添付資料３

プロジェクト事業完了報告書

独立行政法人国際協力機構

バングラデシュ国
トータルクオリティマネジメント（ＴＱＭ）による
電力セクター支援プロジェクト

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東京電力株式会社

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第1章 バングラデシュ国電力セクター概要と支援動向

1.1 バングラデシュ国電力セクターの概要

バングラデシュ国（以下バ国）の電力セクターでは，現在セクターの構造改革が進められている。1990 年代前半まで、BPDB（Bangladesh Power Development Board）による垂直統合（農村部配電に REB）であった電力セクターは、2004 年 12 月現在、下図に示す状況となっている。

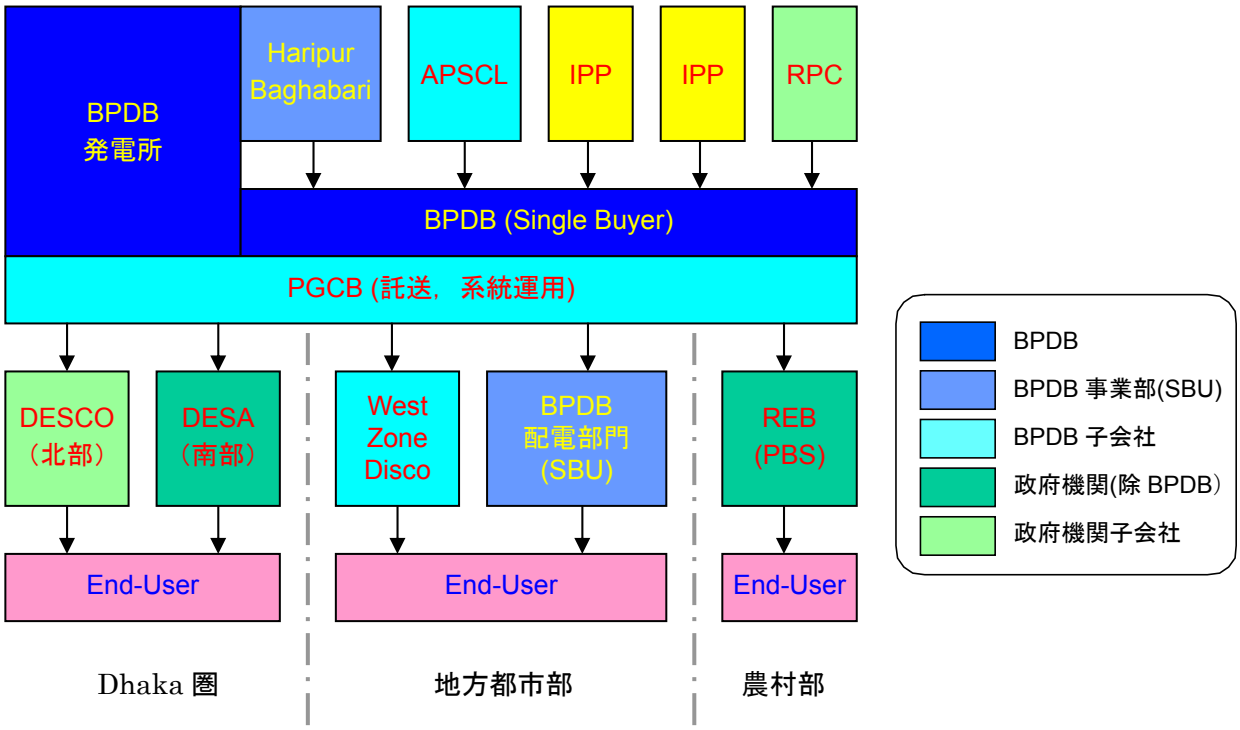


図 1-1 電力セクターの改革の現状

(a) 発電部門の分社化・SBU 化

Ashuganj 発電所はバングラデシュ第 2 の規模の発電所（最大は Gorashal 発電所）であり、BPDB の一部であったが，現在 APSCL (Ashuganji Power Station Company Ltd)に移管され、権限の委譲も進んでいる。

Haripur 発電所と Baghabari 発電所は, BPDB の事業部として, Strategic Business Unit (以下 SBU)化されている。

IPP（Independent Power Producers）は完全な私企業であり，BPDB と PPA (電力受給契約)を結んでおり, すべての製造電力は BPDB が買い取ることになっている。（需要家への直接供給はできない。）

(b) 送変電部門の分社化

PGCB は BPDB の子会社として，会社法の下に設立された公社である。

66kV 以上の送変電設備は BPDB および DESA（Dhaka Electricity Supply Authority）から PGCB（Power Grid Company of Bangladesh）に全て移管（2002 年 12 月 31 日）され，PGCB が管理している。PGCB の事業範囲は、これらの送変電設備の維持管理、系統運用、並びに今後の送変電設備増強計画の立案である（計画のみ：新規設備投資は行わない）。主な収入源は，配電会社からの託送料である（発電会社との直接取引はない）。

(c) 配電部門

Dhaka 圏

Dhaka 市内南部は政府機関である DESA が、北部は DESA の子会社である DESCO（Dhaka Electricity Supply Company）が、それぞれ小売（配電）供給を行っている。PGCB 同様、DESCO は会社法の下に設立された公社である。

DESA, DESCO とも PGCB の設備から電力を受け，BPDB の大口需要家（Bulk consumer）として，BPDB に電気料金を支払い，PGCB に託送料（Wheeling charge）を支払う。

地方都市部

地方都市部の配電事業のうち，西部地域（Khulna および Barisal zone）は，西部配電公社（West Zone Distribution Company，以下 WZDC）が BPDB の子会社として分社化されている。

その他の地域については，基本的には BPDB の配電部門が行っている。パフォーマンスを改善するため，全ての地域を 22 の地区（サークル単位）に分割し，逐次 TPA (Target Performance Agreement)に基づく SBU 化を進めるとともに、引き続き分社化を進める予定である。2004 年度時点で 12 サークルが SBU 化されており、また、南部地域（チッタゴンなど）では分社化の動きが見られる。

農村電化

農村電化は農村電化庁（Rural Electrification Board，以下 REB）および各地の農村電化組合（Palli Bidyut Samity，以下 PBS）によって進められている。PBS の運営状況は 67 組合のうち 15～20 組合が黒字であり，この数字は今後増加することが期待されている。財務状況に応じて REB からの貸し出し条件に格差をつけ，財務状況の脆弱な PBS を支援する仕組みがある。

(d) Bangladesh Energy Regulatory Commission (以下 BERC)

2003 年に Energy Regulatory Commission Act が承認され，BERC が発足した。BERC は電気，ガス，石油の供給に関する料金の設定を担当している。料金レベルについては，BERC は上限値を設定し，その中で各組織が提案し BERC が承認する。

組織員は Chairman 1 名, Member 4 名で構成される予定だが, 現在はまだ Member 2 名しか決定していない。BERC が機能的な活動を開始するには時間を要するものと思われる（2005 年 2 月に要員補填（Chairman 含む）を行うとしている）。

1.2 支援動向

(1) 日本の援助実績・概要

日本政府は、1971 年のバングラデシュ国独立に対する支持を各国に先立って表明するとともに、電力開発においても、1972 年に設立された電力開発庁(BPDB: 当時、全国の発電、送電、配電設備の計画、建設、保守・運転を管轄)に対し、その電力開発推進を積極的に支援してきた。 1973 年から 2002 年までの累計援助額は、有償で US$ 503 million、無償で US$ 50 million にのぼり、２国間援助では最大（次いで中国、ロシア、クウェート）、ADB,WB に次ぐ規模となっている。

日本による支援は、発電、送電、配電、農村電化と多岐にわたっており、中でも有償資金協力によって建設された発電所は、拡張・改修を含めて 8 箇所におよび、バングラデシュの電力開発に顕著な貢献を示している。

日本の有償、無償資金協力によって開発された事業は表 1-1 の通りである（ODA 白書による）。

表 1-1 日本政府による開発援助実績（有償・無償）

分野	事業名	実施年*	事業費（百万円)**	実施機関
発電	(有償)			
	発電船(バージ)建設	1979	3540	BPDB
	カプタイ水力発電所拡張事業	1983	14930 ***	BPDB
	発電バージ建設(2)	1984	6050	BPDB
	ガスタービン発電プラント建設（ハリプール発電所）	1985	7510	BPDB
	シレット・CC発電所建設	1987	8170	BPDB
	シレット・CC発電所建設(II)	1993	5943	BPDB
	ハリプール発電所拡張	1993	15100 ****	BPDB
	発電船改修	1993	1561	BPDB
送電	(有償)			
	ゴアルパラ～バリサル送電線建設	1977	2554	BPDB
	ベラマラ～ファリドプール～バリサル送電線建設	1980	3100	BPDB
配電	(有償)			
	農村電化事業(フェーズIV-C)	1995	5442	REB
	配電網拡充及び効率化	1999	4376	REB
	農村電化事業(フェーズV-B)	2001	1460	REB
	(無償)			
	配電網整備(北西部)	不明	不明	BPDB

*)借款契約年
**) 円借款部分のみ(外貨分)
***) E/S (1981), 拡張事業 (I)(1983), 拡張事業(II) (1984)の合計額
****) 事業の内、改修部分完了、拡張(C/C化)部分はキャンセル （事業費配分は不明）

他方、積極的な電源開発にも関わらず、バ国は全世帯の 31%しか電力供給を受けられない世界的にも低い電化水準にあり、同国における電力供給可能範囲と一人あたりの電力量は低く、又その供給も不安定なままである。

具体的には、BPDB が維持管理を行う発電所の稼働率は、設備の老朽化等の理由で 43%と低い水準に留まるとともに、送電設備の老朽化や盗電、低い電圧による送電等の理由でシステムロス率は約 28.4%と極めて高く、このうち、配電部門におけるロス率が BPDB では 20.7%に及んでいる。

このような、援助の持続可能性を脅かしかねない状況に鑑み、日本政府によるバ国電力セクターへの支援においては、発電所、送電線、農村電化などのハードウェアの建設については、援助効率を精査しつつ、今後とも継続していくものの、今後は、ハード援助とソフト援助を結合することで、援助の相乗効果、持続発展性を発揮することが重要となっている。

このような背景の下、JICA-JBIC 連携により、バ国電力セクターに対するソフト支援プログラムが 1999 年より継続実施されており、本プロジェクトもその一環として位置づけられる（図 1-2）。ここでは、バ政府のセクター改革へのソフト面での協力として、JICA の技術協力（専門家および国別研修）や JBIC の事業実施促進調査（SAPI）を通じた、日本の経験・知識を活用した電力関連公社の経営・運営・財務体質改善等への知的協力を推進している。

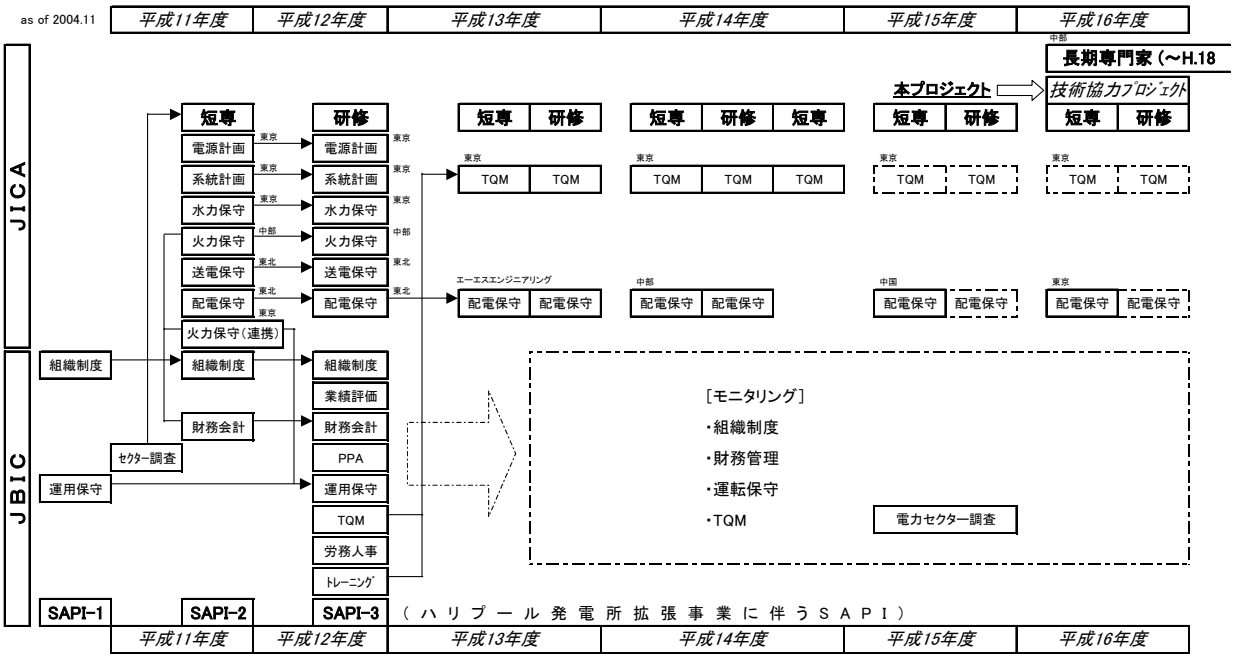


図 1-2 電力セクター ソフト支援プログラム

(2) 他の支援機関による援助概要

バングラデシュ国電力セクターに対する、他ドナーを含めた支援規模は、表 1-2 に示すとおりである。

表 1-2 バ国電力セクター支援規模（1973-2002）

($million)

Source	Loan	Grant	Total
Multilateral			
ADB	1,052	12	1,064
World Bank	685	0	685
Nordic Development Fund	10	0	0
Subtotal	**1,747**	**12**	**1,759**
Bilateral			
France	145	0	145
Germany	196	0	196
Islamic Development Bank	29	0	29
Japan	503	50	553
KFAED/Kuwait	164	58	222
OPEC	57	0	57
People's Republic of China	166	357	523
Russian Federation	393	18	411
SFD/Saudi Arabia	13	11	24
United Kingdom	135	0	135
US/USAID	46	0	46
Subtotal	**1,847**	**494**	**2,341**
Total	**3,594**	**506**	**4,100**

ADB = Asian Development Bank, KFAED = Kuwait Fund for Arab and Economic Development, OPEC = Organization of Petroleum Exporting Countries, SFD = The Saudi Fund for Development, USAID = United States Agency for International Development.
Source: ADB files.

