- The Civil Service Act, B.E. 2535 Regulations of the OCSC, Issue No. 14 (B.E. 2539) Resolutions of the Cabinet in accordance with the document of the Office of the Secretariat to the Cabinet, #OPM 0201/ W125, issued on 20 August 1992.						
- Transferring of public officials/ state employees and relocation to a different public sector.	- The National Public Service Administration Act, B E. 2535 Three year-public force framework of the OCSC.						
- Transferring of medical doctors, dentists, and pharmacists.	- Criteria for transferring medical doctors, dentists, and pharmacists in accordance with the document, # MOPH 0203/95/ W 29, issued on 16 January 1998 The document #MOPH 0203/95/ W 58, issued on 29 March 1999.						
- Assignment of	- The National Public Service Administrative Regulations,						
responsibilities for a position of a provincial governor.	B.E. 2534.  - The Civil Service Act, B.E. 2535.						
- Assignment of responsibilities for a position of a medical doctor of provincial public health office.	- The National Civil Service Administrative Regulations, B.E. 2534 The Civil Service Act, B.E. 2535.						

Table 3.3 Support responsibilities (Continued).

Support responsibility 3	Relevant regulations/ policies						
- Input of public officials/ employees' records in computer databases Audit, report compilation, and publish of public officials' records Publish of a list containing public officials who are entitled for decoration.	- Regulations on application for decoration.						
- Preparation of public officials' record registration and OCSC 7 Preparation of OCSC 7.	- Documents of the OCSC, #SR 1007/2528, issued on 15 September 1975.						
<ul> <li>Compilation of public officials' record files.</li> <li>Requesting for qualification raise of public officials.</li> <li>Change of names.</li> <li>Change of date of birth</li> </ul>	- Documents of the OCSC, #SR 1007/ W 40, issued on 28 November 1975 Regulations of the Office of the Prime Minister on amendment of date of birth in the public official record registration, B.E. 2527.						

Table 3.3 Support responsibilities (Continued).

Support responsibility 3	Relevant regulations/ policies						
- Public official superannuation and pension Retirement audit.	- The Civil Servant Pension Act, B.E. 2494, Amendment #6 (B.E. 2504), Amendment of Section 3 of the Pension Act # 15 (B.E. 2530).  - The Civil Service Act, B.E. 2535.						
- Application processing to receive pensions.	- The Civil Servant's Pension and Retirement Benefit Fund Act, B.E. 2539 whose principles were different from the B.E. 2494 Civil Servant Pension Act. - The Civil Service Act, B.E. 2535.						
- Disciplinary action against public officials/ employees.	<ul> <li>Regulations of the OCSC, Issue No. 8 (B.E. 2536), on penalties of suspension, salary-cut, or salary rate reduction.</li> <li>Regulations of the OCSC, Issue No. 18 (B.E. 2540), on trial procedure.</li> <li>Regulations of the OCSC, Issue No. 11 (B.E. 2538), on immediate suspension and removal from a public official position</li> </ul>						

- Regulations of the OCSC, Issue No. 13 (B.E. 2539), on apparent misconducts.
- Regulations of the OCSC on order release for punishment of civil servants, B.E. 2539.
- Regulations of the OCSC on reporting of disciplinary action and removal of civil servants, B.E. 2539.
- Regulations of the Ministry of Finance on permanent employees of the public organizations, B.E. 2537.
- Urgent documents of the Ministry of Finance, # MF 0527.6/ W 5, issued on 26 January 1996.

Table 3.3 Support responsibilities (Continued).

#### **Support responsibility 3**

## - Guilt pleading action and process of civil servants.

- In cases where the Office of Permanent Secretary to the Ministry of Public Health is a plaintiff or a defendant, acting on its behalf in appealing and coordinating with the investigators, the Office of Provincial State Attorney, Courts, the Office of Judiciary, and other related organizations in proceeding or defending a civil suit and a criminal case.
- Conducting legal and contract audit.
- Releasing the Provincial Public Health Office's orders regarding the superior's authorization of the subcoordinator to act public duties on his/her behalf.
- Circulating regulations, orders, stipulations, resolutions, orders, criteria, and official letters regarding assignment of duties for public sectors.

