

平成7年度
帰国研修員フォローアップチーム報告書
(建築・住宅分野)

平成8年4月

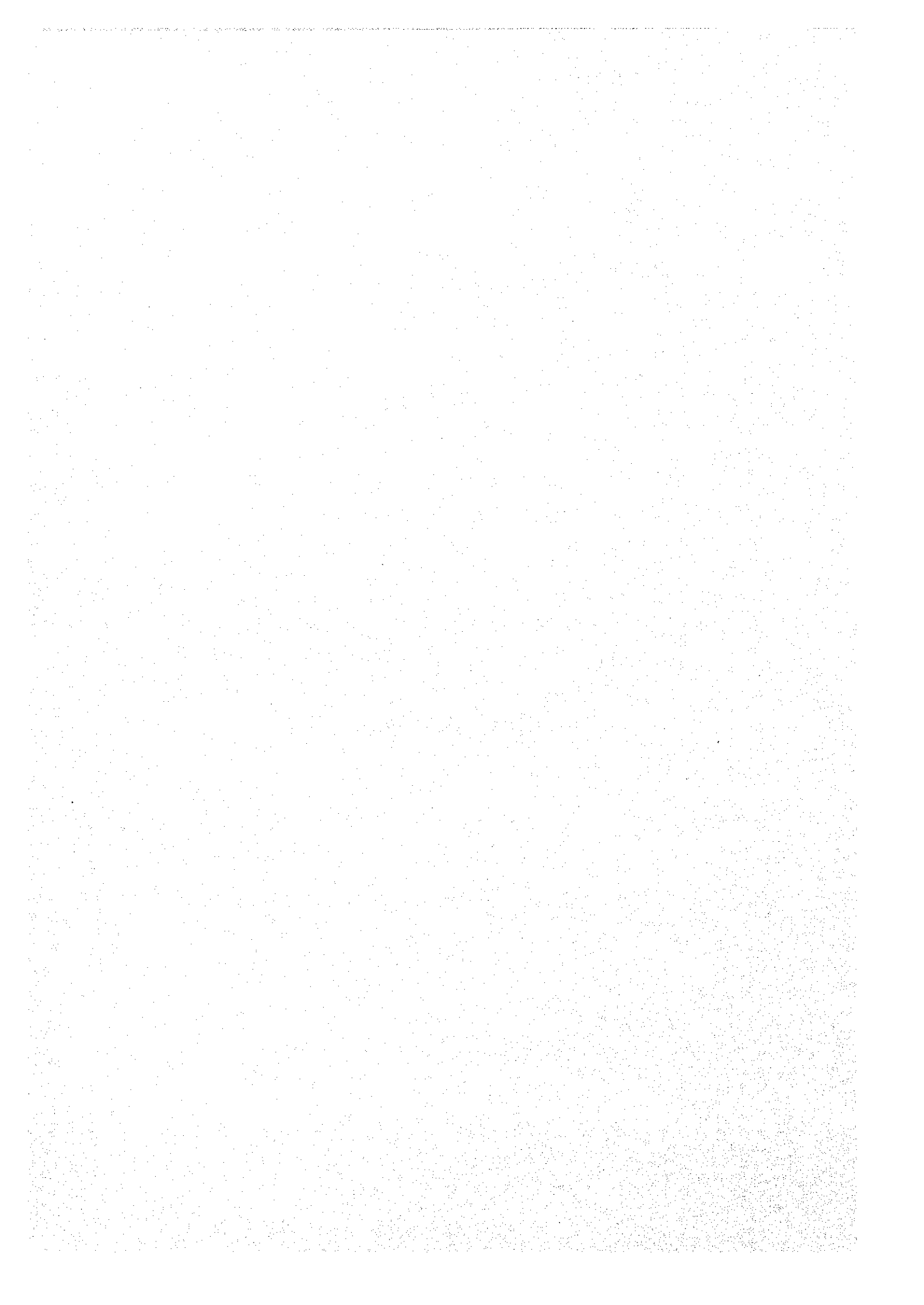
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国際協力事業団
東京国際研修センター

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1131378[0]

序 文

この報告書は、国際協力事業団が建設省及び各研修実施機関の協力のもとに実施している、集団研修「建築技術」、「住宅政策」及び「住宅・住環境改善セミナー」の3コースをその内容とする建築・住宅分野を対象としてケニア国及びエジプト国に派遣されたフォローアップチームの調査結果をとりまとめたものです。

