

シンガポール生産性向上プロジェクト  
巡回指導調査団報告書

昭和63年6月

国際協力事業団

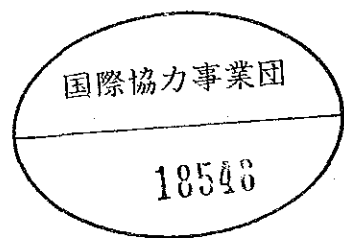


18546

JICA LIBRARY



1071298E21



## は し が き

「生産性向上プロジェクト」は、シンガポールにおける生産性を大巾に向上させることにより、高付加価値及び高度産業技術社会を実現するため、生産性向上を適切に指導し、推進できる人材を養成することを目的としたプロジェクトで、昭和58年6月11日より5ヶ年にわたる技術協力が開始された。

生産性向上は当該国の社会文化と密接に関係するソフト技術分野であり、種々の困難があったものの、日本人専門家及びカウンターパートの努力によって技術移転は順調に進み、いくつかの企業で導入されるなどの具体的な成果が現われ、高い評価を得るに至っている。そして、本年2月に派遣した評価調査団は、R/Dで計画した目標を達成するため2年間のフォローアップ協力をを行うことについて「シ」側と合意した。

本報告書は、フォローアップ協力の実施に必要な昭和63年度技術協力計画を策定するために派遣した巡回指導調査団の調査結果をとりまとめたものである。

ここに、本調査団の派遣に関し、広く御協力いただいた関係各省、各支援機関及び現地で御指導賜った日本大使館等関係各位に深く謝意を表するとともに、フォローアップ協力により、これまでの技術協力が更に実りあるものとなるよう一層の御協力をお願いする次第である。

昭和63年6月

国際協力事業団  
鈦工業開発協力部長  
角野祥三



# 目 次

1. 巡回指導調査団派遣 .....	1
1-1 調査団派遣の経緯と目的 .....	1
1-2 調査団の構成 .....	1
1-3 調査日程 .....	1
1-4 主要面談者 .....	2
2. 要 約 .....	3
2-1 長期専門家派遣計画 .....	3
2-2 短期専門家派遣計画 .....	3
2-3 研修員受入れ計画 .....	3
3. NPBとの協議事項 .....	4
3-1 長期専門家派遣 .....	4
3-2 短期専門家派遣 .....	4
3-3 研修員受入れ .....	5
3-4 その他 .....	5





## 1. 巡回指導調査団派遣

### 1-1 調査団派遣の経緯と目的

大型ソフトウェアプロジェクトとして昭和58年に開始された生産性向上プロジェクトは、開始当初から幾多の紆余曲折はあったものの、派遣専門家、NPBカウンターパート、在シ関係各機関及び国内の関係各機関の協力により、著しい成果をあげ順調に展開するに至った。

本年2月には約5ヶ年に亘る協力の評価を行い、移転未完了とされた部門につきフォローアップ協力を実施することとなった。この協力が実績をあげ残された部門における移転が限られた期間内で完了するよう、本年度の協力計画策定を目的に調査団が派遣された。

目的は以下の通りである。

昭和63年度年次協力計画に関する詳細協議

- 1) 長期専門家派遣計画
- 2) 短期専門家派遣計画 (派遣人数, 業務内容, 派遣時期等)
- 3) 研修員受入れ計画 (受入れ人数, 研修科目, 受入時期, 到達目標等)

### 1-2 調査団の構成

団 長	坂 田 武 穂	J I C A 鉱工業開発協力部調査役
団 員	谷 口 恒 明	日本生産性本部海外技術協力部部長
”	和 田 晴 夫	J I C A 鉱工業開発技術課

### 1-3 調査日程

DATE	TIME	ACTIVITY
23 May (Mon)	1915 Hrs	Arrival of Team by JL 719
24 May (Tues)	AM	Courtesy Call to JICA Office and Embassy of Japan
	1250-1300	Courtesy Call on CH and ED
	1500-1700	Discussion with LTEs
25 May (Wed)	1000-1030	Meeting with PDPI Section - Confirmation of schedule - Overall Discussion on Annual Workplan FY88/89
	1030-1200	Meeting on Productivity Group requirements (LTE/STE/Fellowship)
	1400-1500	Meeting on OSH requirements (STE/Fellowship)

	1500-1700	Meeting on Resource Centre requirements (LTE/STB/Fellowship)
26 May (Thur)	1030-1200	Meeting on Japanese Language Expert (Present stage, progress, and future activities of Japanese Language)
	1400-1500	Joint Committee Meeting -Endorsement of Annual Workplan FY88/89
	1700-1740	Signing of Annual Workplan by ED on behalf of Singapore and Mr. Sakata on behalf of Japan
	1830-2200	PDP Evening hosted by Chief Advisor
27 May (Fri)	PM	Report to JICA & Embassy of Japan
28 May (Sat)	0930	Leave Singapore by SQ12