#### Relevant regulations/ policies

- The Civil Servant Guilt Pleading Procedure Act, B.E. 2539.
- Regulations of the Office of the Prime Minister on the procedural criteria regarding guilt pleading of civil servants, B.E. 2539.
- Orders of the Office of Permanent Secretary to the Ministry of Public Health, #2511/2541, issued on 3 September 1998.
- Orders of the Office of Permanent Secretary to the Ministry of Public Health, #1571/2537, issued on 31 March 1994, on assignment of roles of provincial public health attorneys (Special authorized letter).
- Procedural criteria and directions for additional compensation payments.
- Authorized letters/orders.
- The National Civil Service Administrative Regulations, B.E. 2534.
- Superiors' orders.

#### 3.5.3.3 Conclusion

The outcomes of responsibility categorization indicated details of responsibilities with related legislations and policies as follows.

#### Primary responsibilities

- 1. Operation of public health information system consisted of:
- 1.1 Information and data collection for public health planning and development.
- 1.2 Academic and technical databases consisted of the following areas:
- Health promotion.
- Communicable disease prevention and control.
- Non-communicable disease prevention and control.
- Occupational and environmental health.
- Public health consumer protection.
- Thai traditional medicines.
- Dental health.
- Behavioral health.
- Health insurance for the entire population.
- Fundamental health work.
- 2. Public health planning and development consisted of:
- Planning, study, analysis and research of the environment, policies, strategies, methodologies, and the allocated resources.
- 3. Operation of communicable disease control consisted of:
- 3.1 Communicable diseases that can be prevented by vaccination.
- 3.2 General communicable diseases.

- 3.3 Communicable diseases with animal carriers.
- 3.4 Communicable diseases through contact.
- 3.5 Epidemiological operation.
- 4. Operation in compliance with public health regulations consisted of:
- The Constitution regarding the health.
- The regulations about lawyers and management.
- The public health consumer protection laws.
- The regulations on communicable disease prevention and control.
- The occupational and environmental health laws.
- The health insurance regulations.
- The regulations for Thai traditional medicine protection and promotion.
- 5. Auditing, controlling, supervising, and evaluating the public health operation of the sub-sections of all levels consisted of:
- 1. Follow up and evaluation of the public health operation.
- 2. Concluding the public health promotion
- 3. Preparing periodical and annual reports on the outcomes of the project operation.

#### Secondary responsibilities

- 1. Development of personnel team within the provincial public health office and the sub-sectors consisted of:
- 1.1 Activities of personnel development.
- 1.2 Library work.

- 2. Coordination among related organizations from both government and private sectors consisted of:
- 2.1 Coordination and collaboration with related organizations, funding groups, foundations, and NGOs.
- 3. Service provision to support the related sectors consisted of:
- 3.1 Provision of services to support various organizations that requested for collaboration.
- 4. Health education and promotion comprised of:
- 4.1 Development of village broadcasting centers.
- 4.2 Developing public relations for public health campaign.
- 4.3 Public relation and promotion.
- 4.4 Media acquisition, production, and development.

#### Support responsibilities

- 1. Financial and supplies management comprised of:
- Financial status.
- Expenditures of the Provincial Public Health Office, the Rapid Rural Development Organization, and the District Public Health Office.
- Purchasing and hiring.
- Supplies stock of the sector.
- 2. Administrative management consisted of:
- Administrative system.
- 3. Personnel management consisted of:

- Public force framework.
- Data of the personnel
- Appointment assessment system for a vacant position.

## 3.5.4 Determination of weight scores

## 3.5.4.1 Evaluation questions

1. How was the score outcome for each individual task?

#### 3.5.4.2 Process outcomes

After the imposed responsibilities had been categorized, the project team then determined weight scores for horizontal row and vertical column as shown in Table 3. 4

Table 3.4 Weight scores according to the standard criteria of the P.S.O. 1101 system.