出典:ADB (2003)

この内、最大の資金供与機関である ADB の支援実績は、表 1-3 に示す通りとなっている。同表に示すとおり 1990 年代以降、ADB はバ国電力セクターの構造改革が（世銀主導で）進む中、BPDB への支援は実施せず、発電・配電部門の分社化推進並びに、分社化された組織に対する支援に重点を移している。

WB による支援も、（詳細情報を入手できなかったが）基本的には ADB と同様（あるいは、より民間寄り）のスタンスを取っている。即ち、セクター構造改革進行下、BPDB を対象とした支援は実施せず、近年までは、IPP を中心とした民間資本に対する貸付に注力していた（即ち、公的援助は農村電化のみとなっていた）。しかし、2004 年以降 WB は一部方針を転換し、ADB と共同で分社化の推進とハード支援を行っている。2004 年 12 月時点で、南部地域（チッタゴンほか）配電公社のシステム増強と分社化、並びに Shidhirgangi 発電所のスクラップ&ビルドと分社化を進める予定である。

その他主要援助国（中国、ロシア、クウェート）の支援概要は不明である。

表 1-3 ADB 援助実績

Loan No. ($ million)	Amount	Date of Approval	Name of Project
141-BAN(SF)	9.25	17 Oct 1973	West Zone Power
142-BAN	1.20	18 Oct 1973	West Zone Power
212-BAN(SF)	4.55	19 Dec 1974	West Zone Power - Supplementary
325-BAN(SF)	27.75	09 Dec 1977	Chittagong Power
523-BAN(SF)	26.50	22 Sept 1981	Power System Rehabilitation and Expansion
587-BAN(SF)	35.00	21 Oct 1982	Ashuganj Project
636-BAN(SF)	82.00	13 Sept 1983	Power Transmission and Distribution
683-BAN(SF)	120.00	14 Jun 1984	Sixth Power (Sector Loan)
751-BAN(SF)	40.50	31 Oct 1985	Seventh Power
963-BAN(SF)	165.00	11 Jul 1989	Eighth Power
1356-BAN(SF)	50.00	30 May 1995	Rural Electrification
1505-BAN(SF)	134.40	18 Dec 1996	Ninth Power
1730-BAN(SF)	75.00	21 Dec 1999	Dhaka Power System Upgrade
1731-BAN	82.00	21 Dec 1999	Dhaka Power System Upgrade
1884-BAN(SF)	60.20	17 Dec 2001	West Zone Power System Development
1885-BAN	138.70	17 Dec 2001	West Zone Power System Development
Total	**1,052.05**		
TA No. ($ '000)			
095-BAN	250	17 Oct 1973	Management and Accounting Reforms Study
111-BAN	50	09 May 1974	Energy Survey Inception Study
130-BAN	1,250	31 Oct 1974	Bangladesh Energy Study
218-BAN	250	09 Dec 1977	Power System Rehabilitation and Expansion Study
456-BAN	2,100	15 Apr 1982	Energy Planning
460-BAN	50	07 Jun 1982	Power Transmission and Distribution
487-BAN	650	21 Oct 1982	Power System Master Plan
672-BAN	75	15 Feb 1985	Seventh Power
714-BAN	1,355	31 Oct 1985	East Zone Thermal Power Project
1743-BAN	90	18 Aug 1992	Review and Electricity Legislation and Regulations
1962-BAN	600	11 Oct 1993	Preparation of Power System Master Plan
2004-BAN	1,000	26 Nov 1993	Financial Management Upgrade of BPDB and DESA
2338-BAN	211	30 May 1995	Solicitation for Private Sector Implementation of the Meghnaghat Power
2715-BAN	175	19 Dec 1996	Valuation of Assets of DESC
3129-BAN	900	16 Dec 1998	Support to the Energy Regulatory Authority
3244-BAN	90	20 Aug 1999	Capacity Building - Dhaka Electric Supply Authority Co., Ltd.
3343-BAN	1,000	17 Dec 1999	Corporatization of the Ashuganj Power Station
3801-BAN	900	17 Dec 2001	Corporatization of the West Zone Distribution Operations of the Bangladesh Power Development Board
3978-BAN	850	07 Nov 2002	Corporatization of the Dhaka Electric Supply Authority
Total	**11,846**		

Source: ADB files.

第2章 TQM･配電維持管理に係る協力内容および成果レビュー

本章では、2001 年度以降の本プロジェクト成果をレビューする。

2.1 手法

平成 11 年度以降の JICA による BPDB 経営改善支援の効果を評価するため、以下の調査・分析を行う。

- 平成 11 年度以降の短期専門家派遣報告書等に基づき、支援の実施内容、効果を分析する。
- 平成 13 年度以降の本邦研修参加者に対するアンケート調査、ならびにカウンターパートに対するヒアリングによって、援助効果を把握する。

2.2 活動総括（過去の報告書の分析等）

過去の報告書並びに今回技術移転活動結果に基づき、以下の点を分析・評価する。

- 援助の概要
- 成果：目的達成度並びに、更なる課題に認定

2.2.1 援助活動の概要

本プロジェクトは、バングラデシュ国電力セクターに対し、1999 年度より継続して短期専門家の派遣と国別研修を実施しているものである。図 1-2 に示すとおり、JICA は 1999 年度、電力セクター全体（６分野）の技術的課題をレビューし、重点的にソフト支援が必要な分野の絞り込みを実施した。また、1999 年度から 2000 年度にかけて JBIC は BPDB ハリプール発電所に対し３度にわたる事業実施促進調査を実施し、JICA もこれに呼応し短期専門家派遣並びに国別研修を実施した。

これらの成果を受け、BPDB は、ハリプール発電所の改革（独立採算事業部制化 Strategic Business Unit（SBU）、もしくはその主要要素である Total Quality Management (TQM)）から得た経験を、他の発電所や配電部門にも展開することを決定し、JICA もこれを支援するため、TQM 並びに、（上述の６分野調査を受け）配電維持管理分野を重点分野とし、2001 年度以降、継続して専門家を派遣、派遣結果と連動した国別研修を実施している。また、2003 年度からは、電力エネルギー鉱物資源省に長期専門家が派遣され、現在は、長期・継続的な経営改善支援の一環として、本プロジェクトと長期専門家とが相乗して､バ国電力セクター支援プログラムが実施されている。

(1) 投入

2001 年度から 2004 年度 までに投入された短期専門家派遣指導は、TQM５人月、配電維持管理４人月であり、国別研修は、両分野とも１ヶ月コースを 4 回、累計受講

者数は 40 名（各分野とも 20 人）、内訳は BPDB 32 名（TQM 17／配電 15)、DESA 3 名（配電）、WZPDC 1 名（配電）、PGCB 2 名（TQM）、MEMR 2 名（TQM）となっている。　専門家は、当該分野において十分な経験を有する電力会社職員が中心となっており、十分な専門性を有しているものと判断される。

一方、配電専門家においては専門家の所属会社が毎回異なっており、情報の引継ぎ等で一部非効率な側面が見られている。 即ち、2001 年～2003 年の配電専門家は 3 名共、いわゆる技術レベルの現状確認調査を実施しており、技術移転の焦点を定めることに、ある程度の時間を費やしている。なお、体調不良により活動が限定的となった例も見られる。

2004 年度の配電専門家においては、2002 年度に TQM 専門家としての経験を有すること、援助スキームの変更（専門家派遣から技プロへの変更）により、事前検討が十分になされたことから、調査上の焦点は初期段階で明確であったと思われる。

TQM において技術移転に比較的進展が見られた要因としては、専門家の所属会社が同一であったため情報共有が進みやすかったことに加え、技術移転先として TQM Promotion Office という明確な Target 組織が存在している点が大きいものと思われる。

(2) 活動方法

活動方法は、専門家による個別技術指導が中心である。TQM の場合、TQM Promotion Office を中心に、TQM 推進制度の確立を目的とした指導がなされ、配電においては、主に現場事務所を対象に、配電ロス、事故停電率の削減を目的とした技術指導が行われている。各専門家とも派遣期間中にセミナーを開催し、技術指導結果並びに今後の課題について、情報共有が図られている。セミナーにおいては、カウンターパートの参画を極力促すことにより、現地側のオーナーシップ醸成に努めている。

一方、2002 年～2003 年においては、TQM、配電専門家の派遣時期が同一でなかったため、両者間での連携が進みずらかったようである。即ち、配電において TQM 活動の重要性が認定されているにもかかわらず、TQM 専門家との連携不足により、配電分野での TQM の具体展開に対する支援は手薄であったと言える。

2004 年では、この点に配慮した援助方法の改定がなされたため、両専門家における課題の共有・意思疎通が進んだものと考えられる。具体的には、両専門共同による、配電現場の視察・指導が行われている。

研修プログラムは、現地での指導結果、専門家による助言を受けて構成されており、研修生のニーズも概ね満たしている。また、前年度研修生の評価結果をうけ、研修内容の改定・改善が進んでいる。

2.2.2 成果

2.2.1 に示す指導を受け、BPDB には 2002 年 8 月に TQM Promotion Office、2002 年 11 月には経営幹部による意志決定機関 Steering Committee がそれぞれ設置され、BPDB 全体の TQM 推進・展開に担務している。また、2003 年 3 月には本邦国別研修受講生を中心とした Task Team が組織され、研修・啓蒙・現場展開活動を補完・推進する役割を担っている。

配電設備維持管理に関しては、マイメイシンを始めとする複数の配電事業所で初歩的な QC 活動が実施されるに至り、予防保全的な維持管理活動に関する理解と実践が進みつつある。また、これら維持管理活動を支える制度的方策として業績管理方法の見直しが進められている。

このような成果が見られる一方、TQM・配電維持管理両分野とも、特に今後の持続発展性の側面において課題が残されている。TQM においては、推進に必要な組織的基盤は整いつつあるものの、第一線現場間の活動の質に開きが見られると共に、全社展開の推進速度は日本の経験と比較すると遅いといえる。今後、TQM 推進諸活動の実行に必要な予算的担保や経営幹部のコミットメントを確保する、研修・啓発・広報制度を補完・整備するといった課題が残されており、3.1 で示した改善策を着実に実行することが望まれる。

また、配電維持管理においては、基礎的な保全活動が展開しつつあるものの、活動は一部の事業所にとどまっており、また、活動が今後持続するための組織的・制度的基盤は弱く、意識改革（コスト意識の確立など）も半ばの状況である。これらの課題を解決するため、現在確立されつつある成功モデルの質を高めつつ、これを拡大・標準化するための方策を確立する必要がある。完了報告書で報告したとおり、維持管理にかかわるデータ管理・利用方法、意思決定方法の改善を進めることから開始する必要がある。

2.3 アンケート調査

2.3.1 調査概要

現地において実施したアンケート調査の概要は以下の通りである。

- 対象者：平成１３年度以降国別特設研修（TQM ならびに配電維持管理）受講者：３０名（内訳：BPDB 26, DESA 3, MPEMR 1）
- 目　的：経営改善活動の実践状況の把握、実施に当たっての課題・障害の把握
- 形　式：オープン記載形式（質問事項に対して自由な回答、添付資料による説明を求めるもの）
- 配布・回収：カウンターパート(TQM Promotion Office)を通じて、11 月 19 日週に配布、12 月 10 日を締め切りとして回収

回収したアンケート結果は添付資料の通りである。 配布先について、カウンターパートとの協議の結果、BPDB からの参加者 26 人の内 4 名が、現在国外で在職していること、MPEMR 職員は他の官庁へ異動となったことが明らかとなり、最終的に、２５名に対して配布した。

調査期間中、幾度かの督促を行ったものの、回答が得られたのは 14 名からである（回答率 56%）。回答者はいずれも BPDB 職員であり、DESA からは回答が得られなかった。

2.3.2 調査結果

表 2-1 に、調査した質問項目並びに、得られた回答を整理・分類する。これに続き、各項目に対する評価を行うものであり、評価に当たっては、回答者からの意見と併せて、今回派遣専門家が現地職員との討議を通じて得た認識も反映することとする。

表 2-1 アンケート調査内容並びに結果

質問項目並びに回答	TQM	配電維持管理
母数	10	4
現職務との関係		
密接に関係している 1)	3	3
直接的な係りを保っている 2)	4	1
間接的な関係 3)	3	
ほぼ無関係		
技術移転		
職場を越えて積極的な普及を図っている 4)	3	1
職場活動を通して積極的な普及を図っている	2	2
普及活動は限定的 6)	5	1
普及活動に消極的		
移転・普及活動成果		
高いレベルの課題解決活動が見られる	3	1
限定的（e.g., 5Sレベル）な活動が見られる	5	2
普及・啓蒙段階にとどまっている	2	
何らかの障害により活動が停滞している		1
職場運営・風土の変化 7)		
目に見える変化が現れている 8)	1	1
職員のMoraleの変化が見られる	2	2
普及・啓蒙段階にとどまっている	2	
変化は限定的	1	1
活動推進に対する障害・課題 9)		
構造的問題 10)	3	
上司、経営層の理解不足	6	2
職員に対する教育方法・機会の問題	3	3
その他 11)	1	1
回答なし	2	

Note:

1) TQM: TQM Promotion Officeに在職／配電：配電維持管理業務に在職
2) TQM: Task Team あるいは研修講師として参画／配電：配電工事業務に在職
3) TQM: 職場での推進業務・啓蒙活動
4) 他職場との連携による課題解決活動／他職場に対する積極的研修活動実施
5) 職場事情を考慮した、普及上の工夫が見られる（独自の推進組織構成など）
6) 普及は行っているが、TQM Promotion Officeの指示に従うのみ
7) 職場数：TQM 6/ 配電　4
8) 権限の委譲、業務プロセス・マニュアルの改訂が見られる
9) 複数回答をカウント
10) 省庁による政治的介入、（BPDB内）意思決定プロセスの問題、経営幹部の人事
11) Promotion Office側のサポート,体制

(1) 現職務との関係

回答者の大部分が､移転された技術を何らかの形で職場活動に応用できる職務に在籍している。ただし、回答者以外には、物理的に応用不能な者（海外出稼ぎ者）、無関係な部署へ異動した者（MPEMR からの参加者）が実際に確認されており、また、非回答者の現職務（配電研修生に多い）は不明である。

組織内における、研修生の有効な配置は、技術移転の前提であり、重要性には疑いはなく、実際、TQM においては、研修生の組織化（Task Team）や、優秀な人材の登用（TQM Promotion Office への異動など）も見られている。一方、人事上の意思決定には、構造的（完全 Seniority による異動など）側面も影響しており、必ずしも適材適所は達成されていないようである。

(2) 技術移転活動

受講者の内、3-4 割程度は、得られた知識を積極的に周囲に移転しようとしている。積極的態度を示す回答者においては､現職の業務内容が技術移転を必要とするケースが多いようである。即ち、TQM Promotion Office に在職する場合、あるいは、配電ロス削減等の達成において他者の協力が不可欠な場合など、業務上の「必要性」が技術移転ドライブとなっているようである。

普及が限定的となる理由として、1) 職場の上司等の協力・理解の不足により、普及活動に対する支援・評価が得られない 2) TQM Promotion Office 等、推進管理組織の指示待ち　3) 個人的な資質（得られた知識を囲い込んでしまう）　といった要因が見られている。

(3) 移転活動結果

移転した技術を用いて、参加者の一部は、かなり高度な課題解決・検討活動を実施している。例えば､TQM Promotion Office では､TQM 関連研修制度の確立にあたって、多くの Stakeholder を巻き込み意思決定を行うと共に、QC 手法を用い、推進制度の改善等を実施している。Mymensingh 配電事務所では、三相回線の平衡業務などを恒常的に実施している。

一方、活動が限定的な場合が多く見られることについて、回答者の多くは、TQM による「業務の進め方の改善」については、その必要性・手法等について理解しているものの、これを職場において実展開し、経営効率として実体化するに当たり、技術的・制度的障害に直面しているようである。これは、もう一段進んだ技術移転が必要であることを、示唆しているものと思われる。