1 - 4 主要面談者

National Productivity Board

Mr Mar Bow Tan,	Chairman
Mr Koh Juan Kiat,	Executive Director,
Mr Winston Teow,	Director, PDP Division
Mr Jimmy Low,	Director, Training Centre
Mr Freddy Soon,	Director, Promotion Centre
Mr David Wee,	Acting Director, Resource Centre
Mr Chew Whye,	Director, Management Guidance Centre
Ms Choo Lee Heng,	Director, Administration Div.
Mr Danny Lam,	Deputy Director, Programmes, Training Centre
Mr Lam Chun See,	Trainer, Productivity Guidance Svcs. Sect.
Mr Woon Kin Chung,	Head, Worker Training Research Section

Ministry of Labour

Mr Choy Chan Pong,	Director, OSH Training and Promotion
Mr Liaw You Hin	OSH Training and Promotion

## 2. 要 約

N P B 及び M O L との協議の結果，昭和63年度年次協力計画を作成，調印した。（資料①参照）

### 2-1 長期専門家派遣計画

長期専門家については，本年2月に取り決めたフォローアップ計画暫定実施計画の通りチーフアドバイザー以下計8名とした。

### 2-2 短期専門家派遣計画

短期専門家については，いわゆる生産性関連8名，リソースセンター関連3名，労働安全衛生部門の2名の計13名を派遣することとした。

### 2-3 研修員受入れ計画

研修員受入れについては，暫定実施計画のうちProductivity Groupに関して，2)Individual Attachment in Integrated Productivity Improvementが2名～0名となっていたが，協議の結果これを取り止めることとし，かわりにManagement Consultancy (Manufacturing/service Sector) を11名～12名，技術協力全般及び個別研修を2～3名とした。

### 3. NPBと協議事項

#### 3-1 長期専門家派遣

本年2月に調印したミニッツのフォローアップ協力暫定実施計画の通り長期専門家の数は8名とすることで決定された。

内訳はチーフアドバイザー … 1名, コーディネーター … 1名  
 10E … 1名, マネジメントコンサルタンシー … 3名  
 リソースセンター … 1名, 日本語 … 1名である。

#### 3-2 短期専門家派遣

生産性関連部門で8名, リソースセンター3名, 労働安全衛生2名, 計13名とした。  
 各々の計画は次のとおりである。

STENo	テーマ	討 議 事 項
1.	Integrated Productivity Improvement	カウンターパートがワークショップ, 特定分野における企業指導に際し, I.P. 1が実践できるよう指導する。
2.	Just in Time System	カウンターパートが, ワークショップや企業指導に際しJITを, 実際に指導できるようになることを目的とする。
3. 4.	Total Quality Control	ワークショップの実施や, 企業指導にTQCを取り入れられるようカウンターパートを指導する。
5.	Total Productive Maintenance	ワークショップの実施, 企業の指導に際しTPMを指導できるようカウンターパートを指導する。
6.	Implementation of Quality Chart	企業特に現場レベルにおいて, Quality Chart が広く応用されるよう指導する。
7. 8.	Management Consultancy	企業における生産性と賃金の関連及びサービス業における品質に関する指導を行う。
9.	Professional VTR and editor	1" Betacam, Betacam 3P BVE-800, BVE-5000等の保守に関して指導を行う。3/4" については1" に関する知識で応用できることから割愛した。
10.	Camerawork, Electric Field Production Electric News Gathering operation	リソースセンターの技術スタッフのEFP/ENG/のスタジオにおける操作技術の向上を計る。
11.	Documentary and Dramatised Types of Programmes	ワーカー, 管理監督者レベルの教育の為の番組制作に関する指導を行う。
12.	Exhibition Centre, OSH Week, train-	OSH展示室の質的向上, OSHWe

ing and Promotion

ekの実施、労働安全衛生の訓練及び普及に関する指導を行う。

13. Voluntary Machinery Inspection  
(Power Press)

パワープレスの機械の自主点検の導入に関して指導を行う。

尚、各短期専門家の業務内容、派遣期間等については調印したAnnual Workplan (資料①) 参照。

3-3 研修員受入れ

本年度の研修員受入れ数は、暫定実施計画に取り決めてあった通り、計20名とした。このうち、主な変更点は、生産性関連の研修員受入れのうち、Integrated Productivity Improvement of Individual Attachment (2~0名)をNPB側の都合により取り止めることとし、Management Consultancyの受入人数を11~12名、又OthersのOverall Technical Cooperation and Individual Trainingを2~3名とした点である。これは従来からManagement Consultancy研修の評価が高く、NPBとしてはひとりでも多く本研修に参加させたいとの意向が示され、日本側もこれに同意したのである。