Standard criteria of the	Scores of significance weight							Total					
P.S.O. 1101 information	Primary responsibilities				Secondary responsibilities				Support responsibilities			of 100	
system	16	16	16	11	11	8	4	4	4	4	3	3	%
Order No.	1	2	3	4	5	1	2	3	4	1	2	3	
1. Inclusiveness	15	15	10	10	15	10	15	10	10	15	10	15	
2. Speed	10	10	15	10	10	15	10	10	10	10	10	10	-
3. Accuracy	15	10	15	15	10	10	10	10	15	15	15	15	
4. Connection	10	10	10	10	10	15	10	10	10	10	15	10	
5. Update status	10	15	10	10	10	10	10	15	10	10	10	10	
6. Reliability	10	10	10	15	10	10	10	10	10	10	10	10	
7. Accessibility	10	10	10	10	15	10	15	15	10	10	10	10	
8. Readiness for audit	10	10	10	10	10	10	10	10	15	10	10	10	
9. Participation in	10	10	10	10	10	10	10	10	10	10	10	10	
information process													
Total	100	100	100	100	100	100	100	100	100	100	100	100	

#### 3.5.4.3 Conclusion

Determination of weight scores for the horizontal row provided the highest degree of significance for the primary responsibilities, then the secondary and support responsibilities respectively as follows. 16 scores were given to primary responsibility 1, 2 and 3, 11 scores were given to primary responsibility 4 and 5. For secondary responsibilities, 8 scores were given to secondary responsibilities, 8 scores were given to secondary responsibility 1, 4 scores were given to secondary responsibility 2, 3 and 4. Finally, for the support responsibilities, 4 scores were given to support responsibility 1 and 3 scores were given to support responsibility 2 and 3.

Determination of weight score for vertical column would score in accordance with the standard criteria of each task. The scores varied depending on significance of each responsibility. A sum of the vertical score or that of horizontal will be equal to 100 percent.

## 3.5.5 Determination of key indicators and scoring methods

#### 3.5.5.1 Evaluation Questions

1. What are the outcomes of the key indicator and scoring method determination for each standard criterion?

#### 3.5.5.2 Process outcomes

The determination of the key indicators and scores was carried out for the total 12 responsibilities based on similar methods as followings.

Standard Criterion 1: Inclusiveness of the data

Key indicator: Database number

Description: Inclusiveness of data refers to completeness of database available for

primary responsibility, secondary responsibility and supporting responsibility.

Scoring method can be divided into 2 categories in accordance with characteristics of

the storage system.

1. Document files

Score 0 refers to no database

Score 1 refers to that there is database available for only primary responsibilities.

Score 2 refers to that there is only database available for secondary responsibilities.

Score 3 refers to that there is a complete database for all types of responsibilities

(primary responsibility, secondary responsibility and supporting responsibility).

2. Electronic files

Score 0 refers to no database

Score 1 refers to that there is database available for only primary responsibilities.

Score 2 refers to that there is database available for only secondary responsibilities.

Score 3 refers to that there is a complete database for all types of responsibilities

(primary responsibility, secondary responsibility and supporting responsibility).

Standard Criterion 2: Speed of data system

Key indicator: Time spent for data searching

**Description**: Speed of data system will depend on the time spent in data searching. This

does not include the time used for printing data after being acknowledged.

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## Scoring method:

#### 1. Document files

Score 0 refers to a duration of more than 1 day

Score 1 refers to a duration of between 1 hour – 1day.

Score 2 refers to a duration of between 10-60 minutes.

Score 3 refers to a duration of less than 10 minutes.

#### 2. Electronic files

Score 0 refers to a duration of more than 30 minutes.

Score 1 refers to a duration of between 10-30 minutes.

Score 2 refers to a duration of between 6-9 minutes.

Score 3 refers to a duration of within 5 minutes

#### Standard Criterion 3: Data Accuracy

Key indicator: Numbers of inaccuracy found

Description: The accuracy of the stored files was consistent. There is no appearance of

inaccuracy (Numbers/month)

## Scoring method:

#### 1. Document files

Store 0 refers to a frequency of more than 5 times.

Score 1 refers to a frequency of 4-5 times.

Score 2 refers to a frequency of 1-3 times.

Score 3 refers to no inaccuracy.

#### 2. Electronic files

Score 0 refers to a frequency of more than 5 times.

Score 1 refers to a frequency of 4-5 times.

Score 2 refers to a frequency of 1-3 times.

Score 3 refers to no inaccuracy.

Standard Criterion 4: Data Network

Key Indicator: Database system that can be linked together

Description: Data system can be connected for benefits of data sharing among different

levels with different methods for each level, for example a link of document data between

internal and external sectors through a data circulation system or through a link of

computer files within internal sectors using LAN system and with external sectors using

internet system.

Scoring method:

1. Document files

Score 0 refers to that the data system can not be linked.

Score 1 refers to that there is partial link of some database within the sector.

Score 2 refers to that there is a full link of all database within the sector.