今後の方策として、各技術部門（発電・送電・配電）において、各分野あるいは職場での個別課題に対する TQM の展開を支援することが考えられる。

(4) 職場運営・風土の変化

TQM Promotion Office 並びに Bogora 配電事務所では、これら組織を統括する経営幹部（Member Admin, Chief Engineer）のリーダーシップにより、実施部隊にかなりの意思決定が（実質的に）認められるケースが見られている。また、Mymensingh 等においては、従業員のモラルに明らかな変化が見られている。

一方、職場風土の改善が進まない職場では、上司の理解不足が原因となっているケースがあるようである（タンガイルの例など）。

(5) 推進活動に対する障害

上司・経営層の理解・活動への関与不足、並びに職員教育不足を挙げる回答が多い。本人の努力不足に対する理由付けとしての側面もある（例えば､教育の不足については、これを本人の役割として認識していないケースも見られる）が、経営層による方針管理等の TQM 活動、研修施設の充実に対するニーズは高いものと思われる。

2.4 関係者聞き取り調査

現地活動中における、経営幹部との意見交換、カウンターパートとの協議、タスクチームミーティング・ACE ミーティングなどへの参加、現場訪問時でのディスカッションなどにおいて、プロジェクト関係者とプロジェクトの成果、彼等が直面している問題点などに関してディスカッションを行った。主な内容は、完了報告書、並びに前項(4.3) に反映されている。

第3章 TQM を利用した今後の方向性

本章では今後の TQM 活動の方向性と課題、ならびに援助機関の役割について述べる。なお、下記括弧内に示す章節番号は業務完了報告書の当該セクションに対応する。

3.1 BPDB における TQM Action Plan の変更・追加

BPDB における TQM 活動の現状を鑑み、Action Plan を以下のように変更する必要がある。

(a) 既存制度の軽微な変更 ― Action Plan に反映済み、TQM Promotion Office が主体的に実施

- 既存研修制度の変更（4.2.1(1), 4.2.3(1)）
- 新規研修（経営幹部対象）の企画・立案（4.2.3(2)）
- ACE Meeting における検討内容の変更（4.2.1(2)）
- タスクチームミーティングの運用方法の変更（4.2.1(2)）
- 課題解決活動 QA 集の作成（4.2.4(1)）
- 年次活動評価報告書の作成（4.2.4(2)）

(b) 既存制度の変更（他部門に跨るもの）― 反映未実施、関係組織が協議の上実施

- 研修（TQM 以外プログラムを含む）の新設・改廃基準の策定（4.2.3(2)）
- 研修（TQM 以外プログラムを含む）の再構成（4.2.3(2)）
- SBU（あるいは分社化）の促進（4.2.5(2)）

(c) 既存制度の変更 ― 反映未実施、経営幹部が主体的に実施

- 経営幹部の業績評価・任用基準の見直し（4.2.2(2)）
- 表彰・報償制度の見直し（4.2.4(1)）
- 業務監査・考査組織の設置、第 3 者専門家の任用を含めた評価制度の確立（4.2.4(2)）
- 「経営品質向上促進資金」の設置と運用ルールの策定（4.2.5(2)）
- 経営計画・予算制度の再編、財務組織の見直しを含めた体制の整備（4.2.5(2)）
- 資金調達の多様化に向けた政府との協議（4.2.5(2)）
- プロセス管理に向けた検討、管理の実施（4.2.5(2)）

3.2 セクター改革との整合

TQM による組織能力強化は、現在進められているセクター改革に貢献する形で進めていく必要があり、支援の継続に当たっては、改革への貢献・効率的な支援の実現のた

めに、今後の改革の方向性を見極め、どこをカウンターパートにどのような支援を実施するべきか、を検討することが必要であると考える[1]。

セクター改革の結果、現在の BPDB は、複数の発電会社を統括する持ち株会社に移行する予定である。持ち株会社の機能や権限については、現在のところ明確な方針は示されておらず、TQM の推進体制、組織上の位置づけも不透明である。 TQM の効果的な推進には、世銀など他機関との意見交換を踏まえて、BPDB 持株会社に、どの程度の管理機能（技術計画機能や経営管理機能）と権限を残し、それに必要な資源を配分するか、という課題について合意を形成し、最適な TQM 推進体制・援助対象について検討する必要があると考える。

3.2.1 BPDB 持株会社の権限と機能の明確化

分社化された発電、配電部門会社における経営管理に、持ち株会社がどのように係ることとなるのか（なるべきなのか）について、明確にする。持ち株会社による経営管理機能については、以下に示す関与方法がありうる。

- 資本関係のみ : 連結会計上の処理を行うのみであり、経営管理上の関与は限定的（Board Member として、経営の監督・助言を行う程度）
- 結果管理 : 各会社の経営上の結果（システムロス率、事故停電時間、収益率など）に対する目標値を事前に協議・設定し、その結果に対する説明責任を負わせる。ただし、結果に対するプロセス、あるいは会計処理上の内部統制等については（既存の法制度の下）各会社の裁量にゆだねる。
- プロセス管理 : 結果のみならず、そこに至るプロセスに対する管理を行う。各会社の「経営プロセスの質」即ち PDCA に基づく意思決定や、内部統制のあり方など、について踏み込んだ監査（いわゆる業務監査・考査）を行うこととなる。なお、TQM は、プロセス品質の継続的向上を目指すものであり、この点での管理が、（どの組織が管理上の責任を負うにせよ）本来望ましいといえる。
- 人事管理 : 結果、プロセス管理のみならず、各会社の人事面においても影響力を発揮し、経営目標の達成を促す。

なお、上記選択肢のうち、「資本関係のみ」が、各発電・配電会社の自律性が最も強く、「人事管理」が最も弱くなる（すなわち、BPDB 持ち株会社の管理が強い）。

持ち株会社の機能の明確化に当たっては、これまでの分社化（PGCB, WZPDC, Ashuganji PC, DESA-DESCO）の経緯と現状を調査した上で、これに基づき、他の利害関係者との討議を行い、今後の各発電・配電会社の責任と権限の範囲（予算、人事・

[1]「TQM の推進」を理由に、構造改革に対して BPDB が消極的となることがあってはならない。

研修、設備移管、ボードメンバーetc）、これを誰がどのような形式で管理・統制（ガバナンス）するべきかについて合意を形成する、というプロセスが考えられる。

3.2.2 セクター改革後の TQM 推進体制

TQM によるプロセス革新を進める上で、具備すべき機能は以下の通りである。

- 推進・サポート機能：TQM による経営効率の実現化をサポート、促進する
- 研修機能
- 企画・計画機能：プロセス革新にかかわる目標、方針を定める
- 業務監査・考査機能：経営プロセス、内部統制状況に関し、踏み込んだモニタリング・評価を行う。

これらの各機能について、どのような組織・体制で実施するのが望ましいのか、1. で検討した持ち株会社－各発電・配電会社間での機能分担、ガバナンス構造に照らした上で、検討を行う必要がある。具体的には、上記各機能の関連性も考慮しつつ、a)分社化された各組織に機能を分散させる、b)持株会社に機能を残し、分社組織の統一的管理を行う、c)独立性の高いその他組織（を別途設立し）に機能を移管し、各組織に TQM 関連サービスを提供する、といった代替案がありうる。

一般的には、各機能とも、現場に近い組織に位置したほうが、現場のニーズに対して、即応し密度の高いサービス・管理がなされるものと期待できる一方、各機能とも規模の経済性が働くため、あまり分散させることは経済的に非効率となる可能性がある。　また、現状の TQM 推進においては、BPDB 本部に位置する TQM Promotion Office が中心となって、BPDB に属する各部署に対して全てのサービスを提供することとなっており、分社化された PGCB, WZPDC に対しても、研修実施サービスを提供している。

これらの点を踏まえ、ガバナンス体制と TQM 各機能との関係について、表 3-1 に整理した。

表 3-1　TQM 各機能に対する持ち株会社の関与

	促進・サポート	研修	企画・計画	監査・考査
資本関係	△	△	×	×
結果管理	○	△	×	×
プロセス管理	◎	○	○	◎
人事管理	◎	◎	○	◎

◎：持株会社が主体的に実施すべき

○：持ち株会社が積極的な助言・促進を行うべき

△：持ち株会社の関与も含めて様々な形態がありうる

×：持ち株会社は関与すべきでない（各発電・配電会社の自主性に任せる）

3.2.3 支援方法へのインプリケーション

上記の考察を踏まえると、今後の TQM 支援には以下のような方向性が考えられる。

- TQM 促進の高度化、具体的成果の追求については、促進機能の強化、研修の充実によって、ある程度達成される可能性がある。表 3-1 に示すとおり、これらの機能は、将来の事業形態に係らず、早期に支援を進めることで構わないと考えられる。すなわち、将来、どのガバナンス体制をとったとしても、これらの２機能については、現行の BPDB を支援することで、援助効果が持続する（すなわち引き継がれる）ものと考えられる（△,○,◎が占めている）。
- 研修機能、情報収集・提供（促進機能の一部）については、規模の経済性が強く働くことから、集約された組織が望ましいのも事実である。表 3-1 は、BPDB 持ち株会社の関与について記載しているが、将来的には、これらの機能は持ち株会社の一部である必要はない（△の位置づけ）。まずは、BPDB 関係箇所を支援した後、新しい組織（あるいは別会社）を設立、機能を移管し、各発電・配電会社に研修／情報サービスを提供する(見返りに収入を得る)ことも可能である。
- 企画・計画、監査・考査機能は、経営のあり方、ガバナンスの根幹と係ることであり、将来の事業構造をにらみつつ、慎重に制度化する必要がある（即ち、将来の事業構造によって×にも◎にもなりうる）。援助としては、まずは制度化までは踏み込まず､研修を通した必要な方針管理能力の増強程度にとどめることが望ましいか。
- 具体的成果の追求に当たっては､対象箇所を絞った重点志向による支援が必要であると思われる。重点的な支援においては、対象候補事業所（あるいは会社）の

Top Management の意欲・コミットメント、インセンティブ制度の有無などを十分調査し、援助効果が確実に発現・持続することを見極める必要がある。　また、重点志向の結果、効果の波及範囲が限定される可能性、これまで育成した TQM Promotion Office や中核者を引き続き活用する方策等についても、別途検討する必要がある。

3.3 援助機関の役割

TQM をさらに推進するための援助機関の役割について、以下の点を推奨する。

- BPDB ならびに電力セクター・その他公的セクターにおける、経営管理能力向上の重要性、これを実現する手段としての TQM の有効性について、政府機関（あるいは他の援助機関）との合意形成に向けた側方支援を行う（主体は BPDB 経営幹部）。具体的には、政府による人事権の行使等にあたり、経営幹部のコミットメントの重要性に対する留意を促進する（4.2.2(1)）；資金調達の多様化など、BPDB から政府機関に対する働きかけが必要な場合に適切な助言・促進を行う（4.2.5(2)）　などが考えられる。
- これまでの TQM 導入支援をさらに発展させ、具体的な成果を追及し、これを客観的に評価する仕組みを構築する（4.2.4(2)）。具体的には、
  - 電力関連の各技術に詳しい専門家を派遣し、TQM の具体的展開を、対象箇所を絞って（重点的に）指導・現実化する。
  - 業務監査・考査機能の形成支援・助言を通じ、業務品質の管理能力を促進する。（4.2.4(2), 4.2.5(2)）
  - （必要に応じて）経営幹部の意思決定過程をモニタリングし、これを迅速化、的確化するための助言を行う。（4.2.5(2)）
- 経営幹部による方針管理技術向上に向けた促進活動を行う。具体的には、BPDB から以下の分野に係る要請がなされた場合、その実現可能性に向けた検討を行う。
  - 経営幹部研修実施支援（バ国内実務指導あるいは、本邦研修支援）（4.2.2(2), 4.2.3(2)）
- 将来の持ち株会社機能等に関し、関係機関と協議する。

添付資料

アンケート調査結果

Mr. Md. Abdul Majid
(TQM)

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

I am work as Assistant Chief Engineer, Generation. My main responsibility is to assist Chief Engineer Generation to perform his responsibility. As many as 11 power stations is under our control. Fanchugony Power station is under our office which is also under TQM. So, from our office we advice them, co-operate them, to practice TQM in there office.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]

As a Task Team Member of I advice the QC circle Member of System Planning directorate how to present papers, how to select the 1st Problem to solve, ~~to~~ for the presentation in the annual QC circle competition

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]

As a Task Team Member of I am responsible to look after some directorate, so every month I try to visit them and sit for meeting ad discussion. During discussion we share our knowledge to the different Q.C circle members of different office. I also participate in the Task Team Meeting & Asst. Chief Engineer's Meeting for TQM.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

Chief Engineer. Generation Office is not under TQM Program

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

The Top Management of BPDB & the officials of Power Divisions need TQM Training.

4. Your Profile
   - Career record (since employment)
   - Academic Record

1. A.E – Design – I — 1984
2. A.E TPD – 1 — 1985
3. A.E – AGS, Div-1 — 1986
4. Deputed to Power Division – 1986 – 2000
5. SDE, Program — 2000 – 2001
6. SDE, Training — 2002 – 2003
7. XEN, PRP — 2003
8. XEN, Asst. C.E, Gen – 2003 – 2004

B.Sc Engineering Electrical & Electronics

End of the questionnaire

Re: Questionnaire for Project Review & Evaluation

(TQM)

BPDB: Mr. S.M. Akhtaruzzaman;
Mr. Md. Adam Ali Sheikh;
Mr. Sayeed Akram Ullah;
Mr. Mir Ruhul Quddus;
Mr. Md. Tahir Mian
Ms. Nasrin Parveen;
Mr. Md. Abdul Majid;
Mr. M.A. Hasnat;
Mr. Mahbubul Hoque
Mr. Khondocker Abul Aslam;
Mr. Khan Md. Abul Baser;
Mr. Alam S.M. Faisal;
Mr. Ali S.M. Haidar
Mr. Huq Sayed Mazharul
MEMR: Mr. Islam Sheikh Nazrul

(Distribution)

BPDB: Mr. Muhammad Joynal Abedin;
Mr. Mohammad Badrul Islam;
Mr. Md. Shirajul Islam;
Mr. Md. Abdul Halim;
Mr. Howlader Md. Shirajul Islam
Mr. Md. Mahfuzur Rahman
Mr. Mr. Asit Kumar Sarkar
Mr. Ashok Kumar Ghosh
Mr. Md. Enayet Karim
Mr. Alam Mohammed Khorshed
Mr. Hazrat Ali
Mr. Kazi Abdul Bari
DESA: Mr. Sm Shahidul Islam
Mr. Aminur Rahman
Mr. Mohiuddin A.H.M

Dear Sir and Madam,

Thank you for your continuous cooperation and commitment to the JICA cooperation projects. This questionnaire survey is aiming at evaluating the effectiveness of TQM/Distribution technical cooperation program by JICA, 2001-2003. As this project aims at improving the management capacity, questions will ask you about your and your office's behavioral/ work process change thanks to the series of JICA activities.

Please fill-out the questionnaire; attaching any material to describe concrete example is more than welcome. When answering, please describe the situation of you and your office as concretely as possible.

Please use this questionnaire to feedback yourself and improve your management. Thank you for your cooperation!

