

タイ王国労災リハビリテーションセンター

設立計画事前調査報告書

1983年1月

国際協力事業団

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国際協力事業団	
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序 文

タイ王国は、近年製造業を中心とする工業化の進展がめざましく、同国経済発展の柱となっている。しかしながら、反面、労働災害発生件数も増加の一途をたどっており、同国は、労災防止対策及び被災労働者の早期職場復帰を目的として、労災リハビリテーションセンター設立計画を策定しその実施についてわが国に無償資金協力を要請してきた。

同要請に基づき、日本国政府は、本プロジェクトの妥当性及び可能性を調査するため、国際協力事業団を通じ、昭和57年11月15日から同年11月27日まで、労働省労働大臣官房国際労働課企画官 山下 廣氏を団長とする事前調査団を同国へ派遣した。

事前調査団は、本プロジェクトの基本構想についてタイ王国政府関係者と協議し、要請内容の確認を行い、建設予定地の踏査を実施し、更に帰国後の国内解析作業を終えてここに事前調査報告書を取りまとめた。

最後に、今回の調査にご協力いただいた関係各位に厚くお礼を申し上げます次第である。

昭和58年1月

国際協力事業団

理 事 風 間 孝 晴

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1. 調査の概要

1. 調査団派遣の経緯

タイ国では製造業を中心とする工業化の進展が目ざましく、同国経済発展の柱となっている。しかしながら、このような発展の反面において、労働災害が増加の一途をたどっており、労働災害防止対策及び被災労働者の早期職場復帰のための対策の強化が労働政策上の重要課題となっている。特に被災労働者対策については、内務省労働局が1974年に労災補償基金制度を充足させ、被災労働者に対し休業補償給付等を行っているが、障害者となった者に対する職場復帰を促進するための施設が皆無であるところから労災リハビリテーションセンターの設置を計画し、これに対するわが国の無償資金協力及び技術協力を要請越したものである。

<注> 口上書によるD T E Cより在タイ日本大使館に対する正式要請は1982年10月14日付№1804(1)/26241〔付属資料№1〕によってなされた。

2. 調査の目的

タイ側要請内容の確認並びに本件プロジェクト協力の妥当性及び可能性を調査すること。

なお、調査項目は予め、タイ側本件協力要請官庁である内務省労働局に対して質問状として送付した。〔付属資料№2〕

3. 調査期間

1982年11月15日～11月27日(13日間)

4. 調査団の構成

団 長	山下 廣	労働大臣官房国際労働課企画官
技術協力	仙座 久 義	外務省経済協力局技術協力第2課
職業リハビリ	大槻 芳 樹	国立職業リハビリテーションセンター次長
医療リハビリ	中島 昭 夫	労働福祉事業団中部労災病院リハビリテーション科部長
計画管理	四釜 嘉 總	国際協力事業団無償資金協力部基本設計課

日順	月・日	曜	行 程	調 査 内 容
1	11/15	月	旅行日(東京発11:00, CX 501 香港乗換えバンコック着18:00, CX 703)	
2	11/16	火	10:00~12:00 大使館, J I C A 事務所	小木曾大使表敬。田宮書記官, 後藤書記官よりタイ労働事情, 医療事情についてのブリーフィング。坂牧所

日順	月日	曜	行 程	調 査 内 容
3	11/17	水	12:00~14:00 茂田参事官昼食会	員との打合せ
			15:00~16:30 内務省労働局訪問	ウィチット労働局長表敬 アンボン次長, アンボーン労災補償 基金部長との協議
			9:00~ 9:20 D T E C訪問	カセム D T E C次長表敬
			9:30~12:10 労働局訪問	アンボン次長, アンボーン部長との 協議
			13:30~14:45 "	"
4	11/18	木	15:00~16:30 内務省厚生局訪問	ブラムーン厚生局長表敬 サウオング福祉部長より障害者福祉 行政につき説明聴取
			19:00~20:30 労働局長主催夕食会	
			10:00~12:40 退役軍人総合病院及 び授産施設訪問	ウォングムアング院長, ビシット医 療リハ科部長より説明聴取, 施設視 察
			15:15~16:00 センター建設候補地 (A)〔サムトブラカン 地区〕視察	
5	11/19	金	16:10~16:45 日本電装タイランド 社訪問	竹島工場長より産業安全対策につい て説明聴取。工場視察
			10:00~14:00 プラバデン障害者職 業訓練センター及び 障害者ホーム訪問	サウオング厚生局福祉部長 ソムビット所長代理より説明聴取 施設視察
			15:00~17:00 ラートシン病院訪問	エカチャイ整形外科部長より医療リ ハにつき説明聴取, 義肢作業場等視 察
6	11/20	土	15:00~17:00 中央職業訓練所(N I S D)及び職業紹 介所訪問〔大槻団員 のみ〕	ブラチット N I S D 所長, チャント ラ雇用サービス課長より職業訓練, 職業紹介事情につき説明聴取
			10:00~12:00 団員打合せ 資料整理	
7	11/21	日	移動(バンコク発 15:00, TH210	[チャラーム N I S D 課長, 田宮書

日順	月日	曜	行 程	調 査 内 容
8	11/22	月	<p>コンケン着 16:20)</p> <p>18:30~20:00 コンケン労働事務所 長夕食会</p> <p>10:00~12:00 コンケン障害者職業 訓練センター訪問</p> <p>13:00~14:00 プラチット N I S D 所長昼食会</p> <p>14:30~16:00 コンケン職業訓練セ ンター (K I S D) 訪問</p>	<p>記官同行]</p> <p>ステイチャイ所長らより説明聴取, 施設視察</p> <p>ワタナ所長, 富松専門家より説明聴 取, 施設視察</p>
9	11/23	火	<p>移動 (コンケン発 9:00, TH209 バンコク着 10:20)</p> <p>14:30~17:00 センター建設候補地 (B)(C) [ランシット地 区] 視察</p> <p>◁中島団員のみチェンマイ行き▶</p> <p>移動 (バンコク発 13:30, TH104 チェンマイ着 14:30)</p> <p>14:30~22:00 チェンマイ大学訪問</p> <p>(11/24)8:30~12:00 チェンマイ大 学附属病院訪問</p>	<p>タウオン, チェンマイ大学医学部整 形外科部長より医療事情, 医療リハ につき説明聴取</p> <p>病院視察</p>
10	11/24	水	<p>9:20~10:50 I L O アジア太平洋 地域事務所訪問</p> <p>10:50~12:00 センター建設候補地 (D) [サラヤ地区] 視 察</p> <p>14:30~16:00 タイ東レ社訪問</p>	<p>ブラウン氏, マクギルグレイ氏より A S E A N 各国のリハビリテーショ ンの動向等につき説明聴取</p> <p>大前工場長らより産業安全対策につ いて説明聴取, 工場視察</p>
11	11/25	木	10:00~15:00 労働局訪問	アンボン次長, アンボン労災補償 基金部長との協議
12	11/26	金	11:00~12:00 大使館, J I C A 事務所	三宅公使に調査結果報告

日順	月日	曜	行 程	調 査 内 容
13	11/27	土	14:00~16:00 シリラート病院訪問 〔団長, 中島団員の み〕 旅行日(バンコク発 8:35, KL863 東京着 16:15)	サニット, リハビリテーション科部 長と医療リハにつき意見聴取, 病院 視察

6. タイ例主要協議関係者名簿

(1) Department of Labour

Mr. Vijit Sangtong, Director - General

Mr. Ampol Singhakovin, Deputy Director - General

Ms. Amporn Junenanond, Director, The Office of
Workmen's Compensation Fund

Mr. Prachid Pradabsook, Director, Institute for Skill
Development Bangkok (NISD)

Mr. Chantra Phitarachart, Director, Employment Service
Division

Ms. Doungkamol Changrien, The Office of Workmen's
Compensation Fund

Ms. Benjawan Laohatongtip, "

(2) Department of Public Welfare

Mr. Pramool Chantrarachamng, Director - General

Mr. Savong Tupkrisana, Director, Welfare Assistance
Division

Ms. Chutamart Srichamorn, Welfare Assistance Division

Mr. Sompit Sapmeechai, Acting Director of Prapadang
Vocational Rehabilitation Center

Mr. Sidthichai Suksawan, Chief of Vocational
Training Center, Knonkaen

(3) Hospital

Dr. Pisit Soontonthiti, Chief of Medical Rehabilitation
Section, Veteran's General Hospital

Dr. Ekachai Chulacharitta, Head of Physical Medicine
Department, Lerdsin Hospital

Dr. Sunit Sudhisanronakorn, Chief of Rehabilitation
Medicine Siriraj Hospital

Dr. Thavorn Ratanasri, Chief of Orthopaedic Surgery
Department, Faculty of Medicine,
Changmai University.

O ILO Regional Office

Mr. Henry Brown, Regional Advisor on Vocational
Rehabilitation

Mr. Warren R. McGillivray, Social Security Regional
Advisor

Ⅱ. 調査結果

1. 要請の背景及び経緯

1-1. 労働災害及び被災労働者の現状

(1) タイ国では工業化の進展とともに製造業、建設業を中心に雇用労働者の顕著な増加がみられる(第1表)。

第1表 産業別就業者数の推移

(単位;1,000人,%)

産 業	実 数						増 減	
	1960年		1970年		1980年		(年 率)	
	実数	構成比	実数	構成比	実数	構成比	1960~1970	1970~1980
総人口	26,392	-	34,397	-	47,282	-	2.7	3.2
労働力人口	-	-	-	-	22,728	-	-	-
就業者計	13,772	100.0	16,652	100.0	22,524	100.0	1.9	3.1
農林漁業	11,334	82.3	13,202	79.3	15,943	70.8	1.5	1.9
鉱業採石業	30	0.2	87	0.5	37	0.2	11.4	▲8.3
製造業	471	3.4	683	4.1	1,789	7.9	3.8	10.1
建設業	69	0.5	181	1.1	436	1.9	10.2	9.2
電気・ガス・水道業	16	0.1	25	0.2	60	0.3	5.0	9.0
商業	780	5.7	876	5.3	1,916	8.5	1.2	8.1
運輸通信業	166	1.2	268	1.6	456	2.0	4.9	5.4
サービス業	655	4.8	1,184	7.1	1,887	8.4	6.1	4.8
分類不能	252	1.8	146	0.9	1	0.0	-	-

(資料出所) 総理府統計局, 1960年及び1970年は「人口センサス」
1980年は「労働力調査(7月~9月分)」

(2) このような工業化の進展は、反面において、労働災害の著しい増加をもたらし、災害による障害者も年々増加の一途をたどっている。

タイ国の労働法では、労働者の業務上の傷病及び死亡事故については、使用者は補償金支払の義務があり、15日以内に労働事務所に通報しなければならないとされている。これによって労働局が把握しえた労働災害件数は1974年に4,023件であったが、1981年には28,482件に達している(第2表)。

第2表 労働災害件数の推移

(単位;件)

年	合計	死亡	永久全労働 不 能	永久一部 労働 不 能	一時労働 不 能
1974	4,023	200	28	659	3,136
1975	5,600	237	18	972	4,553
1976	8,440	323	18	1,085	7,014
1977	16,207	366	23	1,376	14,442
1978	20,060	376	30	1,437	18,217
1979	24,419	397	32	1,302	22,688
1980	25,568	395	27	1,454	23,692
1981	28,482	425	31	1,481	26,545

(資料出所) 労働局統計調査企画部

(3) 第2表の労働災害件数のうち後述の労災補償基金制度の給付請求から把握した被災労働者の状況は次のとおりである。

イ. 1981年における被災労働者の総数は27,723人。このうち一時労働不能の者は26,124人と大部分を占め、永久一部労働不能となった者は1,275人、永久全労働不能となった者は10人、死亡者は314人である。〔付属資料№3, 1-10-1表〕

(注)この数値については、①第2表の数値と大差ないことから、労災補償基金の適用によって、はじめて把握される労働災害が多いこと、②労災補償基金制度は、1981年現在全国72県中主要な30県、労働者20人以上の事業所(8,464事業所、約80万人)にしか適用されていないことを考慮すると、被災労働者全体の数はこの数値を相当上回ることが推測される。

ロ. 被災労働者数の産業別状況をみると、最も多いのが食品・飲料・タバコ製造業(4,490人)及び金属製品・機械製造業(4,485人)の二つであり、これに建設業(2,759人)、繊維・衣料製造業(2,545人)がつづいている。〔付属資料№3, 1-10-2表〕

ハ. 障害者となった者(永久一部労働不能及び永久全労働不能)1,285人の障害原因及び障害部位は次のとおりである。〔付属資料№3, 1-3表〕

○障害原因 機械883(68.7%), 圧縮115(8.9%)

落下物92(7.1%), その他195(15.2%)

○障害部位 手及び指1054(82.0%), 足及び足指73(5.7%)

複合40(3.1%), 眼35(2.7%)

その他83(6.5%)

1-2. 労働災害防止及び被災労働者対策の現状

(1) 労働災害の増加に対して、内務省労働局では労働災害防止のための労働安全衛生対策の強化と被災労働者対策の充実を重点として推進している。労働安全衛生対策については、現在、機械、電気、建設、潜水、化学物質、作業環境（騒音、温度、光度）及び建設リフトの7つの安全基準が施行されており、バンコク及び地方労働事務所に配置された労働基準監督官（安全担当はバンコク25人、地方20人）により指導監督が行なわれているが、①労使及び監督官の安全衛生知識の不足、②工場数に比し予算人員の不足、③監督機関に機械の設備が不足、④危険な機械等の使用停止権限は工業省にあり、労働局との連携体制が不十分などの問題があり、実効は十分あがっていない現状にある。このため労働局では労働安全衛生研究所（The National Institute of Occupational Safety and Health）の設立を準備中であり、同研究所に対して、1983年3月から3年間UNDP資金によるILOの技術協力を受けることとなっている。同研究所の機能としては、①安全監督の効率改善、②安全訓練における技術、設備の改善、③調査研究活動、④情報の収集提供が予定されている。

(2) 被災労働者に対する対策としてはまず「労働者保護に関する内務省令」に基づき、使用者は、労働者の業務上の負傷・疾病又はその結果による死亡に対し所定の労災補償金を支払う義務がある。この使用者責任を肩代わりする制度として労災補償基金が設けられ、全額使用者からの拠出（保険料率は業種別メリット制を採用0.2%～4.5%）により、以下の給付を行っている。

- ①療養費 30,000 パーツを限度。（義肢装具を含む）
- ②休業補償給付 月額給与の60%（但し最低1,000～最高6,000 パーツ。以下同じ）
最高52週まで。
- ③障害補償給付 月額給与の60% 最高10年まで
- ④遺族補償給付 月額給与の60% 最高5年まで
- ⑤葬祭料 3カ月分給与（最低5,000～最高10,000 パーツ）分

同基金制度は1974年1月に発足し、遂年適用地域が拡大しており、1982年現在、33県、9,200事業所、84,4196人の労働者をカバーしている。基金の収支状況を1981年度についてみると、258百万パーツの収入に対して、支出は148百万パーツで110百万パーツの黒字を生じている。〔付属資料№3、1-12-3表〕このような剰余金により1981年度末の積立金は396百万パーツ（うち200百万パーツは利息）に達している。

(3) 一方、被災労働者のリハビリテーションに関しては、現状では特別の措置はない。従って労働災害により障害者となった者は一般障害者を対象とする、①大学病院及び主要な私立病院で実施されている医学的リハビリテーション、及び②厚生局で一般障害者を対象として実施されている職業リハビリテーションの枠内でリハビリテーションサービスを受け

ることが可能であるが、これらの施設は後述のようにきわめて限定された小規模のものであり、しかも、職業経験を有する労働者のリハビリテーションに適した機能を有するものとは云い難い。

1-3. 労働政策としてのリハビリテーション対策の必要性

- (1) 労働局では、労働政策としてリハビリテーション対策を重視するに至った理由について、次のように述べている。

「労働災害防止対策の強化に努めているが、すべての災害を絶滅することは不可能である。このため、労災補償基金制度を設立し、被災労働者の救済に努めてきたが、労働災害による障害者が年々増加しており、これらの障害のために職を失った者に対して、補償金を支払った後は何らの援助も提供できない。これらの者の多くは郷里に帰って生涯家族の重荷になっている。労働局としては、これら労働者の技能と経験を失うことは国家経済にとって損失であり、これらの労働者の障害がリハビリテーションを通じて克服されるならば、彼らを職場に復帰させ、国家経済に役立つ者とする可能性がまだ残されていると考えた。このような考え方から労災補償基金の資金を補償金の支払いに充てるだけでなく、リハビリテーションに活用することが考えられた」

この説明から明らかなようにリハビリテーション対策は単に労働者福祉の充実という観点に止まらず、経済発展の担い手たる技能労働力の維持確保という観点から取り上げられている。したがって、労働政策として被災労働者のリハビリテーションが強化されるべきであり、その財源として労災補償基金の資金を活用すべきであるという考え方は労働組合は勿論、使用者団体はじめ、各方面から強い支持を受けている（1979年7月ホアヒンで開かれた「労働災害補償及び障害者のリハビリテーションに関する三者構成セミナー」の結論－付属資料№5－参照）。

- (2) 以上を背景にして、タイ政府の第5次国家経済社会開発計画（1982～86）においても、労災補償基金の活用による職業リハビリテーションセンターの設立が計画されている。この計画を具体化するため、労働局では1981年11月にILOの専門家（Mr. D. S. Spicer）を受け入れ、82年3月、センターのマスタープランを含む文書（Technical Memorandum－付属資料№4－）を受理している。
- (3) なお、ILOアジア太平洋地域事務所によればマレーシア及びフィリピンにおいても、準医療と職業リハビリテーションを含むタイ政府の構想に類似したセンターの設立計画が具体化しつつあり、ASEAN地域におけるこの問題に対する関心の高まりが見られる。

2. タイにおける身体障害者リハビリテーション対策の現状

2-1. 身体障害者対策の現状

2-1-1. 身体障害者の現状

厚生局は法律による身体障害者の登録制度を検討しているが、現状では全国的な障害者の状況を把握するデータはない。

1976年に、東北タイの地域で障害者の抽出調査が行なわれた。この目的は、その地域に職業訓練センターを建設する必要性を確かめるためであった。その調査結果は、抽出人口の5%が障害者であった。これらの障害者は聾啞者、ある種の慢性的病気による能力欠損につづいて、ポリオが多い。この調査の結果は、能力欠損者の農村地域の発生を示すことに役立っている。都市部においては、調査したものはないけれども、病院の記録によると聾啞者は病院やリハビリ治療をを求めることをしないので、農村地域に比して減少しているが、これに反して、交通事故による障害者が盲、四肢まひについて多くなっている。

2-1-2. 身体障害者対策の現状

タイ国における障害者に対する福祉的援助は、宗教的な信条によって多年の間にわたって行なわれてきている。障害者問題は、第2次世界大戦以降、戦争災害と工業化の拡大により、障害者の数が増大することにより現実化してきた。福祉的援助は、早期には、ボランティアや非政府機関の間に組織化され発展してきた。

政府としては、1941年にはじめて内務省厚生局が障害者問題を所掌することとなった。1941年の貧困救済法によって、障害をもった厄介者扱いされている貧困者(乞食)は施設に収容されることとなった。まず第一に、福祉的援助の主な考えは、貧困を防止して、彼等によりよい生活ができるよう、保護し、食糧その他必要なものを供給することである。年を経過するに従って、彼等に対するサービスは、リハビリテーション、職業訓練、雇用という方向へ展開していった。

厚生局の行なり福祉的サービスに加えて、他の政府機関、即ち、医務局、労働局、教育局などが障害者関連行政を担当している。

イ. 厚生局

厚生局は、障害者に対して、福祉と社会的リハビリテーションのサービスを行なっている。即ち、職業訓練、保護工場(授産施設)、施設ケアである。

また、国際障害者年を期して、次の2つのプランをもつ、

- ① ノンタブリ地区に、200人雇用の授産施設を建設中である。
- ② 身障者に対する長期計画としては、身障者登録制を法制化し、健康、教育等について、20年間の計画をもって福祉の充実を期する。

現状としては、厚生局の援助のもとに次の施設が機能している。

(i) 中央地区に障害者向けのホーム。これは年令16才以上の成人の障害者のための施設である。一般的に、彼等は、貧困、厄介者、あるいは家族とともに生活のできない者たちである。このホームは、また、医学的、社会的リハビリテーションをうけている間に職業訓練を必要とする障害者を、準備期間中、受け入れている場所でもある。ホームの収容人員は650人である。

(ii) 2つの職業訓練センター。中央地区と東北地区にあり、15～45才までの成人の障害者のための施設である。入所者と通所者がある。訓練のコースは、1年または6カ月で、洋裁、電子機器、ラジオ・テレビ修理、皮革製品、理容、美容、織機などからなっている。センターの収容能力は、それぞれ一時期に100人である。

(iii) 東部地区に病後回復者の施設が1カ所ある。これは、障害者ホームに収容される同じような人々のために供されている。この施設は、国際障害者年を記念して、1981年の初頭に創設された。収容能力は100人である。

(iv) 障害児のための3つのホーム。(身体的、精神的に幼児期に障害をうけた者)、このうち2つのホームは5～18才までの子供たちの施設である。その子供たちは、孤児、見捨てられた者、あるいは両親が育てることができない人々である。厚生局としては、彼等を少なくとも自立した生活へ導くことができるよう、ケア、リハビリ、教育、職業訓練を行なっている。

これらの施設の収容能力は、250人と300人となっている。

三つの施設のうち、もう一つのホームは世話をする人のいない5才以下の孤児のためのものである。この障害孤児のホームは150人の人数をかかえている。

これらの3つのホームは中央地区にありバンコクに近い。

(v) 精神病寛解者に対するHalf Way Home。この施設は、公共保健省医務局が精神病寛解者のために準備されたものである。ここでの主なサービスは、大工、農業、溶接などをふくむ職業訓練がなされ、施設の外での雇用あるいはレクリエーション的な活動がなされる。この施設の目的は、家族と正常な生活に復するよう、患者を元気づけることである。この施設は、250人の患者を擁し、中央地区にある。

これらの施設に加えて、厚生局は、障害者に必要なサービスを提供している。

即ち、一般雇用、自営などの職業的自立の促進、保護工場の運営、職業支度資金の貸付、義肢の援助などのサービスである。

ロ. 公共保健省医務局

医務局は、メディカルケア、リハビリテーション、義肢装具等について所掌している。これらのサービスは、北部地区にある1カ所を除き、殆どがバンコクにある6つの公立病院で提供されている。

ハ. 内務省労働局

労働局は、障害に対する雇用の提供と、労働災害による障害者に対する労働者補償基

金を所掌している。

ニ. 教育省普通教育局

教育局は初等教育レベルにおける特殊教育を行なっている。特殊教育に関する訓練コースの設定、及び、他の部局や民間組織で行なわれている学校へ、特殊教育を担当する教師を派遣し援助している。