Score 3 refers to that the database can be linked between internal and external

sectors

2. Electronic files

Score 0 refers to that the data system can not be linked.

Score 1 refers to that there is partial link of some database within the sector.

Score 2 refers to that there is a full link of all database within the sector.

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Score 3 refers to that the database can be linked between internal and external sectors.

## Standard Criterion 5: Data Updating

Key Indicator: Updating of data

Description: Time schedule for updating data

#### Scoring method:

#### 1. Document files

Score 0 refers to a delay of more than 2 weeks from the schedule.

Score 1 refers to a delay of between 1-2 weeks from the schedule.

Score 2 refers to a delay of 1 week from the schedule.

Score 3 refers to updating according to the schedule.

#### 2. Electronic files

Score 0 refers to a delay of more than 2 weeks from the schedule.

Score 1 refers to a delay of between 1-2 weeks from the schedule.

Score 2 refers to a delay of 1 week from the schedule.

Score 3 refers to updating according to the schedule.

#### Standard Criterion 6: Reliability

Key Indicator: Frequency of complaints from related parties in 1 month

Description: Frequency of complaints means numbers of complaints lodged by related

parties (i.e. file keepers, users and experts).

## Scoring method:

#### 1. Document files

Score 0 refers to a frequency of more than 5 times per month.

Score 1 refers to a frequency of between 4-5 times per month.

Score 2 refers to a frequency of between 1-3 times per month.

Score 3 refers to no complaints.

#### 2. Electronic files

Score 0 refers to a frequency of more than 5 times per month.

Score 1 refers to a frequency of between 4-5 times per month.

Score 2 refers to a frequency of between 1-3 times per month.

Score 3 refers to no complaints.

## **Standard Criterion 7: Accessibility**

Key Indicator: Numbers of public groups that can access to the data

Description: All people or groups of related people can access to the data with information service provision through LAN and internet systems of the provincial public health information center at the Provincial Public Health Office and at other sub-sectors.

#### **Scoring Method:**

#### 1. Document files

Score 0 refers to only in-charge persons.

Score 1 refers to in-charge persons and assigned persons.

Score 2 refers to in-charge persons, assigned persons and interested persons within the sector.

Score 3 refers to every person in the sector.

#### 2. Electronic files

Score 0 refers to only in-charge persons.

Score 1 refers to in-charge persons and assigned persons.

Score 2 refers to in-charge persons, assigned persons and interested persons within the sector.

Score 3 refers to every person in the sector and general public.

#### Standard Criterion 8: Auditability

Key Indicator: Ready time for audit

**Description:** Determination of time duration ready for audit after being informed of data review request.

#### Scoring Method:

#### 1. Document files

Score 0 refers to a duration of more than 3 days.

Score 1 refers to a duration of between 2-3 days.

Score 2 refers to a duration of 1 day.

Score 3 refers to immediately after notification has been received

#### 2. Electronic files

Score 0 refers to a duration of more than 3 days.

Scote 1 refers to a duration of between 2-3 days.

Score 2 refers to a duration of 1 day.

Score 3 refers to immediately after notification has been received.

#### Standard Criterion 9: Participation in data process

Key Indicator: Number of groups of related people participating in the process.

Description: Data users or related persons both from within the sector or outside the sector participating in data processes such as expression of opinion on the data via questionnaires and web boards on the Internet.

## Scoring Method:

#### 1. Document files

Score 0 refers to only in-charge persons.

Score 1 refers to in-charge persons and assigned persons.

Score 2 refers to in-charge persons, assigned persons and interested persons from within the sector.

Score 3 refers to every person within the sector and interested persons from outside the sector.

#### 2. Electronic files

Score 0 refers to only in-charge persons.

Score 1 refers to in-charge persons and assigned persons.

Score 2 refers to in-charge persons, assigned persons and interested persons from within the sector.

Score 3 refers to every person within the sector and interested persons from outside the sector.

#### 3.5.5.3 Conclusion

There was determination of key indicators and scoring methods for convenience in self-evaluation and to be a guideline for development according to the standard criteria as follows.

Standard Criterion 1: Inclusiveness of data: Key indication was a number of databases.

Standard Criterion 2: Speed of data system: Key indicator was a time period used for data searching.

Standard Criterion 3: Accuracy of data: Key indicator was mistake frequency found.

Standard Criterion 4: Connection of data system: Key indicator was proportion of database systems that can be linked together.