Yours Sincerely,

JICA Technical Cooperation Project Team;

Yoshikazu Terai　　Shigetoshi Otaru

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

My position is executive engineer (instrument) in Siddhirganj power Station. My responsibility is to keep all the instruments and auto control systems of the power station in good working condition.
To build a strong workplace, we have to make 5-S practice, create quality groups, make effective managerial system. In this way my job relate to TQM.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]
My power station is a very old one. Instruments have usually problems. I study the catalougs of Instruments and make brainstorming. I do myself and ~~encou~~ encourage my Sub-ordinates to do the same. We attened quality circle meetings and analyse the problem to identify solution.

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]
By ~~atten~~ participating quality circle meetings and task team meetings I share my acquired ~~knowledge~~ knowledge with others.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

We have one QC groupth for instrument division and two others for mechanical division. We are going to create more QC groupths for other divisions also. The QC groupths of instrument division have solved two significant problems. Usually all persons in the groupth participate in activities.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

The TQM promotion office helped up to promote QC activities in my office.
The top management of the power station have to take interest about TQM for its effective application.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

1) The QC groupth of instrument have two good examples of solving problems: a) Calibrating and installing of hydrogen purity analyzer, b) Installing the vibration and axial shift protection of turbine in a self designed method.
2) We list problems of the work place and select one for solution. We analyse the problem to identify solution, then we implement the solution,

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

In my office TQM have now very early stage. We have no significant change in managerial level at this stage.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

We have some improvement in communication. We shall start new meetings.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Now my colleagues and subordinates are working in QC groups. We are trying to create harmonous human relations based on bonds and brotherhood.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

We are also co-operate with Shikalbaha power station to execute tasks.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

TAM in Siddhiganj power station have very early stage and have no significant effect on Budget planning.

Performance evaluation and incentive/reward system is not introduced.

SBU System is not introduced in Siddhiganj power Station.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

Bangladesh power development Board is an organization mostly of engineers. But most people here busy with paper works. Few people try to understand practical jobs and sophisticated engineering. usually talanted and devoted peoples are ignored and have no encouragement. The situation may be changed with the help of TQM.

performance evaluation and incentive/reward system may be introduced to encourage mass people in the bottom level.

4. Your Profile
   - Career record (since employment)
   - Academic Record

Career record: Working in Bangladesh Power development Board since 30.03.1981 to till and have experience on VHF and carrier Communication, telemetering, Chid network and power station maintanence work.

Academic Record: Bachelor of engineering (Electrical)

End of the questionnaire

S/M
02/12/2004
(MAHBUBUL HOQUE)

Questionnaire for Project Review & Evaluation: overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q 1.1 : Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution) ?

1. To help implement & Promote TQM Activities in BPDB.

2. Make a proposal to the steering committee to formulating policy matters to implement TQM promotion of BPDB.

3. Arrange seminar and to develop training program to promote a quality management system in BPDB & implement those programs.

4. Develop a plan & procedure for proper filing, maintaining records, supervision Of official staff and other administrative work.

5. All Administration & Accounts related work of TQM office.

6. Other activities assigned by the authority.

Q 1.2: Describe concrete job examples where you applied transferred technologies.

(Please fill out concrete example in your job)

As a Deputy Director of TQM promotion office it is my duty to help implement TQM in BPDB . It is a part of my duty to arrange Seminar, Awareness meeting & to motivate employees and provide knowledge on TQM to them. As a trainer of TQM, I try my best to transfer my knowledge & technologies to the staffs & officer's of BPDB.

Q 1.3 : How do you share your acquired knowledge with others ? Please give concrete examples

(Please describe your concrete activities on the job and of the job)

As an officer of TQM office & member of Task Team, I share my knowledge with other officers. We discuss on the strategies as to the implementation and promotion of TQM activities in BPDB. In Steering Committee meeting, I prepare proposals/ideas, which discussed as to how Quality Management system can be promoted at all levels of TQM.

TQM

Nasrin Parveen
Deputy Director
TQM Promotion Office
PDB, Dhaka.

2. Progress of management improvement

2.1 QC Activities

Q 1.1 : Describe the Q.C activities at your office : What activities are underway/How many circles are there/How many problems have been solved/ How many persons (out of how many total personnel) participate in activities ?

In our office 1 (one) Q.C circle is working. There are no regular staffs. All office staffs are working on casual basis. Their service is not guided by 'Service Rules'of BPDB,It will be a time consuming matter to motivate such office staffs towards the Quality Management system.

Q 2.1.2 : Describe concrete procedure to install QC circle program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now ? Is there any feedback to training program in Japan ?.

Not Applicable.

Q 2.1.3 : Quality of Q.C activities

(1) Provide good examples of Q.C report - please attach the report
(2) Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

2.2. Effect on daily operation and management

Q 2.2.1 : Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]
Yes, there are some changes in management. Behavior & attitude changes. Communication gap between staffs & officers are reduced. Q.C circle activities increases workers confidence . Now they are more active, sometimes they give decisions what type of work with a view to improve quality, should be done.

Q 2.2.2 : Describe any improvement in communication . Do you start any new meeting ?

[Please describe concrete example with identified effects]
To implement TQM throughout BPDB, TQM Promotion office Introduced a meeting of ACE (Assist chief Engineer). Now they are responsible for implement TQM of zonal (Chief.Engg) offices. Chief Engineer is the head of a zone (zonal organogram attached here with) ACE assists Chief Engineers. He represent C.E's activities of communication to the officers under his (C.E.) zone. Member (Admn) is the convener of this meeting, So we think that this meeting can accelerate TQM activities.

Q 2.3 : **Effect on attitude**

Q 2.3.1 : Describe any change of your attitude toward your colleagues and subordinates . Now, how do you communicate with them ?

[Please describe concrete situation and your attitude]
Yes there is something change in my attitude towards my subordinate. Now I feel free to have a open discussion and exchange of views on Quality Management System.

Q 2.3.2 : Describe concrete examples where you cooperate with other office/ other divisions to execute tasks :

As a officer of TQM office I give the instruction to implement TQM Activities like:

1. To introduce 5- S activities .

2. Work with Q.C circle.

3. Arranged Training for officer's & staff. We already arranged 15 (Fifteen) Training course for officers & staff up to oct -2004 at the Regional Training Center (RTC) of Tongi, Chittagong, Rajshai & Ghorashal.

4. TQM office arranged seminar/ meeting at Dhaka, Chittagong, Comilla, Tongi, Mymensing & Ghorashal.

3. Management system

Q 3.1 : : Describe any change in management system . Do you have any change in :

- ❖ Budget planning
- ❖ Performance evaluation and incentive/reward system
- ❖ Do SBU/PTA systems bring any tangible differences in your office ?

(Please describe concrete change and its effects : any attachment is welcome

Performance evaluation:

TQM office introduced Incentive/ Reward system on 5-S activities & Suggestion scheme. TQM office proposed to TQM steering Committee for Reward for '5-S activities' and 'Suggestion scheme' for approval. TQM steering committee recommended the proposal & then BPDB's Board meeting discussed the matter of financial involvement against such rewared system and eventually approved it.

Q 3.2: What do you think the problems to in order to further develop TQM program?

(Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial

Some head of the office/manager sometimes becomes reluctant to implement TQM activities under their purview of work. Now it is the time to impart them proper training on managerial activities. We have not sufficient advanced Training material on Managerial level activities. Comprehensive training program using modern techniques (multi-media presentation) of training, topics on Quality Management, heath, safety and Environment may be considered effective towards motivating the employees/Managers for better Quality management system of an organization,Follow -up of such training program needs to be ensured.

4. Your Profile

- Career record (since employment)
- Academic Record

- Career record & Academic Record Attached here with.

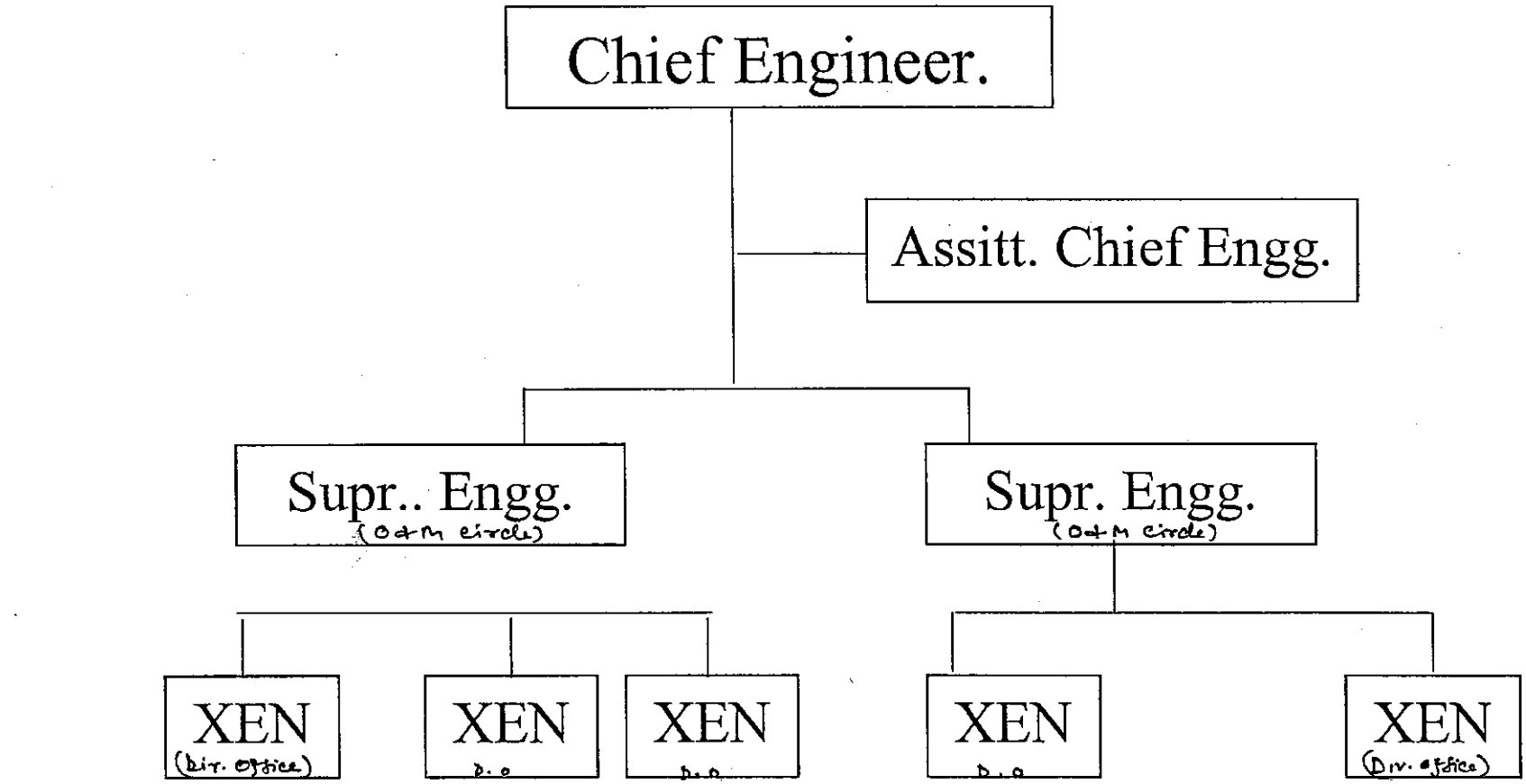
End of the questionnaire

9.12.04

Nasrin Parveen
Deputy Director
TQM Promotion Office
PDB, Dhaka.

Attached with Q- 2.2.2.

Chart of Zonal office



Academic & Service Record

Name	NASRIN PARVEEN		
Occupation	Service		
Designation Organization	Deputy Director, TQM Promotion Office, Bangladesh Power Development Board.		
Date of Joining in service	26-12-1988.		
Educational Qualification	1) Bachelor of Social Science (Hon's), 2) Master of Social Science.		
Educational Record	Institution	Year & Division	Subject
Secondary School Certificate	Vidyamoyee School Mymensingh	1977 2nd	Beng, Eng, Math, Economics,Geograph-y, Civics, History
Higher Secondary Certificate	Mominunnisa College Mymensingh	1979 2nd	Beng,Eng,Economics Civics, History,
Bachelor of Social Science (Hon's)	Dhaka University	1982 2nd	Political science Social Science,History
M.S.S (Master of Social Science)	Dhaka University	1983 2nd	Political science
Training (Home Country)	1) Induction Training for one month at Kaptai Academy on official Administration. 2) Basic Computer Training on Microsoft word, Power Point, & Microsoft Excel at BPDB's Training Directorate, Dhaka. 3) Training Course on "Total Quality Management" from Centre for Management Development, Dhaka. 4) Attended the Training course on "Training of Trainer's" (TOT) during the Period of May-June, 2003. Organized by United States Agency for International Development (USAID), Institute of International Education (IIE), and Centre for Management Development (CMD). 5) Attended the Workshop on "Small Group Activities for Improving Performance" September-2003, Organized by USAID, IIE and CMD.		
Training (Abroad)	One Month's (Jan-Feb, 2003) Country Focused Training course on Total Quality Management (TQM) at Tokyo, Japan, Organized by Japan International Cooperation Agency (JICA).		

Professional Experience: From Jan 1989 to February 2001.	As Assistant Director (Personnel) and Senior Assistant Director (Personnel) in the Directorate of Personnel, BPDB, the duties and responsibilities are: • Performing all related works for recruitment & appointment of all employees. • Transfer posting & promotion of staffs. • Conducting departmental examination of Engineers; • Preparation & publication of the result. • Foreign deputation of BPDB's Engineers & staffs. • Maintenance of all records registers & files regarding Annual Confidential Report (A.C.R) related works.
From February 2001 to July 2002	As Deputy Director (Administration) Office of the Chief Engineer, Power Station Construction.
From August 2002 to till date	As Deputy Director in Total Quality Management (TQM) Promotion office. Assigned work are as follows: • Assist in formulating of mission, Policies, Objectives & Strategies and implementation of TQM at Non technical Directorate of BPDB. • Develop and implement Management Information System (MIS) for human resource development of BPDB. • Arrange Seminar, Workshop and develop a Training Plan to promote a quality culture system in BPDB and implement those programs. • Develop a Plan & procedure for proper recording/filing and supervising official works.
As a Trainer :	Conducted training course for the Class program of "Total Quality Management (ISO)" Standard for: • Superintending Engineer/ Executive Engineer's/ Deputy-Director (Head of the office). • Sub-Divisional Engineer/Assistant Engineer/Asstt. Director. • All Technical & Non- Technical office Employee.

2/2

Signature

Nasrin Parveen
Deputy Director
TQM Promotion Office
PDB, Dhaka.

Adam Ali Sk.
Mr. Md. Adam Ali Sheikh
TQM

Questionnaire for Project Review & Evaluation : Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1 : Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution) ?

Ans : I am posted as Executive Engineer, Electrical Maintenance Division at Baghabari Power Station (SBU).My responsibilities are as follows-

1) To look after the technical and office work of Electrical Maint.
2) To look after the Store Management & Rest House Activities.
3) To look after the School Management & Medical center Activities.

TQM inspired employees in giving their opinion about their working procedure and environment. My current job & responsibilities are helpful to transfer technologies in JICA Projects by fulfill implementation of TQM.

Q1.2 : Describe concrete job examples where you applied transferred technologies.
(Please fill out concrete example in you job)

Ans :Employees are sitting regularly in Q.C Circle meetings. They are cleaning their own work place. They are trying to solve their own problems. Each Q.C Circle maintaining their own flower garden. They are also trying to maintain 5-S Activities.