その他に教育局は、障害をもった生徒が、健全な生徒と共に学習し、差別的な態度を和らげることによって、障害をもった生徒を元気づけるようなプログラムを作成し指導している。

ホ. その他

- ① タイ在郷軍人会は、傷痍軍人に対して医療サービス、リハビリ治療、職業学校、家族の福祉及び雇用についての業務を行なっている。
- ② タイ国王室の援助のもとに、肢体不自由者、知恵おくれ児、盲人などに対して、福祉のための基金が用意され、これによって、医療、保健、教育、職業訓練などのサービスが提供されている。

2-2. 医学的リハビリテーションの現状

2-2-1. 医療制度及び医療の現状

タイの総人口は1980年の統計によれば約4,700万人、医師の数は1981年に約8,000人であり、うち1,500人が国外に居住しているといわれる。医師1人当りの人口は7,224人と極端な医師不足の現状であり、その上医師の50~60%がバンコク周辺に居住しており、無医地区がかなりの範囲にわたり、地方都市にも無医状態のところがあると云われる。

病院はpublic hospital と private hospital があり、public hospital は7つの大学附属病院及び県単位の病院及びその他よりなり、国営である。

一般に対する医療保健制度はWorkmen's Compensation Fund による労災補償制度のみであり、他は低所得者に対する医療費の免除制度がある（年収10,000B以下）。WCFによる医療費は1人当りの上限は30,000Bであり、1日の入院費は250B以下に限定されている。

public hospital での実情は、患者は全額有料患者と、その他の患者に分けられ、後者は入院費及び食費は全額無料であり、治療費はMCWのconsultの結果で医療費の一部負担、月割支払、全額無料等とその経済状態により負担額が決定される。これらの患者は当然医療費内容にも制限を受けている。差額は病院の負担となり国費及び寄附金により補填されている。

Chaing Mai 大学の附属病院の一部の病室では220%の入院状態であり、地方における医療施設の不足を現わせる。

医療費は日本よりはかなり低額であり、大腿切断の場合、全く trouble がなければ義肢を含め約 20,000 B 位である。

2-2-2. 医療スタッフの教育

- a. 医師；一医師の年間卒業数は 7 大学の医学部で 600 名で、1 年間のインターン終了後、2 年間の無医地区での勤務が 3 年前より義務づけられている。
- b. 看護婦；- Junior High School 卒業後の 2 年のコースの準看護婦、High School 卒業後 3 年のコースの正看護婦及び 4 年間の大学コースがある。
- c. P T；- 10 年程前より経過措置の期間を経て免許制度が確立されており、現在は 4 年制の大学があり、年間 20 名の卒業生を出しており、1 年間のインターン後免許が与えられる。現在免許を有する P T は約 300 名であるが実働数は 140～150 名と云われる。

準看護婦を短期間教育したり、High School 卒業後 2 年間の実地教育で P T aid が作られる制度があるが、免許は与えられていない。
- d. O T；- 現在免許を有する O T はなく、Chaing Mai 大学に 4 年制の学部があり明年第 1 回の卒業生が出る。年間卒業数は 10 名が予想される。
- e. その他；- S T, M C W, prothesist 等には現在免許制度はない。

2-2-3. 医学的リハビリテーションの現状

Veteran General Hospital, Lerd Sin Hospital, Chaing Mai University Hospital, Siriraj Hospital を視察した。

前記の病院で O T 部門を有するのは Chaing Mai University Hosp. と Siriraj Hosp. のみである。

a. Staff；-

医師-各病院とも 1～2 名の Specialist を有していた。

P T-各病院とも 5～6 名の P T 及びほぼ同数の P T aid により運営されている。

P T 1 名と P T aid 1 名で約 20 名の患者を受け持っているが Chaing Mai のような地方都市ではかなり患者が過剰のようである。

O T-両病院とも国外で教育を受けたスタッフが 1～2 名で担当していた。

b. P T 施設

Chaing Mai University Hospital は中規模の施設を有しているが、他はいずれも狭く基本的な器具は有しているが充分でなく、旧式の器具が多い。Hurburd tank, exercise pool 等の大きな水治療施設は running cost の面で十分な活用が困難だと述べていた。

c. O T 施設

Chaing Mai Univasity Hosp. Siriraj Hosp. 共に日常生活動作訓練部門はかなり充実した設備を有しているが、いずれも作業療法部門では織機類と木工位で充分とは云えない。

d. 義肢, 装具施設

Lerd Sin Hosp. はかなり大きな Work Shop を有しており、技術者を各病院に派遣して義肢装具の供給体制をとっているが、設備はかなり旧式である。義肢の parts は主として西ドイツの OTTOBOCK 社より輸入しているが、一部 SACH 足等は国内開発を試みている。Chaing Mai University Hosp, は 3 年前に出来た近代的な Work Shop を有しているが、外部へのサービス体制はない。近代的な endskeletal System の使用はみられず、経済的な理由とタイ農村地帯の特殊性によるとの説明であった。義肢製作能力のあるのは 6 病院のみで、一部 private な業者も存在することである。

e. S T

いずれの病院も施設はない。

f. 総括

今回視察した病院は、いずれもタイの医学的リハビリテーションの中心的施設であり、スタッフのレベルも一応国際的水準にあるものの、数が少なく施設及び治療上の面でも経済的な制約が多いようにみられた。

タイ全体で機能訓練を行なえる設備及びスタッフを有する病院は 7 大学病院を中心にわずかな病院のみであり、県単位の病院では医師も少なく、paramedical staff も充分でないので物理療法を行なうのが精一杯とのことであった。

2-2-4. 身体障害者施設における医学的リハビリテーション

身体障害者施設として phrapadaeng 及び Khonken の両施設を視察したが、Khonken は施設はなく、phrapadaeng では既存の部屋を利用した程度の広さで、一応基本的な設備があったが staff も少なくあまり利用されていないようであった。

2-3. 職業リハビリテーションの現状

イ. 厚生局所管の障害者の宿泊施設をもつ 2 つの職業訓練センターがある。

中央地区のブラバデン及び東北地区のコンケンにある。これらの施設では、10 年間に 800 人の訓練をうけた修了生を社会へ送り出している。

ブラバデン、コンケンにおける職業リハビリテーションの概要は次のとおりである。

① 入所資格は、年齢 15～45 才まで。ADL (日常生活) の確立しているもの、学歴不問、訓練をうける理解能力のあるもの、伝染性疾患のないもの、となっている。

② 訓練科目、訓練生人員等

○ブラバデン・センター

洋 裁	34名
皮革製品	28名
電気機器組立	10名
溶 接	10名
ラジオ・テレビ修理	64名
計	146名 (定員100人)

(1年コースである)

○コンケン・センター

洋 裁	}	26名
洋 服		
ラジオ・テレビ修理		29名
理 容		9名
美 容		6名
		70名 (定員50人)

(6カ月コースである)

コンケン・センターにおける訓練科目は、創立当初は、洋裁、洋服の科目のみであったが4～5年後理容、さらに2年後ラジオ・テレビ修理、そして2年前に美容の科目を順次増設した。

将来は、溶接、皮革製品の訓練科を設置したい希望がある。

人気のある訓練科目は、ラジオ・テレビ修理に集中している。

訓練生の障害別は、両センターともポリオが圧倒的に多い。

③ 修了生の進路(1981年度修了生 3カ月後のフォローアップ調査結果)

	ブラバデン・センター	コンケン・センター
自 営	59%	30%
一般雇用	22%	60%
保護雇用	10%	—
そ の 他	9%	10%

なお、ブラバデン・センターにおける保護雇用は、同一施設内にある授産施設で、洋裁30名、織機9名が就労している。これら就労者は近隣から通勤している。これらの者のうち、5人は相当長期間にわたって雇用されているが、大部分は約1年以内で自営又は一般雇用就く。授産施設への発注はすべて厚生局が行い、製品(学童服等)は厚生局が買い上げ貧民に支給している。

これらの修了生は、田舎(出身地)へ帰って、数は少ないが雇用労働者となるものがあるが、多くは、自営により自活している。

④ 入所選考, 入所費用等

入所者の選考は、各県に選考委員会があり、これを経て推せんされた者を中央選考委員会で審査される。

入所期間中の費用については、入所者の入所のための旅費は、自己負担となるが、運営については、政府予算でまかなわれているので、入所者の食費、宿泊代、訓練費は無料である。

⑤ 職員数（ブラバデン・センター）

所長1名、ソーシャルワーカー3名、心理職1名、訓練指導員24名、看護助手1名、事務員3名、その他26名 計59名

ロ. タイ在郷軍人会が傷痍軍人のための総合病院を経営し、その附属施設として職業訓練施設をもっている。ここでは、病院での医療サービスを必要としない人を利用対象者とし、職業訓練を行ない、社会復帰させることを目的としている。

訓練科目は、洋服、テレビ・ラジオ修理、溶接、宝石加工、皮革細工の5科目で、各科目約10人、計50人の人々が訓練を受けている。

3. プロジェクトの概要

タイ政府内務省労働局が新設を計画している労災リハビリテーションセンター（Industrial Rehabilitation Center）の概要は次のとおりである。

3-1. 目的及び入所対象者

- (1) タイ側説明によれば、センターの目的は主としてタイ労働法によって保護される障害労働者に対して、医学的リハビリテーションの一部及び職業リハビリテーションサービス（職業評価、職業指導、リハビリテーションカウンセリング、技能訓練）を提供することともに、センター修了後のフォローアップ及びリハビリテーションに関する調査研究を実施することにある。従ってセンターの入所対象者は、労災補償基金の給付を受ける者はもちろん、労働災害により身体に障害を受けたすべての労働者を含んでいる。
- (2) 既述（1-1(3)）のとおり、労災補償基金統計によれば、1981年の被災労働者総数は27,723人であり、そのうち1,285人が障害者となっている。しかし、労災基金の適用範囲（1981年では30県、労働者20人以上事業所）を勘案し、労働局では労働災害による障害者の年間発生数は約2,500人と推計し、その約半数である1,000人～1,500人をリハビリテーション対策の当面の目標人数としている。
- (3) センターの入所対象者につき、タイ側は、労働災害以外の原因による身体障害者については、本センタープロジェクトが成果を上げるようであれば、必要に応じてこれらの者を対象者に含めてもよいとの考え方を示唆したが、当面は労災補償基金の資金の活用を考慮し、①労働災害により身体障害者となった者であること、②日常生活上他人の介護を要しない者であること、③このセンターのサービスを受けることにより職場復帰又は職業自立が可能と認められることの三つの要件を満たす者としている。

3-2. 機能

- (1) タイ側説明によれば、センターの機能として次の7つを考えている。
 - ① 入所者の相談及び選別（referral and selection）
 - ② 医学的リハビリテーション（medical rehabilitation）
 - ③ 職業評価（assessment of work potential）
 - ④ 職業適応指導（work adjustment and job preparation）
 - ⑤ 技能訓練（skill training）
 - ⑥ 就職指導（resettlement in employment）
 - ⑦ フォローアップ（follow-up and feedback）
- (2) 上記のうち②の医学的リハビリテーションについては、労働局は現在のバンコク市内の公立病院（ラートシン病院、スリラート病院等）との連携体制を基礎とし、治療後機能訓

練を受ける機会の乏しかった者を対象に簡易な理学療法（PT）及び作業療法（OT）を行うことを考えている。

(3) ⑤の技能訓練については、タイ側は次の6コースを考えている。

- i) 金属加工（Bench engineering）
- ii) 簡易機械組立て（Light assembly and miscellaneous）
- iii) 木工（Carpentry and woodwork）
- iv) 電子機器（Electronics）
- v) 事務（Clerical work）
- vi) 洋服仕立て（Tailoring）

このような職種を選択について、タイ側は、①障害者の能力への適応性及び②雇用の可能性を考慮したとしている。すなわち、i)～iii)についてはこれらの関連産業で災害が多いので、障害労働者を元の仕事に復帰させるため、機械等による作業に慣れさせることを考えている。iv)については雇用需要の多い職種であり、下半身障害者でも習得できることを考慮している。v)も同じく下半身障害者等にタイプ等を習得させる。vi)については、自営する場合の技能として考慮した旨説明している。なお手工芸（Handicraft）については、製品の販路の問題があり不適當と考えている。

次に訓練期間については、タイ側はできるだけ短いものとし、最長の場合でも12週間（これはILO専門家のレポート—付属資料№4—を根拠としている）と述べたが、障害者が職種転換のため新しい技能を習得する必要がある場合は短かすぎるのではないかとの調査団の意見に同意し、6カ月～1年の場合あり得るとFlexibleな考え方に変更した。

(4) ⑥の就職指導については、センター修了者には、バンコク及び64県にある労働局の職業紹介機関が求人情報を提供する体制をとる、としている。

リハビリテーションの終了した障害労働者の職場復帰の可能性について、労働局では次のように説明している。

最近、労災補償基金部の中に障害労働者のための医学的リハビリテーション担当官を設置した。同担当官は治療の終わった障害労働者に医学的リハビリテーションを受けさせるために病院に紹介するとともに、雇用主ともコンタクトする。リハビリテーションの進行状況はその担当官を通じて雇用主に知らされる。このサービスについて大部分の雇用主は満足しており、リハビリテーション終了後、心よくその労働者を元の職場に復帰させるか、彼らの能力に適合した新たな職務に就けるようにしている。このような状況から、障害労働者を元の雇用主に復帰させることはリハビリテーションにより本人も自信をもち、雇用主も確信が得られるので十分可能性がある。しかしながら、障害のために通勤が困難になる等の事情で新たな雇用主に就職させることは、一般に供給超過の労働市場の下ではかなりの困難があると思われる。このような場合は自営の道も考える必要がある。

(5) なお、通常雇用直ちに就けない者のため保護雇用の工場（Sheltered factory）設置

については、将来計画とし、当面は医療及び職業リハビリテーションのセンター設置のみを考えている。

3-3. 規 模

センターの定員は、当面100人程度とする。年間受入数については一応300人を想定しているが、訓練期間によって異なってくるので、未定である。

3-4. 施 設

センターの施設は、機能訓練室、各種のワークショップ、入所者用寄宿舎その他必要な施設とする。

(タイ側のマスタープランの一例は付属資料№6参照)

3-5. 建設予定地

調査団は以下の4カ所のバンコク近郊にある候補地を視察した。

(1) サムトラカン

既に労働局の用地となっており、交通の便、工業地帯に近いというメリットがあるが、面積が7ライ(1ライ≒1,600平方米)と将来予想しうる拡張計画等からみて狭い。

(2) サラヤ

本サイトはマヒドン大学サラヤ・キャンパスの近くという説明も実際行って見ると、同大学より6～7km奥に入っており、アクセスのための道路の整備、水道、電気等のインフラの整備のために多額の予算を要すると考えられ不相当と考えた。面積は24ライ。

(3) ランシット(クロンルアン)

面積は約20ライあるが、漁業局が適地を確保済みであり、残された部分は地形の複雑な水没した土地であり、不相当。

(4) ランシット(タンヤブリ)

国有地を現在厚生局が貧民収容所(Beggars' House)に利用している。100ライ以上の広さがあり、同局との調整がつけば今回視察した中では最良と考えられた。

サイトについては、今後早急に労働局が関係機関(厚生局、国有財産局等)と協議し、タンヤブリの確保又は他の候補地の確保に努力することとなった。

3-6. 組 織

センターは、労働局労災補償基金部の下部組織として所長(P.C.7クラス)以下約40人の職員(PT2, OT2, 心理職1, ソーシャルワーカー3, 訓練指導員9～12人)の配置を計画している。〔付属資料№3, 3-6-1参照〕

3-7. 運営費

センターの運営費としては、初年度約700万パーツ（約8,000万円）を見込んでいる。〔付属資料No 3, 3-6-2参照〕これは労災補償基金の剰余金を充てる計画であるが法改正の必要がある。法改正については、労使を含む関係者の支持もえて法案作成中であるが、1983年4月の総選挙後の国会での審議を経る必要があり、実現の時期を明示することは困難であるとのことであつた。ただし、それまでの間は一般予算の中から支出することについて内務大臣の許可が下りており問題はないとしている。

4. わが国への協力要請

4-1. 施設の建設及び機材供与

わが方無償資金協力による施設（寄宿舍を含む）の建設と機械の供与を希望している。

タイ側より暫定的な供与希望機材のリストが提出されたが、センターの機能の検討とあわせて検討の必要がある。〔付属資料№7〕

4-2. 技術協力

専門家の派遣及び研修員の受入れ。タイ側は（特に労働局としては）未経験の分野であり、全面的に日本の協力を得たいとしている。専門家派遣時期及び研修員受入時期については、施設建設に先立って行なわれることを希望している。

Ⅲ. 結論と提言

1. 本件プロジェクトの妥当性及び可能性並びに意義

(1) 本件プロジェクトは、以下の理由により、十分な妥当性と可能性を有すると考えられる。

- イ. タイ国では工業化の進展とともに労働災害による被災労働者が顕著に増加しつつあり、これら労働者の早期職場復帰を目的とするリハビリテーション対策は労働者福祉の観点からのみならず、この国の発展に不可欠な技能労働力の維持確保の観点からも、その充実に必要とされるに至っていること。このためタイ政府が労使はじめ各方面の強い要請を背景にその具体化を推進しているものであること。
- ロ. 本件プロジェクトは、対象者を障害者一般ではなく労働災害により身体障害者となった者に限定し、技能の回復を図ることにより、元の雇用主のもとで引続き雇用されることを最優先していること。また新たな雇用主に雇用される場合の困難も、本人の職業経験の実績、職業紹介機関の活動強化によって担当程度克服されると認められるほか、自営等による職業自立の可能性も考えられること、などからセンターの機能がよく組織されるならば、所期の成果を十分あげることが期待されること。
- ハ. 運営費の財源として労災補償基金制度の裏付けがあり、人員、建設予定地の確保についても実現性が高いと認められること。
- ニ. 病院、職業紹介機関、厚生局等関係機関とのデマケーション、協力体制も十分と認められること。

(2) なお、本件プロジェクトにわが国が協力することについては特に次のような意義があると考えられる。

- イ. 新しいタイプのプロジェクトに対する協力として相手国政府のみならず、労使及び国民一般の広範な支持と評価を受けることが確実とみられること。
- ロ. 日系進出企業における労働災害も相当部分を占めると思われるところ、本件プロジェクトに対する協力は日本に対する相手国国民のイメージの改善に寄与すると考えられること。
- ハ. ASEAN各国の中でも遅れているタイの労働・社会保障制度の整備を促進する契機ともなり、タイの経済社会の安定に寄与すると認められること。

2. 本件プロジェクト協力にあたっての基本構想（試案）

タイ側構想に調査団の意見を入れた本件プロジェクトの基本構想を示せば以下のとおりである。（今後の技術的検討により修正も考えられる）

2-1. センターの目的及び機能

- (1) センターの目的は、労働災害により身体に障害をうけた労働者に対し、機能訓練、職業評価、職業適応指導及び職業訓練を受ける機会を提供することにより、これら被災労働者の早期職場復帰又は職業自立を促進することとする。

(2) センターの入所者は、①労働災害によって身体障害者となった者、②ADL（日常生活）が確立し、日常生活上他人の介護を要しない者、③センターのサービスを受けることにより職場復帰又は職業自立が可能と認められる者、④伝染性疾患を有しない者との条件を満たすものとする。

(3) センターの機能は医学的リハビリテーション及び職業リハビリテーションとする。

2-2. センターにおける医学的リハビリテーションの役割

A. 考察

1980年の我が国の調査によれば障害者数は1,977,000人、うち肢体不自由者は1,127,000人であり、労災に起因する肢体不自由者は、155,526人と推定される。又1981年の4日間以上の休業を要する労災事故による患者数は311,000人である。タイ国とは産業構造及び雇用形態がかなり異なるとは云えタイ側の統計はかなり実数よりも少ないものと考えられる。又各病院の実態から考え彼等のいう permanent total disabled も実数はかなりあると予想される。

これらのこと及び先に述べたタイの医療事情を考慮すると、タイの労災患者のたどる経路は第1図のようなものが考えられ、当センターにも、必ずしも医学的リハビリテーション完全に終了した障害者のみ集まるとは考えられず、又 vocational training を必ずしも必要とせず、医学的リハビリテーションの追加のみで職場復帰可能な障害者も多数あると予測されるので、当センターに医学的リハビリテーションの設備を併設するのは有効なことと考えられる。

タイ側の統計が充分でなく、医学的リハビリテーションを必要とする障害者数の正確な予想は困難であるが、タイ労働局及び各病院のリハ医の意見によれば minimum 30%位が適応者となると予測される。

B. 医学的リハビリテーションに必要な設備

当センターは障害者を対象とするものであり建物の構造は国際障害者マークの標示基準に一致することが必要であり、その他床の構造等にも充分の注意が必要である。

当センターには次のような部門が必要と考えられる。（第2図）

a. 医師診療室

目的 障害者の医学的評価

入所者の健康管理及び発病時の治療

面積 $4 \times 5 m^2$

評価室との間は open になるような構造が望ましい。

器具 X-線読影装置, 診察机, ベット, 器具戸棚, 書類保管戸棚

b. 治療室兼休養室

目的 急病者の一時的な収容及び治療

面積

器具 ベット 2, 薬品等の保管戸棚

c. 評価室兼義肢装具 fitting room

目的 医学的リハ施行中の障害者の機能検査

義肢, 装具の check

面積 $6 \times 10 m^2$

診察室との間はアコーディオンカーテンの様な仕切りのある構造

器具 平行棒, ベット 2, 机, 器具戸棚

d. 機能訓練室

目的 PTによる機能訓練及び移動々作を主とする日常生活動作訓練

面積 $400 \sim 500 m^2$

器具 平行棒 2, 姿勢鏡 1, (車椅子5), 各種杖, 滑車式抵抗運動器 5, 助木 1, 治療用テーブル 3, テイルトテーブル 1, マット及び附属品, バーベル及び垂鈴セット, 訓練用階段 1, 訓練用障害物 1, (トレッドミル 1), 固定自転車 1, 手関節訓練器 1, 肩回旋器 1, 回内回外訓練器 1,

e. 物理療法室

目的 機能訓練及び作業療法の補助手段として

面積 $6 \times 6 m^2$

給水湯及び排水設備及び耐水床

器具 バブルバスタンク(手用, 足用)

パラフィン浴槽 1

ホットバック 2

f. 作業療法室

目的 OTによる作業療法及び上肢動作を中心とする日常生活動作訓練

面積 $400 \sim 500 m^2$

訓練種目 上肢の基本動作訓練

日常生活動作訓練

木工 木地加工, 彫刻, 組立, 鋸挽, 塗装

金工 板金, 針金細工, プリキ板細工

手工芸, モザイク, 手芸, 陶芸, 織物

器具 上記訓練可能な設備

g. 義肢装具工作室

目的 義肢, 装具の適合調整, 修理, 簡単な装具, 自助具の製作

面積 70~100㎡

器具 集塵装置, 圧縮空気用コンプレッサー

工作台 2~3, 中型ボール盤, 中型帯鋸盤, グラインダー丸型,

ハンディーカービングマシン, 複合サンディングマシン, 中型オープン,

空気式小型加工機(エアードリル, グラインダー)