Standard Criterion 5: Updating status of data: Key indicator was updating of the data.

Standard Criterion 6: Reliability: Key indicator was frequency of complaints within 1 month period.

Standard Criterion 7: Accessibility: Key indicator was a number of public groups that can access to the data.

Standard Criterion 8: Auditability: Key indicator was time period required to prepare for audit.

Standard Criterion 9: Participation in data process: Key indicator was a number of groups of people who participated in the data process.

Separated scoring methods were adopted for two different data systems, which were document files and electronic files. The score levels were the same for both systems, ranging from 0-3 scores.

#### 3.5.6 Evaluation of current conditions of the sector

#### 3.5.6.1 Evaluation questions

- 1. What are the methods used in evaluation of current conditions of the sector?
- 2. How is the evaluation outcome for each criterion?
- 3. What scores are expected by the organization for each criterion?
- 4. Who are responsible for the evaluation process?
- 5. What is the discrepancy between the obtained score and the expected score?

#### 3.5.6.2 Process outcomes

After the key indicators and scoring methods were determined, a group of committee was formed, so called "the Committee for Evaluation of the Organization Primary Situations", which comprised of the medical doctor of the Provincial Public Health Office as a chairman and 3 other experts as team members responsible for situation review. The evaluation process employed recording methods, photo taking, interview of operational staff, observation, document audit and data testing. The evaluation results obtained, the expected scores, and discrepancies between obtained scores and expected scores are shown in the following tables.

# Primary Responsibility 1: Operation of Public Health Information System

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	-1
2. Speed	2	3	-1
3. Accuracy	3	3	0
4.Connection	1	2	-1
5. Updating status	2	3	-1
6. Reliability	2	3	-1
7. Accessibility	1	3	-2
8. Auditability	3	3	0
9. Participation	2	3	-1

# Primary Responsibility 2: Planning and development of public health works

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	3	3	0
2. Speed	2	3	-1
3. Accuracy	2	3	-1
4. Confection	2	3	-1
5.Updating status	2	3	-1
6. Reliability	3	3	0
7. Accessibility	1	2	-1
8. Auditability	3	3	0
9. Participation	2	3	-1

# Primary Responsibility 3: Operation of epidemiological works

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	-1
2. Speed	1	3	-2
3. Accuracy	2	3	-1
4. Connection	0	3	-3
5.Updating status	2	3	-1
6. Reliability	2	3	-1
7. Accessibility	1	3	-2
8. Auditability	2	3	-1
9. Participation	2	3	-1

# Primary Responsibility 4: Operation in accordance with Health Regulations

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	3	3	0
2. Speed	1	3	-2
3. Accuracy	3	3	0
4. Connection	0	3	-3
5.Updating status	2	3	-1
6. Reliability	3	3	0
7. Accessibility	2	3	-1
8. Auditability	2	3	-1
9. Participation	1	3	-2

# Primary Responsibility 5: Inspecting, controlling, supervising and evaluating public health operation of the sub-sectors.

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	3	3	0
2. Speed	1	3	-2
3. Accuracy	3	3	0
4. Connection	2	3	-1
5.Updating status	1	3	-2
6. Reliability	2	3	-1
7. Accessibility	1	2	-1
8. Auditability	3	3	0
9. Participation	2	3	-1

# Secondary Responsibility 1: Human Resources Development in the Provincial Public Health Office and the sub-sectors.

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	1	3	-2
2. Speed	1	3	-2
3. Accuracy	i	3	-2
4. Connection	0	3	-3
5.Updating status	1	3	-2
6. Reliability	2	3	-1
7. Accessibility	1	3	-2
8. Auditability	1	3	-2
9. Participation	1	3	-2

# Secondary Responsibility 2: Cooperation with other related organization from both government and private sectors.

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	-1
2. Speed	2	3	-1
3. Accuracy	3	3	0
4. Connection	2	3	-1
5.Updating status	1	3	-2
6. Reliability	2	3	-1
7. Accessibility	2	3	-1
8. Auditability	3	3	0
9. Participation	2	3	-1

# Secondary Responsibility 3: Provision of services to support other related organization from both government and private sectors.