分野毎の受入予定人数は次の通りである。

生産性関連	11~12名
リソースセンター	3名
労働安全衛生	3名
その他	3~2名
	20名

なお、受入時期、到達目標等は調印した年次計画(資料①)参照。

3-4 その他

3-4-1 フォローアップ協力の実施と技術移転について

シ側は過去5年間の協力の成果を高く評価しており、フォローアップ協力が実施されることになったことにより、より効果的な技術移転が行なわれることを期待している旨の発言があった。

調査団よりは、本年度の年次協力計画がより円滑な技術移転を可能とする基礎となることを期待するとともに、今後チーフアドバイザーを中心に実効ある活動が展開されることを望む旨述べた。

最終的には、PDPが延長されたことにより、本プロジェクトのSecond Phase Planによって強調されたシンガポールの生産性向上推進を担うNPBの役割が達成されるべきであること、又その為の限られた期間で成果を上げる為には協力をする側と受ける側双方が最大の努力を払うべきであり、今後のプロジェクト展開に関しより具体的実践計画を立て実施する様申し入れた。今後チーフアドバイザーはじめ派遣専門家を中心にNPB側と検討が加えられることになろう。

3-4-2 日本語指導について

本プロジェクトにおいては、その移転効果を促進する為、日本語を指導してきている。特に日本的経営の移転を効果的に実施する為には、日本語の理解が重要である。

NPB側もこの点については、充分認識しており、今後は多様化した指導を行うよう要望した。NPB側はこれまでの実施により日本語に対する動機付けや基礎的学習はほぼ終了したとし、今後は学習者のレベルに合わせた指導、及び座学に限定せずプロジェクトの活動により密着した指導を要望した。

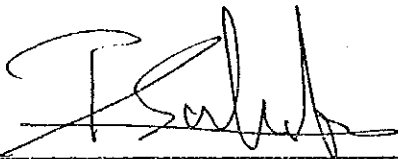
今後はNPBの考えを生かして指導を展開することとし、併せてカウンターパートを中心に積極的対応をするよう再度要請した。



ANNUAL WORK PLAN  
FROM JUNE 1988 TO MARCH 1989  
OF THE TECHNICAL COOPERATION ON  
THE PRODUCTIVITY DEVELOPMENT PROJECT  
IN THE REPUBLIC OF SINGAPORE

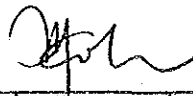
The Japanese side and the Singapore side have jointly formulated, with reference to the Minutes of Meeting signed on Feb 9 1988, between the Japanese Evaluation Team and the Authorities concerned of the Government of the Republic of Singapore for the Technical Cooperation on the Productivity Development Project in the Republic of Singapore, the Annual Work Plan from June 1988 to March 1989 as annexed hereto.

Singapore, 26 May, 1988



---

Mr Takeho Sakata  
Leader  
Mutual Consultation Survey Team  
Japan International Cooperation  
Agency, Japan



---

Mr Koh Juan Kiat  
Executive Director  
National Productivity Board  
Singapore





ANNUAL WORKPLAN FOR FY88/89

FISCAL YEAR ITEMS	FY88/89			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>A LONG TERM EXPERTS</b>				
1 Chief Advisor				
2 PDP Coordinator				
3 IOE (Integrated Productivity Improvement)				
4 Management Consultancy . Consultancy in Productivity Management for SMEs . Consultancy in Service Sector . Training Development				
5 Video Programme Production				
6 Japanese Language				

*JS*

*JD*

ANNUAL WORKPLAN FOR FY88/89

FISCAL YEAR ITEMS	FY88/89			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<p><b>B SHORT TERM EXPERTS</b></p> <p><u>INDUSTRIAL ENGINEERING, QUALITY CONTROL AND TOTAL QUALITY CONTROL</u></p> <p><u>STE #1</u></p> <p>IPI</p> <p><u>STE #2</u></p> <p>JIT</p> <p><u>STE #3, 4</u></p> <p>TQC</p> <p><u>STE #5</u></p> <p>TPM</p> <p><u>MANAGEMENT CONSULTANCY &amp; SMES</u></p> <p><u>STE #6</u></p> <p>Implementation of Quality Chart</p> <p><u>STE #7</u></p> <p>Management Consultancy in Productivity-Wage Linkage at Enterprise level</p> <p><u>STE #8</u></p> <p>Quality Management in Retail Industry</p>			$\frac{1E}{1M}$	$\frac{1E}{3W}$
		$\frac{1E}{2W}$		$\frac{1E}{3W}$
			$\frac{1E}{1M}$	$\frac{1E}{1M}$
		$\frac{1E}{1M}$		$\frac{1E}{1M}$