マシン(革用, 布用)

2-3. センターにおける職業リハビリテーションの役割

- (1) センターの建物, 機器, 訓練期間, 指導員の基準は, 労働局の所管運営することとなるで, 一般職業訓練校に準じた基準とすることとし, かつ, 障害者の障害別, 障害程度に適應した施設, 設備をそなえ, 弾力的に運営することによって効果を期待するとする。

(注, 日本では, 身体障害者の職業訓練については, 障害者5人に, 指導員1人の予算措置がされている)

- (2) センターの機能は, 下記のように考えられる。

イ. 入所希望者の選考

ロ. 医学的リハビリテーション

ハ. 職業評価(被災労働者の障害の種類, 程度, 職業能力の評価, 職業経験, 技能の有無の判定, これらの状況により訓練のプランにかかわってくる)

ニ. 職業適応指導又は職業準備訓練。(主として, 従前の職種に復帰可能な者, 又は, 経験技能を活かして職業自立が可能な者。短期間訓練)

ホ. 職業訓練。(主として, 同一企業の他の職種へ転換を要する者, 又は, 新職場へ再就職する者など新たな職種の技能習得を必要とする者。長期間訓練。訓練コースとしては, 金属加工, 機械組立, 木工, 電子機器, 事務, 洋服などが考えられるが, 求人需要の多い職種, 就労しやすい職種を勘案する必要がある。例えば, 軽印刷, 宝石研磨, 金属工芸, 窓枠工, 空調機器メンテナンス等)

ヘ. 雇用へのあつ旋。(職業安定機関, 地方事務所との連携, 受入事業所の啓蒙の必要がある。修了予定者の名簿の提供など)

ト. 修了者のフォローアップ

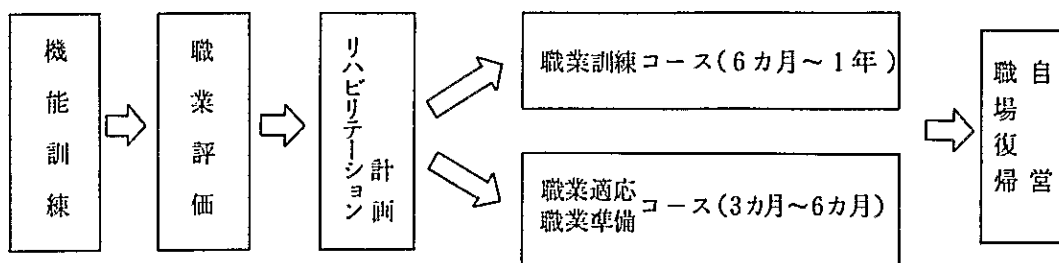
(3) 指導，訓練の期間は，職業適応指導，職業準備訓練については，3カ月～6カ月とし，職業訓練については，6カ月～1年間とする。ただし，指導，訓練の効果，技能習得状況によって，この期間の短縮，又は延長もありうるよう弾力的に措置する。

なお，被災時期とセンター入所時期とのタイムラグのある者についての調整を必要とする。医療リハビリの継続，自宅待期とする。

(4) センターの規模は，一時期に収容可能な定員は100名とし，指導，訓練のそれぞれのコースを勘案し，年間300名程度が利用できるものとする。

(5) センターの施設は，医学的リハビリテーション関係施設，面接相談室，職業評価室，指導訓練部門施設，管理棟，体育施設，集会所，食堂，入所者用宿舎，その他必要な施設とする。

(6) 職業リハビリテーションプログラムは下記のとおりである。



3. 本件プロジェクト協力にあたって留意すべき事項

(1) タイ側にとって未経験の分野であるので，日本側でわが国の経験を踏まえつつ現地のニーズに合った構想の具体化をタイ側と共同で進める必要がある。

(2) このため，タイ側では，可能な範囲で被災労働者のフォローアップ調査を実施する予定であるので，その調査結果，今回調査によって得られた情報及び追加調査により次の事項について技術的な検討を行なう必要がある。

イ. 医学的リハビリテーション部門の活動内容，必要な施設・設備

ロ. 職場適応指導及び職業訓練部門の指導訓練内容，訓練期間，施設・設備

ハ. 寄宿舍，体育施設等センター機能に必要な施設の内容・構造等

(3) タイ側要望のうち

イ. 寄宿舍については，通所困難な障害者にとり不可欠の施設でありリハビリテーションに密接な関わりを持っていること，障害者の利用に十分配慮した構造とするために我が国の経験を生かす必要があること，等から，是非無償資金協力の対象とすべきである。

ロ. 専門家派遣及び研修員受入の時期に関する要望の理由も，もっともでありできるだけ要望に応えることが望ましい。

〔参 考〕 その1

タイ国における職業訓練の概況

- (1) 一般職業訓練校（健常者向けの訓練校）が、6つのブロックの地域割の中心に設置されている。現在6校であるが、この他、国連の援助により建設中が1校ある。
- (2) 訓練の種類は、下記のコースが用意されている。
 - ① Pre-employment Training
 - ② Up-grading Training
 - ③ On the Job Training
 - ④ Inplant Training Promotion
 - ⑤ Non-technical Training
- (3) 訓練の修了生は、1981年、9,510名である。このうちPre-employment Trainingには2,513名（26.4%）、Up-grading Trainingには3,017名（31.7%）が占められている。
- (4) 訓練科目は、自動車整備、機械、溶接、電気、ラジオ・テレビ修理、空調冷凍庫、建築、木工塗装、測量等である。

競争率は2～3倍であるが、このうち自動車整備科は人気が高い。
- (5) 訓練の期間は、6カ月コース、10カ月コースがある。6カ月コースは、年2回オープン1月、7月が訓練期間開始月である。10カ月コースは、1月から始まり、11月、12月は準備コースとしている。
- (6) 訓練生の年齢は、15才～25才であって寄宿舎に入居しているものもあるが、通所生もいる。

寄宿生は、1カ月食事代560 Bt を含む、600 Bt（1 Bt ≒ 10円）の費用負担が必要である。
- (7) 指導員は、訓練生16人に1人の基準があり、これが概ね守られている。
- (8) 訓練の内容は、午前中講義、午後実習に配分され、実践的な訓練を行なっているので、就職状況はよい。

〔参 考〕 その2

日本における身障者職業訓練の概況

- (1) 訓練校数

国立県営	12校	（このうち身障協会委託1校を含む）
県立県営	6校	
- (2) 訓練生の定員

国立県営	1校当り100～250名	計2,290名
県立県営	1校当り30～100名	計310名

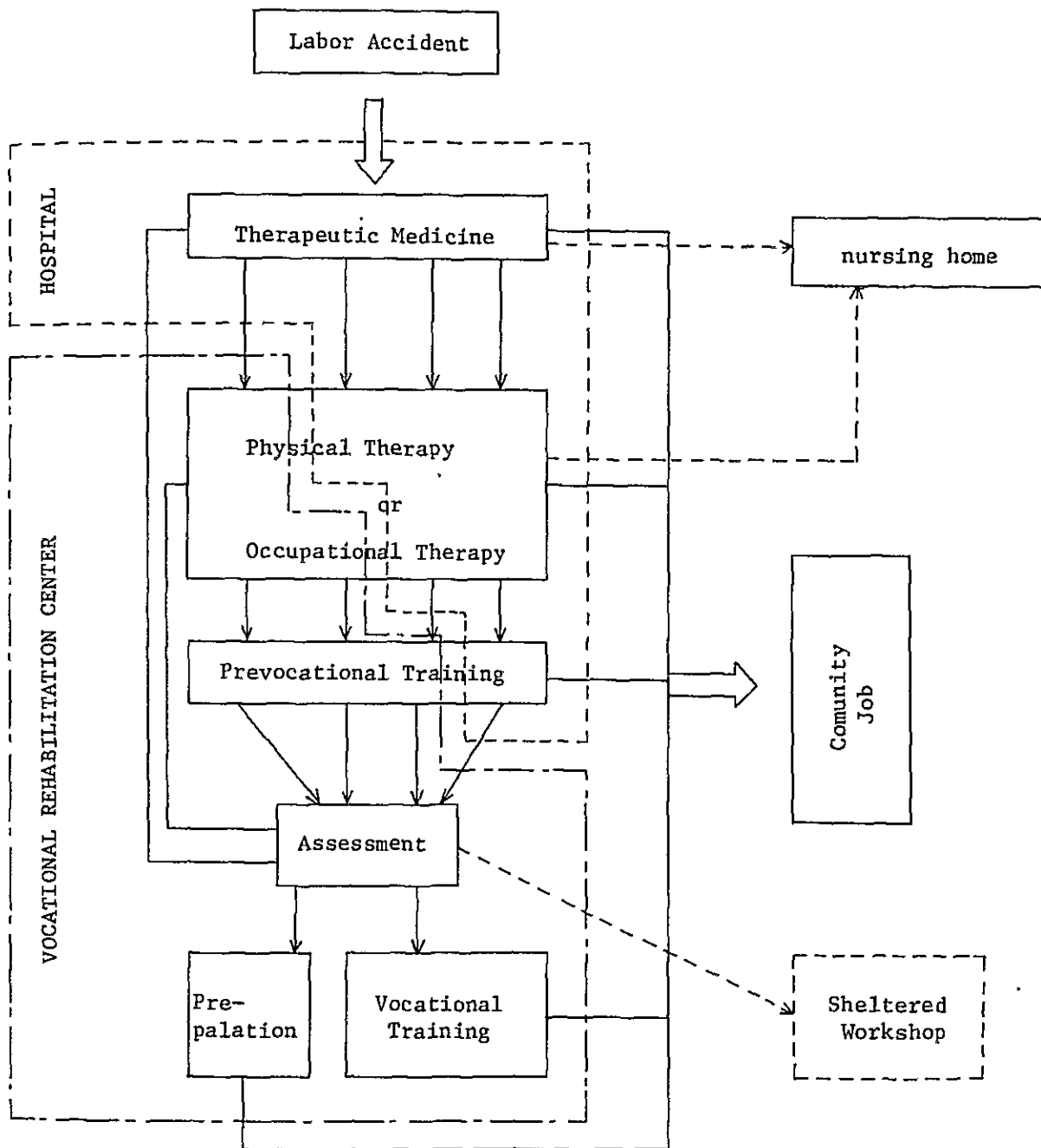
(3) 訓練の期間

6 ヶ月, 1 年 (期間の延長もありうる)

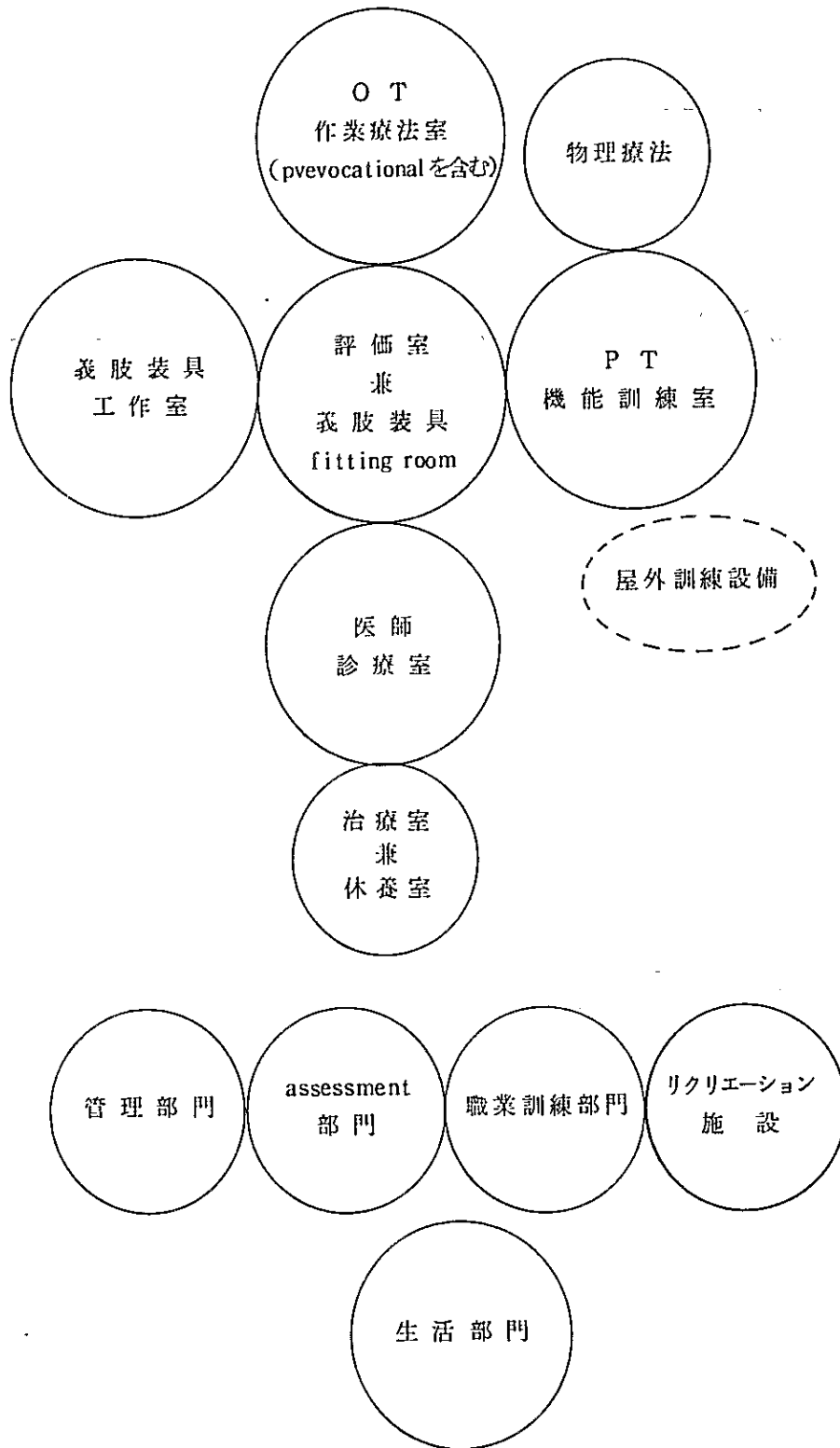
(4) 訓練科

機械工作	電気製図	電子機器
機械組立	建築製図	電子計算機
金属彫型	トレース	溶 接
金属加工	木 工	光学機器
精密機械	木材工芸	時計修理
機械製図	塗 装	印章彫刻
臨床検査 (3 年)	製版印刷	一般事務
義肢装具	軽 印 刷	経理事務
製 靴	デザイン	和 裁
表 具	製 本	洋 裁
皮革製品	編 物	洋 服
陶 磁 器	理 容	縫 製
園 芸	構内電話交換	

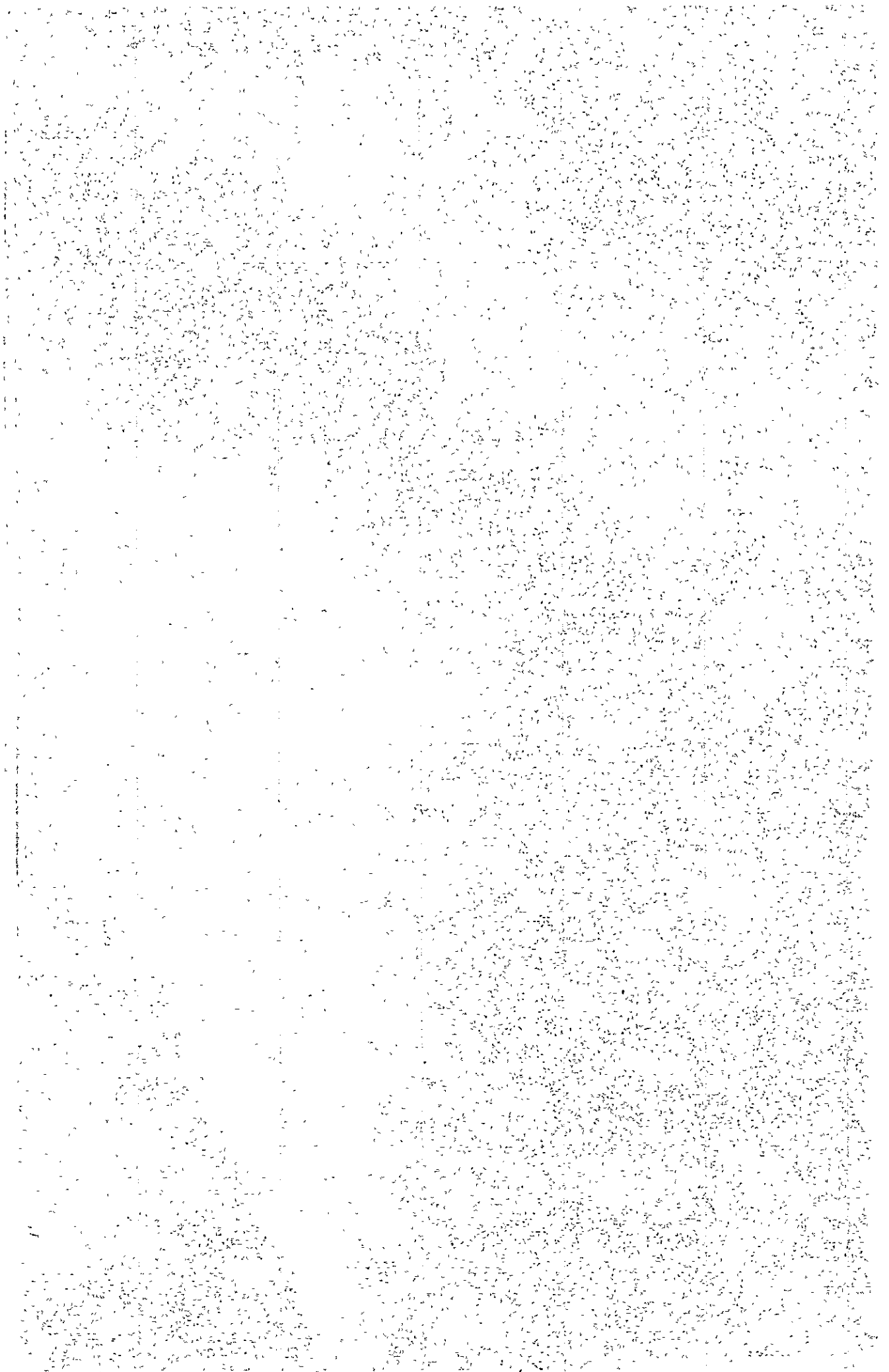
第 1 図



第 2 図



付 属 資 料



- 資料1 タイ政府の協力要請文書
- 資料2 タイ政府労働局に対する質問状
- 資料3 同上 質問状に対する労働局の回答
- 資料4 ILO専門家による労災リハビリテーションセンター
設立に関する調査報告書
- 資料5 労働災害補償及び障害労働者のリハビリテーションに
関する三者構成セミナーの結論
- 資料6 労災リハビリテーションセンター・マスタープラン(タイ側構想)
- 資料7 設置機材リスト(タイ側提出)
- 資料8 内務省労働局組織図

大使	主管经济	WI
公使	JICA)
参赞		
参赞		
参赞		

Sabamaki

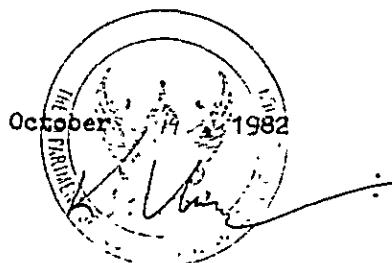
DEPARTMENT OF TECHNICAL AND ECONOMIC COOPERATION
 Krung Kasem Road, Bangkok, Thailand
 Cable: DTEC.
 TEL 817555

No. 1804(1)/26241

The Department of Technical and Economic Cooperation presents its compliments to the Embassy of Japan and has the honour to request, on behalf of the Department of Labour, Ministry of Interior, grant aid for Industrial Rehabilitation for Disabled Workers Project.

Detailed information on the request is enclosed herewith for the Embassy's consideration.

The Department of Technical and Economic Cooperation avails itself of this opportunity to renew to the Embassy the assurances of its highest consideration.



Encl.

The Embassy of Japan,
 Bangkok.

DEC-II/CP
 Tel. 2811031

1. Project title : Industrial Rehabilitation for Disabled Workers.
2. Requesting agency : Department of Labour, Ministry of Interior.
3. Proposed source of assistance : Japanese assistance.
4. Background information and justification for the project :

4.1 The Workmen's Compensation Fund set up by the Government of Thailand in 1974 and operated by the Department of Labour, now covers employers of 20 or more employees in 33 provinces with at least 3 provinces being added each year. The fund itself may at the present be used to meet medical expenses following industrial injuries, to make compensatory payments for loss of limb, sense or function, to meet funeral expenses and consequent compensatory payments to surviving dependants.

4.2 Every year a considerable number of employed people were injured sufficiently severely to meet with problems when trying to return to employment. In 1981 of a total of 27,723 workers known to have been injured 1,175 were classified as permanent partially disabled or worse. It is this group of people who will benefit from the type of rehabilitation programme envisaged.

4.3 There are presently no resources in Thailand specifically designed for

rehabilitation

rehabilitation of industrially disabled workers insured under the Workmen's Compensation Fund.

Without such facilities the skills of many of these workmen are lost to the economy. Additionally, there is a loss of self-esteem for the worker who prior to the accident enjoyed financial independence and may now be dependent on others

5. Details of the project :

5.1 Program goal : To develop a comprehensive industrial rehabilitation programme which will return to employment in the shortest practicable time as many as possible of the more severely injured who sustained their injuries in the course of their employment and who are beneficiaries of the Workmen's Compensation Fund.

5.2 Project objectives :

5.2.1 To establish an Industrial Rehabilitation and Assessment Centre for disabled workers.

5.2.2 To strengthen the work of Workmen's Compensation Fund.

5.2.3 To give advice on industrial accident prevention .

5.3 Conditions expected at completion of project:

5.3.1 To have an industrial rehabilitation centre in Bangkok, providing assessment, counselling, work preparation and placement services for about 300-600 disabled workers per year.