Q1.3 : How do you share your acquired knowledge with others ? Please give concrete examples
(Please describe your concrete activities on the job and of the job)

Ans : I give advice how to form and function Q.C Circle , how to improve 5-S Activities & how to analyze and solve the problems in a better & easy way.

2. Progress of management Improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/How many circles are there/How many problems have been solved/How many persons (out of how many total personnel) participate in activities ?

Ans : Q.C. Circle meeting, keeping working environment neat & clean , maintaining flower garden nice & charming.
There are three QC Circles in my Division named –

1. JOTI – For Electrical Maintenance Section.
2. BANDHAN – For Store & Rest House.
3. SHEBA - For School & Medical center.

36(thirty Six) problems.(18 +15 + 3).
27(twenty seven) persons (12+7+8) out of 27(twenty seven) persons.

Cont'd to page – 2

2.12.04

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/steering committee ? What supports do you need now ? Is there any feedback to training program in Japan ?

Ans : Each Q.C Circle was formed with all circle members Headed by one team leader. In each & every QC Circle there is one facilitator who give support the QC circles communicating with the Divisional Head/Steering Committee. QC Circles sit in meeting once in every week for two hours.

TQM promotion office has supplied some manuals, monitoring circle activities.

No feedback.

Q2.1.3: Quality of QC activities

(1) Provide good examples of QC report – Please attach the report

(2) Describe the actual process of this QC activity. How do you identify issues ? How were teams formed to tackle the identified issues ?

Ans : Q.C Circle members listed problems in their meeting by brain storming. Then they made a gradation table to select the priority. According to gradation list 1st priority problem is selected for solution. Then they prepared for analyzed the problem by cause & effect diagram. After work done, they present an effective analyzed Presentation .
Teams are formed according to their trade & Technical know how.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making ? Do you have some change in authority delegation ?
(Please describe concrete example with identified effects)

Ans : Now people are inspired to find solution of any problem they faced.
Normal workers have got a few chance to express their opinion through Q.C Circle and local Steering committee.

No change in delegation of authority.

Cont'd to page – 3

2.12.04

Q2.2.2: Describe any improvement in communication. Do you start any new Meetings ?
(Please describe concrete example with identified effects)

Ans : People are keeping their work place neat and clean.They are consulting with each other to find out solution and improve working environment. They are inspired & satisfied to do something for the organization.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them ?
(Please describe concrete situation and your attitude)

Ans : I always try to co-operate with my colleagues & subordinate, give advice to solve problems as my knowledge best.
Recently there was a problem with one 132 KV Isolator Control Box (Operating Mechanism disorder). During solving the problem I was with the QC Circle Members.

Q2.3.2: Describe concrete examples where you cooperate with other office/other divisions to execute tasks.

In our Power Station initially I was directly involved with the formation of Q.C Circle and Steering Committe.Still I am organizing Steering Committee meeting.

I tried my best to inspire all other QC circle Members. I also suggest other Q.C Circle – to how make a presentation and total nine presentation had been done in our Power Station.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- Budget planning
- Performance evaluation and incentive/reward system
- Do SBU/PTA systems bring any tangible differences in your office ?

(Please describe concrete change and its effects: any attachment is welcome)

Ans: We have started five year planning with regards to maintenance and operation.

Performance evaluation and incentive/reward system yet to be started.

We started functioning as SBU from last financial year, but not yet get full facilities.

Cont'd to page – 4

2.12.04

Q3.2: What do you think the problems to in order to further develop TQM program ? (Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial)

Ans: In order to further develop TQM programme commitment is required from all levels, specially from top administration/management and worker representatives.

No unwanted interference from political, top administrative and worker representatives is a must to further develop TQM programme.

4. Your Profile: Md. Adam Ali Sheikh, Executive Engineer, Baghabari Power Station(SBU),BPDB, Sirajgonj.

- Career record (since employment):

	Designation, Office & Place	Duration of Service	
		From	To
a)	Executive Engineer Electrical Maintenance Division Baghabari Power Station, BPDB, Shahjadpur , Sirajgonj.	01-11-1999	Till to date.
b)	Executive Engineer Haripur 109 MW Extension Project BPDB, Narayangonj .	19-09-1999	31-10-1999
c)	Sub-Divisional engineer Operation Division Bheramara 60 MW Power Station. BPDB, Bheramara, Kushtia.	15-05-1999	18 – 09 -1999
d)	Sub-Divisional engineer Operation & Elect. Maint. Saidpur 20 MW GT Power Station, BPDB, Saidpur ,Nilphamari.	01-9-1987	14-05-1999
e)	Sub-Divisional engineer, Line & Sub-Station Maint. GMD, BPDB, Ishurdi	14-7-1986	31-8-1987
f)	Sub-Divisional engineer, Line & Sub-Station Maint. GMD, BPDB, Faridpur	01-06-1985	13-7-1986
g)	Assistant Engineer Line & Sub-Station Maint. GMD, BPDB, Khulna	01-02-1981	31-05-1985
h)	Assistant Engineer (Trainee) Directorate of Training & Career Development, BPDB, Dhaka.	15-10-1980	28-02-1980

Cont'd to page – 5

2.12.04

- Academic Record:

Description of Certificate / Diploma / Degree		Name of the Board / University	Division / Class & Year	Main Subject
a)	S.S.C (Science)	RAJSHAHI BOARD	1st (1972)	Bengali, English, Math, Elec. Math., Physics, Chemistry, Biology Etc.
b)	H.S.C (Science)	RAJSHAHI BOARD	1st (1974)	Bengali, English, Physics, Chemistry, Biology, Math Etc.
c)	Degree (B.Sc. Egg. Electrical)	RAJSHAHI UNIVERSITY	2nd Class. (1978 held in 1980)	Electrical Ckt. Elctrical Machine,Electronics, Switching Ckt Electrical Measurement,Feedback Control Ckt. Management Fluid Mechanics, Strength of Material Etc.

2.12.04

(Md. Adam Ali Sheikh)
Executive Engineer,
Electrical Maintenance Division.
Baghabari Power Station,
BPDB,Shahjzdpur,Sirajgonj.

Re: Questionnaire for Project Review & Evaluation

(TQM)

BPDB: Mr. S.M. Akhtaruzzaman;
Mr. Md. Adam Ali Sheikh;
Mr. Sayeed Akram Ullah;
Mr. Mir Ruhul Quddus;
Mr. Md. Tahir Mian
Ms. Nasrin Parveen;
Mr. Md. Abdul Majid;
Mr. M.A. Hasnat;
Mr. Mahbubul Hoque
Mr. Khondocker Abul Aslam;
Mr. Khan Md. Abul Baser;
Mr. Alam S.M. Faisal;
Mr. Ali S.M. Haidar
Mr. Huq Sayed Mazharul
MEMR: Mr. Islam Sheikh Nazrul

(Distribution)

BPDB: Mr. Muhammad Joynal Abedin;
Mr. Mohammad Badrul Islam;
Mr. Md. Shirajul Islam;
Mr. Md. Abdul Halim;
Mr. Howlader Md. Shirajul Islam
Mr. Md. Mahfuzur Rahman
Mr. Mr. Asit Kumar Sarkar
Mr. Ashok Kumar Ghosh
Mr. Md. Enayet Karim
Mr. Alam Mohammed Khorshed
Mr. Hazrat Ali
Mr. Kazi Abdul Bari
DESA: Mr. Sm Shahidul Islam
Mr. Aminur Rahman
Mr. Mohiuddin A.H.M

Dear Sir and Madam,

Thank you for your continuous cooperation and commitment to the JICA cooperation projects. This questionnaire survey is aiming at evaluating the effectiveness of TQM/Distribution technical cooperation program by JICA, 2001-2003. As this project aims at improving the management capacity, questions will ask you about your and your office's behavioral/ work process change thanks to the series of JICA activities.

Please fill-out the questionnaire; attaching any material to describe concrete example is more than welcome. When answering, please describe the situation of you and your office as concretely as possible.

Please use this questionnaire to feedback yourself and improve your management. Thank you for your cooperation!

Yours Sincerely,

JICA Technical Cooperation Project Team;

Yoshikazu Terai

Shigetoshi Otaru

寺井 義和

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

- Monitoring of T.Q.M activities in diff. offices of BPDB., Assist Director T.Q.M to Promot & Implement of T.Q.M in BPDB & WZPDCO.
- To By Collection the TQM activities report from field & ~~Analysis~~ after analysis, necessary suggestion had been given to the field offices.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]

First of all I trained-up the people of Haripur Power station, BPDB. As a result, BPDB Q.C. circle of Haripur Power station stood 2nd in National Q.C. Convention'2003 and also stood 2nd in BPDB's Q.C. Convention'2004.

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]

I shared my Knowledg by arranging seminer, through Training ~~for~~ in different Training Centre of BPDB & WZPDCO. By visiting the different offices of BPDB and By discussing among the officers & Employees.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

NO Remarkable Q.C activities in T.Q.M. Promotion office due to shortage of employee.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

Not Applicable

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

Not Applicable

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

- Behavior & attitude changes gradually.
- Q.C. circle activity, suggestion scheme and by attending in steering committee normal worker can participate in managerial decision making.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

TQM Promotion office introduced a ~~meeting~~ monthly meeting of ACE (Asstt. chief Engineer) Strong which communication & interaction can be made among the Q.C. activities of diff. offices of BPDB.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Yes. By discussion, note, seminer & sometimes by telephone is the way of communication.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

As a ~~office~~ of TQM ~~offic~~ & Task team member ~~following~~ my activities as follow:-

1. Physical visit of Diff. office
2. Provide diff. suggestion to diff. Circle
3. Provide Traing to the ~~officer~~ & Employee.
4. Analyse the TQM activity of diff. ~~offic~~
5. Monitor over telephone.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

* Normally Budget planned from field ~~offic~~ & checked by BPDB Head ~~offic~~ which finally approved by GOB.
* Incentive/Reward for 5S activities & Suggestion scheme Newly introduced.
* SBU/PTA system bring low system loss, Reliability of Power supply improved,

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

To develop TQM Program following activity/ action to be taken

- ~~Concept~~
- Commitment of High officials
- Initiative from office Heads.
- Zonal T.Q.M. office
- Follow-up of Taining program.

4. Your Profile
   - Career record (since employment)
   - Academic Record

Asstt. Engr. – Distribution & Commercial operation from 25.03.81 to 25.03.85

Sub-div. Engr → Com. operation from 25.03.85 to oct'87.

- DO — → Haripur Power station from oct'87 to 28.09.99

XEN → Haripur Power station from 29.09.99 to 31.10.2004.

XEN → TQM Promotion office from 1.11.04 to till date.

Secondary school — 1972, ~~2nd~~ – 1st div.
Higher Secondary s – 1974 – 2nd div.
B.Sc. Eng. (E.E) – 1978 – 2nd class.

End of the questionnaire

Mr. Sayed Akram Uhah.

TQM

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

Current Job & Responsibilities: -
1. Preparation of Tender Document for Construction of new power station under BPDB/ maintenance or Spare parts procurement of existing power Station.
2. Tender Evaluation. 3. Drawing approval for the works mentioned in sl no. 01.

PDCA cycle is followed for the works. After completion of all works analysis is being done. If the performance in not satisfactory, corrective measures are incorporated for the next works.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]
5-S Activity are being performed in our office. Now the work Place is more cleaner. When needed we can find out the files/Documents without wasting time which in-turn save working hours.

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]
Dissemination the acquired knowledge to QC facilitators and QC leaders through discussion. As a resource Person deliver lectures in TQM training courses in BPDB.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

Qc circle activites, 5-s activities are underway in my office. Four circles are there in my office. One problem have been solved. All employees participate in activities.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

Under the guidence of TQM promotion office & direction of TQM Steering committee, Qc program have been installed. TQM promotion office advised to adopt Qc program (Qc circle activites, 5-s activities etc) and they are monitoring the program. TQM promotion office in association with training Directorate arringed training program on TQM throughout the year and BPDB officials are receiving training in this regard.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

① Qc activity are in a preliminary stage. Hope to improve in near future.

② Process:-

(a) Discussion in circle meeting. (b) Identification of the problem (c) Find out the ways to overcome the problem. (d) Suggest authority the procedure to overcome the problem. (e) Monitoring the performance.

Such issues were identified which are directly responsible for individual performance and performance of the office as a whole.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

→ No. →

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

Qc circle members meet together to find out problems and solution of the problems.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Try to communicate all related information through discussion to colleagues and subordinates for the enhancement of performance of the office as a whole.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

As a resource person delivering lectures to OPDB officials in TQM training Courses.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

N/A.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

TQM promotion office with the help of JICA experts are creating a TQM culture throughout BPDB. Many more BPDB offices have been taken under TQM program and TQM promotion office is helping them which his best effort.

Since this is a new culture, awareness Seminar may be organised in every offices to develop a new mindset.

4. Your Profile
   - Career record (since employment)
   - Academic Record

Carrer Record :-
a) Goloranbo power station (July 1994 — September 1999)
b) Worked in middle East (Kuwait) (September October 1999 - Dec' 2000)
c) Goloranbo power Station (Dec' 2000 — April 2001)
d) Power Station construction office (April 2001 — August 2002)
e) TQM promotion office (August 2002 — February 2003)
f) Baghabari power station project (February 2003 — May 2004)
g) Design & Inspection Directorate (May 2004 to till date)

Academic Record :-
a) Bachelor of Science in Electrical & Electronic Engineering.
b) post Graduate Diploma in Development planning.

End of the questionnaire

04/12/04
(Sayeed Imran Mahmood)
Sub Divisional Engineer.

Re: Questionnaire for Project Review & Evaluation

(TQM)

BPDB: Mr. S.M. Akhtaruzzaman;
Mr. Md. Adam Ali Sheikh;
Mr. Sayeed Akram Ullah;
Mr. Mir Ruhul Quddus;
Mr. Md. Tahir Mian
Ms. Nasrin Parveen;
Mr. Md. Abdul Majid;
Mr. M.A. Hasnat;
Mr. Mahbubul Hoque
Mr. Khondoker Abul Aslam;
Mr. Khan Md. Abul Baser;
Mr. Alam S.M. Faisal;
Mr. Ali S.M. Haidar
Mr. Huq Sayed Mazharul
MEMR: Mr. Islam Sheikh Nazrul

(Distribution)

BPDB: Mr. Muhammad Joynal Abedin;
Mr. Mohammad Badrul Islam;
Mr. Md. Shirajul Islam;
Mr. Md. Abdul Halim;
Mr. Howlader Md. Shirajul Islam
Mr. Md. Mahfuzur Rahman
Mr. Mr. Asit Kumar Sarkar
Mr. Ashok Kumar Ghosh
Mr. Md. Enayet Karim
Mr. Alam Mohammed Khorshed
Mr. Hazrat Ali
Mr. Kazi Abdul Bari
DESA: Mr. Sm Shahidul Islam
Mr. Aminur Rahman
Mr. Mohiuddin A.H.M

Dear Sir and Madam,

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Please fill-out the questionnaire; attaching any material to describe concrete example is more than welcome. When answering, please describe the situation of you and your office as concretely as possible.

Please use this questionnaire to feedback yourself and improve your management. Thank you for your cooperation!