TS

CB

ANNUAL WORKPLAN FOR FY88/89

FISCAL YEAR ITEMS	FY88/89			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<u>RESOURCE CENTRE</u>				
<u>STE #9</u> Maintenance and Servicing of Professional Video Tape Recorders and Editors				1E 3 - 4M
<u>STE #10</u> Camerawork, EFP and ENG Operation				1E 2-3M
<u>STE #11</u> Production of Documentary and Dramatised Types of Programmes (Planning and Direction)				1E 2-3M
<u>OCCUPATIONAL SAFETY AND HEALTH</u>				
<u>STE #12</u> OSH Exhibition Centre, National OSH Week and OSH Training and Promotion			1E 5M	
<u>STE #13</u> Voluntary Machinery Inspection (Power Presses)			1E 3M	

RP

AM

## ANNUAL WORKPLAN FOR FY88/89

FISCAL YEAR ITEMS	FY88/89			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>C FELLOWSHIP</b>				
<u>PRODUCTIVITY GROUP</u>				
1 Management Consultancy for Manufacturing and Service Sectors		$\frac{11-12F}{3M}$		
<u>RESOURCE CENTRE</u>				
3 Video/Television Production		$\frac{1F}{3M}$		
4 Technician			$\frac{1F}{15W}$	
5 Engineer			$\frac{1F}{15W}$	
<u>OCCUPATIONAL SAFETY AND HEALTH</u>				
6 OSH Exhibition Centre and National Safety and Health Week			$\frac{1F}{1M}$	
7 Voluntary Machinery Inspection (Power Presses)				$\frac{1F}{1M}$
8 Voluntary Machinery Inspection (Construction Machinery)				$\frac{1F}{1M}$
<u>OTHERS</u>				
9 Overall Technical Cooperation and Individual Training		$\frac{2-3F}{2W}$		

STE# 1

Area of Expertise :

-----

IPI

Objective of Attachment :

-----

To give advice, guidance and assistance to counterparts in the specific field of Integrated Productivity Improvement (IPI) to help counterparts develop expertise to conduct workshops and implement practical IPI in companies.

Qualifications and Experience

-----

1. Degree in Engineering or Management Science.
2. Experience in consultancy and training on IPI.
3. Fluent in spoken and written English.

Terms of Reference

-----

- 1 To guide, advise and assist counterparts to conduct workshop discussions pertaining to specific subjects in the field of IPI.
- 2 To guide, advise and assist counterparts on specific steps as well as the problems related to the implementation of IPI in companies from industries such as garment, furniture, electronics and metal industries.
- 3 To guide, advise and assist counterparts to develop the framework or guidelines and cases for the implementation of IPI in companies.
- 4 To guide, advise and assist counterparts in discussions and communications with top management in companies so as to establish core supporters to lead IPI.

TS

JP

Expected Results

- 1 At least two counterparts would have developed the expertise in the field of IPI.
- 2 The framework or guidelines and cases for the implementation of IPI would be jointly developed by the STE and counterparts.

Period of Attachment :

1 month (1 Nov to 30 Nov 88)

PS

CH

STE# 2

Area of Expertise :

JIT

Objective of Attachment :

To give advice, guidance and assistance to counterparts in the specific field of JIT to help counterparts develop expertise to conduct workshops and implement practical JIT in companies.

Qualifications and Experience

1. Degree in Engineering or Management Science.
2. Experience in consultancy and training on JIT.
3. Fluent in spoken and written English.

Terms of Reference

- 1 To guide, advise and assist counterparts to conduct workshop discussions pertaining to specific subjects in the field of JIT.
- 2 To guide, advise and assist counterparts on specific steps as well as the problems related to the implementation of JIT in companies from industries such as garment, furniture, electronics and metal industries.
- 3 To guide, advise and assist counterparts to develop the framework or guidelines and cases for the implementation of JIT in companies.
- 4 To guide, advise and assist counterparts in discussions and communications with top management in companies so as to establish core supporters to lead JIT.

PS

CD

Expected Results  
-----

- 1 At least two counterparts would have developed the expertise in the field of JIT.
- 2 The framework or guidelines and cases for the implementation of JIT would be jointly developed by the STE and counterparts.

Period of Attachment :  
-----

3 weeks (1 Jan to 26 Jan 89)

JS

CH



STE#3

Area of Expertise :

-----

TQC

Objective of Attachment :

-----

To give advice, guidance and assistance to counterparts in the specific field of TQC to help counterparts develop expertise to conduct workshops and implement practical TQC in companies.

Qualifications and Experience

-----

1. Tertiary Education.
2. Experience in implementing TQC projects.
3. Fluent in written and oral English.

Terms of Reference

-----

- 1 To guide, advise and assist counterparts to conduct workshop discussions pertaining to specific subjects in the field of TQC.
- 2 To guide, advise and assist counterparts on specific steps as well as the problems related to the implementation of TQC in companies from industries such as garment, furniture, electronics and metal industries.
- 3 To guide, advise and assist counterparts to develop the framework or guidelines and cases for the implementation of TQC in companies.
- 4 To guide, advise and assist counterparts in discussions and communications with top management in companies so as to establish core supporters to lead TQC.