5.3.2 To set up

- 5.3.2 To set up a more efficiency and accuracy system of work in the Workmen's Compensation Fund.
- 5.3.3 To minimize the frequency rate of industrial accident.
- 5.4 Duration of the project : 7 years
- 5.5 Project work plan and activities
 - 5.5.1 Appraisal the present system of work of the workmen's compensation fund so that suggestions can be made on the more effective way of servicing employers and employees properly
 - 5.5.2 To set up the criteria for industrial accident prevention.
 - 5.5.3 To build up, equip and staff the Industrial Rehabilitation Centre.
 - 5.5.4 To provide fellowships for the national staff of the centre
- 6. Assistance requested : Details will be discussed later on
 - 6.1 Expert
 - 6.2 Fellowship
 - 6.3 Building
 - 6.4 Equipment
- 7. Estimated Funds - Approximately U.S. \$ 10 million
- 8. Local counterpart :
 - 8.1 Counterpart budget : will be determined after the approval on the staff planning of the project by the Civil Service Commission. .
 - 8.2 Counterpart personnel :
 - 8.2.1 Existing : local staff of the Workmen's Compensation Fund.
 - 8.2.2 New positions

8.2.2 New positions requested.

8.2.2.1 Centre Director

8.2.2.2 Deputy Directors (Administration
and Technical)

8.2.2.3 Resettlement (placing) officer

8.2.2.4 Occupational Psychologist/
counsellor

8.2.2.5 Social Worker

8.2.2.6 Section Instructors

8.3 Other staffs : General officers, accountant and
common service officers

9. Disbursement Schedule : will be discussed later

10. Institutional Framework :

The project will be administered and implemented
by the Government of Thailand through its Department of
Labour's Office of Workmen's Compensation Fund and will
have relevance to health and social welfare authorities,
employers' and workers' organisations, medical institutions
and other agencies in the public and private sectors which
are concerned with the physical, social educational and
vocational interests of disabled persons.

Statistics on Industrial Injuries
of the Office of Workmen's Compensation Fund (1974-1981)

Year	Industrial Injuries				
	Total	Temporary Disability	Permanent Partial Disability	Permanent Total Disability	Death
1974	3,200	2,704	401	-	95
1975	4,605	3,937	535	1	132
1976	10,136	9,141	854	3	438
1977	16,537	15,073	1,250	6	198
1978	20,135	18,697	1,219	9	210
1979	24,370	22,962	1,104	8	296
1980	25,334	23,836	1,191	13	298
1981	27,723	26,124	1,275	10	314

Source: The Office of Workmen's Compensation Fund,
Department of Labour

Questionnaire to the Department of Labour

1. Background and justification of the project

- 1-1 Reason why the Department of Labour takes up the Rehabilitation of injured workers in such a situation as unemployment and underemployment problem, especially of young peoples, is urgent task.
- 1-2 Position of Rehabilitation measures for injured workers in the National Economic and Social Development Plan
- 1-3 Number of workers who are permanent partially or totally disabled by cause and part of disability, and their employment situation.
- 1-4 Target number of disabled workers who should be made to get employment through rehabilitation measures
- 1-5 Number of disabled persons in Thailand by cause and part of disability, and their employment situation
- 1-6 Present measures of the Government of Thailand for the rehabilitation of disabled persons.
- 1-7 Reason why the measures for injured workers are specifically important in comparison with those for disabled persons in general
- 1-8 Possibility to secure necessary resources to carry out the rehabilitation project in the future, taking into consideration that the training cost of disabled worker is much higher than that of usual workers
- 1-9 Priority between industrial injury prevention and rehabilitation for disabled in the labour policy
- 1-10 Statistics on industrial injury
 - 1-10-1 Number of industrial injury in recent years and future prospect
 - 1-10-2 Number of industrial injury by industry and cause

- 1-11 Present measures of industrial safety and health
 - 1-11-1 Legislation
 - 1-11-2 Measures (Inspection, Guidance, etc.)
- 1-12 Present situation of Workmen's Compensation Fund and future prospect
 - 1-12-1 Outline of the system
 - 1-12-2 Coverage and benefit payment
 - 1-12-3 Balance of payment

2. Objective and scope of the project

- 2-1 Relations between the strengthening of the work of Workmen's Compensation Fund, the improvement of safety and health measures and the function of the Industrial Rehabilitation center
- 2-2 Problems of the work of Workmen's Compensation Fund
- 2-3 Problems of the safety and health measures
- 2-4 Scope of the ILO/UNDP technical cooperation in the safety and health measures

3. Establishment of the Industrial Rehabilitation Center

- 3-1 Objective of the Center
- 3-2 Qualification for the applicants to the Center
- 3-3 Functions of the Center
 - 3-3-1 Proposed functions and facilities of the Center
 - 3-3-2 If the Center is expected to provide physical training:
 - i) Linkage between hospitals and the Center;
 - ii) Possibility to recruit specialists (physical therapist, occupational therapist, etc.)
 - 3-3-3 If the Center is expected to provide vocational training:

- i) Course proposed;
 - ii) Training period;
 - iii) Annual capacity of each course;
- 3-3-4 If the Center is expected to provide job placement service:
 - i) Linkage between other job exchange offices (or agencies) and the Center
- 3-3-5 If the Center is expected to have a sheltered factory (or workshop):
 - i) Kind of business or product;
 - ii) Possibility of getting continuous order from customers and selling of the products;
 - iii) Possibility of government subsidy to the running cost
- 3-4 Prospects on employment including self-employment for the users of the Center including training course graduates
- 3-5 Administrative position of the Center
 - 3-5-1 Relation with the organisation of the Department of Labour
 - 3-5-2 Possible rank of the Director who will be assigned
- 3-6 Organisation and staffing plan
 - 3-6-1 Number of staff by their speciality and rank
 - 3-6-2 Source of recruitment
 - 3-6-3 Organisation chart
 - 3-6-4 Annual staffing plan
- 3-7 Infrastructure around the site
 - 3-7-1 Electricity supply
 - 3-7-2 Water supply and drainage situation

- 3-7-3 Shape and situation of the site
- 3-7-4 Map, Address
- 3-8 Flow of budget
 - 3-8-1 Annual budgetary schedule
 - 3-8-2 Organisational set-up of the budgetary system
 - 3-8-3 Route of budgetary allocation and disbursement

1. BACKGROUND AND JUSTIFICATION OF THE PROJECT

1.1 Reason why the DOL takes up the rehabilitation of injured workers

Since the major policy of the Government of Thailand in the field of labour welfare is to secure the provision of accident prevention and compensation to the majority of workers and to improve the benefit structure of the Workmen's Compensation Fund, therefore, it has increasingly become aware that complementary efforts must be made in the field of both accident prevention and rehabilitation. The DOL realizes that compensation payment alone were not sufficient means to prevent persons with permanent partial or total disability from longstanding hardship, thus, the provision of rehabilitation services for those injured workers in need of such services is deemed to be necessary.

1.2 Position of Rehabilitation measures for injured workers in the National Economic and Social Development Plan

It is envisaged in the Fifth National Economic and Social Development Plan (1982 - 1986) that the DOL through its Office of Workmen's Compensation Fund should set up a Vocational rehabilitation Centre to provide rehabilitation services primary for disabled workers covered under the Workmen's Compensation Fund.

Previously, the "Fourth National Economic and Social Development Plan (1977 - 1981) recommended that 'The National Executive Council Announcement No. 103 should be revised to make the use of reserves more flexible, for example, to finance the prevention of accidents in the factories and the administration of Vocational Rehabilitation Centre.

1-3 NUMBER OF PERMANENT PARTIAL AND PERMANENT TOTAL
 BY CAUSE OF DISABILITY
 (1979 - 1981)

Cause of disability	1979		1980		1981	
	PPD	PTD	PPD	PTD	PPD	PTD
TOTAL	1,104	3	1,191	13	1,275	10
Vehicles	42	2	36	4	47	1
Machines	752	2	820	-	882	1
Hand tools	76	-	66	-	39	-
Fall to different level	19	-	23	3	21	5
Falling object	75	2	31	2	92	-
Fall of Person	9	-	1	-	3	-
Electricity, heat, poison and chemical	5	-	14	1	13	1
Flying object	17	-	25	-	29	-
Attack by man	1	-	3	1	3	1
Noise	1	-	3	1	3	1
Compression	97	1	96	-	114	1
Occupational diseases	1	-	4	-	2	-
Overload	-	-	-	1	2	-
Others	2	1	13	-	14	-

1-3 NUMBER OF TEMPORARY PARTIAL AND PERMANENT TOTAL
 DISABLED WORKERS BY PART OF DISABILITY
 (1975 - 1981)

PART OF DISABILITY	1975		1980		1981	
	PTD	PTD	PTD	PTD	PTD	PTD
TOTAL	1,104	9	1,191	13	1,275	19
Eyes	25	1	39	1	34	1
Neck, head and face	7	1	6	4	11	-
Hands and fingers	933	1	1,209	-	1,059	-
Arms	22	-	36	-	29	-
Trunk	7	-	1	1	1	2
Back and shoulder	3	1	2	3	4	2
Feet and toes	56	-	44	-	73	-
Legs	28	1	21	3	22	2
Loss	-	-	2	-	2	-
Multiple injuries	15	3	19	1	37	3
Others	2	-	2	-	3	-

1.4 Target number of disabled workers who should be made to get employment through rehabilitation measures is approximately between 1,000 - 1,500 totally.

1.5 Number of Disable persons in Thailand

Not available

1.6 PRESENT MEASURES OF THE GOVERNMENT OF THAILAND FOR THE REHABILITATION OF DISABLED PERSONS

- promote and support economic, social and family status of disabled persons by widening the opportunity to receive rehabilitation services among the disabled.
- provide accommodation for disabled persons in need of rehabilitation services but lack of ability to support themselves.
- establish the vocational rehabilitation centre for disabled persons in urban and rural area.
- promote and support the work of committees set up for rehabilitation purposes.
- revise and improve rules and regulations which limit the rights to be evolved in the labour market of disabled persons.
- establish sheltered factory within the Department of public welfare to promote employment opportunity to severely disabled persons.

1.7 Reason why the measures for injured workers are specifically importance in comparison with those for disabled persons in general

1.7.1 Rehabilitation services for disabled persons

in general are directed almost exclusively towards congenital conditions or crippling disabilities contracted in the early years of life

1.7.2 The rehabilitation programmes offer for disabled persons in general are designed to teach disabled or handicapped people a skill to get them started in employment while the programme provides for disabled workers aim at restoring the lost skill to put them back to work or developing new skill for those who can no longer follow their previous occupation because of disability.

1.7.3 For the disabled in general, there is so little or no pre - assessment for suitability before commencing vocational training. Thus, suitability is judged on trial and error during training, a method which often wastes training time and opportunity for the others.

1.7.4 The rehabilitation programmes for disabled in general are lengthy, usually at least 12 months after medical rehabilitation is complete and sometimes longer. While the rehabilitation programme is designed to attempt to put them back to work in the community as far as possible from 12 to 18 months after the disability.

1.8 There are two possible ways of providing necessary resources to carry out the rehabilitation project in the future:

1.8.1 from the annual Government Budget

1.8.2 from the proceeds of a special fund or the provision of a separate Rehabilitation Law to enable the allocation of a percentage of accumulated surplus and earned interest for administrative expenses of the future.

1.9 The policy of the Labour Department in the future

Industrial accident prevention and rehabilitation of disabled workers is that both activities are important and necessary to carry on together to secure the labour welfare.

For the prevention of industrial accident the Labour Department has requested assistance from the UNDP for setting up of the National Institute of Occupational Health and Safety and hopefully to receive future assistance from the Government of Japan as it is a part of five - phase comprehensive plan of the technical cooperation and grant between the Government of Thailand and the Government of Japan.

1.10 Statistics on industrial injury in recent years:

1.10.1 INDUSTRIAL INJURY

(1974 - 1981)

Year	Total	Industrial Injuries *			Death
		Temporary Disability	Permanent Partial Disability	Permanent Total Disability	
1974	3,200	2,704	401	-	95
1975	4,605	3,937	535	1	132
1976	10,136	9,141	854	3	138
1977	16,537	15,073	1,260	6	199
1978	20,135	18,697	1,219	9	210
1979	24,379	22,962	1,104	8	206
1980	25,334	23,836	1,191	13	224
1981	27,723	26,124	1,275	10	314

Note: * Only industrial injuries reported to OWCF

Source: The Office of Workmen's Compensation, Department of Labour

1-10-2

INDUSTRIAL INJURY BY CAUSE (1979-1981)

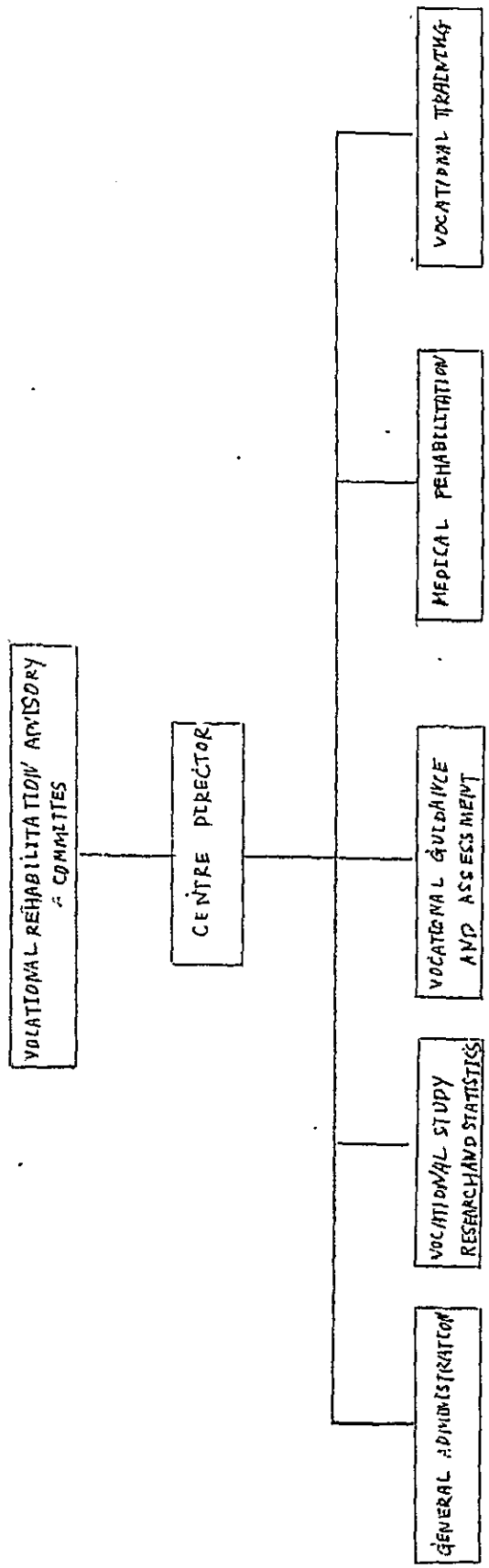
Cause of Industrial Injury	1979				1980				1981					
	Total	TD	FD	Deat.	Total	TD	PPD	FTI	C. I.	Total	TD	PPD	FTD	Death
TOTAL	24,340	22,962	1,104	296	25,334	25,023	1,91	13	294	27,423	26,124	1,245	10	3
Vehicles	1,455	1,357	43	154	1,529	1,351	31	4	153	1,933	1,559	47	1	13
Machinery	3,643	2,882	452	7	3,885	2,856	820	-	10	2,986	3,092	882	1	1
Hand Tools	1,521	1,457	76	3	1,230	1,211	48	-	1	1,185	1,145	87	-	1
Fall of Person	1,235	614	9	5	849	792	37	3	51	765	755	18	-	2
Fall I. different level	743	704	19	17	708	403	1	-	4	849	801	21	5	2
Falling objects	2,830	2,938	75	15	2,954	2,856	811	2	45	3,283	3,180	92	-	14
Electricity & cur.	1,471	1,424	5	42	1,401	1,354	14	1	29	1,528	1,488	13	1	26
Poise, chemical & explosion	822	822	1	1	721	722	13	1	5	798	779	8	-	11
Flying objects	5,911	5,999	17	-	4,039	4,004	25	-	7	4,000	3,970	29	-	1
Airact by man	126	102	1	23	5	2	2	1	-	142	85	3	1	52
Noise	53	52	1	-	15	2	2	-	1	15	4	1	-	-
Compression	5,377	5,263	97	11	5,467	5,217	96	-	14	6,038	5,914	114	1	9
Occupational Diseases	152	150	1	-	99	89	11	-	3	248	242	2	-	2
Overload	469	419	-	-	593	591	-	1	1	822	819	3	-	1

INDUSTRIAL INVENTORY BY INDUSTRY
(1979-1981)

Industry	1979				1980				1981				
	Total	T.D.	F.F.	F.P.	T.D.	F.F.	F.P.	F.P.	Total	T.D.	PPP	PTD	DATE
Mining and business relating to rocks, pebbles :	168	1	1	11	316	22	17	16	422	383	20	1	18
Manufacture of food, beverage and tobacco	3,602	35	9	4	31	88	28	4490	4332	115	2	3	
Manufacture of textile garments hides and leather products	180	96	2	23	20	1	10	2545	2419	114	1	9	
Converting of timber and manufacture of timber	1996	189	112	13	1859	19	19	1934	1934	130	-	14	
Manufacture of paper and paper products, printing and publishing	537	562	30	4	588	32	2	645	589	46	-	10	
Manufacture of chemicals and chemical products, petroleum,													

INDUSTRY	1979					1980					1981				
	Total	T.D.	PPD	PTD	Deaths	Total	T.D.	PPD	PTD	Deaths	Total	T.D.	PPD	PTD	Deaths
Manufacture of non-metal products	1081	1515	46	-	11	1461	1601	44	11	9	1960	1892	58	-	10
Manufacture of metal by basic process	2352	2494	50	-	5	3014	1954	85	7	4	1456	1322	24	-	4
Manufacture of metal products, machine and accessories	3169	3899	505	-	6	4355	3450	379	-	2	4444	3851	410	1	17
Manufacture and repair of transport equipment	1954	1751	100	-	9	2306	2194	109	-	3	2591	2223	112	-	5
Other industrial manufacture	93	80	2	-	-	60	58	2	-	-	53	46	8	-	-
Public Utilities	5	4	-	-	1	4	4	-	-	-	24	26	1	-	-
Construction	2019	1951	48	1	18	2389	2283	91	1	54	2450	2223	64	3	49
Transport, warehousing and communication	301	135	55	1	45	474	319	22	2	14	108	302	15	-	62
Trading, Retailment, Hotel	1209	1201	43	-	14	1028	961	25	3	43	1321	1051	45	1	40
Other Occupations	2443	403	72	-	23	546	523	22	1	25	649	629	19	1	26

ORGANISATION ^{CMS} ~~BASED~~



1.11 Present measures of industrial safety and health

1.11.1 Legislation

In the field of prevention, the following safety standards have been set up to provide guidelines for safety measures of the factories:

- (I) Safety standard on machinery
- (II) Safety standard on electricity.
- (III) Safety standard on construction
- (IV) Safety standard on diving ?
- (V) Safety standard on chemical substance
- (VI) Safety standard on environment (noise, heat, illumination)
- (VII) Safety standard on temporary construction
list

1.11.2 Measures

Inspection

- a) Functions of Labour inspection
 - (I) providing inspection services for private safety equipment
 - (II) Providing inspection service for boiler
- b) Actions taken by Labour Inspectors
 - (I) First inspection
 - (II) Warning inspection
 - (III) Workplace inspection
 - (VI) Special inspection
- c) Inspection measures emphasizes on factories reported high frequency rate of work injuries to the Office of Workmen's Compensation Fund

d) Organisation chart and number of labour inspectors ✓
in Bangkok metropolis and in Provincial Labour Office is Attached

1.12 Present situation of Workmen's Compensation Fund and
future prospect

1.12.1 Outline of the system

The Workmen's Compensation Fund of Thailand
commenced its operation within the Department of Labour on January
1974

The Fund replaces employer's liability on workmen's
compensation for employers whose workers are covered by the Fund.
Consequently contributions are made by employers only. The con-
tribution rate (As a percentage of the annual earnings of workers
covered by the Fund) Varies from 0.2 % to 4.5 % depending on the
industrial classification of the employer. There are 136 classi-
fications. After an employer has contributed to the Fund for 4
years, his contribution rate is adjusted annually (experience
rated) and increased or decreased for the next year to reflect
his experience similar to Japanese ICF system)

At present, the Fund itself may be used to meet
medical expenses following industrial injuries, compensatory
payment to surviving dependants.

1.12.2 Coverage and benefit payment

A. COVERAGE

The Fund now covers employers with 20 or more
employees in 33 provinces. The Fund has gradually expanded its
geographical coverage so that in 1972, 344,196 workers employed
by 9,200 employers were covered.

B. BENEFITS

The amounts of periodic benefits provided under
the Fund are subject to a minimum of \$ 1,000 per month and a maximum
of \$ 6,000 per month. The benefits are:

- (a) Temporary Disability/Grat Benefit ^{50%}
- monthly amount = 50% of monthly earnings.
 - benefit is payable retroactively, after a three day waiting period.
 - maximum period benefit is payable is 52 weeks.
- (b) Permanent Disability Benefits
- (I) Total Disability Benefit ^{50%}
- monthly amount = 50 % of monthly earnings
 - pension is payable for 10 years
 - The payment period depends on the nature and degree of disability.
- (II) Partial Disability Benefit
- monthly amount = 50 % of monthly earnings
 - benefit is payable for up to 10 years
 - The payment period depends on the nature and degree of disability.
- (c) Survivors' Pensions
- total monthly = 50 % of monthly earnings
 - total monthly amount is shared equally among the widow (or disabled widow), children under 18 (or who are over 18 if disabled or undertaking advanced studies) and parents
 - pension is payable for a maximum of 5 years
- (d) Funeral Grant
- amount of lump sum grant = 1 X monthly earnings
 - minimum grant = 7 500 maximum grant = 7 12 000
- (e) Medical Care
- provision is required for the treatment or replacement ~~of~~ limbs
 - includes the revision of prosthetic devices
 - maximum expenditure per case = 7 20 000

Limits also apply to hospital daily room and board expenses which will be paid (Z 250 per day in 1982)

1.12.4 FUTURE PROSPECT OF THE WORKMEN'S COMPENSATION FUND

- The expansion of the work to cover additional provinces (3-5 more provinces will be covered each year)
- The extension of coverage to cover employers with 10 or more employers
- The implementation of temporary disability insurance to provide compensation for injured workers whose injuries arise out of the course of employment

✓
?