本報告書が、当該研修分野における調査対象国の状況、問題点、帰国研修員の活動状況及び研修コースに対する要望について、関係各位の一層のご理解の一助となれば幸甚です。

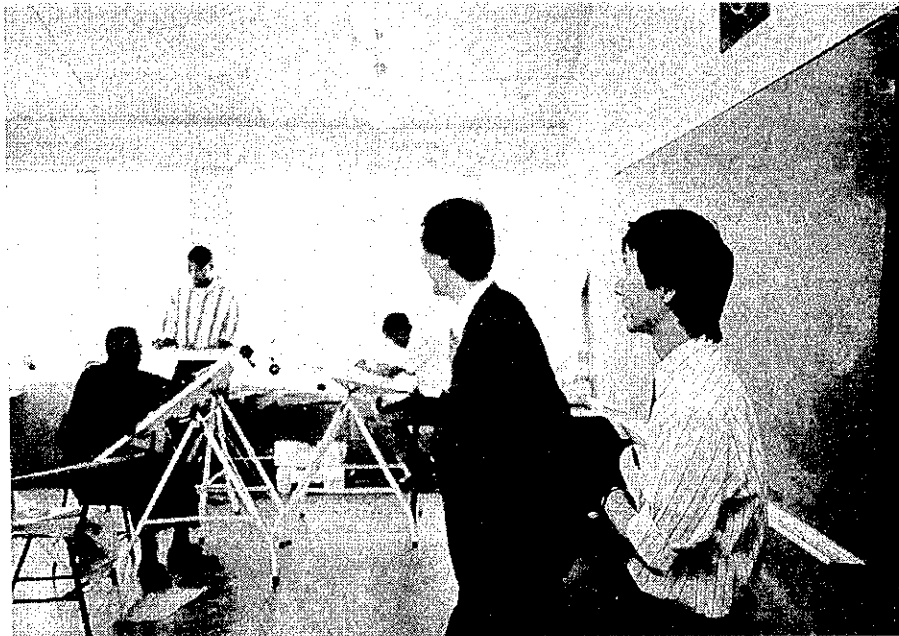
なお、今回の調査業務にあたり、多大のご支援、ご協力を賜った外務省、建設省、在外公館関係者及びその他関係各位に深い感謝の意を表する次第です。

平成8年4月

国際協力事業団
東京国際研修センター
所長 石崎光夫



ケニア人事院 (Directorate of Personnel Management)
Mr. Wanjala wa Muricho, Deputy Director, Manpower Development Division



ジョモケニヤッタ農工大学 (建築学科・設計演習風景)
右 山田 理 専門家



公共事業・住宅省 (Ministry of Public Works & Housing) ケニア



ナイロビ市役所 (Nairobi City Council)



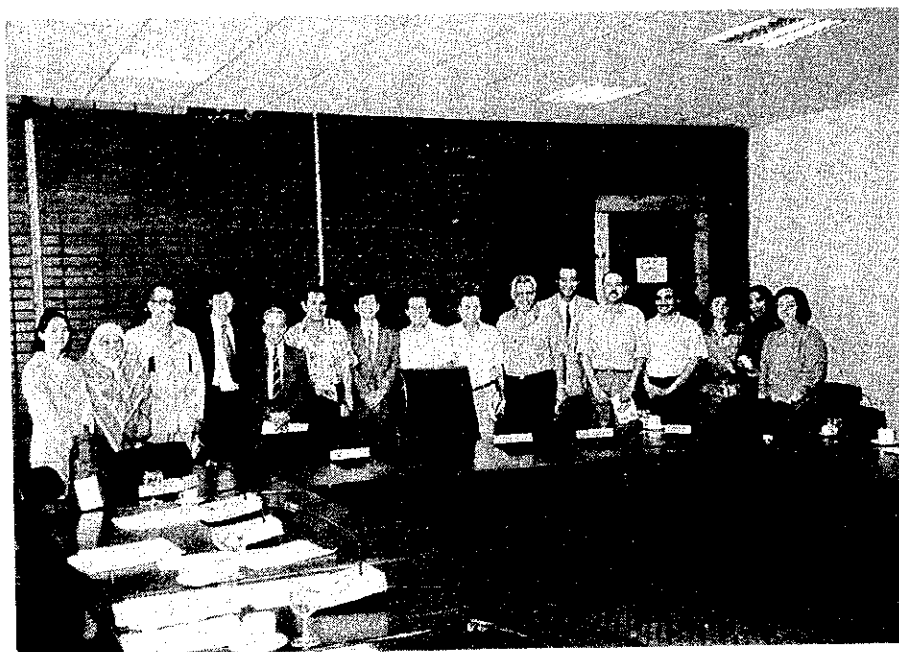
帰国研修員(ケニア)



外務省 (Ministry of Foreign Affairs) エジプト
Amb. Sobhy Nafae, General Director, Department of Waffedin Affairs, Training,
Finance and Technical Cooperation (左から2番目)



住宅・公共事業省 (Ministry of Housing and Public Utilities) エジプト



住宅建築・計画研究所 (Housing Building & Planning Research Centre) エジプト

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I. 調査概要

1. 調査目的

- (1) わが国で実施した研修の成果がケニア、エジプト国の建築・住宅分野において、いかに活用され、どのような波及効果をもたらしているかを知ることにより、コース評価のための一資料とすること。
- (2) ケニア、エジプト国における建築・住宅分野の研修ニーズを把握すること。
- (3) 研修のアフターケアとしての要望を聴取し、可能な限り技術的助言をすること。

2. 調査分野：建築・住宅

対象コース

- (1) 集団研修 「建築技術コース」
- (2) 〃 「住宅建設コース」
- (3) 〃 「住宅・住環境改善セミナー」

3. 調査団員構成

団長 篠原 正積	建設省住宅局市街地建築課
(総括)	高度利用調整官
団員 伊丹 健	(財)日本建築センター
(技術指導及び調査)	国際部 次長
団員 市野 多鶴子	国際協力事業団 東京国際研修センター
(企画及び業務調整)	研修第二課

4. 調査方法

- (1) 調査団出発前に送付しておいた質問表を現地にて回収・分析し、帰国研修員に対し面接を行い、研修のニーズ及び評価、アフターケアに対する要望等の意見を聴取した。
- (2) 技術協力窓口及び関係機関を訪問し、当該分野における研修ニーズ及び研修成果活用状況等を聴取した。