PS

Q12

**Expected Results**  
-----

- 1 At least two counterparts would have developed the expertise in the field of TQC.
- 2 The framework or guidelines and cases for the implementation of TQC would be jointly developed by the STE and counterparts.

**Period of Attachment :**  
-----

2 weeks (18 Sep to 2 Oct 88)

PS

OK

STE#4

Area of Expertise :

-----

TQC

Objective of Attachment :

-----

To give advice, guidance and assistance to counterparts in the specific field of TQC to help counterparts develop expertise to conduct workshops and implement practical TQC in companies.

Qualifications and Experience

-----

1. Tertiary Education.
2. Experience in implementing TQC projects.
3. Fluent in written and oral English.

Terms of Reference

-----

- 1 To guide, advise and assist counterparts to conduct workshop discussions pertaining to specific subjects in the field of TQC.
- 2 To guide, advise and assist counterparts on specific steps as well as the problems related to the implementation of TQC in companies from industries such as garment, furniture, electronics and metal industries.
- 3 To guide, advise and assist counterparts to develop the framework or guidelines and cases for the implementation of TQC in companies.
- 4 To guide, advise and assist counterparts in discussions and communications with top management in companies so as to establish core supporters to lead TQC.

PK

AM

Expected Results

- 1 At least two counterparts would have developed the expertise in the field of TQC.
- 2 The framework or guidelines and cases for the implementation of TQC would be jointly developed by the STE and counterparts.

Period of Attachment :

3 weeks (Feb 89)

TP

CA

STE# 5

Area of Expertise :

-----  
TPM

Objective of Attachment :

-----  
To give advice, guidance and assistance to counterparts in the specific field of TPM to help counterparts develop expertise to conduct workshops and implement practical TPM in companies.

Qualifications and Experience

- 
1. Tertiary Education.
  2. Experience in implementing TPM projects.
  3. Fluent in written and oral English.

Terms of Reference

- 
- 1 To guide, advise and assist counterparts to conduct workshop discussions pertaining to specific subjects in the field of TPM.
  - 2 To guide, advise and assist counterparts on specific steps as well as the problems related to the implementation of TPM in companies from industries such as garment, furniture, electronics and metal industries.
  - 3 To guide, advise and assist counterparts to develop the framework or guidelines and cases for the implementation of TPM in companies.
  - 4 To guide, advise and assist counterparts in discussions and communications with top management in companies so as to establish core supporters to lead TPM.

TP

AM

Expected Results

- 1 At least two counterparts would have developed the expertise in the field of TPM.
- 2 The framework or guidelines and cases for the implementation of TPM would be jointly developed by the STE and counterparts.

Period of Attachment :

1 month (Mar 89)

IS

CM

-----  
STE# 6

Area of Expertise :  
-----

Implementation of Quality Chart.

Objective of Attachment :  
-----

To develop and promote the widespread application of Quality Chart among companies, especially at the operational level.

Qualifications and Experience :  
-----

1. Minimum of 2-3 years in conducting Quality check using charts/models at company level.
2. Some training experience in quality related areas.
3. Could speak and write English effectively.

Terms of Reference :  
-----

1. To introduce practical models/charts on Quality check at the operational level-supervisors and workers.
2. To develop promotional schemes and activities in conjunction with the implementation of the Quality Chart.
3. To help implement Quality Chart and related activities in 2 companies.

Expected Results :  
-----

1. A manual/handbook on Quality Chart for practical use at operational level.
2. Promotional schemes for implementation of Quality chart.
3. Two companies implementing Quality Chart related activities.

PS

an

Period of Attachment :

-----

1 month (3rd Quarter FY 88)

NOTE : Further discussions would be carried out by NPB and LTEs in Jun/Jul 88 to determine the specific area of STE assistance.

IP

CAJ



-----  
STE# 7

Area of Expertise :

-----  
Management Consultancy in Productivity - Wage Linkage at Enterprise Level.

Objective of Attachment :

-----  
Assist the NPB to develop and promote practical schemes to enhance the productivity-wage linkages at the enterprise level.

Qualifications and Experience :

- 
1. Minimum of 3 years experience in management consultancy specialising in productivity-wage schemes.
  2. Some training experience in productivity-wage related areas.
  3. Could speak and write English effectively.

Terms of Reference :

- 
1. To introduce practical models on Employees Stock Option Plan (ESOP) and Company Stock Ownership Schemes (COSTOCK).
  2. To develop effective strategies and action plan on the promotion of ESOP and COSTOCK among companies in Singapore.
  3. To help implement ESOP and COSTOCK in two local companies from service and manufacturing sectors.