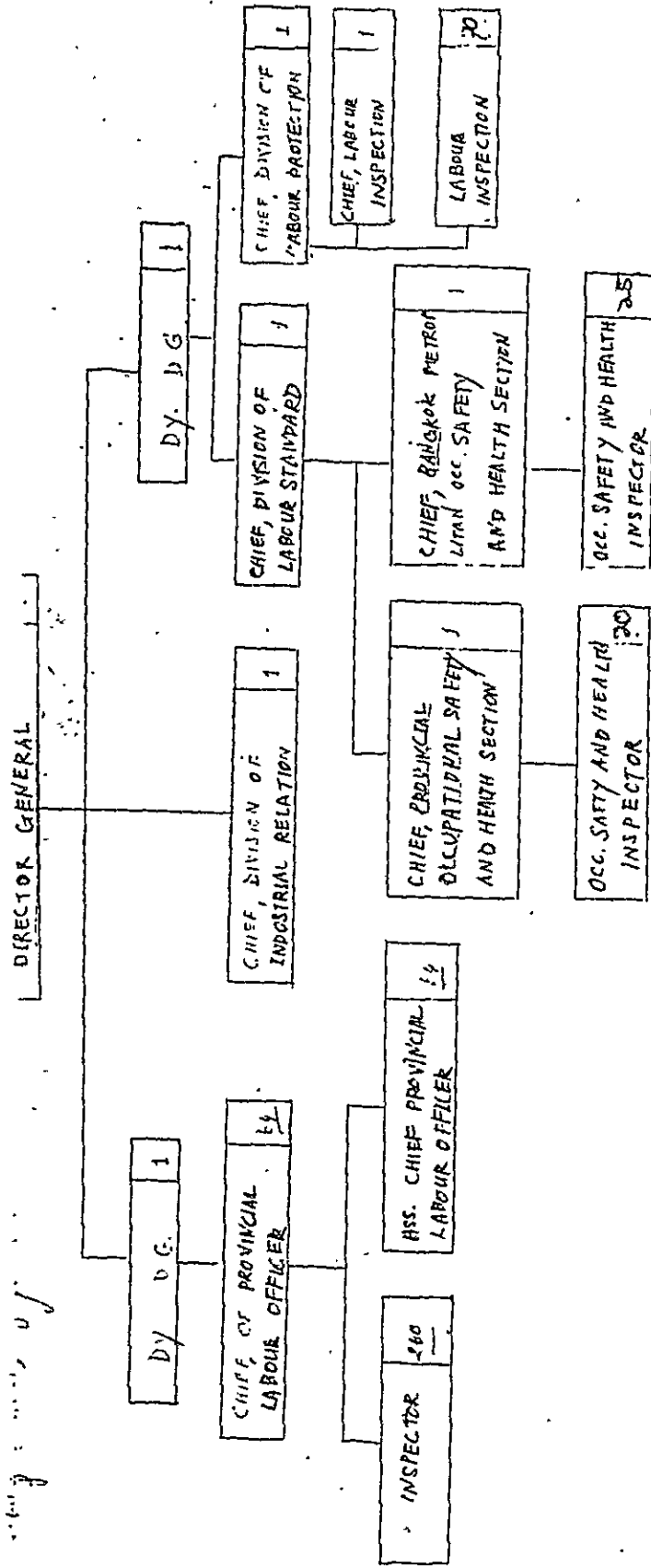
SUMMARY OF THE ANNUAL DATA OF
THE WORKMEN'S COMPENSATION FUND
(1974 - 1981)

YEAR	NUMBER OF COVERED PROVINCES	NUMBER OF COVERED EMPLOYERS	CONTRIBUTION (in million pesos)	NUMBER OF COVERED WORKERS	NUMBER OF INJURED WORKERS	COMPENSATION PAID
1974	1	2,102	24.20	272,848	5,200	16.30
1975	4	2,704	35.77	349,814	4,605	23.50
1976	6	3,405	51.25	496,400	10,136	52.05
1977	12	4,500	74.75	570,000	16,537	51.07
1978	17	5,403	90.71	590,640	20,135	62.17
1979	22	6,101	114.62	659,041	24,390	75.22
1980	25	7,377	151.15	745,513	25,334	98.29
1981	<u>30</u>	<u>8,465</u>	<u>186.80</u>	<u>797,240</u>	<u>27,723</u>	<u>148.17</u>

1-12-3 1-12-3 BALANCE OF PAYMENT

YEAR ENDED DECEMBER, 31
(in 000's balft)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
<u>Contributions</u>			
Quarterly Contr.	46,662.12	58,074.45	67,879.74
Yearly Contr.	51,568.01	65,406.54	84,413.73
Additional Contributions	16,379.36	28,667.51	34,173.149
<u>Total Contributions</u>	<u>114,609.49</u>	<u>154,148.53</u>	<u>186,495.96</u>
Fines	2,722.09	4,436.33	6,564.21
Discount	203.50	309.05	362.83
Interest Income	22,868.43	45,559.01	64,242.31
Miscellaneous	0.00	3.47	0.14
<u>Total Income</u>	<u>140,403.63</u>	<u>302,454.44</u>	<u>259,998.45</u>
<u>Expenditures</u>			
Compensation	13,645.82	86,986.18	44,777.58
Medical Benefits	23,340.63	27,895.85	35,522.06
Insurance	1,125.00	1,171.63	1,419.63
Interest	0.54	—	—
Unrecovered Loss	38,101.55	3,220.53	66,292.75
<u>Total Expenditures</u>	<u>75,213.58</u>	<u>98,273.19</u>	<u>148,175.50</u>
<u>Net Income</u>	<u>65,190.05</u>	<u>104,180.26</u>	<u>109,922.95</u>



ORGANIZATION OF INSPECTION.

2. Objective and scope of the project

2.1 It is a major policy of the Labour Department to provide safety standards to prevent injuries in the work places. However, it is impossible to eliminate all the accidents at work. Therefore, the Office of Workmen's Compensation Fund was set up within the DOL to replace employer's liability by payment of compensation for employers to injured workers whose injuries arise in the course of employment. After the Fund has been operated for 3 years, statistics indicate the increasing number of injured workers each year, many are disabled partially and some are disabled permanently. After all compensations have been paid, no further assistance is provided for those disabled workers who lost their job as a result of the injuries. Many have to leave their job for their hometown in the rural and be a burden of their family for their whole life.

The DOL realises that the lost of skill and experience of these workers is a cost to the economy and there is an opportunity to bring these people back to work and be the useful resources only if their disabilities are rehabilitated and their skills are restored and developed in the right way. Therefore, the DOL has taken into consideration the implementation of vocational rehabilitation programme to help these disadvantage group of people along with the prevention and the compensation.

At present, the DOL is considering the following actions.

- (I) the amendment of Workmen's Compensation Law, so that surplus and interest from the fund can be allocated for the administration of the rehabilitation project.
- (II) reversion measures for special and serious cases in some industries by referring those cases to safety inspectors to further action.

2.2 PROBLEMS OF THE WORK OF WORKMEN'S COMPENSATION FUND

- 2.2.1 Lack of personnel to support the expansion of work.
- 2.2.2 Lack of modern equipment to facilitate the flow of work in all divisions. All functions including bookkeeping, data recording, filings are performed by manual.
- 2.2.3 Limitation of the annual government budget allocated for operating expenses of the Fund, and the quota of increased staff each year discourage the expansion of work both horizontally and vertically.
- 2.2.4 Limitation of the Workmen's Compensation Law to make use of accumulated surpluses and interest to support the administration of the scheme, particularly the new programme i.e. the running cost of the Vocational Rehabilitation Centre.

2.3 PROBLEMS OF THE SAFETY AND HEALTH MEASURE

- 2.3.1 Lack of knowledge and understanding about safety and health among all parties concerned including employers, employees and the safety inspectors.
- 2.3.2 Limitation of safety budget and personnel compare with number of factories.
- 2.3.3 Inadequacy of inspection facilities e.g. equipment, tools, vehicles.

2.4 SCOPE OF THE ILO/WHO ^{TECHNICAL} COOPERATION IN THE SAFETY AND HEALTH MATTERS.

The Labour Department is now requesting technical assistance from the ILO and WHO for the establishment of the national Institute of occupational safety and health.

The objectives of the institute are:

- (I) to improve the efficiency of safety inspection
- (II) to improve technical and equipment level in safety training programme
- (III) to promote research activities on occupational safety and health
- (IV) to establish the Information Centre for safety and health

3. Establishment of the Industrial Rehabilitation Centre

3.1 Objective of the Centre

To provide ~~some parts~~ of medical rehabilitation and full vocational rehabilitation services including vocational assessment and guidance, rehabilitation counselling, skill training placement, follow-up and rehabilitation research primarily for disabled workers protected by the Labour Law of Thailand.

3.2 Qualification for the applicants to the Centre

- Firstly, all disabled workers benefit from the Workmen's Compensation Fund
- Secondly, disabled workers protected by the Labour Law of Thailand.

3.3 Functions of the Centre

3.3.1 Proposed functions and facilities

- (i) referral and selection
- (ii) Medical rehabilitation
- (iii) assessment of work potential
- (iv) work adjustment and job preparation
- (v) skill training
- (vi) resettlement in employment
- (vii) follow-up and feedback

3.3.2 If the Centre is expected to provide physical training

- 1) Linkage between hospitals and the Centre.

At present, the Workmen's Compensation Fund maintains close connection with many public and private hospitals both in Bangkok and other provinces. While the rehabilitation facilities for disabled do not exist, disabled cases are referred to hospital for medical treatment and physical training before sending back to employment therefore, If the Centre is set up there should be no problem in getting cooperation from those medical institutions.

- ii) Possibility to recruit specialists physical therapist,
occupational therapist

If the Centre can provide some incentives (e.g. higher salary, housing) to motivate these specialist, the opportunity to recruit these specialists is very possible, for at least, ^{thru out} twenty graduated physical and occupational therapists each year.

3.3.3

i) Training Course proposed

- a) Bench engineering
- b) Light assembly and miscellaneous
- c) Carpentry and woodwork
- d) Electronics
- e) Clerical work
- f) Tailoring.

- ii) Training period : should be as shortest as possible
(to a maximum of 12 weeks)

3.3.4 Linkage between other job exchange offices and the Centre

The Employment Service Division under the Labour Department is now open its branches in Bangkok and 64 provinces to promote employment opportunities in the labour market. Thus, if the Centre is set up as part of activities carried on by the Labour Department, it is very likely that the Centre can coordinate with the offices of employment services for the flow of information concerning the job opportunity for the clients of the Centre.

- 3.3.5 At first stage, the Centre is not expected to have a sheltered factory instead medical and vocational rehabilitation will be emphasized with the expectation for future expansion to the last phase or the setting of sheltered workshop

3.4 Recently, the Office of Workmen's Compensation Fund has started a referral system for disabled workers who need further medical rehabilitation i.e, physiotherapy and occupational therapy. after the necessary medical treatment is over Also, a referral officer is responsible for linking disabled workers, hospitals and employers together. The progression of rehabilitation is informed to employer's of the disabled through the referring officer. Although, medical rehabilitation is the only service that the Fund provides for disabled workers through medical institutions, most of the disabled's employers are satisfied with the result and willing to put those disabled workers back to their job or put them in new positions suitable for their developed skill and disability. If the Centre is established, a more comprehensive rehabilitation programme will be set up and it will provide a better prospects on employment for the disabled workers.

3.5 Administrative position of the Centre

3.5.1 Relation with the organisation of the DOL

The Centre will be administered by the Department of Labour through its Office of Workmen's Compensation Fund. The linkage of the Centre's organisation and the DOL is as follows.

DOL

OACF

Vocational rehabilitation

3.5.2 Rank of the Centre Director = P.C.7 *

(* Position Classification of the Civil Service Commission)

3.6 ORGANISATION AND STAFF PLAN

3.6.1 Number of staff by their specialty and rank.

(i) Specialist and Technical staff

<u>Number</u>	<u>Position</u>	<u>Rank</u>
1	Centre Director	P.C.7
5	Chief of Division	P.C.6
1	Doctor	P.C.5
2	Physio Therapist	P.C.3-5
2	Occupational Therapist	
2	Nurse	P.C.2-4
3	Nurse assistance	P.C.1-3
1	Psychologist	P.C.3-5
3	Social Worker	P.C.3-5
2 1 1	Workshop Instructor	-

(ii) Ancillary staff

<u>Number</u>	<u>Position</u>	<u>Rank</u>
5	Administrative and record officer	P.C.2-5
2	Accountant	P.C.3-5
3	Clerk/Bookkeeper	P.C.2
2	Typist	P.C.1
1	Telephone Operator	-
3	Cook, kitchen	-
2	House keeper	-
6	Guard	-
4	Labourer	-
2	Gardener	-
2	Cleaner	-

3.6.2 Source of Recruitment: Civil Service Commission

Government Budget for Operating expenses of the Centre
(prepared for 1983)

Salaries	1,874,940.-	
Wages	690,480.-	
Remuneration	403,000.-	
Other Expenses	171,000.-	
Supplies	1,656,500.-	
Equipment	1,832,100.-	(OFFICE FITTINGS)
Utilities	<u>400,000.-</u>	
Total	<u>7,028,020.-</u>	

INTERNATIONAL LABOUR OFFICE

ILO TECHNICAL CO-OPERATION PROGRAMME

Technical Memorandum

to the

Government of Thailand

concerning

the Development of an Industrial

Rehabilitation Programme under the Office

of Workers Compensation Fund,

Department of Labour

Geneva, March 1982

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I. Introduction

At the request of the Department of Labour, a branch of Thailand's Ministry of the Interior, the International Labour Organisation initiated an advisory project with the aim of advising the Office of the Workmens Compensation Fund on the organisation, physical planning and administration of an industrial rehabilitation scheme for industrially injured workers. The ILO assigned to the project Mr. D.S. Spicer, an industrial rehabilitation expert from the United Kingdom, with the following Terms of Reference:

- (1) to investigate the scale of the problem, taking into account the present and future needs in industrial rehabilitation of beneficiaries of the Workmens Compensation Fund;
- (2) to determine, in collaboration with the Department of Labour, the objectives of an industrial rehabilitation programme and the facilities required;
- (3) to advise on an appropriate organisational framework within the Department of Labour for the administration of an industrial rehabilitation programme. This will include interim measures for case referrals, vocational guidance, skill training, selective job placement and follow-up;
- (4) to advise on the physical planning of the proposed Industrial Rehabilitation and Assessment Centre, identify the services to be provided and the equipment requirements and define the functions of the Centre as they concern assessment, counselling, physical reconditioning, skill training, work preparation, selective placing and follow-up. Prepare job descriptions for technical and administrative personnel;
- (5) to advise on the design and layout of the proposed Centre with particular reference to accessibility features;
- (6) to collaborate with other governmental and non-governmental organisations providing social, vocational and health-related services;
- (7) to prepare a detailed project document for international assistance for the establishment of an industrial rehabilitation and assessment centre based on the findings and conclusions of the advisory project.

The expert arrived in Bangkok on 27 November 1981 and departed on 17 February 1982, having achieved all objectives set by his terms of reference.

The expert wishes to record his sincere thanks and appreciation for the help and co-operation he received from the staff of the Department of Labour, in particular the Director and staff of the ~~Office of the Workmens—Compensation—Fund.~~

II. Findings

A. Technical background

(1) The scale of the problem

The expert commenced the project by investigating such statistics as were available concerning the numbers of people becoming disabled as a result of industrial accidents and the range of disabilities. Figures were produced from Workers' Compensation Fund (WCF) sources for each year from 1974 to 1980 inclusive.

The figures for each individual year are not readily comparable because, commencing in 1974 with a limited number of employers in one province, each successive year to 1980 introduced an extension of the Fund to other provinces and drew in further categories of employers.

The first conclusion to be drawn from the figures was that by far the greater majority of disabilities were of a temporary nature and the victims would most probably have returned to their employer within a very short time. In 1980, for example, of a total of 25,568 people known to have been injured, 23,692 were categorised as "temporary disability" and rapidly returned to their current occupation. Making the gross but probably accurate assumption that these figures are likely to be representative, it can be expected that at least 90% of beneficiaries of the fund will neither need nor wish to use any rehabilitation services provided.

Of the remaining 10%, by far the greater proportion (1,454 in 1980) suffered permanent partial disability. It is from this group of people that a clientele will appear for whom some sort of rehabilitation service could prove beneficial. There was also a very small number of people (27 in 1980) who were described as having suffered permanent total disability and for whom any rehabilitation service might offer a lifeline back to employment. If, therefore, no distinction is made between these two latter categories and fatalities are ignored, the annual throughput to be expected on the current data available will be between 1,500 and 2,000 cases.

Some research is now required into the actual position of the sample group (1980) to find out what happened without rehabilitation and to appraise the possible outcome if rehabilitation services had been available. There also is a need to consider the severity of the injuries, what they mean in terms of a return to the same or similar employment and alternative employment, where necessary.

~~The expert found considerable difficulty in obtaining any useful statistics on re-employment after disability. The Department of Labour is concerned only with administering the WCF and thus restricts the collection of information to matters directly related to payments from the fund. Part of the justification for a vocational rehabilitation service of the type and size envisaged will be the success rate for returning disabled people to their former, or suitable alternative, employment at an effective level. Such a success rate must be measured and for this purpose statistics must be gathered, studied and applied. An approach is to be made to the University Research Faculty to investigate the prospect of preliminary research from which further research and an ongoing programme of statistics can be generated.~~

(2) Development plans

The Office of the Workmens Compensation Fund, since its inception in 1974, has gradually been accumulating a reserve of funds by way of interest on the balance of employers' contributions over compensatory payments from the fund. This reserve of funds has now reached the point where it becomes viable to include, as part of the services of the fund, a rehabilitation programme to serve the needs of injured workers and aimed at returning to employment in the shortest practicable time as many injured workers as it is possible for the programme to handle.

B. Detail of activities

(1) Visits and interviews

To get as broad a picture as possible of the general problems facing the disabled in the employment market, the expert arranged, through his counterpart, a series of visits to and interviews with a wide cross-section of the local community with an interest, both direct and indirect, in the rehabilitation and employment of disabled people. ~~A complete list of people and places seen is contained in Appendix D.~~ The results of the interviews are summarised as follows:

(a) Employer reaction - Two separate organisations representing employers were invited to give their views on the employment situation in general, how it might affect the re-employment of disabled people and on the proposal to introduce an industrial rehabilitation and assessment programme. Both organisations agreed that ~~job opportunities existed~~, many of which could be available to disabled people if properly matched to the jobs ~~on offer~~. It was suggested, however, that the majority of the job vacancies were at semi-skilled or skilled level which indicated a need for careful selection and possibly training. The re-employment of disabled people was seen in a different light by each organisation. Where one tended to be pessimistic about their future prospects, the other was encouragingly optimistic. Both organisations were favourably disposed towards the proposal for an industrial rehabilitation programme and agreed to give it active support.

(b) Worker reaction - One of the two major organisations representing workers in Thailand gave its views on the prospects for re-employment of disabled people in the prevailing climate of Thai industrial relations and how it was thought that the introduction of an industrial rehabilitation programme might improve those prospects. It was generally recognised that there were difficulties facing the more severely disabled and more could be done and needed to be done to reduce the accident rate in industry and so reduce the number of disabling accidents. It was also conceded that workers' organisations had a role to play in working together with employers in the interests of those of their members who became disabled, but in keeping with a depressed economic climate which is virtually worldwide, such resources as were available to the organisation were almost entirely devoted to improving wages and conditions and there were none that could be spared for what could only be described as a social responsibility. In any case, the organisation saw this as shared responsibility of the trade unions, the employers and the government. It was wholeheartedly in favour of an industrial rehabilitation and assessment programme and pledged itself to take an active part in the programme's development.

(c) Independent organisations' reaction - Several organisations involved in helping disabled people were approached for their views on the proposal for an industrial rehabilitation programme; these included the War Veterans' Organisation; the Social Welfare Council; the Foundation for the Welfare of the Crippled; the Centre for the Blind. All appreciated only too well the problems facing the disabled in their attempts to secure employment. They all voiced the same opinion regarding the proposal, appreciating both the need and the logic of a new concept in rehabilitation. All were prepared to assist in any practical way to whatever extent their own resources and commitments would allow.

(d) Official reaction - Several individuals representing different disciplines within government departments were approached for their reaction. These included doctors and administrators, each either actively involved in working with the disabled or with a controlling influence. All expressed an interest in and enthusiasm for a free approach to rehabilitation of the disabled worker.

Included amongst the doctors interviewed were two who are prominent in the prosthetics/orthotics field, and in this regard it became apparent that most of their energies were directed towards lower limb amputees and their successful return to independent mobility. In both cases, their expressed views on upper limb prosthetics indicated a lack of interest in anything other than a predominantly cosmetic approach. The versatility aspect of upper limb prosthetics is still under-developed and largely unexplored. The field for rehabilitation in this aspect is thus wide open and should be one of the main features of an industrial rehabilitation programme.

~~Amongst the administration staff interviewed, the Director of the Employment Services Division gave some useful information on the difficulties so far experienced in trying to place disabled people in employment. From her observations, it becomes more apparent that there is a pressing need in Thailand for an effective placement service for disabled people.~~

Because of the special interest and active involvement of the Department of Public Welfare in rehabilitation, the Director General of that Department was approached for his views on the proposal by the Department of Labour to enter the field of rehabilitation. He appreciated the fresh concept and agreed that the Department of Labour was the appropriate agency to administer an industrial rehabilitation programme. He also gave his assurance of this Department's full support and co-operation in meeting the objectives of the programme.

(2) Existing rehabilitation facilities

The expert investigated the existing facilities for rehabilitating the disabled and, by means of interviews and visits to those establishments operating within daily travel of his base location, was able to make the following observations:

(a) there was a noticeable lack of cohesion or co-ordination between the programmes on offer and in all cases they are designed either to teach disabled or handicapped people a skill to get them started in employment or new skills because they can no longer follow their previous occupation;

(b) there is little or no pre-assessment for suitability before commencing vocational training. Thus, suitability is judged by trial and error during training, a method which runs the risk of, and often does, waste training time and opportunity for others;

(c) the rehabilitation programmes are lengthy, usually at least 12 months after medical rehabilitation is complete and sometimes longer;

(d) with the exception of the War Veterans' Organisation and the Centre for the Blind, rehabilitation services are directed almost exclusively towards congenital conditions or crippling disabilities contracted in the early years of life;

(e) the War Veterans Organisation offers a programme which comes nearest in style to the expert's preferred concept of rehabilitation but leans too far towards vocational training to be of use for industrial assessment purposes. It is also very unlikely that the Organisation could find sufficient spare capacity to be able to share its facilities;

(f) because of the severity of disabilities such vocational training as is included is pitched at a level to suit the individual rather than to meet the requirements of industry. Whilst placings are reasonably good for the relatively small number of clients entering the employment field at any given time and bearing in mind the tendency to lean rather heavily towards home-working or other self-employment activity, it is unlikely that such training facilities would be adequate to cope with the higher rate of throughput likely to result from a rapid rehabilitation and assessment service. However, they may serve as a useful complement to an industrial rehabilitation programme by providing vocational training to those industrial rehabilitation clients found to be in need of this service.

C. Other activities

National sports meeting for the disabled

During the mission, a three-day sports meeting was held for the disabled at the National Sports Stadium in Bangkok, to which the expert was invited and attended with his Department of Labour counterpart; they attended the opening and closing ceremonies, part of the first day's programme and the final social evening. During the first day's activities, the expert was invited to make presentation awards to the leaders in some of the events and, in adopting an active role, the expert felt that good groundwork had been laid amongst the officials involved for promoting an interest in and support for the rehabilitation programme proposed for the Department of Labour.