5. 調査日程

日順	月日	曜日	行 程	宿泊地	内 容
1	10.13	金	東京→パリ	パリ	
2	14	土	パリ→	機中	
3	15	日	→ナイロビ	ナイロビ	
4	16	月		◇	JICA事務所打合せ 大使館表敬 質問表分析
5	17	火		◇	人事院(技術協力窓口)訪問調査、 ナイロビ市役所表敬訪問、 ジョモケニヤッタ農工大学(山田専門家)訪問
6	18	水		◇	公共事業・住宅省(関係機関)訪問調査 ナイロビ市役所訪問、意見交換
7	19	木		◇	帰国研修員面談及び懇親会 JICA事務所報告
8	20	金		◇	団内打合せ及び資料整理
9	21	土		◇	休日
10	22	日	ナイロビ→アジスアベバ →カイロ	カイロ	
11	23	月		◇	JICA事務所打合せ 大使館表敬訪問
12	24	火		◇	住宅・公共事業省(関係機関)訪問調査、 帰国研修員面談 外務省(技術協力窓口)訪問調査
13	25	水		◇	住宅建築・計画研究所(関係機関)訪問調査、 帰国研修員面談 JICA事務所報告
14	26	木		◇	大使館報告
15	27	金	カイロ→ロンドン	機中	
16	28	土	ロンドン→	ロンドン	
17	29	日	→東京		

II. ケニア調査結果

1. 当該分野の概況

(1) 技術協力窓口 (DMP=Directorate of Personnel Management)

(表敬訪問相手：ワンジャナ・ワ・ムリチョ人材開発部門局長)

DMPは、我国の人事院の一部に相当する国家機関で公務員研修の対外窓口を担当しており、国レベルでの全体的な公務員の人材育成計画を策定しているが、建築技術者などの各種別の人材育成計画までは作成していない。また、DMPは、自己の研修施設を全国で三箇所所有している。

ムリチョ氏のJICAの技術協力に対する評価は高かった。

(2) 関係機関

① MPW=Ministry of Public Works & Housing

(面談相手：S.M. キグル氏他4名)

MPWの組織については別図 参照。

MPWにおける建築技術者は、いわゆる営繕業務に携わる者は建築局及び土木局に、住宅関係業務に携わる者は住宅局に配属される。

建築関係業務は大きく、建築設計、構造設計、設備設計、積算・発注及び工事監理に分けられるが、MPWにおいては、以下のとおり職能分化されている。

- ・ 建築設計 = Architect
- ・ 構造設計 = Civil Engineer
- ・ 設備設計 = Electric Engineer, Mechanical Engineer etc.
- ・ 積算 = Quantity Surveyor

また、Architect, Electric Engineer, Mechanical Engineer及びQuantity Surveyorは建築局に、Civil Engineerは土木局に所属している。

建築技術にかかる問題点として、国家予算が乏しく、設備機器(コンピュータ関係機器)が不足しているため、先端技術を習得しても生かすことが困難な状況である。

MPWには、独自の研修施設はなく、計画的な研修も行われていない。職員の海外研修やスカラーシップについては、それぞれのチャンネルを通じて実施されている。

JICA研修員の選定について、明確な基準や方法は特に決まっていない。JICA研修に対する評価は高く、また要望としては定員枠の拡大と実施方法について参加研修員の国の実状がそれぞれ異なっているので、例えば、東アフリカ地域からの参加者をまとめて研修できないかという意見があった。JICAの第三国研修の制度などを説明し、アドバイスした。

② NCC=Nairobi City Council

・(表敬訪問相手：C. J. M. キンゴリ市長他10名)

市長から直接詳しく市の実状やJICAに対する要望は聞けなかった。

しかし、スラム問題は大きな課題のようである。我々がケニアに入国した10月15日から17日にかけて市内のキベラ地区のスラムで部族間抗争による暴動が発生し、3人が死亡し、関係者14人が逮捕されるという事件があり、スラムは、社会問題の温床になっている。

・(面談相手：P. M. キビンダ氏他12名)

市長表敬訪問の後、NCCの都市計画担当者から、意見交換したい旨の申し入れがあり、当初予定にはなかったが急きょフォローアップの一環として実施した。

JICA研修のメリット、JICAの技術協力の内容説明を行い、JICAのケニア事務所を活用するようアドバイスした。また、ケニアと日本の都市計画制度の違いについて意見交換した。

(3) JKUAT=Jomo Kenyatta University of Agriculture and Technology

(面談相手：山田 理専門家)

① 大学教育の状況について

ケニアには国立大学が5校あり、建築コースを持っている大学はナイロビ大学とJKUATの2校のみである。

ナイロビ大には、建築学科があつて、学生数は1学年当たり約100人である。建築学部の中に建築学科があり、建築学科の学生数は1学年当たり約20人である。また、建築系の大学院はナイロビ大のみである。

JKUATの工学部建築学科の学生数は20人で、修業年数は6年、JKUATが大学としての形態を整えてから5年しか経っていないので、まだ、建築学科の学士卒業生は出ていない。

JKUATは、ナイロビ市中心から35km北東に位置し、日本のGrant Aidによる大学で、1990年4月に開校した。農学部3学科(園芸、農業工学、食品科学；修業年数それぞれ4、5、4年)、工学部4学科(土木、建築、機械、電気；修業年数それぞれ5、6、5、5年)及び理学部3学科(生物科学、物理、数理；修業年数それぞれ4、4、4年)からなる。建築学科は設計演習に多くの時間を取っているとのことである。