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	1	3	-2
2. Speed	2	3	-1
3. Accuracy	2	3	- <del> </del> -i
4. Connection	1	3	-2
5.Updating status	2	3	-1
6. Reliability	2	3	-1
7. Accessibility	1	3	-2
8. Auditability	2	3	-1
9. Participation	2	3	-1

# Secondary Responsibility 4: Public health education and promotion

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	-1
2. Speed	2	3	-1
3. Accuracy	1	3	-2
4. Connection	1	3	-2
5.Updating status	1	3	-2
6. Reliability	1	3	-2
7. Accessibility	1	3	-2
8. Auditability	1	3	-2
9. Participation	1	3	-2

# Supporting Responsibility 1: Financial and supplies management

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	F-1
2. Speed	1	2	-1
3. Accuracy	3	3	0
4. Connection	0	1	-1
5.Updating status	1	2	-1
6. Reliability	3	3	0
7. Accessibility	0	1	-1
8. Auditability	1	2	-1
9. Participation	0	2	-2

# Supporting Responsibility 2: Administrative Management

Standard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	3	3	0
2. Speed	3	3	0
3. Accuracy	1	2	-1
4. Connection	0	1	-1
5.Updating status	3	3	0
6. Reliability	1	2	-1
7. Accessibility	1	2	-1
8. Auditability	3	3	0
9. Participation	2	3	-1

# Supporting Responsibility 3: Personne! Management

Staudard Criteria	Actual score	Expected score	Score discrepancy
1. Inclusiveness	2	3	-1
2. Speed	0	2	-2
3. Accuracy	3	3	0
4. Connection	0	1	-1
5.Updating status	1	2	-1
6. Reliability	1	3	-2
7. Accessibility	0	3	-3
8. Auditability	1	3	-2
9. Participation	0	3	-3
		į.	1

# **Evaluation Methods**

1. Inclusiveness of the data was evaluated by interviewing the data operators, observing during operation and document audit.

- 2. Speed was evaluated by interviewing the data operators, observing during operation and testing of a search engine.
- 3. Accuracy of the data was evaluated by interviewing the data operators, observing during operation and document audit.
- 4. Connection was evaluated by interviewing the data operators and observing during operation.
- 5. Updating status was evaluated by interviewing the data operators, observing during operation and document audit.
- 6. Reliability was evaluated by interview with the data users.
- 7. Accessibility was evaluated by interview with the data users.
- 8. Auditability was evaluated by interview with the data operators.
- 9. Participation in the data process was evaluated by interview with the operators.

#### 3.5.6.3 Conclusion

From the evaluation of the organization primary status, there were differences among the actual scores of each standard criterion and for each responsibility. The expected scores were also different for each responsibility.

#### 3.5.7 Establishment of Development Plans

## 3.5.7.1 Evaluation questions

- 1. What activities are included in the development plans?
- 2. Who involves in establishment of the plan?

#### 3.5.7.2 Process outcomes

After the evaluation of the organization primary status was conducted, the project team participated in establishing the development plan according to the standard criteria as follows.

# 1. The activity carried out to improve the inclusiveness of the data.

 The existing database was surveyed using the questionnaire, which required responsible persons from all departments to fill in their responsibilities.

# 2. The activities employed to improve the speed of the data system

- 1. Systematized and categorized the database.
- 2. Developed a data receiving system from district levels through Internet system instead of sending data contained in documents or diskettes.
- 3. Established an index book for data searching, ranking in according with operational groups/sections.
- 4. Created the electronic index system for the information center with the use of PHP Language connecting to the access base, which could allow the following functions.
  - Input, amendment and search for data topics and directory of such data.
  - Sending the data files to the computer system of the information center.

- 5. Assigned 2 officers for data-processing and enquiries responding at the information service center during official hours.
- 6. Located one internal phone line (number 222) for internal information enquiry 1 external direct line (043-511233) for external information enquiry services.

# 3. The activity carried out to improve accuracy of the data.

1. Formed a central committee for data audit and proofing on every 3 months.

#### 4. The activities carried to develop the data network.

- 1. Created the index book for all databases, which showed data receiving and forwarding entries.
- Creates indices for the electronic database of the information center with the use of PHP Language connecting to the access base, which allowed for the following functions.
  - Input, amendment and search for data topics and directories of such data.
  - Sending the data files to the computer system of the information center.
- Person can use the data from the computer system of the service center when needed.
  - 3. Linked the existing data base through various programs such Access, SQL, Server, SQL Anywhere developed by PHP Language.