III. Conclusions

The rehabilitation services currently available are oriented towards vocational training and tend to cater for those groups who need long-term rehabilitation to prepare them for employment. There is also a marked tendency for individual rehabilitation programmes to result in self-employment or even merely social readjustment in the domestic environment. Whilst this may be quite acceptable in the context of the relatively small throughput of the existing programmes, it is not the right concept for a programme directed at people who have work experience and have suffered injuries in the course of their employment which are sufficiently serious to warrant reassessment of their work potential.

What is required is a concept of industrial rehabilitation which embraces short-term assessment of work potential and a short period of work preparation during which medical rehabilitation, if required, is continued in the form of remedial physical therapy. This requires that a programme based on this concept commences before medical rehabilitation is completed. It also requires that the programme will include the remedial facilities necessary and an attending physician.

This concept of rehabilitation, as described to people representing the various organisations and disciplines listed in the

appendix, has been well received and supported. What has been questioned however is whether the Department of Labour is the right agency to administer such a rehabilitation programme. Of this, the expert is in no doubt and, in support, submits the following observations:

- (1) it is intended, at least at its inception, to finance the programme from the resources of the Workmens Compensation Fund;
- (2) the clientele passing through the programme will be mostly beneficiaries of the Workmens Compensation Fund;
- (3) the programme will be industrially oriented with employment as its primary objective and thus will become an employment service bringing it within the aegis of the Department of Labour;
- (4) a significant part of the programme will be concerned with placing clients in jobs when rehabilitation is completed. This is also a task appropriate to the Department of Labour and for which a specialist service must be developed.

IV. Recommendations

In the light of the foregoing conclusions, the expert recommends:

1. That the Department of Labour, through its Office of the Workmens Compensation Fund, institutes an industrial rehabilitation centre with an assessment and work preparation programme aimed at industrially injured workers, with the objective of providing the facilities to enable those workers to return to employment as soon after injury as practicable. For the majority of clients, the programme should be constrained to a maximum of 12 weeks and should include the following elements:

- (1) referral and selection - a process which should ensure that only those clients in need of and likely to benefit from industrial rehabilitation are accepted into the programme;
- (2) assessment of work potential - a period of time and controlled activity during which each client's personal attitudes and skills are assessed. For this purpose, it is proposed that a system based on that known as "Singer" be adopted, that being considered by the expert to be the most appropriate to the programme envisaged;

- (3) work preparation - depending on the findings of the assessment this service will be provided for those clients who should be engaged in work activities prior to re-entering the employment market; the period of stay may go from four to eight weeks, depending on the individual case and the progress achieved;
- (4) progress analysis and professional recommendations - a process which should involve the whole rehabilitation team but which is crystallised in the form of a "case conference" comprising the key members of the team;
- (5) resettlement in employment - a service which will require the controlling influence of specially trained officers located both within the programme and in the field and also the co-operation of local employment offices in each province;
- (6) follow-up and feedback - a process designed to give a continuous flow of data on the results of the programme;

2. that to initiate the industrial rehabilitation programme, a rehabilitation unit be created under the control of the Director of the Office of the Workmens Compensation Fund and staffed by three executive officers at appropriate levels. An outline organisational chart and job specifications for this unit is contained in Appendix II;

3. that to provide the basic services of a rehabilitation programme prior to the full development of that programme, further staff appointments are made and training given at the programme's inception for the posts of rehabilitation centre director designate, counselling officer and disablement resettlement officer, these three officers to be attached to the rehabilitation unit;

4. that a purpose-designed building is provided in a suitable location to house the facilities and staff required to service an industrial rehabilitation and assessment programme as outlined in the first recommendation. In making this recommendation the expert considered very carefully the justification for such capital investment in terms of the likely throughput of beneficiaries of the Workmens Compensation Fund. He concluded that:

- (1) the building should initially be planned for an occupancy of 100 clients but should be erected on a site which will permit expansion to cater for a maximum occupancy of 200 clients;

(2) in choosing the site it would be most desirable if it were sufficiently large to also accommodate a hostel building for clients from outside Bangkok and for those who, because medical rehabilitation is still incomplete, are subject to a restriction in mobility but who are otherwise fit to commence industrial assessment; also it will provide the only opportunity for industrial assessment for those workers who suffer injuries so severe that daily travel is virtually impossible;

(3) the minimum sizes of the land required for each of the three options are:

- (a) for a 100 place centre - 3.5 acres
(= 14,000 sq m)
- (b) for a 200 place centre - 8 acres
(= 32,000 sq m)
- (c) for a 200 place centre and hostel - 14 acres
(= 56,000 sq m)

Note: The budget proposals included in the draft project document are for a 100 place centre situated on a piece of land of approximately four acres. If either option (b) or (c) is adopted, the budget proposals must be amended accordingly.

An organisational chart giving details of the activities and staffing requirements for a 100 place industrial rehabilitation centre is attached as Appendix III, an outline plan of the proposed building is attached as Appendix IV, brief details of the job descriptions, qualifications required and grade levels of the centre director designate, counselling officer and disablement resettlement officer are attached as Appendix V.

5. that a sub-committee of the Workmen's Compensation Fund Committee be constituted and designated Disablement Advisory Committee, to act in an advisory capacity and as a guiding body during the development phase of the Industrial Rehabilitation Programme.

APPENDIX I

Persons met and consulted

<u>Name</u>	<u>Title and Organisation</u>
✓ Mr. Henry Brown	Regional Adviser on Vocational Rehabilitation—(ILO)—
✓ Khun Vijit Sangtong	Director General—Dept. of Labour
✓ Khun Ampol Singhakowin	Deputy Director General Department of Labour
✓ Khun Amporn Junenanond	Director - Office of the Workers' Compensation Fund
Khun Sanan Vongsuthee	President - National Congress of Thai Labour
Khun Suphand Moongvicha	General Secretary - Employers Confederation of Thailand
Khun Jumnean Joungtrakul	Deputy General Secretary Employers Confederation of Thailand
Dr. Sompoon Klitalak	Member of Workers Compensation Fund Advisory Board
✓ Dr. Sunit Sudhisarnrakorn	Deputy Chief of Rehabilitation Medicine - Siriraj Hospital
—Dr. Damrong Kitkusol—	Director of—Prosthetics and Orthotics Dept: - Siriraj Hospital
Khun Virat Chuwonglerd	Director - Phrapradaeng Vocational Rehabilitation Centre
Khunying Samangjai Damrong-Baedyagun	Chairman - Social Welfare Council
Dr. Sadap Dhiraputra	Member - Social Welfare Council
Khun Chidchan Mangsusutra	Secretary - Foundation for the Welfare of the Crippled
✓ Dr. Ekachai Chulacharitt	Director - Prosthetics and Orthotics Dept: - Lerdsin Hospital
✓ Khun Prasit Chaiyatipaya	Assistant to the President of the War Veterans Organisation of Thailand

<u>Name</u>	<u>Title and Organisation</u>
Reverand Charles Velardo	Director - Centre for the Blind
Khun Sawang Numsomboon	Chairman - Foundation for the Welfare of the Crippled
Khun Wipa Satasuwan	Secretary of the Administrative Board Foundation for the Welfare of the Crippled
Khun Pramool Chandharachannong	Director General - Department of Public Welfare
Khun Chantira Phitarachart	Director - Employment Services Division

APPENDIX II
ORGANISATION OF SPECIALIST REHABILITATION UNIT

DIRECTOR - OMCF
(INITIAL POLICY AND FINANCE)

REHABILITATION UNIT

SELECTION

PROCESSING APPLICATIONS
REFERRAL TO SELECTION COMMITTEE
RECORDING AND CLASSIFYING RELEVANT INFORMATION
CALLING FOR ASSESSMENT PROCESS
PREPARING CASE FILES

ASSESSMENT

SUBMISSION TO COUNSELLING SERVICE
REFERRAL TO AGENCIES FOR SPECIALISED ASSESSMENT
RECORDING RESULTS
COLLATING ASSESSMENT RESULTS

PLACEMENT

EMPLOYERS REGISTER
LIAISON WITH EMPLOYMENT SERVICES DIVISION
SUBMISSION TO PLACEMENT OFFICER
FOLLOW-UP

APPENDIX II (CONT)

OFFICE PROCEDURES

1. Selection

- Receiving and Recording details of clients for rehabilitation
- making up case files with relevant papers
- submitting case files to committee for selection
- noting committee decisions on return of case files
- notifying referral source of Committee decision
- making up case files complete with all known details of client

- source of referral;
accident report;
medical report

- registering and routing system for files

- medical reports;
previous work record
Personal details
family commitments

2. Assessment

- Liaising with other Depts - Organisations, etc; for specialist services
- Individual counselling
- Collating results for "Case Conference" and organising the "Case Conference" team and business
- Noting "Case Conference" decision and completing records for placing action.

- Occupational Psychologist
Social Worker
Director of Franchises
Practical abilities

- submission to specialist counsellor

3. Placement

- Liaison with Employment Services Division
 - Register of Employers
 - Vacancy lists
 - Trades with skills shortages
 - Vocational training
- Liaison with Department of Public Welfare
 - Sheltered employment
 - By Rehabilitation Section
 - Press; radio; television; local events; organisations; societies
 - research facility
- Direct placing action
 - Publicity
- Follow-up

APPENDIX III

FUNCTIONS OF AN INDUSTRIAL REHABILITATION CENTRE

The role of an industrial rehabilitation and assessment centre is to provide work-orientated facilities which can assess and develop an individual's abilities and work efficiency. This is best achieved by an initial period of concentrated assessment followed by a further period of practical working activity designed to meet the needs of the individual and to relate to the type of occupation the individual is likely to follow. Thus the functions necessary within the centre can be summarised as follows:

1. Selection

This is a closely controlled process which is intended to ensure that only those in need of and are likely to benefit from a rehabilitation programme prior to a return to employment are admitted. For the majority of applicants the process usually resolves itself into a routine within the capacity of administrative staff. There should, however, be sufficient flexibility built into the routine which will ensure that any applicants who might normally be excluded but for whom there may be special considerations can be referred for a decision to any or all of the team of specialists.

2. Intake

This process, correctly executed, should ensure that each individual course commences on the best possible footing. It commences at the time of arrival on the first day and lasts until the initial formalities, interviews, tests, etc. are complete. It should be so arranged that, following arrival, all clients are passed from stage to stage with the minimum of delay and are kept fully informed at each stage of its purpose and place within the programme as a whole. It is during the intake process that the necessary domestic details are dealt with, medical records are checked, key members of staff are introduced and the general rehabilitation course programme is outlined.

3. Assessment and First Case Conference

It is intended that the assessment programme shall be self contained and identifiable as a separate function within the over-all programme. For this reason it is most suitably accomplished in a separate workshop located within the main centre building. The aim of the assessment phase is to discover, in as short a time as is practical, as much about the clients as is necessary and helpful to guide the rehabilitation team in their efforts to resettle them in the most suitable employment. During the phase each client will undergo tests designed to determine aptitude, ability and work potential and will be interviewed and counselled by the key specialists who make up the case conference

team. For each client the assessment phase will culminate in an initial case conference during which a tentative work experience programme will be mapped out, and will result in allocation to one or more of the work activities included in the remainder of the programme.

4. Practical Work Activities

To provide an opportunity for clients to practice old skills or develop new skills and to gain confidence and with it an increasing work tempo, a number of activities equated with the more common occupations (and thus the more likely prospects for placing) are included in the centre. Those selected for this programme are as follows:

a. Metal Working (Hand)

This activity is concerned with the hand finishing and fitting of metal articles and components and will entail the use of hand tools such as files, hacksaw, hammer, etc; and should include light fabrication involving the use of welding equipment. The work selected can and should be representative of the type of work commonly found in the industrial sector. It should be graded for varying degrees of skill and should be so arranged that it will provide remedial exercise particularly for upper limb amputees.

b. Metal Working (Machine)

A selection of the more usual engineering production machinery provides the basis for this activity. The selection should include machines such as centre lathes, capstan lathes, milling and grinding machines, pillar and radial drills and power saws. With a good selection of production work to maintain a steady output this activity contributes most significantly to the industrious atmosphere such a centre needs to perform satisfactorily. The activity is well suited to both upper and lower limb amputees and with judicious switching of clients between machines, permits development of control of prosthesis and scope for use of accessories.

c. Woodworking and Wood Machinery

Although in essence this activity provides similar work experience to that of metal working in terms of remedial value, the scope of the production work likely to be available in terms of work preparation will justify its inclusion in the programme. It should be regarded predominantly as a hand operation with limited use of woodworking machinery such as circular and bandsaws, planes and thicknesser, router and sander. Both upper and lower limb amputees should cope quite easily with this activity.

d. Miscellaneous and Light Assembly Work

As its name suggests this activity can cover a wide spectrum of occupations including both mechanical and electrical work and work of a more general nature. The accent will be on finger and hand dexterity with minimum

requirement for body mobility. It will thus lend itself to those of the disabled who have restricted movement by virtue of below the waist problems, and should cater particularly for clients confined to wheel chairs.

e. General Activities

For a proportion of the clients passing through the programme and in particular those clients who perhaps were previously employed in some form of construction work, there will be a need to return to some form of out-door occupation. This activity should be so designed that it will provide the kind of work experience which relates to out-door activities and develops the physical attributes of clients to enable them to cope with the more rugged conditions inherent in such work. The key-note of this activity is versatility and work selection will need careful planning to relate satisfactorily to normal occupations.

f. General Commercial Work

Tests and assessment sometimes indicate that particular clients have a far better aptitude for some form of clerical/commercial activity than for manual work and with some experience are able to earn a better living in that field than in their previous employment. As this activity is also generally sedentary by nature it lends itself very well to the more severely disabled in terms of restricted mobility. It is also practicable to adapt this activity to the needs of those clients for whom a short period of remedial education improves their chances of re-entering the employment market.

5. Remedial Physiotherapy

Running concurrently with the assessment and work experience programmes, a course of remedial physiotherapy will promote early recovery of function and when properly planned and controlled will enable industrial rehabilitation to commence before medical rehabilitation is complete. Remedial Physiotherapy should be directed by a qualified Remedial Physiotherapist under the control of an appropriate medical practitioner and should be based on a properly equipped gymnasium. In practice the remedial programme will feature prominently in the early stages of each client's programme and will gradually reduce as the programme proceeds until towards the end it will be phased out altogether.

6. Final Case Conference and Course Recommendations

Towards the end of each client's programme the case conference team will meet to consider progress made during the course and to make recommendations regarding employment. For the vast majority of clients the recommendation will be for direct

placing in suitable employment, but there may also be other recommendations such as retraining for new or additional skills or due to physical limitations, sheltered employment.

7. Placing Action

This is perhaps the most crucial function in so far as until the client is satisfactorily resettled in employment the course of rehabilitation will not have achieved its objective. For this reason the placing service must be staffed by competent placing officers who are in touch with the needs of industry, the requirements of a wide variety of occupations and can sell the services of disabled workers to any and every employer.

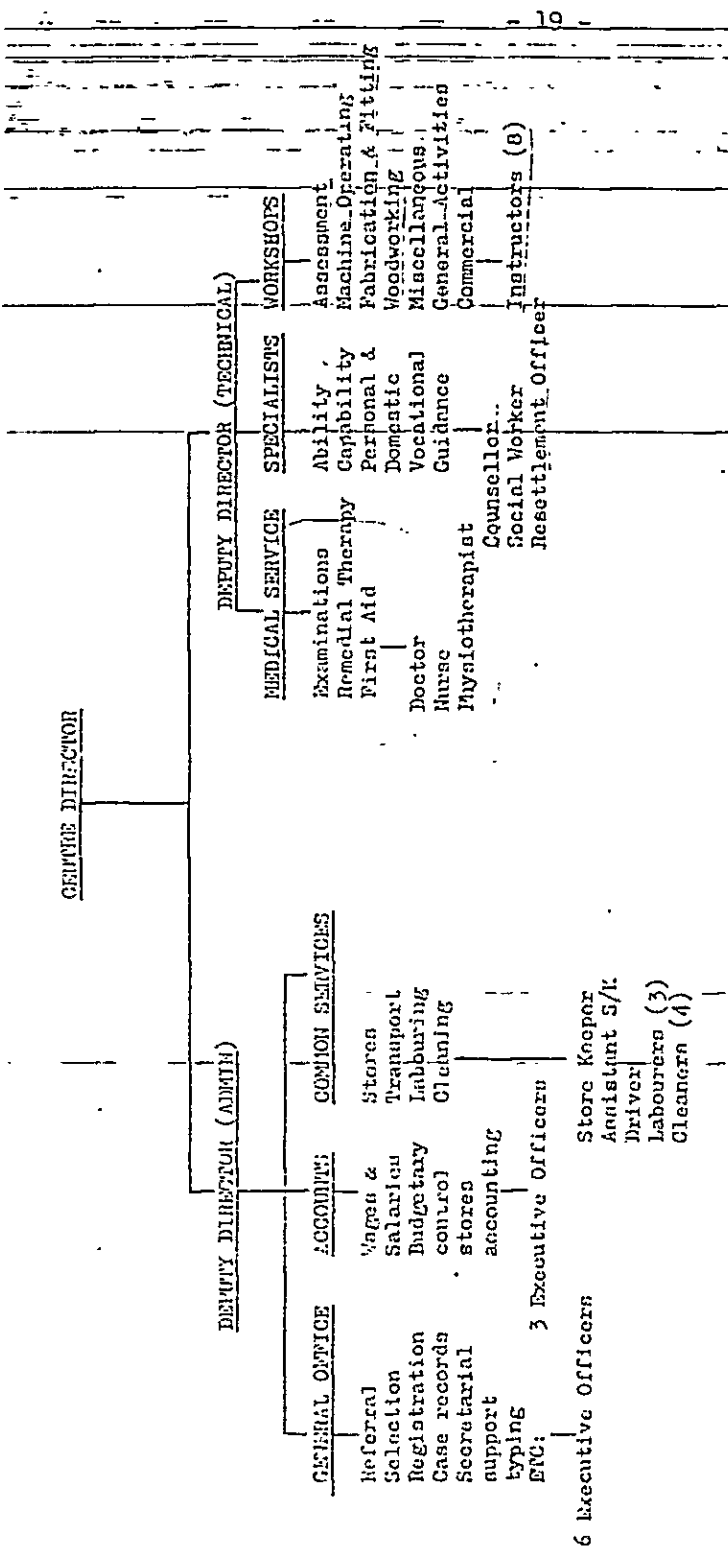
8. Support Services

In addition to the main functions of the rehabilitation programme a number of support services will be required. Without going into detail these will include:

- a. Clerical and secretarial support /
- b. Budgetary control /
- c. Salaries, wages and other payment facilities /
- d. Communications - internal and external /
- e. Storage and labouring /
- f. Transport. /

9. Centre Organisation

The accompanying organisational chart with staffing requirements indicates where each function fits into the overall centre programme.

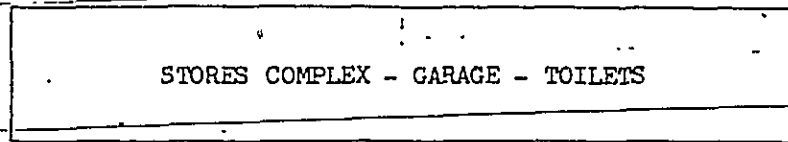


APPENDIX IV

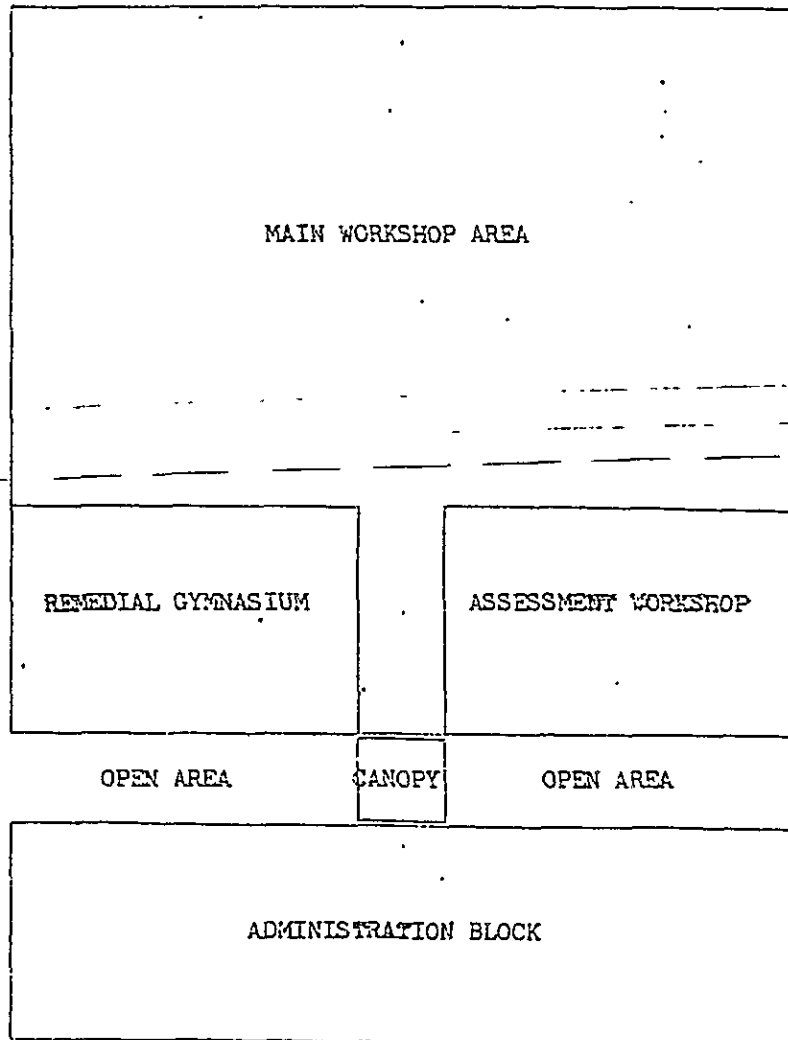
BLOCK PLAN OF REHABILITATION CENTRE

(Scale 3 mm = 1 m)

(Minimum plot area 4,000 m²)