Expected Results :

- 
1. Practical models on Employee Stock Option Plan (ESOP) and Company Stock Ownership Schemes (COSTOCK).
  2. Action plan on promotion of ESOP and COSTOCK in Singapore companies.

RP

an

3. Two local companies (service and manufacturing) implementing ESOP and COSTOCK.

Period of Attachment :

-----  
1 month (4th Quarter FY 88)

NOTE : Further discussions would be carried out by NPB and LTEs in Jun/Jul 88 to determine the specific area of STE assistance.

PL

ON

-----  
STE# 8

Area of Expertise :  
-----

Quality Management in Retail Industry.

Objective of Attachment :  
-----

Assist the retailing industry to develop and implement a Quality Management System to improve performance and quality of customer service.

Qualifications and Experience :  
-----

1. Minimum of 3 years experience in designing and implementing quality management systems in the retail industry.
2. Some training experience on quality management system/ techniques.
3. Could speak and write English effectively.

Terms of Reference :  
-----

1. To introduce an approach to the framework and conduct of Quality Audit so that organisations can receive periodic feedback on the status/level of quality of work/service.
2. To devise strategies for developing Quality Management function in the organisation, including Quality Policy.
3. To develop promotional devices such as Quality Handbooks, competitions, visible displays to promote quality consciousness and practices in the organisation.
4. To develop case studies in the banking sector depicting good quality of customer service for promotional purpose.

RP

Q12

Expected Results :

1. A manual on Quality Audit in the retail industry.
2. Practical strategies on implementation of Quality Management Systems in a retailing environment.
3. Quality Handbook for Retail Business.
4. Case Studies on quality of customer service in the retail industry.

Period of Attachment :

1 month (2nd Quarter FY 88)

NOTE : Further discussions would be carried out by NPB and LTEs in Jun/Jul 88 to determine specific area of STE assistance.

STE# 9

Area of Expertise :

Specialise in the design of professional video tape recorders and editors.

Objective of Attachment :

To train RC technical staff to maintain and service the 1-inch, Betacam and Betacam SP video recorders, the BVE-800, BVE-5000 editors.

Qualifications and Experience :

At least 5 years of design experience with either of the 2 types of recorders (1-inch, Betacam) and at least 1 year technical familiarity with each of the editors (BVE 5000, BVE 800).

Terms of Reference :

1. Principles of operation, system design and block diagrams of Umatics, 1-inch and Betacam, VTRs.
2. Alignment and maintenance of these VTRs.
3. System design and circuitry of SONY BVE800 and BVE5000 editors.
4. Alignment and maintenance of these editors.
5. Identify trouble shooting techniques and spare parts inventory recommendation.

RP

gn

Expected Results :

1. A technical manual is expected for each type of video recorder, 1-inch and Betacam. This manual describes the signal flow and recording format, including a technical description of each major signal block and function of manual components/circuits.
2. Main counterpart must know how to service and maintain all the equipment.

Period of Attachment :

3 to 4 months (Dec 88 to Mar 89)

TR

92

-----  
STE# 10

Area of Expertise :  
-----

Camerawork, Electric Field Production (EFP) and Electric News Gathering (ENG) operation.

Name of expert(s) recommended for above post :  
-----

Technical director from NHK or professional video production houses in Japan.

Objective of Attachment :  
-----

To upgrade the technical handling skill of RC technical staff in the use of cameras for EFP/ENG/Studio operation.

Qualifications and Experience :  
-----

At least 2 years practical experience in camera work and 4 years working experience as a technical director in EFP/ENG/Studio operation.

Terms of Reference :  
-----

1. To train RC staff on these areas :
  - a) Principles of camera techniques, shooting sequence, camera axis, etc. for more advanced programs such as role play, drama and variety type programs.
  - b) Camera exercise/practice using portable, and studio cameras in drama and role play and variety situations.
  - c) Proper usage of camera, sound and lighting in outdoor (eg shopping centres and offices) and indoor recording (factories and interviews).
  - d) Creation of special effects and atmosphere using filters and cameras.

PS

am

2. To provide OJT guidance.

Expected Results :

1. A manual on Advanced Camera Techniques is expected.
2. Main counterpart must be able to handle the camera creatively.
3. Special camera attachments and filters to shoot under varying conditions - moving car, racing boat, flying plane.

Period of Attachment :

2 to 3 months (Mar to May 89)

LP

402



-----  
STE# 11

Area of Expertise :  
-----

Production of Documentary and Dramatised Types of Programmes  
(Planning and Direction).

Qualifications and Experience :  
-----

1. Must have produced a wide range of documentaries that are both informative and entertaining for adults.
2. Must have skills to train and coach producers on camera work, picture continuity, directing and programme planning.

Terms of Reference :  
-----

1. The STE should oversee the production of documentary or dramatised types of programmes aimed at workers, supervisors and managers for training & promotional purposes.