ナイロビ大が名門校でナイロビ大を第一志望とする受験生が以前多かったが、国の財政事情により、設備が劣っていたり、学生がストライキをやっていたり、優秀な教授達がマンデラ政権以降、給料の高い南アフリカ共和国に行ってしまったため、最近では日本の援助を受けているJKUATを第一志望とする受験生が多くなってきた。

② 建築士の資格制度について

建築士の受験資格として学士卒で2年、修士卒で1年の実務経験が必要でかつ、建築士の資格を有する上司が作成した実務記録を提出する必要がある。

試験を通った者は、試験機関団体(AK)による1ヶ月に渡る講習を受ける。講習内容は、設計事務所の経営ノウハウとか業務報酬などの経営実務関係である。年間30人ぐらいが合格する。建築士は全ての建物の設計ができる。

Diploma Course(修業年3年、短大・高専クラス)を出ても建築士の受験資格はなく、建築士の補助的作業をすることになる。

③ 外国の大学認定について

イギリスが、旧植民地国の大学に対して、一定のレベルに達した大学に認定(CAA)を行い、他の国の大学の卒業生と同等の資格を付与している。

ナイロビ大がこの認定を受けており、JKUATは卒業生がまだ出ていないのでこれから取ることになる。

2. 当該分野における課題(ニーズ)等について

帰国研修員と面談し、JICA研修に対する評価及び要望について下記のとおり意見交換を行った。

(1) JICA研修制度の評価について

面談に参加した全員が研修コースの有益性を認めていた。有益だった科目については帰国研修員の職務の内容により異なっていた。

(2) 研修に対する要望・改善案について

- ・研修期間が短すぎる。
- ・日本の技術はケニアに比較して進みすぎているので、第三世界の事例を多く取り入れた方がよい。アジアの事例が多いが、他の地域のケースも広くとり上げたら良い。

(3) 研修内容の企画について

- ・研修参加者は同職種の人を集める方が望ましい。特にPlanner系とEngineer系はコースを分けるべきではないか。(なお、いろいろな職種がmixしたほうがinformationが広がってよいと言う意見もあった。)
- ・参加人数については、概ね妥当の評価を得た。

(4) 取得した知識、技術の活用について

職務遂行上の参考としている例はあるものの、日本とケニアの実状の違いから直接的な活用は困難という意見が多かった。なお、ケニアの宅地開発で我国の土地地区画整理手法のアイデアの導入を計画しているという帰国研修員がいた。

(5) NEEDSについて

技術レベルは常に変化しているので、継続的なアフターケアを望む声があった。また、職場が変わって研修が活かされなかったという者もいた。

(6) 日本の理解について

来日前は、日本についての十分な知識がなかったが、研修を終えて新たな発見をしたりして、我国に対して好印象を持って帰国している。

3. 研修効果に影響をおよぼす人事的要因

(1) 研修候補者の募集・選考方法

JICA事務所に送付されたG.I.は、JICA研修をはじめ、公務員研修の対外的な窓口となっている人事院(Directorate of Personnel Management: 以下DPM)に送られるが、DPMでは研修計画の具体的な内容について、各省庁に任せているのが現状であり、一般的な調整業務のみを行っている。(国レベルでの全体的な公務員の人材育成計画はDPMが策定し、各職種別の育成計画は各省庁毎の対応に任せている。)

よって、DPMはそのままG.I.を関係省庁(当該分野においては公共事業・住宅省)に送り、同省がその他の関連省庁、関係機関へ配布する。

選考方法について、公共事業・住宅省の場合、各部(Department)の中で、候補者を出し、最終的にChief Architectがその中から一名を選出する。その際の明確な選考の基準は設けていないとのことであった。

(2) 帰国研修員の定着状況

今回の面接では19名いる帰国研修員のうち、8名に会い、話を聞く機会を得た。出席した帰国研修員の中で帰国後別の組織へ転職した者が3名いたが、3名とも引き続き関連分野において活躍している。

また、殆どの帰国研修員は帰国後昇進し重要なポストに就いている。

出席出来なかった残り11名の帰国研修員については残念ながら追跡できなかった。

4. 研修コースの評価および改善への提言

(1) ニーズとの適合度

ニーズとの適合度については、日本のレベルが高く、ケニアの実情に合った研修には必ずしもなっていないようだ。しかし、他の途上国の研修員と意見交換をすることでそのギャップを埋められるとの意見もあった。

(2) 習得技術の活用・普及状況

個人のレベルにとどまり、オープンに活用されている状況にはなかった。しかし、土地区画整理手法のアイデアの導入を計画しているという帰国研修員もいた。

一か国から1名参加出来るかどうかという現研修のシステム上、技術を普及させるところまで期待するのは難しいであろう。

5. アフターケアに対する要請および評価

- ・ 現在、帰国研修員に送付している"Kenshuin-Shi"は概括的なものでありプロジェクトなどの有用な技術情報も盛り込んで欲しいとの意見が多くだされた。また、"Kenshuin-Shi"自体が送られてこないという帰国研修員も複数いた。
- ・ 全体の同窓会はあるが職種別のつながりを持つため関連研修コース別の同窓会を運営して欲しいとの要望が出された。

III. エジプト調査結果

1. 当該分野の概況

(1) 技術協力窓口(MFA=Ministry of Foreign Affairs)

(表敬訪問相手：ソビイ・ナファエ部長)