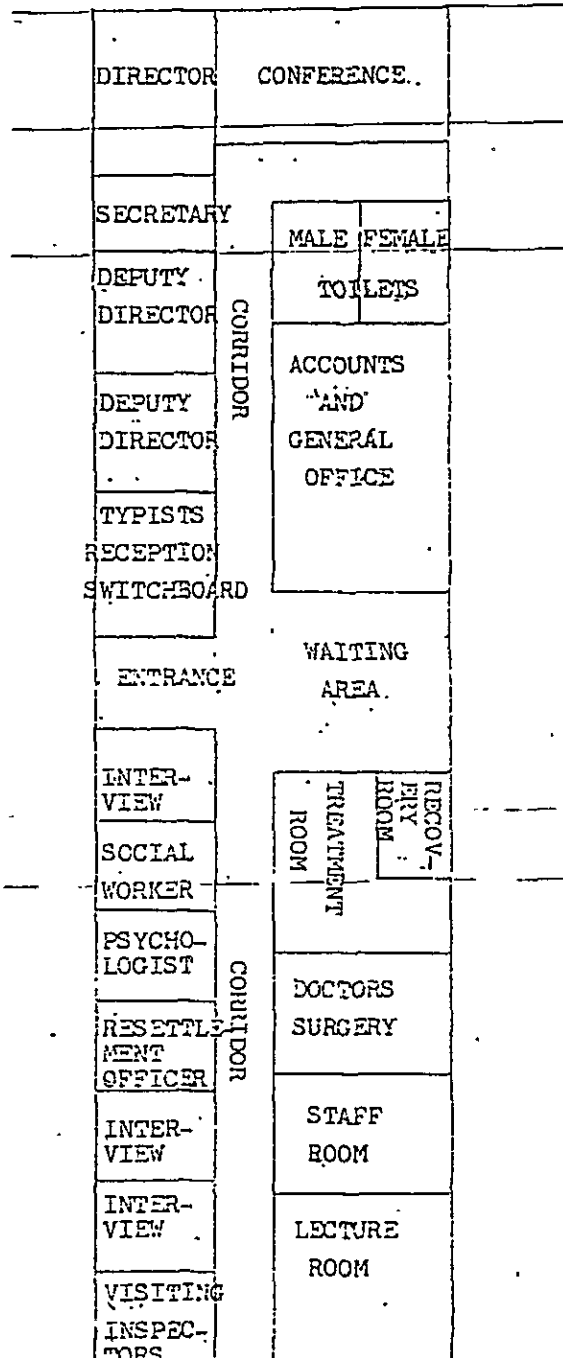


OPEN AREA



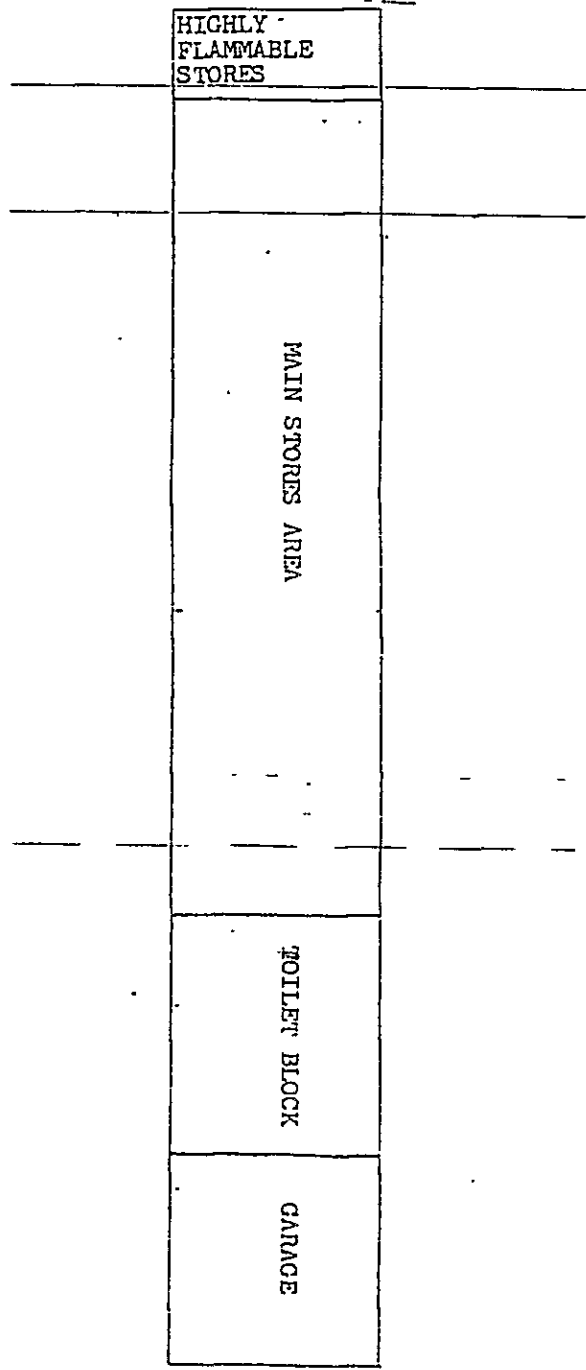
PLAN OF ADMINISTRATION BLOCK

(Scale 5 mm = 1 m)



PLAN OF OUT-BUILDINGS COMPLEX

(Scale 5 mm = 1 m)



APPENDIX-V

JOB DESCRIPTIONS FOR KEY PERSONNEL

1. Centre Director

(a) Responsibility - overall management and smooth functioning of the Centre and its facilities.

(b) Tasks - ~~forward planning of the general rehabilitation programme~~ to take account of the needs of both clients and the job market;

- supervision of both administrative and technical management and the "Case Conference" team of specialists, Chairman of Case Conference;

- staff matters including safety, welfare and training;

- liaison with other government departments and private organisations, employers etc;

- maintenance of premises and equipment;

- promotion of rehabilitation programme by regular visits and talks to appropriate Forums and by inducing employers etc, to visit the centre;

(c) Qualifications Desired - University Degree at Master level preferably in Business Administration or a closely allied field. Some experience at middle or higher management level in a medium-sized competitive organisation is also desirable.

(d) Salary Level - Should equate with Civil Service level 7.

2. Deputy Director (Administrative)

(a) Responsibility - day - to - day management of the administrative functions of the Centre and clients' welfare arrangements whilst on the premises.

- (b) Tasks - supervision of the work of the general office, accounts office, stores and general support services;
- preparation of budgetary forecasts and close monitoring of current budget expenditure;
- monitoring of stores accounting and stock control systems;
- pricing of production work;
- maintenance of internal communications systems.
- monitoring the health, safety and welfare of administrative staff.
- (c) Qualifications desired - University Degree at Bachelor level in the field of Accountancy with supporting experience at supervisory level in accountancy or a similar field.
- (d) Salary Level - Should equate with Civil Service Level 6.

3. Deputy Director (Technical)

- (a) Responsibility - day-to-day management of the direct rehabilitation processes, i.e. the assessment programme and practical work experience, and overseeing of specialist services.
- (b) Tasks - supervision of the assessment and work experience sections to ensure the smooth flow of the rehabilitation programme;
- maintaining an adequate supply of suitable production work for assessment and work experience purposes;
- carrying out quality control checks of all equipment and materials taken into the Centre;
- maintaining a regular and effective programme of planned maintenance of plant and equipment;
- briefing of section instructors on individual clients' programmes of rehabilitation;

-
- analysing instructors' reports for presentation at case conference;
 - attending case conference as workshops representative;
 - interviewing clients as required for matters concerning progress, discipline, technical problems, etc;
 - monitoring the health, safety and welfare of staff and clients in the workshop situation;
-
- (c) Qualifications - University Degree at Bachelor level in one of the social sciences. Subsequent experience in personnel work in a medium-sized commercial organisation would be a distinct advantage.
- (d) Salary level - Should equate with Civil Service level 6.

4. Occupational Psychologist/Counsellor

- (a) Responsibility - to carry out psychological assessments of clients' potential and provide a counselling service for clients' benefit.
- (b) Tasks
- interviews all new clients to determine their rehabilitation needs and aspirations with the objective of drawing up an initial plan of action;
 - interprets test and assessment results and modifies each plan of action accordingly;
 - identifies clients in need of further vocational guidance and provides the counselling service required;
 - provides the framework of the final report on each client for discussion at Case Conference;
 - consults other members of Case Conference team and section instructors as necessary to obtain all relevant information for inclusion in final report;
 - monitors research and follow-up projects and interprets results in validation of the Programme;

(c) Qualifications - University Degree at Bachelor level in Psychology.
desired Experience in Occupational Psychology a distinct
advantage but not essential.

(d) Salary level - Should equate with Civil Service level 5.

5. Resettlement (Placing) Officer

(a) Responsibility - to achieve satisfactory resettlement in employment
for the clients completing the rehabilitation
programme;

(b) Tasks

- liaising with the Employment Services Division at
Head Office level and in the field;
- canvassing Employers on behalf of clients;
- promoting the aims and objectives of the Rehabilitation
Programme amongst employers through their trade
organisations;
- arranging work trials for clients with employers who
require them and giving support to clients on such
occasions;
- interviews clients starting the rehabilitation programme
and monitors their performance by consultation with
instructors and other members of the Case Conference team
as their course progresses;
- attends Case Conference as a team member and embodies
placing recommendation in final report;

(c) Qualifications - Formal qualifications such as a University Degree are
desired helpful but not essential and should take second place
to knowledge and experience of both local and National
Industry, preferably with some background of employment
service.

(d) Salary Level - Should equate with Civil Service level 5.

6. Social Worker

(a) Responsibility - to give support, where necessary, to clients who have personal difficulties and to advise other members of the Case Conference team of problems which may influence the Programme.

(b) Tasks - receives each new intake and monitors their induction programme;

- interviews each client for social welfare purposes;

- liaises with other appropriate social welfare agencies as circumstances dictate;

- attends case conference as a team member;

- gives what social welfare support is necessary, and within the Programme's capability, to clients who need it;

(c) Qualifications - University Degree (or equivalent) at Bachelor level desired in an appropriate Social Science. Previous experience of work with people disabled through injury is also highly desirable.

(a) Salary level - Should equate with Civil Service level 5. This post may also be filled on a consultancy basis as the amount of case-work initially is expected to be light.

7. Section Instructors

(a) Responsibility - to maintain a safe, practical working environment for clients in their care.

(b) Tasks - noting and implementing course requirements for each client as directed by the Case Conference team;

- maintaining work tempo and production standards on their sections;

- allocating appropriate work tasks according to the needs of the client;

~~supervising work activity and monitoring progress for subsequent reporting purposes;~~

~~- completing progress reports as required by Case~~

Conference team members:

~~- giving support to clients under their control and ensuring that problems which arise are dealt with expeditiously by the appropriate person;~~

~~maintaining discipline on their sections;~~

~~- maintaining in good repair all machines, equipment and tools in their charge;~~

~~- ensuring the health and safety of their clients;~~

(c) Qualifications - Education to Secondary School Certificate level. desired Trade experience in their various activities is essential and must take preference over other considerations.

(d) Salary level - Should equate with Civil Service level 5.

APPENDIX-VI

DOCUMENTS CONSULTED

- ~~1. Survey on Urban Employment Situation of Thailand - 1979~~
2. The Labour Laws of Thailand
3. Technical Memorandum to the Government of Thailand concerning Vocational Rehabilitation of the Disabled.
4. The Proceedings of Rehabilitation International 4th Annual Regional Meeting of East Asian and the Pacific - 1977. (Seminar on Vocational Training for the Disabled).
5. The Proceedings of the Tripartite Seminar at Hua Hin - 1979 (Paper on Principle and Feasibility of Comprehensive Rehabilitation Schemes, Interdisciplinary Team Approach and Multi-Agency Participation.)
6. Social Security Survey of the Disabled - Report No. 19
7. Social Security Survey of the Disabled - Report No. 24
8. Provision of Social Security Schemes aimed at Promoting Rehabilitation. - ISSA Geneva

Title : The Tripartite Seminar of Compensation
for Work Accidents and Rehabilitation of
Disabled Workers in Thailand

Date : July 2 - 5 1979

Place : Hau Hin, Prachuap Khiri Khan, Thailand

Hosts : Department of Labour
ILO
Friedrich Ebert Stiftung

Participants : 26 representatives from the following
organizations

1. Department of Public Welfare
2. Ministry of Public Health
3. Department of Labour
4. Employers' Organizations
5. Trade Unions
6. Mahidol University (Siriraj and Rama-
thibordi Hospital)
7. Council of Social Welfare

Conclusion of the seminar

1. There should be more complete and accurate statistics on the work accidents not only those covered by the Workmen's Compensation Fund but including those in other provinces for planning and implementing the industrial rehabilitation programme

2. Employers, employees and Government should collaborately participate in setting up safety measures to prevent work accidents

3. After the accidents incurred, the injured workers should receive the best medical treatment and rehabilitation including physical, mental, vocational and Social rehabilitation

4. The Labour Laws should be revised to increase compensation benefits for workers and to make use of the surplus of the Workmen's Compensation Fund for other benefits of both employers and employees, particularly the industrial rehabilitation for disabled workers as mentioned in (3)

5. To establish the Industrial Rehabilitation Center and to set up the Rehabilitation Committee consists of employers', employees' and Government's representative and other knowledgeable persons for the administration of the Center .

6. The Department of Labour will be responsible for planning and implementing the Industrial Rehabilitation programme

7. Rehabilitation personnel especially physical and occupational therapists should be rapidly produced

8. The vocational training for disabled workers should cover different trades in the industry and the self - employment as well,

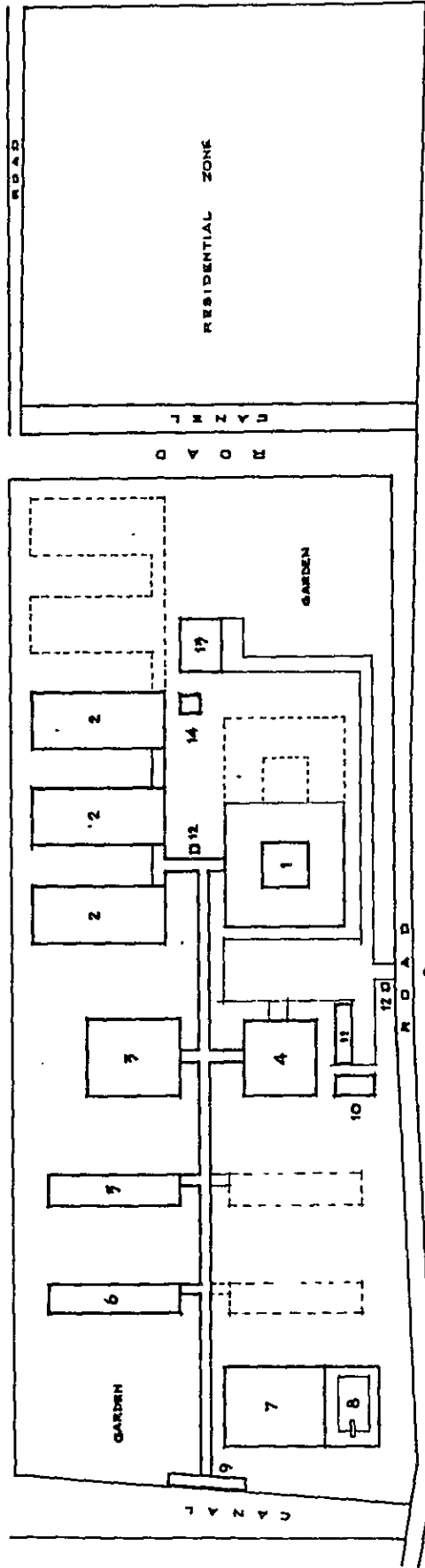
9. The Law concerning disabled persons proposed by the Council of Social Welfare should be enforced as early as possible ;

10. The Social Insurance scheme should be initiated at least the provision of health insurance in the early stage.

INDUSTRIAL REHABILITATION CENTRE

PRIMARY MASTER PLAN

SCALE 1:1000



NORTH

	APPROX. AREA (M ²)	APPROX. AREA (M ²)
1 ADMINISTRATION BLOCK	754	280
2 WORKSHOP	1664	40
3 REMEDIAL PHYSIOTHERAPY	700	70
4 CANTEN	760	90
5 MALE DORMITORY (2 STOREYED)	260 x 2	8
6 FEMALE DORMITORY (2 STOREYED)	260 x 2	170
7 AUDITORIUM & RECREATION HALL	700	12
8 SWIMMING POOL		
9 SALA (BY THE CANAL)		
10 LAUNDRY HOUSE		
11 GARAGE		
12 GUARD BOOTH		
13 MAIN STORAGE		
14 FLAMMABLE STORES		

----- FUTURE EXPANSION

List of sections in the workshop of the Vocational
Training Centre

1. Bench engineering section
2. Light assembly and miscellaneous section
3. Carpentry and woodwork section
4. Electrical/Electronics section
5. Clerical section
6. Tailoring section

EQUIPMENT LIST
FOR GENERAL MECHANICS COURSE

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
	<u>Machine tool and accessories:</u>		
1.	Lathe straight types	1	8,000
2.	Milling machine, precision type	1	12,000
	<u>Cutting tools, M/C tools:</u>		
3.	Spring bar	1	22
4.	Harding bar	1	13
5.	Turning tool holder set	2	60
6.	Thread cutting tool holder	1	35
7.	Plain milling cutter	2	150
8.	Side and face milling cutter	1	200
	<u>Measuring and testing tools and equipment:</u>		
9.	Steel rule	1	12
10.	Outside micrometer set	1	250
11.	Inside micrometer set	1	70
12.	Cast iron surface plate	1	300
13.	Tape rule	1	15
14.	"V" Block set	1	50
15.	Machine vice	1	20

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
<u>General workshop equipment:</u>			
16.	Bench Drilling machine	1	650
17.	Shaping machine	1	8,500
18.	"C" clamp set	1	45
19.	oil can	1	10
20.	Grudge gun	1	15
21.	Fire extinguisher	1	150
22.	Soldering iron	2	50
23.	Safety goggles	5	40
24.	Face shield	5	30
25.	Fire bucket	2	10
26.	Emergency lamp	1	25
27.	Fire-rod kit	1	40
28.	Machine vice set	1	500
29.	Soldering iron - non-electric. (set of 3)	1	25
30.	Soldering iron heater	1	70
31.	Blow lamp	1	30
32.	Blacksmith force (hearth)	1	1,000
33.	Forge tools - set of 9 tongu	1	110
34.	Prising tools: set of 3.	1	25
<u>Hand tools:</u>			
35.	Socket - wrench set, set of 20	1	50
36.	Open-end wrench set	2	20
37.	Ring wrench set	1	35
38.	Adjustable wrench set	1	25
39.	Chain wrench	1	40
40.	Pipe wrench	1	5
41.	"C" clamp set	1	25
42.	Tool makers' clamp	5	50
43.	Diagonal cutting pliers	4	16
44.	End-cutting pliers	4	24
45.	Long chain nose pliers	1	10

<u>S.No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
46.	Flat nose pliers	4	16
47.	Round nose pliers	4	20
48.	Punch and chisel set	1	40
49.	Riveting hammer	4	36
50.	Setting hammer	4	24
51.	Phillips screw driver set	2	16
52.	Scraper set	2	20
53.	Safety goggles	6	30
54.	Rack saw	1	26
55.	Cold flat chisel	5	20
56.	Diamond point chisel	4	24
57.	File set	5	15
58.	Tool box	1	30
59.	Soft hammer	3	18
60.	Hand vices	2	20
61.	Combination pliers	4	24
62.	Die stock set	1	160
63.	Chaser set	1	15
64.	Torque wrench	3	30
65.	Twist drill set	1	80
66.	Adjustable crane set	1	140
<u>Workshop Furniture:</u>			
67.	Storage cupboards	1	150
68.	Material rack	1	100
69.	Workshop benches	20	5,000
70.	Instructor's table	1	120
71.	Instructor's chair	1	100
72.	Steel filing cabinet	1	120
73.	Chain board	1	200

Note: Only the minimum equipment necessary has been recommended.

EQUIPMENT LIST
FOR SHEET METAL COURSE
 (No. of trainees: 20)

<u>S.No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in ₹/</u>
<u>Measuring and testing tools:</u>			
1.	Combination square set	1	100
2.	Tin men's steel square	2	36
3.	Flat steel square	2	12
4.	Vernier caliper gauge	1	24
5.	Outside caliper	2	10
6.	Inside caliper	2	12
7.	Radius gauge	2	16
8.	Outside micrometer	1	36
9.	Steel measuring tape	1	20
10.	Aluminum plumb and spirit level	1	30
11.	Steel rule	1	8
12.	Steel straight edge	1	100
13.	Screw pitch gauge set	2	12
14.	Weld joint gauge	2	12
15.	Flexible rule	1	20
<u>General workshop equipment:</u>			
16.	Sheet metal shearing machine	1	200
17.	Power hack saw	1	3,000
18.	Circular cut-off sawing machine	1	250
19.	Sheet metal cutter machine	1	220
20.	Punch drilling machine	1	50
21.	Punch marking machine	1	400
22.	Fly press	1	500
23.	Electric drill	1	120
24.	Portable fat force	1	300
25.	Grinder's goggles	3	24
26.	Safety helmet	3	21
27.	Gloves	4	32
28.	Water and oil separator	1	30

<u>Sl. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
29.	Air line hose	26 M	26
30.	Heated electrode cabinet	1	750
31.	Air hose quick coupler and connector	4	20
32.	Air blow gun	4	40
33.	Buffing polishing machine	1	125
34.	Sheet metal shearing machine	1	1,500
35.	Bending machine, universal	1	600
36.	Pivoting machine	1	1,250
37.	Punching machine	1	175
38.	Fly press	1	2,500
39.	Spot welding gun	1	570
40.	Spot welding machine	1	1,050
41.	Gas welding and cutting set	1	170
42.	Welding table - ABC	1	130
	<u>Hand tools:</u>		
43.	Soldering iron	1	30
44.	Flux lamp	3	22
45.	Oil can	2	17
46.	"C" clamps	2	50
47.	Adjustable wrench	2	74
48.	Bolt cutter	2	90
49.	Sheet metal and welding clamp	2	50
50.	Locking wrench pliers	2	10
51.	Three-wheel pipe cutter	1	70
52.	File cutter	2	20
53.	Pipe wrench	2	10
54.	Water pump pliers	1	20
55.	Pliers.	6	36
56.	Bolt and rivet cutter	2	250
57.	Shearers	2	30

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
58.	Pipe seamer	1	75
59.	Hollow punch	1	150
60.	Punch and chisel set	1	30
61.	Screw driver Phillips set	2	20
62.	Wrench standard	2	10
63.	Key files	2	20
64.	Tinner's tools	4	200
65.	Sheet metal corner	2	90
66.	Riveter	2	100
67.	Rivet set	2	20
68.	Hammer	4	24
69.	Wooden mallet	2	20
70.	Rubber mallet	2	10
71.	Hollowing hammer set	2	20
72.	Riveting hammer set	2	40
73.	Screper	1	16
74.	Tool coat	2	16
75.	Tool box	5	100
76.	Hack saw pipe	2	20
77.	Screw driver	2	20
78.	Tinner's set	2	20
79.	Scraper	4	16
80.	Adjustable wrench	4	24
81.	Wrench standard	1	40
82.	Wrench standard	2	16
83.	<u>Workshop furniture:</u>		
84.	Workshop table	1	50
85.	Workshop lamp	2	50
86.	Cable winder	2	50

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
86.	First-aid kit	1	40
87.	Fire extinguisher	1	100
88.	Fire bucket	3	10
89.	Work wrench	1	140
90.	Work bench	20	3,000
91.	Bench clamp	5	10
92.	Bucket	3	15
93.	Busc dip	2	20
94.	Blackboard	1	200
95.	Blackboard instrument set	1	120
96.	Steel filing cabinet	1	120
97.	Steel storage cabinet	1	150
98.	Material rack	1	100
	<u>Audio visual equipment (aids):</u>		
99.	Slide magazine and cassettes	1	75
100.	Transparencies "sheet metal"	1	25
101.	Transparencies "sheet metal fabrication"	1	30
102.	Transparencies "sheet metal welding"	1	75
103.	Portable drawing board	1	60
104.	Wall charts safety	1	20
105.	Wall charts "basic tools"	1	20
106.	Sound/slide and programmes	1	75

Note Only the minimum equipment necessary has been recommended.