Yours Sincerely,

JICA Technical Cooperation Project Team;

Yoshikazu Terai　　Shigetoshi Otaru

寺井 義和

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

My Current job is related to maintenance of Thermal power station. As Siddhirganj 50 MW unit power station is an old one, so there are usually many maintenance and repair jobs which involve a number of maintenance technical personnel.

To organize and manange those works as well as personel, the TQM technology helps me.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]

In the month of July '2004, a problem with Turbine gave lot troubles to operate the power station properly. Then we, in the mechanical maintenance staffs arranged a meeting and discussed in Quality Circle and found a solution to solve the problem. There we applied "Brain Storming" & "Reverse Brain Storming".

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]

We have a Quality Circle (QC) in my maintenance division and I am working as "Facilitator". In weekly meeting of QC, we discuss about maintenance related problems and their solutions. Through QC activities.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

In Mechanical maintenance division, in total 2 (Two) Quality circles are there. For last 6 (six) months are solved 2 (Two) problems related to emergency situation of the power plant operation & maintenance.

In QC activities, almost all persons out of 26 persons/Staffs take part.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

TQM promotion office always gives us sincere guidance & support. But in site office, the Concerned people many of them are not familiar with TQM idea. And also due to some policy and planning problems, the steering Committee is not functioning properly and can not provide proper support. We need effective & Continuous support and instructions from the local steering Committee.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity.. How do you identify issues? How were teams formed to tackle the identified issues?

In our power station, we are in initial stage of implementing TQM activities. So there is no such good example of QC report to be provided. But QC activities are in progress

We usually identify issue by Cause-effect method or by "fish Bone Diagram".

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

There is no such remarkable change in organization management. I, myself alone can not or is not capable to bring any substantial change in policy making or managerial policy.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

Yes, there is improvement in communication with my staffs and usually we have meetings once in a week. This enables us to know each other better and solve our problems in proper maintenance of repair works of our power station.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Yes, there is change in my attitude towards my colleagues and sub-ordinals. I have become more communicative, attentive and friendly to them.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

To execute task, we usually have Co-operation among operation division, Electrical maintenance division, I & C division and of course our division. All jobs are Co-ordinated among us and after Completion of a job, we jointly evaluate and then allow Clearance for operation of the power Station.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

In my office, there is little change in management system.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

There are problems in developing TQM program. It is difficult to offer any fruitful suggestion.

4. Your Profile
   - Career record (since employment)
   - Academic Record

Joined Bangladesh power development Board in 1984.
presently serving as Sub-Divisional Engineer in Siddirganj power station.

Master of Science (M.Sc) in Engineering - 1984

End of the questionnaire

Re: Questionnaire for Project Review & Evaluation

(TQM)

BPDB: Mr. S.M. Akhtaruzzaman;
Mr. Md. Adam Ali Sheikh;
Mr. Sayeed Akram Ullah;
Mr. Mir Ruhul Quddus;
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Yours Sincerely,

JICA Technical Cooperation Project Team;

Yoshikazu Terai

Shigetoshi Otaru

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

My current job is the renovation & expansion of the distribution system in Sylhet under 18 Town Power Distribution Project. As head of the office, my responsibility is to co-ordinate the development works under my division. I've joined here very recently. I'ld like to introduce the elements of PCM (Project Cycle Management) in my office.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]

I'ld like to introduce the 7 (seven) elements of PCM (Participatory Planning) in my project. They are namely — (1) Stakeholder analysis, (2) Problems analysis, (3) Objectives analysis, (4) Selection of project, (5) Formation of PDM (Project Design Matrix), (6) Appraisal of PDM, and (7) Plan of operation (P.O).

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]

In order to share my acquired knowledge with others, I'm sending two of my employees to RTC, Tongi for TQM training in the month of December/2004. Similarly, I'll send another two employees to RTC, Chittagong the next month for TQM training. I think that when they'll acquire some knowledge on TQM through training, then it will be easier for me to have successful interaction with them resulting in a positive outcome for my office.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

My office is now on the verge of entering the QC Circle activities of TQM. That is why my employees are being sent to Training Centres for acquiring knowledge on TQM. Once a certain number of employees are trained, the TQM activities will be geared up. In the meanwhile motivational works are underway and office discipline has been restored to a great extent.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

First of all, I'ld like to have my employees trained on TQM. Very soon, I'll formulate the QC circle and steering committee in my office. TQM Promotion Office is playing the supportive role by giving books and manuals on TQM. Now I'll have to get my employees well acquainted with the important QC tools. I'll definitely share my valuable experience in Japan with my employees.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

Since this is a project office, so attempt will be taken to successfully introduce PCM resulting in participatory planning, monitoring and evaluation. And QC activities will be started in due course of time creating a collegial feeling among the members of QC circle.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

We're now just working hard to introduce participatory management in our office. With that end in view, we're practicing to have as many interactions as possible. When they'll be educated in QC, then it'll be possible to delegate power to them. Because QC begins with education and ends with education. We're trying to adopt any decision on the basis of concensus thereby allowing normal workers to participate in managerial decision-making.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

Now the communication among employees has developed to a significant extent. Whenever I get time, I want to teach my employees on a one-one basis about the following matters — (a) Quality improvement, (b) Cost reduction, (c) Assurance of delivery process, (d) Improvement in human relations and their abilities, and (e) Assurance of safety.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

We've developed the habit of sitting together discussing any issues to find out a solution on the basis of concensus. There prevails a collegial feeling among my colleagues and subordinates which is very helpful in problem solving. My ultimate objective is to delegate as much authority to the front line workers as possible in order to improve the corporate health and character of the organization.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

As I'm now working in Sylhet in the Project Division, I usually get the chance to cooperate with my colleagues in the distribution offices. This is because my working jurisdiction covers the towns of Sylhet and Moulavibazar. All project works are carried out after discussions with the concerned O&M working personnel. Definitely we treat them as our internal customers. As a result, we always try to satisfy the requirements of our customers.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

We're now trying to be more specific in management system.

(a) Our budget planning has become more precise with break-ups into different categories. Each category is very distinct from both physical and financial view points.

(b) Performance evaluation and incentive/reward is in practice in the project work. For each financial year, goals and targets are established according to the policy determined by the top management.

(c) SBU/PTA systems definitely bring tangible differences in our office, because from the point of view of the project we're now evaluating the performance of distribution system feederwise using different indicators.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

In order to further develop TQM program in my organization, the top management should be well motivated. They should develop the habit of studying the statistical methods. They should have a clear understanding about rationale, data and information. They should have the knowledge of arresting fictitious data obtained from field offices so that dependable policy can be taken by them. Because, unless policies are determined, goals and targets cannot be established. The working personnel of the central secretariat should be well conversant with SQC. If they donot have any idea about the statistical methods, it'll be very difficult for them to help the top management in framing their policy. They must realize that TQM is a thought revolution in management.

4. Your Profile
   - Career record (since employment)
   - Academic Record

(a) Since employment, I worked in many offices of the BPDB in different capacities, especially in transmission and distribution projects.

(b) I'm a BSc. Engr. (Electrical & Electronics), having obtained my degree from BUET (Bangladesh University of Engg. & Technology).

(c) I've got junior and senior diplomas in French from the Alliance Française de Dhaka.

07.12.2004

Executive Engineer,
18 Town Power Distribution Construction
Division-7, BPDB, Sylhet.

End of the questionnaire

Akhtaruzzaman
XEN, Baghabari P/S
-TQM

Questionnaire for Project Review & Evaluation : Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1 : Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution) ?

I am posted as Executive Engineer, Operation Division at Baghabari Power Station.
I look after the technical and office work of Operation Division & Security Section.
TQM inspired employees in giving their opinion about their working procedure and environment.

Q1.2 : Describe concrete job examples where you applied transferred technologies.
(Please fill out concrete example in you job)

Employees are sitting regularly in Q.C.Circle meetings.They are cleaning their own work place.They are trying to solve thier own problems.Each Q.C.Circle maintaining their own flower garden.

Q1.3 : How do you share your acquired knowledge with others ? Please give concrete examples
(Please describe your concrete activities on the job and of the job)

I give advice how to form and function Q.C.Circle.

2. Effect on daily operation and management

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/How many circles are there/How many problems have been solved/How many persons (out of how many total personnel) participate in activities ?

Q.C. Circle meeting, keeping working environment nice looking, maintaining flower garden.
Two in Operation Division and One in Security Section.
Six problems.
Forty persons.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/steering committee ? What supports do you need now ? Is there any feedback to training program in Japan ?

Q.C.Circle was formed with one team leader,one facilitator.they are sitting once in every week.

TQM promotion office has supplied some manuals, monitoring circle activities.

No feedback.

Q2.1.3: Quality of QC activities

(1) Provide good examples of QC report – Please attach the report
(2) Describe the actual process of this QC activity. How do you identify issues ? How were teams formed to tackle the identified issues ?

Q.C.Circle members listed problems in their meeting.Then they made a gradation table to select the prioritity.According to gradation list 1st priority problem is selected for solution.Then cause & effect diagram is prepared for analysis.work done,effect analysed.Presention done.
Teams are formed according to their trade.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making ? Do you have some change in authority delegation ?
(Please describe concrete example with identified effects)

Now people are inspired to find solution of any problem they faced.
Normal workers have got a few chance to express their opinion through Q.C.Circle and local Steering committe.

No change in delegation of authority.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings ?
(Please describe concrete example with identified effects)

People keeping their work place neat and clean.They are consulting with each other to find out solution and improve working environment.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them ?
(Please describe concrete situation and your attitude)

I always try to co-operate with my colleagues & subordinate,give advice to solve problems as my knowledge permit.
Recently there was a problem with one Jack Oil Pump I was with to solve the problem.

Q2.3.2: Describe concrete examples where you cooperate with other office/other divisions to execute tasks.

In our Power Station initially I was directly involved with the formation of Q.C.Circle and Steering Committe.Still I am organizing Steering Committe meeting.

I tried my best to inspire all circles Q.C.Circle presentation and nine presentation had been done in our Power Station.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- Budget planning
- Performance evaluation and incentive/reward system
- Do SBU/PTA systems bring any tangible differences in your office ?

(Please describe concrete change and its effects: any attachment is welcome)

We have started five year planning with regards to maitenance and operation.

Performance evaluation and incentive/reward system yet to be started.

We started functioning as SBU from last financial year,but yet to get full facilities.

Q3.2: What do you think the problems to in order to further develop TQM program ?
(Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial)

In order to further develop TQM programme commitment is required from all levels,specially from top administration and worker representatives.

No unwanted interference from political, top administrative and worker representatives is a must to further develop TQM programme.

4. Your Profile

- Career record (since employment)

Designation, Office & Place		Duration of Service	
		From	To
a)	Executive Engineer Operation Division Baghabari Power Station.	04-02-2003	Till to date.
b)	Executive Engineer Mechanical Maint. Division Siddirgonj Power Station.	26-07-2002	03-02-2003
c)	Executive engineer Mech. & Civil Maint. Division Baghabari Power Station.	01-05-2000	25-07-2002
d)	Executive engineer Boiler Maint. Division Chittagong Power Station.	21-5-1994	30-04-2000
e)	Executive Engineer Mech. Maint. Division- 2 Kaptai Hydro Power Station	16-5-1994	20-5-1994
f)	Executive Engineer in Charge Mech. Maint. Division- 2 Kaptai Hydro Power Station	4-12-1993	15-5-1994
g)	Executive Engineer in Charge Khulna Power Station. (210 MW Chittagong Thermal Power Station On Deputation)	22-02-1993	03/12/1993
h)	Sub-Divisinal Engineer Turbine Maintenance Khulna Power Station (210 MW Chittagong Thermal Power Station On Deputation)	26-11-1992	21-02-1993
i)	Sub-Divisinal Engineer Turbine Maintenance Khulna Power Station	20-9-1982	25-11-1992
j)	Assistant Engineer Turbine Maintenance Khulna Power Station	20-9-1978	19-9-1982

- Academic Record

Description of Certificate / Diploma / Degree		Name of the Board / University	Division / Class & Year	Main Subject
a)	S.S.C (Science)	RAJSHAHI BOARD	1st (1970)	Bengali, English, Math, Elec. Math., Physics,Chemistry, Bio.
b)	H.S.C (Science)	RAJSHAHI BOARD	1st (1972)	Bengali, English, Physics, Bio, Chemistry, Math.
c)	Degree (B.Sc. Egg. Mechanical)	RAJSHAHI UNIVERSITY	2nd Class (1976 held in 1978)	Thermodynamics, Power plant Engineering, Automobile, Fluid Mechanics, Machine Design, and Industrial Management.

2.12.04

S.M. Akhtaruzzaman
EXECUTIVE ENGINEER.

এস, এম, আখতারুজ্জামান
নির্বাহী প্রকৌশলী পরিচালন
আই ডি নং-১-০২৫২
বাঘাবাড়ী বিদ্যুৎ উৎপাদন কেন্দ্র

(S.M. Haidar Ali)
Director
T Q M Promotion Office
P.D.B. Dhaka.

TQM

Questionnaire for the Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

My current job and responsibilities are to promote TQM all throughout BPDB, to manage TQM promotion office, to act as a member secretary of steering committee, to develop training plan to promote quality culture & to implement the activities as advised by the TOP management.

As Director TQM my present job almost relates to transferred technologies in JICA projects (TQM)

Q1.2: *Describe concrete job examples where you applied transferred technologies.*

[Please fill out concrete example in your job]

Following are the Job examples:

1. Preparation of Annual Action plan of TQM office
2. Awareness seminar held at Ghorashal P/S, Chittagong (Dist) & comilla (Dist)
3. Directly disseminating the technologies to PDB & WZPDCL officers & staffs through my lecture in training classes at RTC, Tongi, Chittagong, Rajshahi Ghorasal P/S & khulna (WZPDCO) in every month.
4. Annual Q.C. Circle convention held on Sept/04
5. Some new lecturers are being guided by me to impart TQM training for staffs & mid level officers as a comprehensive training program in BPDB & WZPDCO.
6. Established mentioning system for TQM activities through Task-Team & TQM officer (ACE)

Q1.3: *How do you share your acquired knowledge with others ? Please give Concrete examples.*

[Please describe your concrete activities on the job and of the job]

I share my acquired knowledge with the trainees in training class (Mid level managers, facilitator, Head of offices /Directorate /ESU & staffs), In every month I share my knowledge with the TQM officers, visit some offices as Director of TQM , I share my knowledge with all offices & employee through question-answer session with them.

(S.M. Haidar Ali)
Director
T Q M Promotion Office
P.D.B. Dhaka.