建築関連の人材育成は他の部署が行っている関係から、広く建築関係等全般について下記のとおり意見があった。

- ・日本とエジプトでは建築分野において土地利用の制約や、地震が多いことなど似た条件を有しているのでJICAの技術協力の必要性や効果は高い。
- ・エジプトは途上国といっても技術的レベルは高く、今後、日本からはコンピューター等の先進技術に関する研修を期待する。

以上に対して、日本側要望として帰国研修員が日本で得た知識を広く普及できるよう、対策を考えていただきたいと依頼した。

(2) 関係機関

① MHU=Ministry of Housing and Utilities

(面談相手：H. E. ゲバリ氏他4名)

(7) JICA研修候補者の選定等について

省内に設置されているフェローシップコミッティにおいて、人選を行っている。フェローシップコミッティは月2回開催され技術者のフォローアップ等を行っているようだ。

選定基準(CRITERIA)があつて、年齢、職務経歴、語学力等が重視される。

(4) 帰国後の報告について

帰国後、フェローシップコミッティに研修にかかるレポート提出を義務づけている。その後の昇進にも影響がある。

(ウ) 省内における研修について

エジプト全土に省内のVocational Centerが66箇所あり、内容は建設関係現場作業等の技能研修が大半でエンジニアに対する研修は限られている。修了生は年間約14,000名の実績があり、研修後、湾岸地域で活躍している。

(エ) 日本以外の外国の研修制度について

エジプトはドイツの技術を高く評価しており、ドイツとのコール・ムバラク合意による研修制度がある。ギルドのマイスター制度に関連する技能研修で始まってから2年しか経っておらず日本との比較はできない。

(オ) 日本で得た知識等の国内への普及について

エジプトでは、帰国後、セミナー等を開くことがないため、また、技術が地

位や収入に大きく影響する社会なので個人レベルに留まり、広く普及しにくい社会になっている。出席した研修員のうち、1人が木造技術、耐震設計について個人レベルで同僚に紹介したということであった。

これについて、我々は、セミナー等を開き、広く情報を伝えて欲しい旨要望した。

(カ) エジプトにおける建築関係分野での技術上の問題点について

エジプトにおける建築関係分野での技術上の問題点についてヒアリングしたところ、海岸地域における建築物の建設や維持管理技術(塩害対策)及び砂漠地域における住宅地開発技術を確立したいとのことであった。

また、雨があまり降らない国なので、雨水排水対策が十分でなく、雨量20~30mmで洪水になるなど排水設備が貧弱であるが、これらに対するプロジェクトは財政の制約上等のため、見込みがたっていないとのことであった。

(キ) その他

耐震関係について、ビルディング・コードにより建築の構造安全性のチェックを行っている。耐震規定は1992年の10月の地震の経験から修正された。チェックはLocal Governmentが行うが、建築工事完了段階でInsurance Companyが最終チェックを行っている。しかし、工事完了後は建物所有にかかる税金が高いため、最上階の柱の鉄筋を露出させる等工事中の状態にしておいて、使用している建物も多いとのことである。

(3) 関係機関

① HBPRC=Housing, Building and Planning Research Centre

(面談相手：E. マラワニ氏)

(ア) 名称の変更

General Organization for Housing, Building and Planning Researchから、Housing, Building and Planning Research Centreに名称が変わった。

(イ) セクションについて

組織の変更とともにセクションが1つ増えて、従来の7部から8部になった。Information Centreを創設して必要なデータサービスを行う等情報化社会に対応している。

(ウ) 研究活動について

大きく、建築関係の研究と都市計画関係の研究を行っており、建築関係では、建築材料、音響、照明技術、建築工法等を、都市利用関係は、日本でいう地区計画的な具体の地区における土地利用計画、公共施設計画等を作成している。

(エ) 研究スタッフについて

建築関係の研究者のうち、Architectは4人、Engineerが35人である。

(オ) その他

HBPRCは大学や産業界と協力しあって研究を進めているが、関係省庁等の行政とのつながりが乏しく、研究成果を行政に活用されていないようだ。研究成果を行政サイドに提示し、Recommendするよう要望したが、なかなかむずかしい旨の回答があった。1年前から大学、産業界と協力して、耐震技術の研究を進めているが、まだ成果はでていない。

成果が出れば、関係省庁にRecommendしたいとのことであった。

都市計画については、Ministry of New Communitiesの下部組織であるTown Planning Organizationが行っており、HBPRCは都市地域の特定地区の都市計画(土地利用計画、公共施設計画等)を作成している。

2. 当該分野における課題(ニーズ)等について

(1) 研修コースに関する要望等について

MHUの出席者からは、都市(再)開発、公共施設整備、リスク・マネジメント、CADシステム、テクニカルトレーニングなどの要望があった。

HBPRCの全体面談の出席者のうちの各セクションの長からは、

- ① エジプトの気候にあった建築材料、工法の研究やパッシブ・ソーラーシステムの研究
- ② 建築物における音響技術、騒音対策。建築物内騒音だけでなく、交通騒音など都市計画レベルでの対策にかかる研究など。
- ③ 伝統的建造物の保全にかかる研究(エジプトでは始まったばかり。)という要望があった。

(2) JICA研修で有益だったものについて

MHUの出席者からは、耐震設計、品質管理があげられた。

HBPRCの全体面談の出席でEx-participantの一人からは、土地区画整理の事業手法に関心を持ち、ドイツのシステムや途上国の例を調査し、現在、博士論文にまとめているという報告があった。