EQUIPMENT LIST

TOP CARPENTRY AND WOODWORK COURSE

(No. of trainees: 20)

1.	Surface planer/jointer	1	3,000
2.	Thicknessing planer	1	3,250
3.	Spirals router/wood shaper	2	4,250

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost in US\$</u>
4.	high speed router	3	1,200
5.	wood lathe	1	3,000
6.	air and disc sander	1	250
7.	rust. sander	3	1,000
8.	drill bit machine	1	1,300
<u>Cutting tools:</u>			
9.	Solid centre router bit	4	1,300
10.	Wood twist drills	5	300
11.	Expansive bit	3	50
12.	various machine cutters	5	250
<u>General working equipment:</u>			
13.	portable electric all-purpose saw	2	1,700
14.	portable electric planer	2	900
15.	portable electrical disc. sander/grinder	1	400
16.	portable electric screw driver	2	500
17.	portable electric blower/vacuum cleaner	1	300
18.	saw sharpening machine	1	280
19.	Sand-stone wheel	1	230
20.	grinder	1	200
21.	sharpening machine	2	375
22.	Electric automatic straight/cutter grinder	1	450
23.	portable electric drill	2	300
24.	Electric drill stand	1	80
25.	Wood and metal work vice	10	250
26.	rod clamps	30	150
27.	rod clamps	10	200
28.	Vice bench fitting	1	250
29.	Cramp heads	10	25
30.	Sash cramp	5	400
31.	T-bar cramp	5	550

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in RS₹</u>
32.	G-cramps	4	2,000
33.	Corner cramp	10	200
34.	First-aid kit (portable)	2	80
35.	Safety and shop sign kit	2	300
36.	Fire extinguisher	4	400
	<u>Hand tools:</u>		
37.	Carpenter's hand saw	10	200
38.	Carpenter's panel saw	10	150
39.	Carpenter's back saw	10	180
40.	Back saw blades	10	3,600
41.	Back saw frame	10	80
42.	Carpenter's jack plane	10	350
43.	Carpenter's claw hammer	10	300
44.	Carpenter's axe	10	120
45.	Carpenter's claw hammer	10	70
46.	Hammer warrington	10	30
47.	Carpenter's mallet	10	50
48.	Carpenter's chisel	10	400
49.	Nail bar (case opener)	2	40
50.	Carpenter's ratchet brace	10	450
51.	Bit roll	10	70
52.	Wood bits	10	770
53.	Screw driver bits	10	60
54.	Oil can	10	50
55.	Oil stone, combination	10	50
56.	Rubbing block	10	40
57.	Nail set	10	10
58.	Centre punch	10	2
59.	Screw drivers	10	200
60.	Saw file	10	40

<u>No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u>
			<u>17,226</u>
61.	Scratch brush/scrapper	10	30
62.	Scrapper	10	30
63.	Brush point	10	11
64.	Carpenter's working gauge	10	27
65.	Carpenter's chisel, paring	10	150
66.	Saw set multiples	10	100
67.	Combination plane	10	400
68.	Spirit level, bricklayer's	10	500
69.	Attachment unit for spirit level	10	200
70.	Spirit level, boat level-shaped	10	100
71.	Rule 12' 12"	10	1
72.	Wrench, various	10	100
73.	Safety glasses	10	50
74.	Phillips hand/breast	10	100
75.	Hand try	10	10
76.	Tape measure	10	50

Workshop furniture and equipment:

77.	Carpenter's bench	20	1,750
78.	Tool box	10	1,000
79.	Instructor's table	3	120
80.	Instructor's chair	12	50
81.	Steel filing cabinet	2	100
82.	Tool cabinet	2	700
83.	Material storage cabinet	2	700
84.	Material rack	1	100
85.	Chalk board	1	100
86.	Eraser net for chalk board	1	100

Audiovisual equipment:

87.	Educational slider	1	450
88.	Educational film	1	500

Note: Only the minimum equipment necessary has been recorded.

EQUIPMENT LIST
FOR WELDING COURSE

(No. of trainees: 20)

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost in US \$.</u>
<u>General workshop equipment</u>			
1.	Hydraulic press	1	500
2.	Pedestal grinder	1	600
3.	Drilling machine	1	750
4.	Buffing machine	1	120
5.	Portable pipe cutting machine	1	450
6.	Spot welding gun	1	500
7.	Spot welding machine	1	1,600
8.	Heated electrode cabinet	1	700
9.	Gas cylinder CO ₂	1	350
10.	Gas cylinder argon	1	350
11.	Gas cylinder acetylene	1	300
12.	Gas reduction valve	2	140
13.	Gas regulator	4	260
14.	Spark lighter	5	15
15.	Gas welding and cutting torch set	1	300
16.	Welder's hand shield	10	30
17.	Welder's apron	10	10
18.	Gas welder's goggles	1	100
19.	Welder's gloves	10	20
20.	Cutting and set	1	100
21.	Welding torch	2	400
<u>Hand tools</u>			
22.	Back saw	1	30
23.	Rule	2	40
24.	Spring flux measuring tape	5	15

Sl. No.	Description	Quantity	Total cost
			₹ 507
16.	Welder	1	10
17.	Welder	4	100
18.	Welder set	1	100
19.	Welder set	1	10
20.	Welder set	7	10
21.	Welder set	2	10
22.	Welder set	2	10
23.	Welder set	2	10
24.	Welder set	2	10
25.	Welder set	2	10
26.	Welder set	2	10
27.	Welder set	2	10
28.	Welder set	2	10
29.	Welder set	2	10
30.	Welder set	2	10
31.	Welder set	2	10
32.	Welder set	2	10
33.	Welder set	2	10
34.	Welder set	2	10
35.	Welder set	2	10
36.	Welder set	2	10
37.	Welder set	2	10
38.	Welder set	2	10
39.	Welder set	2	10
40.	Welder set	2	10
<u>Workshop furnitures</u>			
41.	Fire extinguisher	1	100
42.	Fire extinguisher	1	100
43.	First-aid kit	1	100
44.	Work bench	20	1,000
45.	Cutting table	1	100
46.	Welding table	4	400
47.	Gas cylinder trolley	1	100
48.	Storage cabinet	2	100
49.	Filing cabinet	1	100
50.	Material storage cabinet	1	100
51.	Material stand	1	100
<u>Audio-visual aids</u>			
52.	Overhead projector	1	100
53.	Slide projector	1	100

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
54.	Wall charts safety	1	20
55.	Instructional transparencies	1	150
56.	Wall charts "Welding process" - Part I	1	20
57.	Wall charts "Welding process" - Part II	1	20
58.	Wall charts "Gases used in welding"	1	20
59.	Wall charts "Basic tools"	1	20
60.	Instructional transparencies "Arc welding"	1	70
61.	Instructional transparencies "Gas welding"	1	70
62.	Slide and instructional prog. "Welding"	1	75

Note Only the minimum equipment necessary has been recommended.

EQUIPMENT LIST
FOR OFFICE TRAINING COURSE

(No. of trainees: 20)

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
<u>Photographic and reproduction equipment and supplies:</u>			
1.	Photo-copying machine	1	1,500
2.	Copying paper	20	200
3.	Stencil duplicator	1	1,800
4.	Colour-change kit	1	30
5.	Stencils	50	500
6.	Stencil ink	25	125
7.	Plastic rubber	2	10
8.	Stencil adhesive	5	10
9.	Corrector	5	10
10.	General-purpose cleaning liquid	5	100
<u>Office and draughting equipment and supplies:</u>			
11.	Typewriters	20	12,000
12.	Electronic pocket calculator	10	1,000

Note Only the minimum equipment necessary has been recommended.

EQUIPMENT LIST
FOR ELECTRICAL ELECTRONICS COURSE

(No. of trainees: 20)

<u>No. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in U.S.</u>
<u>Machine tools:</u>			
1.	Drilling machine	1	1,300
2.	Double-ended grinding machine (pillar type)	1	650
<u>Measuring and testing equipment:</u>			
3.	Measuring rule	2	12
4.	Measuring tape	2	40
5.	"V" block set	1	450
6.	Radius gauge	2	16
7.	Screw pitch gauge	4	8
8.	Wire gauge	4	16
9.	Multi-meter	2	100
10.	Voltmeter	5	100
11.	Portable power meter	1	100
12.	Portable earth resistance tester	1	200
13.	Portable electric drill	1	600
14.	Coil winding machine	1	800
15.	Universal armature winding machine	1	3,000
16.	Battery charger	1	50
17.	Battery tester	1	30
18.	First-aid kit	2	80
19.	Safety and shop sign kit	1	150
<u>Special skill training equipment:</u>			
20.	Two-circuit switch	5	100
21.	Two-way switch	5	100
22.	Light switch	5	150
23.	Fuse, 25A	10	100
24.	Reset control switch	5	125
25.	Push button	10	50

<u>Sl. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
26.	Door opener	5	75
27.	Voltage transformer	1	150
28.	Single-phase kva motor	1	50
29.	On-off switch	5	50
30.	Two-circuit double interruption switch	5	200
31.	Motor control switch	5	300
32.	Insulating switch	5	100
33.	Electric bell	10	30
34.	Electric buzzer	10	30
35.	Electric door opener	10	40
36.	Electric generator and motor demonstration kit	1	400
<u>Hand tools</u>			
37.	Screw driver	10	20
38.	Screw driver (Phillips)	10	20
39.	Screw driver set	5	50
40.	Combination pliers	10	25
41.	Flat nose pliers	10	20
42.	Long nose pliers	10	20
43.	Wire stripping pliers	10	20
44.	Cable cutter	4	8
45.	Pipe cutter	5	50
46.	Factory scissors	10	20
47.	Cable knife	10	20
48.	Adjustable spanners	4	20
49.	Open-end spanners	2	40
50.	Box spanner - wrench set	1	100
51.	C clamp	1	10
52.	Flou lamp	5	150
53.	Soldering iron, electric	10	150
54.	Soldering gun	2	50
55.	Carpenter's bit brace	2	50

<u>Sl. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost in Rs.</u>
56.	Goggles	10	40
57.	Steel brush	10	30
58.	Dusting brush	10	10
59.	Oil can	5	10
60.	Poxy Knife	5	10
61.	File knife	5	20
62.	Flat file	10	10
63.	Back sawfrase	2	14
64.	Back Saw blades	5	5
65.	Chiani net	1	35
66.	Handy Drill set	1	15
67.	Circular cutter	1	20
68.	Tool box	5	100
69.	<u>Workshop furniture and storage equipment:</u>		
69.	Work bench	20	1,000
70.	Tool storage cabinet	1	300
71.	Stool	5	75
72.	Instructor's desk	1	50
73.	Instructor's chair	1	50
	<u>Audio-visual equipment:</u>		
74.	Educational slides	1	450
75.	Educational movie films	1	650
	<u>Electronics:</u>		
76.	Electronics training kit A	10	1,000
77.	Electronics training kit B	10	1,000
78.	Electronics training kit C	10	1,000
79.	Electronics training kit D	10	1,000
80.	Construction rack	2	200
81.	Electronic calculator	5	300
82.	Tool case	10	200

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
83.	Inspection mirror	10	750
84.	Bench light	20	500
85	Educational slides	1	450

Note Only the minimum equipment necessary has been recommended,
recommended

EQUIPMENT LIST
FOR TAILORING COURSE
(No. of trainees: 20)

<u>S. No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>in US\$</u>
1.	Single-needle lockstitch industrial sewing machines, single phase, 13 amp.	20	26,000
2.	Automatic straight knife cloth cutting machine, motor 3/4 hp, volts 208-250	2	2,000
3.	Button-hole machine, motor 1/3 hp	1	6,670
4.	Button-sewer machine, motor 1/3 hp	1	2,620
5.	Single-needle chain stitchover-edging machine, motor 1/2 hp	1	1,720
6.	Long tables	2	3,000
7.	Sig cupboard	2	3,000
8.	Chairs for trainees	20	4,000
9.	Iron	4	250
10.	Work bench	20	4,000
11.	Instructor's chair and table	1	500
12.	Scissors	5	50
13.	Tailer mirror	1	100
14.	Other types of equipment and tools		4,000

EQUIPMENT LIST
FOR PLUMBING COURSE

(No. of trainees: 14)

<u>No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>(in \$)</u>
1.	Drilling machine	1	1,500
2.	Radial grinding machine	1	100
<u>Measuring and testing equipment:</u>			
3.	Vernier caliper	10	100
4.	Combination square set	5	500
5.	Outside caliper	10	60
6.	Inside caliper	10	60
7.	Plumber's square	5	100
8.	Steel measuring tape	2	10
9.	Wipe and sheet gauge	1	40
10.	Proving pump	1	250
11.	Proving pump	1	200
12.	Air gauge	2	150
13.	Welding drain plug (stopper) set	4	200
14.	Technical pressure gauge	2	150
15.	Testing cone	1	50
16.	Combination drain prover	1	200
17.	Double-ended grinding machine	1	100
18.	Hand grinding machine	1	100
19.	Electric drill	1	75
20.	Electric drill stand	1	100
21.	Sheet metal shearing machine	1	50
22.	Portable electric drain cleaner	1	120
23.	Grinding under pressure machine	1	150
24.	Portable folding pipe vice	4	200
25.	Roll locking pipe vice	1	100
26.	Propane gas furnace	1	500

No.	Description	Quantity	Total cost in US\$
27.	welding cable	1	50
28.	Adjustable pipe support	2	60
29.	Welding cylinder trolley	1	100
30.	Angle grinder	1	250
31.	first-aid kit (portable)	2	100
32.	Fire cutting bar	2	200
33.	Safety and shop sign kit	1	150
34.	safety harness	10	350
<u>Special training equipment.</u>			
35.	Lever type handle	10	1,000
36.	Wall type toilet pan	5	500
37.	Low-level alternator	2	500
38.	Wall-hung type urinal	4	400
39.	Shower tray	4	300
40.	Kitchen sink	4	400
41.	Oil - cook tap	10	150
42.	Boiler connection tap	10	150
43.	Filler tap	10	150
44.	Shower and bath mixing tap (hand, one-hole type)	10	350
45.	stop cock	10	100
46.	Angle stop cock	10	350
47.	Bath/shower thermostat	4	300
48.	Shower pipe	4	400
49.	Electric system	1	400
50.	Water stop cock	1	120
51.	Gate valve	10	200
52.	Tank cock	10	150
53.	ball valve - 4. (cock)	10	500
54.	Check valve	10	250
55.	water pump	1	600

No.	Description	Quantity	Total cost	
			\$	¢
56.	Plumbing trapping kit	2	800	
57.	Tool box	10	200	
58.	hand saw frame	10	00	
59.	hack saw blades	100	10	
60.	Flat nose screw driver	10	30	
61.	Double-point scriber	10	30	
62.	Ball point hammer	10	40	
63.	1/2" square	10	70	
64.	pipe wrench	10	30	
65.	Adjustable wrench (shifting spanner)	10	60	
66.	Water pump pliers	10	100	
67.	Combination pliers	10	60	
68.	Flat file	10	60	
69.	Plumber's line	10	30	
70.	Seamless rule	10	20	
71.	Electric - flex measuring tape	10	20	
72.	Ratchet soldering iron	10	00	
73.	Electric solder	10	80	
74.	Minimum plumb and spirit level	10	250	
75.	Electric soldering iron	2	240	
76.	Blow lamp	4	80	
77.	Propane gas soldering iron set	4	100	
78.	Oil can	10	50	
79.	Goggles for welding	10	100	
80.	Gloves	10	70	
81.	Ratchet stack and dies	3	21300	
82.	Spender set	4	160	
83.	pipe tags	10	340	
84.	pipe cutter	10	50	
85.	plating tool set	4	300	
86.	twist drill set	4	100	

No.	Description	Quantity	Total cost
			In US\$
87.	Rivet punch	4	100
88.	Hollow punch	4	100
89.	Steel barrier springs	4	80
90.	Flammable steel drain cleaner	4	400
91.	Face shield	5	75
92.	Revolving head punch pliers	4	32
93.	Punch and chisel set	6	120
94.	Shovel	6	90
95.	Spade	6	90
96.	Gasop's hammer	6	72
97.	Riveting hammer	6	74
98.	Work bench	20	2,000

Workshop furniture and storage equipment

99.	Steel workbench	10	500
100.	Steel filing cabinet	2	240
101.	Steel storage unit	1	300
102.	Instructor's chair	1	90
103.	Instructor's table	1	120
104.	Material rack	1	100
105.	Chalk board	1	200
106.	Instrument set for chalk board	1	120

Audio-visual equipment

107.	Educational slides	1	450
108.	Educational films	1	500

109. Only the minimum equipment necessary and form recommended.

Miscellaneous:

<u>no.</u>	<u>Description</u>	<u>Quantity</u>	<u>Total cost</u> <u>In US\$</u>
1.	Asstulance	1	10,000
2.	Teack	1	10,000
3.	Microtype	1	20,000
4.	Office bar	2	24,000
5.	Wheel chair	2	2,000
6.	Laundr room 'laundr'	1	5,000

Rehabilitation Equipment

Self - help safety devices

1. Hemiplegic arm slings
2. Stainless steel shower chair.
3. Shower chair (removable)

Exercise Equipment

1. Complete exercise programme.
2. Knee exercise units

Electro-therapy

1. Electrical stimulation
2. Ultra - sound
3. Ultra - violet

Heat therapy and cold therapy

1. Infrared
2. Short wave Diathermy
3. Micro-wave therapy
4. Hot pack
5. Paraffin bath

Hydro therapy

1. Whirl - pool (arm, leg, hip)
2. Mobile arm - whirl pool
3. Low profile mobile whirlpool
4. Physio-therapy building and swimming pool.

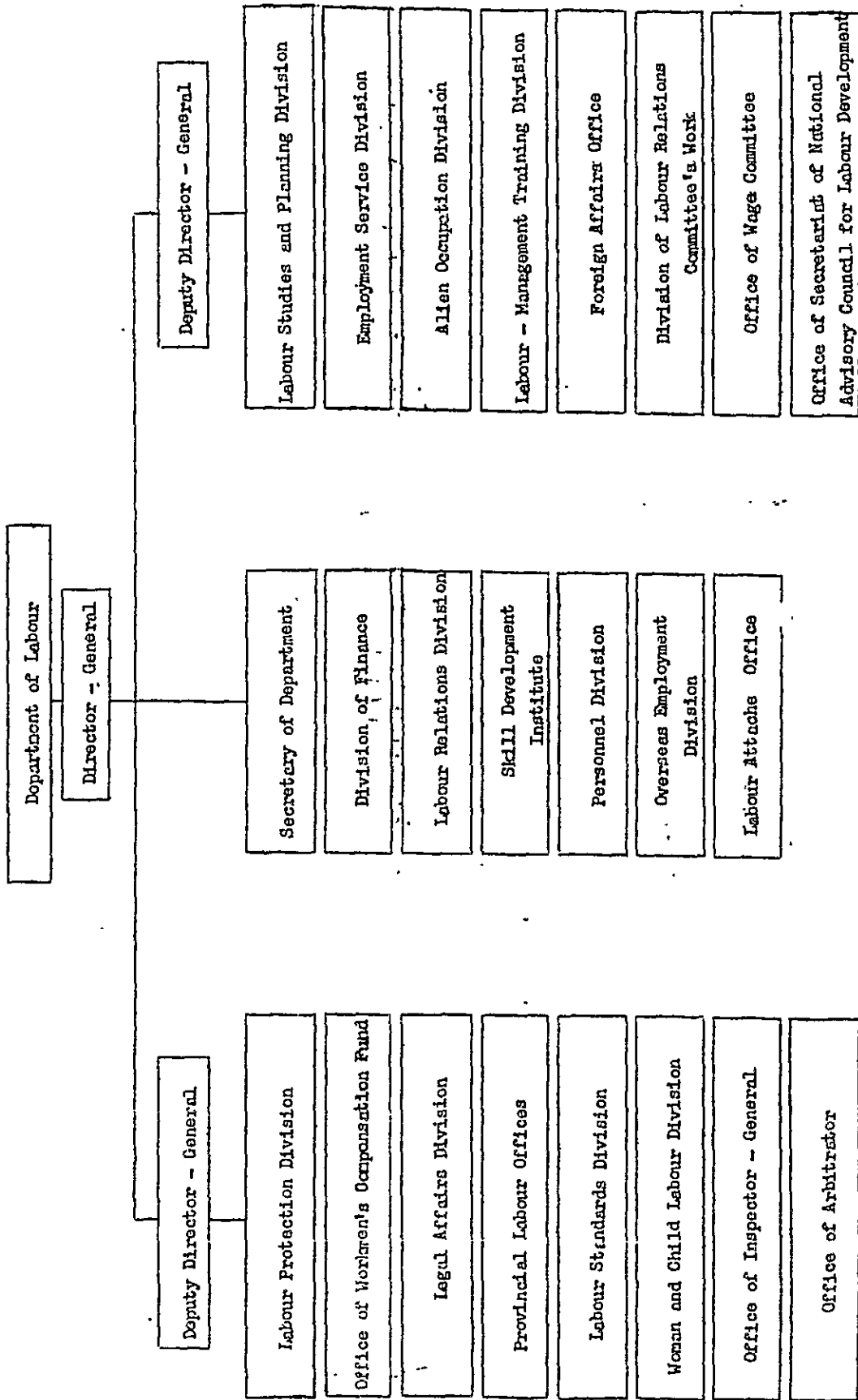
Traction

1. Cervical Traction Intermittent and continuous traction machine
2. Pelvic traction

Diagnosis and testing apparatus

1. Dynamometers
2. Goniometers (arms and legs)
3. Neurological Hammer
4. Stethoscope
5. Sphygmo-manometer
(Mercury type)
6. Pocket steel tape

Organization of Department of Labour



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