2. Progress of management improvement

2.1 Q.C. Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there, How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

Awareness meeting, seminar, formation of steering committee/ QC. Circle in site offices, developed TQM training materials & establishing training program in 4 training centres, arranging 6 (six) zonal QC competition & BPDB's annual QC convention at Dhaka. In my office there is only one Q.C. Circle. 5-S activities are under way & no problem has yet been solved by the circle. Out of 12 (6 officer + 6 staffs), 10 (5 employees & 5 officers) participate in Q.C. activities.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

Primarily we visited haripur p/s (TQM model)& other private organization where TQM had been introduced to gather practical knowledge. Then I got country focus training in japan arranged by JICA. After returning Dhaka arranged PDB steering committee meeting, task team meeting & shared .... knowledge & technologies with the members of the team. With hole hearted support of the then chairman I took some program to install QC all over BPDB. By the support of member (Admn.) Q.C. activities are spreading gradually. I got full support from steering committee. I need policy management to be formulated by the top management in respect of TQM. No feed back to training program in Japan are being done.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

Report of QC is attached herewith (Shapla QC Circle Ghorasal P/S)

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

No remarkable change in organization management are found to be describe. We have established suggestion system & steering committee in different offices where normal workers may participate in managerial decision-making. No change in authority delegation.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

Through Q. C. Circle activities workers are now more capable to communicate with the managers /Director/SE / XEN / through their presentation. I have started meetings with the TQM officers (Assistant chief engineer) in every month. This type of meeting is new in BPDB.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and Subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

Obviously, my attitude has been changed towards my colleagues & subordinates. I communicate them with friendly attitude. In my office, I exchange my concern with my subordinates as a coach, not as a master.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

I cooperated with different offices to execute TQM activities. For example, CERS (Workshop) Tongi, Directorate of Audit, RTC, Tongi, Ghorasal, Khulna., Ghorashal P/S, S & D- soloshahar, chittagong. and so on.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

We have a change in management system, BPDB's ...chairman (Mr. S.A. Mayeed) instructed TQM office to send MIS as and when required for smooth promote TQM in BPDB & accordingly I sent MIS (attachment-A)

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

Problems

1. Frequent change of CEO in the this crucial time of reform process.
2. Board members and chief Engineer BPDB are supportive and some of them are not involving themselves due to ensuing retirement.
3. PDB policy management not yet formulated
4. Chief engineers are participating in TQM steering committee meeting but officially they are not responsible as much as their usual duties, especially, monitoring of TQM activities under his jurisdiction.
5. Inadequate training facilities to expedite further development of TQM.

Suggestion

1.TQM activities should start from ministry (MPEM)
2. Required measures are solicited form the JICA Experts & are to be focused by the experts in the ensuing WRAP up seminar.
3. BPDB policy management should be established immediately & to be deployed to guide daily management (By Q.C. circle)
4. Technology knowledge sharing system to be strengthened.

4. Your Profile
   - Career record (since employment)
   - Academic Record

4. Your Profile

Career record (since employment)

Designation, Office & Place		Duration of Service	
		From	To
a)	Director TQM Promotion office BPDB, Dhaka.	22-09-03	unto date
b)	Executive Engineer Document Centre, PBPD, Dhaka.	21-11-1999	21-09-03
c)	Executive Engineer Resident Engr. (XEN) Satkhira Electric Supply	17-07-1994	20-11-1999
d)	Executive Engineer Turn-Key Division, Greater Khulna Power dist. project, Khulna.	24-02-1994	17-07-1997
e)	Executive Engineer Planning & Development Division. Khulna.	26-04-1993	24-02-1994
f)	Executive Engineer Distribution Division, Madaripur	28-03-1992	25-04-1993
g)	Executive Engineer 18-Town Project, Jessore,	30-06-1985	23-03-1992
	Sub-Divisional Engineer Resident Engineer (XEN) office Jessore, Electric Supply.	15-11-1982	30-06-1985
	Assistant Engineer Operation Division, Khulna Electric Supply.	27-07-1977	08-11-1982
	Assistant Engineer Operation and Maintains Circle, Dhaka Electric Supply, Dhaka.	20-03-1976	19-07-1977

- Academic Record

Description of Certificate /Diploma /Degree		Name of the Board/ University	Division / Class & Year	Main Subject
a)	S.S.C. (Science)	Jessore Board	2nd (1967)	Bengali, English, Math Chemistry, Physics, Etc.
b)	H.S.C (Science)	Jessore Board	2nd (1969)	Bengali, English, Math Chemistry, Physics
c)	Degree B.Sc.Egg.(Electrical)	Rajshahi University	2nd (1975)	Power System, Switch Gear and protection, Electric circuit and system communication engg. power station Electrical Machine.

12/12/04

S.M. Haidar Ali
Director
TQM Promotion Office
BPDB, Dhaka.

End of the questionnaire

ATTACHMENT – A

M.I.S.

TQM Promotion Office, BPDB,
"Hasan Court" (2nd Floor),
23/1, Motijheel C/A, Dhaka-1000.
Phone : 7163624
Fax : 7163625

বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড

Bangladesh Power Development Board

Memo No 186 -/ BPDB/ TQM /

Date :16-06-04

To

The Chairman,
BPDB, Dhaka.

Sl. No.	Name of the Offices.	Description of Works	Problems to be addressed
1.	RTC (Regional Training Centre), Tongi, Gazipur.	Vertical extension of the two-storied institute bldg. for constructing hostel on the 3rd floor. [It goes without saying that senior officials like the S.E.S/ Directors are taking part in TQM training session regularly at RTC, Tongi.]	The Director, Fin nce to be advised to take necessary action from his end.

16/6/2004

(S.M.Haidar Ali)
Director,
TQM Promotion office,
BPDB, Dhaka.

M.I.S.

TQM Promotion Office, BPDB,
"Hasan Court" (2nd Floor),
23/1, Motijheel C/A, Dhaka-1000.
Phone : 7163624
Fax : 7163625

বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড

Bangladesh Power Development Board

Memo No২২০-/ BPDB/ TQM /

Date: 06-07-04

To

The Member (Admn.)
BPDB, Dhaka.

Sl. No.	Name of the office	Description of job	Problems to be addressed
1	2	3	4
1.	TQM Promotion Office, BPDB, Dhaka.	Placement of one DD (X-EN) in place of the present DD (X-EN) who is going abroad very soon.	Mr. Sukumar Biswas, Asstt. Chief Engineer, Ghorashal Power Station, who is very sincere & energetic, is very much interested to join the TQM Promotion Office, Dhaka. As Mr. K.A. Bari, the present DD (X-EN) is giong to the U.A.E. very soon having lien from the government, so the posting of Mr. Sukumar Biswas to the TQM Promotion Office is urgently required to carry forward the pending mission of this office.

05/9/2008

Signature of the Director,
TQM Promotion Office,
BPDB, Dhaka.

hp/Mazh:M.I.S.English

M.I.S.

TQM Promotion Office, BPDB,
"Hasan Court" (2nd Floor),
23/1, Motijheel C/A, Dhaka-1000.
Phone : 7163624
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বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড

Bangladesh Power Development Board

Memo No 218-/ BPDB/ TQM /

Date: 06-07-04

To

The Member (Admn.)
BPDB, Dhaka.

Sl. No.	Name of the offices	Description of job	Problems to be addressed
1	2	3	4
1.	Ghorashal Trg. Centre, Palash, Narsingdi.	Placement of a competent DD (X-EN) in Ghorashal Trg. Centre.	Mr. Mushtaque Muhammad, the present DD (X-EN) of Ghorashal Trg. Centre does not have the minimum drive in himself. Instead, Mr. Abdul Khaleq, the present DM (Operation) of Ashuganj P.S. Company Ltd. is very much interested to join the above mentioned Trg. Centre. He is very honest & dedicated. Moreover, he has the experience of serving in the TQM Promotion Office for three and a half months.

06/7/2004

Signature of the Director,
TQM Promotion Office,
BPDB, Dhaka.

hp/Mazh:M.I.S.English

M.I.S.

TQM Promotion Office, BPDB,
"Hasan Court" (2nd Floor),
23/1, Motijheel C/A, Dhaka-1000.
Phone : 7163624
Fax : 7163625

বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড

Bangladesh Power Development Board

Memo No -২17/ BPDB/ TQM /

Date 06-07-04

To

The Chairman,
BPDB, Dhaka.

Sl. No.	Name of the Offices.	Description of Job	Problems to be addressed
1.	The Chief Engineers & equivalent officers	The following two philosophical books will be given to the Chief Engineers & equivalent officers during the 2nd Module of TQM Training to be held in the Conference Room of the office of the Controller (Accounts & Finance) on 17.07.04 & 18.07.04. The books are as follows : I. Fundamentals of QC Circles. II. How to operate QC Circle Activities.	The Chief Engineers & equivalent officers to be asked to give copies of the books to the immediate subordinate officers, and hence down to the level of Executive Engineers. The contents of the books, if properly assimilated, could be used to solve all the day-to-day problems of any kind of office with the application of control & improvement tools by QC Circles upholding humanity & voluntarism, and bearing in mind the two elements i.e. customer satisfaction & contribution to society.

06/7/2004

(S.M.Haidar Ali)
Director,
TQM Promotion office,

hp/Mazh:M.I.S.English

Dist

Questionnaire for Project Review & Evaluation :Overall evaluation of technical transfer effect(2001-2004)

1. .Relation between current job and transferred techniques.

Q1.1: Described your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e TQM of Distribution)?

- Executive Engineer, Sales & Distribution Division -I,. PDB, Bogra.
- To run the operation and maintenance system.
- some sorts of development works in my division and also revenue collection.
- Administrative and other overall activities in my division.
- I met with all of my sub-ordinates just after joining my working place and transferred JICA training experience.
- 5-S and TQM activities enhanced in my office as far as possible.

Q1.2. Describe the concrete job examples where you applied transferred technologies.

(Please fill out concrete example where you applied transferred technologies.

- Computerized billing has already been started.
- Improved customer Service and relation
- 5-S and QC circle activities running well .

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

(Please described your concrete activities on the job and of the job)

- During staying in Tokyo /Hiro Shima some video snaps were taken and 3 No of C Ds were copied and those were shown to my sub-ordinate & colleague.

02/02/08

(Md. Enayet Karim)
Executive Engineer
Distribution Division
PDB, Bogra.
ID No. 1-0344

Dist

2. Progress of Management Improvement.

2.1 QC Activities.

Q2.1.1 : Describe the QC activities at your office. What activities are underway/ How many circles are there/ How many problems have been solved/How many persons (out of how many total personnel) participate in activities?

- At present in my office there are 13 No of QC Circles
- Load balancing of Distribution X-formers, feeder maintenance to clear write off way and replacement of 1Q defective meter etc.
- 16 No of Problems were solved so far.
- Out of 105 No of staff,70 persons are participating in this activities.

Q2.1.2: Described concrete procedure to install QC the program in your office. What supports did you receive from promotion office/steering committee? What supports do you need now? Is there any feed back to raining program in Japan ?

There are 13 QC Circles in Sales & Distribution Division-I, PDB, Bogra. Each circle consists of a Facilitator, a team Leader and some members. Two meeting are held by each circle every month. Each circle finds out a problem & then seeks problem solution to it. The best solution in accepted and put forward to concerned authority for approval .

We are always getting relevant guide lines, training on TQM from TQM promotion Office. We need logistic and more financial support at present.

* Yes.

Q2.1.3 Quality of QC activities

(1) Provide good examples of QC report- Please attached the report.
(2) Describe the actual process of this QC activity. How do you identify issues ? How were teams formed to tackle the identified issues .

(1) Report attached.
(2) Ditto.

02/02/05

(Md. Enayet Karim)
Executive Engineer
Distribution Division
PDB, Bogra.
ID No. 1-0344

2.2. Effect on daily operation and management.

Q2.2.1 Describe any change in organization management . Do your establish any system that allows normal workers to participate in managerial decision making? Do you have some change in authority delegation?

(Please describe concrete example with identified effects)

- Still then no change in organization management.
- Once in a month through QC circle meeting.
- No. I can not . It can be done by B PDB.

Q2.2.2. Describe any improvement in communication. Do you start any new meetings ?

(Please describe concrete example with identified effects)

- We the task team members meet every 3rd Wednesday in Director, TQM Promotion Office, Dhaka.
- I have made 4 meetings in SE, O& M Circle office, Bogra.
- Monitored TQM activities in S&D-I, S&D-II & SE, O&M Office as per direction of TQM Directorate.

2.3 Effect on attitude.

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them ?

(Please describe concrete example with identified effects)

- Yes, I directly communicate with my colleagues and sub ordinates. Some times I give direction /Advice through telephone.

02/02/08

(Md. Enayet Karim)
Executive Engineer
Distribution Division
PDB, Bogra.
ID No. 1-0344

Q23.2: Described concrete examples where you co-operate with other office/other divisions to execute tasks.

* As per format given by TQM Office, I co-operate with S&D-II and Operation & Maintenance circle, PDB, Bogra.

3. Management System:

Q3.1. Described any change in management system. Do you have any change in

- Budget planning
- Performance evaluation and incentive/reward system
- Do SBU /PTA systems bring any tangible differences in your office?

• SBU target and active Board order .5 Bonus, May, June/03 Bonus and 2nd & 3rd quarter bonus office order by Board to be attached. • XEN submitted budget through SE, CE to Director Finance and in the month of December in Director Finance meeting it will be decided. • Some change should be made in incentive/reward system. • Some tangible changed due to SBU/PTA in my office.

02/02/08

(Md. Enayet Karim)
Executive Engineer
Distribution Division
PDB, Bogra.
ID No. 1-0344

Q3.2 . What do you think the problems to in order to further develop TQM program ?

(Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial)

- TQM is a vast thing. Through training every educated person should be trained as far as possible by BPDB training facilities. Training budget of BPDB should be increased.
- Some qualified Engineer should be Trained in Japan for TQM by JICA.

4. Your profile :

- Carrier record (since employment)
- Academic record..

A:

- I have joined BPDB as an Asstt. Engineer in the year of January/03.
- Then I promoted as Sub-Divisional Engineer in 1986 with effect from Jan/84
- In the year of 1998/Feb I have been promoted as an Executive Engineer from date of joining I am serving in distribution sector as Distribution Engineer and visited Australia for pre-shipment inspection- list.

B:

- Secondary School Certificate Examination- 10 years - 1st Division.
- Higher Secondary School Certificate Examination-2 years= 2nd Division.
- Bachelor of Science in Electrical Engineering -4 years- 2nd class.

Different :

- Training taken in BPDB training center such as-Distribution, Engineering
- * Basic operation training in Bheramara Power Station, Distribution Management System. TQM training, Protective Measure of Relay Operation system, Unbundling Seminar at Hotel Sheraton under U.S. AID etc.

02/02/08

(Md. Enayet Karim)
Executive Engineer
Distribution Division
PDB, Bogra.
ID No. 1-0344

M. A. Halim
XEN. Mymensing
Dist.

Questionnaire for Project Review & Evaluation : Overall evaluation of technical transfer effect (2001 - 2004)

1. Relation between current job and transferred techniques

Q1.1 : Describe your current job and your responsibilities. How does your job related to transferred techologoies in JICA projects (i.e., TQM or Distribution)?

Working under 18 town power project Division-6 Mymensingh. Responsible to construct new lines,sub station. Renovation of Distributionlines, consumer service connection etc.Completed one pilot schem feeder under JICA/JBIC. to Extenion of 11 kv lines to the possible consumer premises for reliabl power supply and reduce line loss.For easy maintenace work we have installed few numbers of 11 k sectionalizer .

Q1.2 : Describe concrete job examples where you applied transferred technologies.

[Plese fill out concrete example in your job]
Unders Sales & Distribution Divin-1(N), Mymensingh I was entrusted to complete a Distribution lin named Kachijhulypilot scheme feeder. Financedy JBIC. I have completed this project successfully Distribution lines constructed with minium L.T. lines and max H.T line . Installed all consumer meter ou side consumer house. I applied acquired knowledge to this project. For which System loss comes dow from 35% to 11%, break down works reasionably reduces power supply be came reliable an maintenance works became easy due to installation of sectionalizer.