More specifically, he will train and guide producers in :

- a) planning of programmes
- b) script
- c) shooting (camera script)
- d) direction
- e) auditioning and talent selection
- f) music selection

Expected Results :  
-----

1. NPB producers are able to better plan and direct programmes, understand the principles and applications of good programme planning for documentaries and dramas.
2. NPB producers are able to identify good camera work and picture continuity and apply this in their own productions.

JP

90

3. NPB producers have training material and manual on programme planning, directing and cinematography.

Period of Attachment :

-----  
2 - 3 months (Mar to May 89)



-----  
STE# 12

Area of Expertise :  
-----

STE on OSH Exhibition Centre, National OSH Week and OSH Training and Promotion.

Objective of Attachment :  
-----

1. To provide technical guidance for the upgrading of the OSH Exhibition Centre.
2. To provide technical guidance for the organisation of National OSH Week.
3. To facilitate technical transfer in the area of OSH training and promotion.

Qualifications and Experience :  
-----

1. Experience in planning of OSH exhibitions, planning and organising of safety and health weeks and OSH training and promotion in general.
2. A good command of written and spoken English.

Terms of Reference :  
-----

1. To identify the aspects of the OSH exhibition centre which should be upgraded.
  2. To work out the estimated cost of the proposed upgrading of the OSH exhibition centre.
  3. To advise and assist in the planning and implementation of the upgrading of the OSH exhibition centre.
- TP
- JK

4. To advise in the planning and implementation of activities of the National OSH Week.
5. To assist in the planning and implementation of other STES' and fellowship programmes.
6. To advise on OSH training and promotion in general.

Period of Attachment :

-----  
5 months (Sep 88 to Jan 89)

PS

4r

STE# 13

Area of Expertise :

STE on Voluntary Machinery Inspection (Power Presses).

Objective of Attachment :

To advise and assist the Ministry of Labour in the introduction of voluntary machinery inspection in factories with particular emphasis of power presses.

Qualifications and Experience :

1. Minimum 5 years experience in inspection of power presses.
2. Good knowledge of the voluntary machinery inspection system in Japan.
3. Experience in conducting training on voluntary inspection of power presses.
4. Good command of written and spoken English.

Terms of Reference :

1. To advise on the implementation of the voluntary machinery inspection programme with particular emphasis on power presses.
2. To prepare the training programme on the inspection of power presses in the English language with detailed syllabus, lecture notes, case studies, inspection check-lists and AVA materials.
3. To conduct training of counterparts and other officers of the Ministry of Labour in the inspection of power presses.

Period of Attachment :

3 months (Oct to Dec 1988)

Area of training/attachment :  
-----

Training fellowship for Management Consultancy.

Number of fellows : 11 - 12

Objective of attachment :  
-----

To upgrade the skills of management consultants through the learning of practical tools and techniques in management consultancy of small and medium-sized enterprises from both the manufacturing and service sectors.

Terms of Reference :  
-----

To study, discuss, observe and conduct :

1. The type of tools, techniques and process used in management consultancy in Japan.
2. How management consultancy is carried out in the areas of automation, quality control, product upgrading, financial and cost control, upgrading of management skills and workers' productivity and computerisation.
3. Actual management diagnosis and consultancy assignment in selected SMEs.

Expected Results :  
-----

1. A thorough understanding of the techniques and application of management consultancy in both manufacturing and service sectors.
2. Skills upgrading and enhancement in the areas covered under the terms of reference.

PP

CA

Proposed Training Programme :

-----  
The training programme should comprise a fair mix of lectures, discussions, exercises, case studies, presentations, company visits and field practices. Essentially, the training programme should cover the following topics :

- a. Introduction - Basic Guidelines to consulting.
- b. Consulting in Financial Management.
- c. Industrial Engineering (IE) and Production Management.
  - i) Cost Analysis
  - ii) Basic IE Techniques
  - iii) Quality Control and Total Quality Management
  - iv) Consulting in Production Management
  - v) Field Practice for IE and Production Management
- d. Environmental Analysis.
- e. Consulting in Marketing Management.
  - i) Product-Market Analysis
  - ii) Analytical Techniques for Marketing
- f. Consulting in Personnel Management.
  - i) Organisation and Systems Analysis
  - ii) Methods for Improving Personnel Management
  - iii) Design of Basic Wage Structure and Gain Sharing Schemes
  - iv) Training Needs Analysis
- g. Consulting on Corporate Strategy and Corporate Planning.
- h. Consulting Techniques.
  - i) Basic Techniques for Consulting
  - ii) Managerial Problem Solving Techniques
- i. Field Practice on Management Diagnostic Survey.
- j. Consulting in the Retail Sector.
  - i) Consulting Method
  - ii) Field Practice
- k. Workshop : Discussion with JPC consultants.