### 5. The activities carried out to improve updating status.

- 1. Set up a clear schedule for data processing, sending and updating.
- 2. Checked the delayed and the late updated process. Then reported the outcomes to the planning and evaluation committee on a monthly basis.
- 3. Put a notice on the Internet the sectors that were late in submitting report.

  Posted a list of organizations that caused delay in data-reporting process.

## 6. The activity carried out to improve reliability of data.

1. Kept the complaint record.

# 7. The activities carried out to improve accessibility of data.

- 1. Established the information service center on the first floor of the Provincial Public Health Office with allocation of 2 service officers, 1 direct telephone line and 1 computer set and printer at the information center.
- 2. Installed data searching engine.

# 8. The activities carried out to improve auditability and;

# 9. Participation in data process.

In order to lift up every standard criterion, the Roi-Et Provincial Public Health Office had established the project to develop information center and health information system as follows.

### The Project of Information Center and Public Health Information System

### **Development**

# Principles of rationale

The Roi-Et Provincial Public Health Office had developed its operation system to achieve accreditation for the information system according to the P.S.O. 1101 standard of "Thailand International Public Sector Standard Management System and Outcomes'. After the evaluation, it was found that the Roi-Et Provincial Public Health Office had stored majority of its data in forms of document and computer files. However, the storage of these documents and computer files was still below the standard criteria in terms of networking, speed, accuracy and accessibility. It was, therefore reasonable to establish a project to develop an information center and public health information system to lift up in accordance with the standard criteria.

#### **Objectives**

- 1. To develop electronic/computer database in accordance with the standard criteria.
- 2. To develop a computer system capacity to store the above database.

### **Procedures**

- 1. Evaluated the database and electronic data storage methods based on with the 9 standard criteria.
- 2. Organized activities to improve the areas that were below the standard criteria.
- 3. Implemented the activity plan.
- 4. Evaluated the outcomes.

#### **Activities**

- 1. Developing an information center.
  - Appointed a service officer to locate at the information center and set out responsibilities.
  - Allocated work venue and instruments.
  - Allocated budget for the project operation.
- 2. Developing the data standards.
  - Recorded data details, sources and destinations, receiving-sending time, updating time, collecting methods, in-charge persons, storage and compilation, and file names-standard file names.
  - Prepared/ complied work instrument manuals for all related systems.
- 3. Developing data storage system and network.
  - Stored data in form of document files with standard file codes and operated of 5-S activities throughout the area.
  - Stored data in form of computer files in the computer of the data owners and then sent a copy to the information center under the standard file name. The database files which cannot be sent through this system might be linked using PHP Language.
  - Created file index books for convenience in searching and connecting data.
  - Created file index system through computer system for convenience in searching and connecting data.
- 4. Developing the data transferring system.

- Created a data receiving and sending system through the internet and intranet.
- Notified the Public Evaluation and Planning Committee via the internet about the sector caused delay in data sending.
- 5. Developing the audit system for testing accuracy of the data.
  - Established a central committee to audit data on a 3 month basis.
- 6. Developing information service system.
  - Established the information service center on the 1<sup>st</sup> floor with allocation of 2 service officers, 1 direct telephone line, 1 computer set and a printer for the service center.
  - Set up a box for public opinions.
- 7. Providing training for personnel on computer operation skills such as file storage with ability to access the developed system as follows:
  - Trained 15 related about personal application programs for 2 days.
  - Explained and demonstrated computer operation techniques for personnel in the office for 1 time.

#### **Budgets**

The budget for the project implementation was funded by the Roi-Et Provincial Public Health Office.

- Expense of the training program on personal application programs (at end of October 2001)
  - The expense for meals and snacks during the 2-day training sessions (20 personnel x 100 Baht x 2 days) was 4000 Baht.

- Extra-duty compensation for 4 staff who worked in transferring data and rearranging the new filing system (4 staffs x100 Baht x 20 days) was 8,000 Baht.

# Implementation Duration

20 August 2001 - 30 October 2001

#### **Evaluation**

The project was evaluated in accordance with the standard criteria of the information system (P.S.O. 1101).

# Expected Outcomes

- 1. The electronic/computer database with quality/attributes as the standard criteria.
- 2. The useful database for work operation.

### 3.5.7.3 Conclusion

Establishment of the information center and public health information system development project was able to effectively lift up all the 9 criteria according to the 9 standard criteria.