(3) 業務に役立つトピックについて

MHUの出席者からは、Rehabilitation(震後対策?、修復?)、CADについて関心が高かった。

(4) JICA研修に対するNEEDSについて

MHUの出席者からは、年齢制限を現行の40才から50才に引き上げて欲しいという意見があった。また、研修期間について3ヶ月に延長し、増やした期間はOJTを希望していた。ただし、同席していた上司は職位によっては3ヶ月以上職場を空けることは問題があるとコメントしていた。

HBPRCの全体面談の出席でEx-participantからは、

- ① ハイテク技術の紹介ばかりでなく、途上国の実態にあったものをテーマにとりあげてほしい。
- ② 共通の問題を抱えた国に絞って研修員を参加させるべきだ、ラテンアメリカとかアジア等からと参加者が広すぎる。
- ③ 研修(カリキュラム)の内容があまりに変わっていない。もっとUp to dateな内容にしてほしい、(これには誤解もあったようで、JICAカイロ事務所の人が反論していた。)
- ④ アーキテクトとエンジニアを分けてコースを組んでもらいたい、関心のない講義を聞いても興味がないため時間の無駄になる。

というような意見がよせられた。

なお、参加していたEx-participantは、建設の3コースからの参加者は一人だけで、JICAの他のコースからの参加者であった。

(5) 同窓会について(アフターケア)

MHUの出席者からもHBPRCの全体面談の出席者からも、研修員全体のALUMNIはあるが、分野別のものが欲しいという要望があった。エジプト全体の同窓生の数は270名で地方にも分散しており、同窓会の集まりはあまりよくないということであった。

3. 研修効果に影響をおよぼす人事的要因

(1) 研修候補者の募集・選考方法

JICAエジプト事務所ではG.I.を技術協力窓口である外務省(Ministry of Foreign Affairs)に送付するにあたり、選考時特に留意する点がある場合は特記事項としてG.I.に添付している。

外務省は入手したG.I.の送付先を選定するが、その際、G.I.記載の目的、到達目標および参加資格要件を加味し決定する。当該分野ではMinistry of New CommunitiesおよびMinistry of HousingへG.I.を送付する。それを受けて各省庁が候補者を選考し外務省へ要請書を送付する。外務省はそれを取りまとめJICA事務所へ送付する。候補者の選考方法および基準については各省庁に委ねており、外務省で候補者を絞ったり候補者に面接等は行っていない。(面接はJICA事務所にて実施。)

(2) 帰国研修員の定着状況

15名いる帰国研修員のうち今回7名に面会することが出来たが、出席出来なかった帰国研修員の中には海外で出稼ぎをしている者もいるとのことであった。技術や専門知識を身に付けると、より賃金の高い湾岸地域へ出稼ぎに出るパターンが多いという。残りの欠席者は地方に異動になっている。

関係機関の所属長の話では帰国研修員は帰国後昇進する可能性が高く、重要なポストを担っているとのことであった。

4. 研修コースの評価および改善への提言

(1) ニーズとの適合度

ニーズとの適合について、比較的エジプトのニーズにあっているようだ。

日本の最先端技術の習得に関心を持つ者も多い。

(2) 習得技術の活用・普及状況

個人のレベルにとどまり、普及されている状況にはなかった。技術がその人の地位及び収入に直接つながる個人主義の強い社会構造の国において、技術を広く普及させることを期待するのは難しいだろう。

5. アフターケアに対する要請および評価

ケニアと同様に同窓会について全体の活動、会合だけでなく、分野毎の会をつくり帰国後、セミナーの開催等により、新たな情報を入手する機会があれば良いとの意見が出された。

また、建築に関する情報誌の送付や、自国で短期間の研修を実施してほしいとの要望があった。

IV. 提言(結びにかえて)

この度の約二週間のケニア及びエジプト調査結果を次のとおり取りまとめ、提言に換えさせていただきたい。なお、これは現地調査及びその後のデータ収集に限界があったこと等により、個人的意見や印象的な部分がある程度含んでいることをあらかじめお断りしておきたい。

今回の調査対象の二国は、今後のJICAの集団研修制度を考えていく上で途上国における典型的な問題を抱えているとともに地理的、経済的、社会・文化的観点等から非常に異なった状況にあるといえる。

ケニアは、他の途上国一般と同様、研修の成果を今後の技術の普及・活用していく基盤を併せて整備していくことが必要となっている。我国の先進的技術を活かすためには、ハード、ソフト両面にわたる条件整備が不可欠である。このためには、多面的な対応が必要であるが、この際特に、現行のJICAの様々な技術協力手法をその後のフォローアップに活用することが有効である。

また、エジプトは、このような基盤整備に先立って、経済的・社会的な構造、個人の意識・価値観等の面に起因する問題をかかえているといえる。すなわち、JICAの研修の成果を一部個人のみのものでなく、広くエジプト国全体の建築技術レベル向上に資すると言う観点から、第三国研修制度の活用等により、広範かつ継続的に技術の普及を図る方法等を検討することが必要となっている。

以上を踏まえて、現行のJICAグループ研修制度について、改善検討すべき点を述べることとする。

1. 研修の内容、方法等について

(1) 途上国における技術向上のための試みの事例等の充実

現在のカリキュラムは我国における制度、仕組み及び先進的技術の紹介等を中心として組まれている。しかしながら、既に述べたとおり、今回の調査においてEx-participant等から、途上国の技術水準、設備器械等のインフラ整備の実態等からみて、帰国後において当該取得技術、知識等を活用していくうえで必ずしも適切なものとはなっていないのではないかとの指摘が多々あった。これは、JICA研修により取得した技術、知識を帰国後に当該国における技術水準をレベルアップさせるための普及方策ともからむ問題でもある。