Q1.3 : How do you share your acquired knowledge with others? Plese give concrete examples.

[Plese describe your activities on the job and of the job]
Before talk up of any works. We discussed together about our plan, Work to be done, The way work t be taken up through respective Q.C. Circle.As for example respective Q.C. circle through routin inspection and applying PDCA cycle they have taken up a project named ``tranformer load balancing" Applying Q.C. tools all the distribution transformers load balanced . Resulting no break down i distribution transformer and saving six lack taka per year and also Q.C. circle discused the safety o human life and decided and taken up a safety measure project through Q.C. circle . And successfully al the workers are using safety equipment such as safety belt, hand gloves, hel mate and shoes an safety tools etc. During visit on 28/11/2004 by JICA TQM expert physically they have expreinced on th spot.

2. Progress of management improvement

2.1 QC Acivities

Q2.1.1 : **Describe the QC activities at your office. What activities are underway/ How many circles are There / How many problems have been solved / How many persons (out of how many total personnel) participated in activities.?**

There are sixten numbers of Q.C. circles. Each Q.C. circle responsible for routine maintenance an inspection of distribution lines . Through PDCA cycle collected information and through Q.C. circle usin Qc tools problems are identified and taking project to solve the problem on the basis of gradation. Th daily break down/interruption duration datas are collecting and discussing in QC, circle meeting t minimise the problems.80 members are involved in QC. circle activities out of one forty.

Q2.1.2 : **Describ concrete procedure to install QC. The program in your office. What supports did you receive from promotion office/streeing committee? What supports do you need now? Is there any feedback to training program in Japan?**

One Q.C. circle comprises one facelilator, one team leader and at least six member. each Q.C. circl has a specific name such as "Rupali QC. Circle" and responsible for feeder wise maintenance/tre trimming of lines etc. each QC. Circle met together twice in a month to identify/solve the problem through discussion among them selves. From promotion office/steering committee QC. circle receive al suport as they need. Support in respect of financial and materials are need. The training programm conducted in Japan through JICA. We are trying to motivate our workers, engineers, to work togethe through TQM activities and it is functioning with satisfaction.

Q2.1.3 : **Quality of QC activities.**

(1) Provide good examples of QC report - Please attach the report.

(2) Describe the actual process of this QC activity. How do you identify issues? How were teams Fromed to tackle the identified issues?

(1) Q.C. Reports of x-former load balancing is a good report and having a good result.(enclosed)
(2) As described earlier QC circle team leader having discussion with all members chacked out th problems with 4 M view point. Than take up the projects and complete it using QC tools.

2.2 Effect on daily operation and management.

Q2.2.1 : Describe any change in organization management. Do you establish any system that allows Normal works to participate in managerial decision- making? Do you have some change in authority Delegation?

[Plese describe concrete example with identified effects]
Under TQM activities the management system remains as it is. Only the way of work placed under TQ activities guide. We establish a system to participate the workers to reflect their views to the Executiv Engineer when ever it is necessary. For safety of the workers, all the workers met the Executiv Engineer and reflect the problem to supply safety devices and accordingly action taken by the authority We have no changed in authority delegation.

Q2.2.2 : Describe any improvement in communication. Do you start any new meeting?

[Plese describe concrete example with identified effects]
Yes improvement in communication is all ready been made by motivating the workers through Q activities. Such as problem of transformer unbalancing and non-availibility of safety devices have bee solveed through QC activities.

2.3 Effect of attitude

Q2.3.1 : Describe any change of your attitude toward your colleagus and subordnates. Now, how do you communicate with them.

[Plese describe oncrete situation and your attitude]
All the QC circle members acknowledged about TQM activities for which after accepting the TQ activities the attitude toward colleagues and subordinate seems to be accelerated which may b observed from the monthly QC circle meetings.

Q2.3.2 : Describe concrete examples where you cooperate with other office/other division to execute tasks.

QC activities of Mymensingh Division-1(N) in respect of transformer load balancing and use of safet devices has been observed by Division -2(S) Mymensingh and Sherpur. The said Division also starte said works. Through steering committee we try to solve the same tyeps of problems in a same manner.t unify the system.

3 **Management System**

Q3.1 : Describe any change in mamagement system. Do you have any change in:

1 **Budget planning**

2 **Performance evaluation and incentive/reward system**

3 **Do SBU/PTA systems bring any tangible difference in your office?**

(1) No change in management system. (2) No change in budget planning. (3) No change in Performance evaluation and incentive/reward system. (4) SBU/PTA system may bring tangible deference if present incentive/reward system modified.

Q3. 2 : What do you think problems to in order to further develop TQM program?

[Plese describe concrete examples to promlems. Plese describe any suggestion that you think beneficial]

Present problem

At present we have less trainer in TQM program.
Zone wise there is no specfic TQM branch office.
In sufficent facilities in each Division to hold QC meeting.

Suggestion

Zone wise TQM branch office with all accessories to be established.
Division wise all engineers shoud be trained in TQM program through JICA.

4 **Your Profile**

1 **Career record (since emplyment)**
2 **Academic Record**

Career Record

Serving under power Development board since 1972 invarious field. such as construction maintenance/sales Division . At present I am working as Executive Engineer 18 Town power distributio project -6, Mymensingh. When I was posted to sales & Distribution-1(N), Mymensingh that time i go training in distribution system through JICA. After getting training I have started TQM activities in sales Distribution Division-1(N),/(S)-2/Sherpur. In the anual convention held in Dhaka through TQM Directorat two QC circle. Presentation were made successfully.

Academic Record

S.S.C. Examination passed - 1967
Diploma in- Electrical-Engineering passed in - 1972
A.M.I.E. in- Electrical-Engineering passed in - 1979

5/12/09

M. A. Halim
Executive Engineer
18 TPDCD-6
PDB, Mymensingh.
TQM. Task Team Member

Xen

Mr. Asit Kumar Sarkar
Dist

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

Responsibilities : Operation & Maintenance of 33KV/11KV 1.4KV line & 33/11KV Sub-station as well as commercial operation.
My Job relates to distribution of power.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]
I applied transfered technologies in operation & maintenance of power lines/ S/S in SE D-1 (North) My meeting through forming QC circles.

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]
I am a lecturer of TQM training courses in BangladeshPDB. I share my knowledge, experience with participants on how Japanese have implemented TQM & got tremendous achievements through this. And I suggest that we should/will do all works through QC circles. In the same way I try to do the same in my own office stuffs.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

TQM at my present office is at very early stage.
I have formed 5 QC circles & 1 steering committee.
33 kV/11kV line faults have been reduced greatly through tree-trimming & other schedule maintenance. [Prob no. 1]. 2nd Prob is X-mer (11/.4kV Dist TR) regular maintenance which is going on.
Out of 54; 36 personnel are involved in TQM activities.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

To install QC chain of command should be maintained by the head of the office. TQM promotion office assisted in several ways as 'how to form' 'whom should be included,' etc. Booklet & Book etc.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

Weekly QC meeting is held. They discussed about problems & select one problem to solve on the basis of priority. But task team meeting has not been started yet.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

Actually no change in organization management.

No change in authority delegation.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

I started new meeting once. Afterwards I tried to hold further but failed due to indifference or -ve tendency of some people.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

I have changed my attitude towards my colleagues & subordinates but due to lack of chain of command, its effect is not noteworthy. Chain of command should be maintained by the head of the office.

~~Chain of command means - Head of office communicate~~ with immediate sub-ordinate following the order for Returns.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

Not yet. But I started correspondence with S&D. Pahartali & S&D ~~Hoda~~ Shalashahar.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

No.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

Chain of command must be followed in office.
Higher authority / TQM representative of Dhaka will visit other offices.
motivation of XEN/SE/CE's is must
decentralisation of responsibility / Power.
We should take intiative to prevent paper-oriented / based TQM activities. It is happening in some cases.

4. Your Profile
   - Career record (since employment)
   - Academic Record

I do practical my job in the field of distribution where I am responsible for operation, maintenance of power lines & Sub-station.
B.Sc. Engineer in Electrical & Electronic. from BUET in 1995.

End of the questionnaire

Dist.
Md. Hazrat ali
Executive Engineer
S&D Division, paharetoli
PDB, Chittagong.

Questionnaire for Project Review & Evaluation: Overall evaluation of technical transfer effect (2001-2004)

1. Relation between current job and transferred techniques

Q1.1: Describe your current job and your responsibilities. How does your job relate to transferred technologies in JICA projects (i.e., TQM or Distribution)?

As an XEN in S&D Division paharetoli, ctg :-
To improve the quality power supply to the consumer.
To increase the revenue collection and reduce the system loss.
To develop SBU and Qc activities.
To maintain properly office management and administration.
To transfer technologies in JICA project on distribution system :-
By applying action plan (short term and long terms) for the improvement of power system in Bangladesh.

Q1.2: Describe concrete job examples where you applied transferred technologies.

[Please fill out concrete example in you job]
To introduce SBU activities.
To develop Qc activities schedule.
To develop TQM training schedule.
To increase motivation activities.
To apply distribution system.
To apply consumer complain.

Q1.3: How do you share your acquired knowledge with others? Please give concrete examples

[Please describe your concrete activities on the job and of the job]
To make action plan (short term and long term)
To develop paper for seminar.
To develop Qc activities.
To arrange the seminar on training course.
To develop training materials for Qc circle.
Training program for Qc circle.
Data Collection.

2. Progress of management improvement

2.1 QC Activities

Q2.1.1: Describe the QC activities at your office: What activities are underway/ How many circles are there / How many problems have been solved/ How many persons (out of how many total personnel) participate in activities?

To held steering committee meeting in every months.
Weekly Qc circle meeting also held.
There are 14 nos. of Qc circle.
Tooo nos. of problems have been solved.
79 nos. of persons are participate in Qc activities out of 89 nos.

Q2.1.2: Describe concrete procedure to install QC the program in your office. What supports did you receive from promotion office/ steering committee? What supports do you need now? Is there any feedback to training program in Japan?

To install Qc with the help of steering Committee, Facilitator, team leader and member.
* TQM and Qc circle activities and suggestion scheme to give us from the promotion office. Any problem solved by the promotion office. To arrange the seminar on the training course by TQM promotion office. yes. from the training Program in Japan to feedback TQM, Qc circle and power distribution system.

Q2.1.3: Quality of QC activities

① Provide good examples of QC report—*Please attach the report*

② Describe the actual process of this QC activity. How do you identify issues? How were teams formed to tackle the identified issues?

the process of Qc activity:- Name of the circle, Facilitator, Leader, Division/Branch, member "Slogon" Issues are identified by the Qc circle's Leader and members. The identified issues will submit by the team leader to Facilitator. Finally, the Facilitator submits the issues for the final approval of the steering Committee.

2.2 Effect on daily operation and management

Q2.2.1: Describe any change in organization management. Do you establish any system that allows normal workers to participate in managerial decision-making? Do you have some change in authority delegation?

[Please describe concrete example with identified effects]

To change Lengthy central procurement process.
To change longtime for taking decision.
Target of work properly fixed.
No. normal workers will not allow to participate in managerial decision makings.
Yes, I want Some change in authority delegation.

Q2.2.2: Describe any improvement in communication. Do you start any new meetings?

[Please describe concrete example with identified effects]

The improvement in communication stated as below:
To develop TQM and QC activities.
To improve the reliability of power supply.
To reduce the system loss and increase bill collection.
To increase motivation activities.
Yes, I started new meetings.

2.3 Effect on attitude

Q2.3.1: Describe any change of your attitude toward your colleagues and subordinates. Now, how do you communicate with them?

[Please describe concrete situation and your attitude]

To change of my attitude toward my colleagues and subordinates :-

To develop QC activities schedule.
To develop TQM training schedule.
To increase Motivation activities

To communicate with the help of steering Committee, task team meeting and QC progress.

Q2.3.2: Describe concrete examples where you cooperate with other office/ other divisions to execute tasks.

In everymonth, I arrange a meeting with the help of other SBU / divisional head. During the meeting, all facilitator, teram leader and member of QC circle are present there To discuss the improvement of Qc circle activities and how to improve the TQM and Qc circle.

3. Management system

Q3.1: Describe any change in management system. Do you have any change in:

- ✧ Budget planning
- ✧ Performance evaluation and incentive/reward system
- ✧ Do SBU/PTA systems bring any tangible differences in your office?

[Please describe concrete change and its effects: any attachment is welcome]

Not applicable.

Q3.2: What do you think the problems to in order to further develop TQM program?

[Please describe concrete examples to explain problems. Please describe any suggestion that you think beneficial]

No, there are no problems to develop TQM program. In BPDB, TQM is new thing. Gradually it will be improve for time being. Staff and officers are motivated gradually. But at present needs to arrange Deminar on training course, to develop training materials and training programs.

4. Your Profile
   - Career record (since employment)
   - Academic Record

I am join in BPDB in 1984 as an Asst. Engineer. and I have worked in various field office for 21 years. At present I am working in Sales and Distribution Division paharitoli Chittagong as an Executive Engineer.

B.sc. Engineer, Electrical and Electronic passed from BUET, Dhaka.

End of the questionnaire

Ans: Q 2.1.3.(1)

Introduction of the circle:

Name of the circle: Jamuna Quality control circle.

Facilitator: Mr. "X" SDE

Leader: Mr. "y" SAE

Division/Branch: Technical group

Nos. of member: 6 (six) nos.

Name of the member:

1. Mr. y, SAE, Leader.
2. Mr. Z F/M member.
3. Mr. A L/M "
4. Mr. B L/M "
5. Mr. C L/M "
6. Mr. D L/M "

Work of the circle:

To identify the problem.
To determine cause of the problem.
To Solve the problem.
To submit the problem for approval.
To established after approval.
To observe the result.

Problems of The circle

Not right way of clearance.
Not distribution transformer load balancing.
Not transformer oil test.
Not fresh jumper and loop.

Explanation procedure of marking:

(1) To considering expenditure:—

(a) To maintainance cost, for book value 5% → 8 number
(b) " " for " " 10% → 6 "
(c) " " for " " 20% → 5 "
(d) " " for " " 30% → 4 "
(e) " " for " " 50% → 3 "

(2) To considering efficiency:—

(a) efficiency for 100% → 8 number
(b) " " 90% → 7 "
(c) " " 80% → 6 "
(d) " " 70% → 5 "
(e) " " 60% → 4 "

(3) To considering self interest:

a. for 100%, 8 nos.
b. for 90%, 7 "
c. for 80%, 6 "
d. for 70%, 5 "
e. for 60%, 4 "

To determine the gradiation of the problems

SL. no.	Description of The problem	Expenditure	Efficiency	Def interest	Total no.	position
1.	Not right way of clearance	7	6	6	19	3rd
2.	Not distribution XFR load balancing	8	7	7	22	1st
3.	Not XFR oil test	6	7	7	20	2nd
4.	Not fresh jumper and loop	6	6	6	18	4th

Finalization of the subject:

" According to the gradation table " Not to XFR load balancing " stands 1st position. So this problem accepted for the solution.

After the solution of the 1st problem, then the other problems will accept for the further solution.


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