Period of Attachment :

-----  
3 months (Aug/Sep - Oct/Nov 1988)

PP

an

FELLOWSHIP REQUIREMENTS :

Pg 28 of 33

-----  
Area of training/attachment :

-----  
Video/Television Production.

Number of fellows : 1

Objective of attachment :

-----  
To learn how to produce video programmes on issues and concerns to management and companies, in general.

Terms of Reference :

- 
1. Know the fundamentals of video production.
  2. Learn the methods of production.
  3. Know the production techniques that can be applied suitably in documentary - type programmes.
  4. Familiarise oneself with the video equipment/production equipment of programmes.

Expected Results :

-----  
The producer, after training, should be able to undertake production on his or her own, using the methods and techniques learned.

TP

Am



Proposed Training Programme :

1. Group training at NHK, Training Institute (Summer course)
2. Individual training at NHK covering
  - a) "hands-on " production of programmes
    - picture continuity
    - camera work
    - directing cameramen
    - editing
  - b) Observation of various types of productions
    - drame (role-play)
    - documentaries
    - forums - panel discussions
    - training - type programme

Period of Attachment :

3 months

CP

Am

FELLOWSHIP REQUIREMENTS

Area of Attachment : Manufacturer training at Sony, Matsushita,  
and study visit to NHK

Number of fellows : 2 (1 Technician, 1 Engineer)

Terms of Reference  
-----

Sony : 11.5 weeks  
-----

Basic production eg basic servicing Seg 2000 setup, Editing using  
BVE 5000, servicing and maintenance, audio recording and audio  
editing.

1-inch operation and NEC effector & Optiflex.

Betacam BVP505 operation and maintenance

Grass Valley 1680 10xp and Grass Valley 100G operation and  
maintenance.

Matsushita : 1.5 weeks  
-----

Servicing and maintenance on industrial grade video projector,  
transcoder.

NHK : 2 weeks  
-----

Understanding of basic video production techniques for example  
programme planning, scripting and editing.

Period of Attachment  
-----

15 weeks (From Aug 88)

JS

Am

Area of training/attachment :  
-----

OSH exhibition centre of national safety and health week

Number of Fellows : 1  
-----

Objective of Attachment :  
-----

1. To obtain ideas and technical know-how on the upgrading of the OSH Exhibition Centre.
2. To learn about the organisation of National Safety and Health Weeks in Japan.

Expected Results :  
-----

1. To collect materials and information on OSH exhibition.
2. To collect materials and information on the activities of National Safety and Health Weeks in Japan.
3. To recommend the conceptual plans and details for the upgrading of the OSH exhibition centre.
4. To propose a conceptual plan and details for the organising of the National OSH Week in Singapore.

Proposed training programme :  
-----

1. To visit JISHA, OSH Associations and companies in Japan.
2. Attachment to the Industrial Safety Technical Museum of the MOL in Japan.

Period of Attachment : 1 month (Oct 88)

JS

On

FELLOWSHIP REQUIREMENTS :

Pg 32 of 33

-----  
Area of training/attachment :  
-----

Voluntary machinery inspection (power presses).

Number of fellows : 1  
-----

Objective of attachment :  
-----

To learn about the system of voluntary machinery inspection and the training programme on voluntary inspection of power presses.

Expected Results :  
-----

1. A report on the voluntary machinery inspection system and the training programme on voluntary inspection of power presses in Japan.
2. To develop a course on voluntary inspection of power presses with detailed curriculum, lecture notes and other training materials.

Proposed training programme :  
-----

1. Attachment at the safety division, MOL Japan.
2. Attachment to an organisation in charge of training on voluntary inspection of power presses.
3. To attend the course on voluntary inspection of power presses in Japan.
4. Visit factories where such inspections are carried out.
5. Attachment to an approved agency which conducts inspection of power presses.

Period of Attachment : 1 Month (Mid Jan to mid Feb 89).

PP

On

FELLOWSHIP REQUIREMENTS

Pg 33 of 33

Area of training/attachment :

Voluntary machinery inspection (construction machinery).

Number of fellows : 1

Objective of attachment :

To learn about the system of voluntary machinery inspection and the training programme on voluntary inspection of construction machinery.

Expected Results :

1. A report on the voluntary machinery inspection system and the training programme on voluntary inspection of construction machinery in Japan.
2. To develop a course on voluntary inspection of construction machinery with detailed curriculum, lecture notes and other training materials.

Proposed training programme :

1. Attachment to the safety division, MOL Japan.
2. Attachment to an organisation in charge of training on voluntary inspection of construction machinery.
3. To attend the course on voluntary inspection of construction machinery.
4. Visit factories where such inspections are carried out.
5. Attachment to an approved agency which conducts inspection of construction machinery.

Period of Attachment : 1 Month (Feb 89)

IP

gn





JICA