特に、技術的事項に関しては、コンピューター使用にからむ場合が多くこれは一部の途上国においてはコンピューター器機が未整備なところもあり、今後の技術普及のあり方とあわせて検討していく必要があると思われる。当面は、カリキュラムの内容編成に関し「途上国での技術水準の実態とその向上のための取り組み」を充

実らせていくことで対応できないか。この時、できる限りアジア諸国、ラテンアメリカ諸国、アフリカ諸国等幅広い国々における取り組みの実態とすることが望まれる。

(2) 研修員とカリキュラム

今回の調査で帰国研修員のあいだから、特に建築技術コース (Architectural Engineering Course) について、建築の設計・計画に従事する者(いわゆる Architect)と建築の構造、設備の設計・計画に従事する者(いわゆる Building Engineer)については途上国においては職能 (Profession) として分化しており、業務上も研修員としての興味も非常に異なっている点についての指摘がなされた。

このような状況に対応するため、平成5年度からコース名を Building Engineering から現在の名称に変えるとともに研修員となる対象を土木技師ではなく建築士である旨のPRをおこなっているが十分に認知されていない状況である。また、我国の建築士の制度が、上記の Architect + Engineer の両面を備えたものであることから研修のカリキュラムもこの点を踏まえたものとなっているが、むしろ途上国では、両者は分化しているのが一般的であることに鑑み、今後の研修の方法、カリキュラムの内容等に工夫の余地がないか検討することが必要と思われる。

なお、研修員のうち、研究機関からの参加者は、行政機関職員や Public Corporation 等からの研修員とも研修方法等が異なるべきであるが、研修員の選定方法等ともからめて検討する必要がある。

2. カントリーレポートの充実及び情報収集のネットワーク化

途上国においては、建築技術関係に限らず組織体制がしばしば変わるのが実状である。したがって、建築技術者の採用、政府部内での配置状況、教育システム等及び政府の組織図、建築技術者の配置状況等の途上国における人材開発にかかる基礎的な情報をできる限り最新のものとして収集しておく必要性を今回の調査において痛感したところである。

このための貴重な情報源としては、研修員から提出されるカントリーレポートがあるが、残念ながらこの期待に十分応えられるものとはなっていない。カントリーレポートについては、その重要性について従来からも指摘があると聞いているが、今回の調査でもその点について再認識したところであり、内容・項目のチェックとともに

研修員に的確にこれを提出させるよう指導の徹底を望みたい。

このカントリーレポートは、我々にとっての情報であるばかりでなく、研修に参加した他の各途上国の研修員にとっても貴重な情報となっていることにも留意すべきである。

さらに、その後の情報のフォローアップについても検討する必要がある。その際、次に述べるとおり「同窓会活動の支援」の一環として情報整備もあわせて検討し情報のネットワーク化を試みてはどうか。情報のネットワーク化を図るには人とのつながりが不可欠である。

3. 同窓会活動の支援

今回の調査で強く感じたのは、帰国研修員の帰国後のフォローアップの必要性である。帰国後の彼らの技術活用、普及は個人個人の活動のレベルで対応できる部分については、いろいろな制約の面から困難と言わざるを得ない。

このためには、彼らの活動を支援していくことが重要であるが、その一環としていわゆる「同窓会」活動の支援をより協力に進めていく必要がある。

これまで行われている同窓会活動はJICAのAll Alumni(全分野)であるが、これをさらに進めて技術分野それぞれのフィールド毎の活動を支援することができないか。これは、同窓会活動に何の期待するかと言う点から検討することが必要であるが、上記2に述べたこと等に加え、今後の建築分野に係わる様々なJICA技術協力を推進していくに当たって、いろいろな面でサポートを期待できる基になるものと思われる。

最後に、今回の調査ミッションにおいては、次の方々大変お世話になった。

- ・ JICA現地オフィスには技術協力窓口、技術協力関係機関及び帰国研修員とのアポイント及びクエストマネアの配布・回収等についてご協力・ご支援をいただいた。
- ・ 在ケニア日本大使館一等書記官 阪井清志氏及び在エジプト日本大使館一等書記官 皆川 猛氏には現地における技術協力の実態等について有益な情報をいただいた。
- ・ また、ケニアにおいては、JOMO KENYATTA UNIV. OF AGRICULTURE & TECHNOLOGYに派遣されているJICA専門家 田口 定則氏 (Team Leader) 及び山田理氏にケニアにおける建築関係の大学教育制度・現状、官公庁における建築関係技術者の状況及び建築・住宅行政の概要等についてご教示いただいた。

この場をおかりして厚くお礼を申し上げたい。

V. 添付資料

1. 主要面会者リスト

(1) ケニア

① 在ケニア日本国大使館

塩崎 修	公使
阪井 清志	一等書記官

② JICAケニア事務所

長島 俊一	所長
石田 幸男	次長
小田中 恵	所員

③ ジョモケニヤッタ農工大学

田口 定則	プロジェクトチームリーダー
山田 理	専門家(建築)

④ 人事院 (Directorate of Personnel Management)

Mr. Wanjala wa Muricho, Deputy Director, Manpower Development Division

⑤ ナイロビ市役所 (Nairobi City Council)

Mr. Cllr. John M. King'ori,	Mayor
Dr. Thiongo Muchiri,	Assistant Director
Mr. William E. O. Amungam,	Dip. Town Planning, Resistered Planner, Deputy Director, City Planning and Architecture
Mr. W. E. O. Amunga,	Ad Planner
Mr. C. K. Mgithi,	Principal Planner
Mr. Peterson Theuri,	Assistant Planner (Research)
Mr. Charles K. Gacheru,	Ag. Assistant Director (Architecture)
Mr. Sammy M. Karani,	Land surveyor
Mr. A. M. Kariuki,	Ag. Deputy Director (Land Survey)
Mr. Eliphaz W. Masiude,	Chief Administration Officer
Mr. Alexander Kamenyi,	Transportation Engineer & Planner
Mr. C. M. Kanau,	Dd. (Quantity Surveyor)
Mr. P. M. Kibinda,	PIU
Mr. B. W. Muauiki,	Forward planning

⑥ 公共事業・住宅省 (Ministry of Public Works & Housing)

Mr. Maurice O. Ayugi,	Director, Kenya Building Research Centre
Mr. Bukania,	Chief Architect

Mr. F. O. Guya	
Mr. D. M. Kialah	
Mr. John M. Mwangi,	Public Relations Office
Mr. Eng. S. M. Kiguru,	Engineer-in-Chief

(2) エジプト

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| ① 在エジプト日本国大使館 | |
| 皆川 猛 | 一等書記官 |
| ② JICAエジプト事務所 | |
| 鈴木 信一 | 所長 |
| 石岡 秀敏 | 副参事 |
| Mr. Mohamed Kamel Sadek, | Public Relation |
| Ms. Mai Ali Khalaf, | Executime Secretary |
| ③ 外務省 (Ministry of Foreign Affairs) | |
| Amb. Sobhy Nafqe, | General Director, Department of Waffedin Affairs,
Training, Finance and Technical Cooperation |
| ④ 住宅・公共事業省 (Ministry of Housing and Public Utilities) | |
| Mr. Eng. Hussein El Gebaly, | Undersecretary for Technical Affairs, Minister's Office |
| ⑤ 住宅建築・計画研究所 (Housing Building & Planning Research Centre) | |
| Mr. El Malayany, | Director |
| Prof. Dr. Eng. Adel Elmallawany, | Director |
| Prof. Dr. George Bassili Hanna, | Head Building Thermal Unit |
| Prof. Dr. Eng. Mohamed Elmessiry, | Head of Building Phisics and Environment Dept. |
| Prof. Dr. Magda Shalier, | Strength of Material and Quality Control |
| Prof. Dr. Hamdy A. El. Sayed, | Raw Material and Processing Department |
| Prof. Dr. Fathy H. Mosalamy, | Raw Material and Processing Department |
| Dr. Basil Ahmed Mohamed El-Sabbagh, | Raw Material and processing Department |
| Mr. Mohamed Hassan Mohamed, | Lecturer Assistant,
Division of Strength of Materials and Quality Control |
| Mr. Adel Hashem Hammam, | Soil Mechanics and Foundation Eng. |

2. 帰国研修員リスト(面会者)

(1) ケニア

NAME	NAME OF THE TRAINING COURSE	YEAR	PRESENT OCCUPATION
Ms. GRACE WAGIO NGURE	Housing	1981	Chief Social Officer, Urban Development Dept., Ministry of Local Government
Ms. JENNIFER NAMBUI GATHECHA	Housing	1984	Supt. Architect Housing Dept., Ministry of Public Works & Housing
Mr. KITHUMA W. D. NZAINGA	Improvement of Housing & Living Environment	1989	Senior Estates Officer, Estates Dept., National Social Security Fund
Ms. PHYLLIS WANJIKU KIARIE	Improvement of Housing & Living Environment	1991	Mortgage Administration, Mortgage Dept., Housing Finance Company of Kenya
Mr. WILLIAM S. W. BUSOLO	Building Engineering	1986	Principal Architect/Consultant, Intershelter Consultant Services
Mr. PHILIP ONYANGO SIKA	Building Engineering	1990	Chief Superintending Architect, Architectural Dept., Ministry of Public Works & Housing
Mr. BENSON MUKOYA WAMAYA	Building Engineering	1991	Superintending Structural Engineer, Structural Dept., Ministry of Public Works & Housing
Ms. MUNANO AIDAH NJERI	Building Engineering	1992	Superintending Architect, Architectural Dept., Ministry of Public Works & Housing

(2) エジプト

NAME	NAME OF THE TRAINING COURSE	YEAR	PRESENT OCCUPATION
Mr. HASSAN IBRAHEIM HESSUM	Building Engineering	1986	Managing Director, Project Sector in addition Head of Development Zone at Western Sinai Design, Quantities Div. Sinai Development Authority
Mr. AHMED SABRI HELAL	Building Engineering	1987	Chief of Central Project Directorate, Ministry of Organization of new Urban Communities Authority
Mr. MOHAMED ALI AHMED	Building Engineering	1988	Head of Planning Department, General Organization for Physical Planning
Mr. ISMAIL MOHAMED ABD ELMONEM ISMAIL	Building Engineering	1989	Member of Technical Working Group Minister's Cabinet
Mr. HUSSEIN ELSAID BUSSEIN	Building Engineering	1993	Executive Engineer, Projects Executive Department Alexandria General Organization for Sanitary Drainage
Mr. MOHAMED SAIED MOHAMED RAZIAN	Housing	1990	Site Engineer (Building)
Ms. HANIA MOHAMED AHMED HAMDY	Architectural Engineering	1994	Lecturer, Department of Architecture, Faculty of Engineering and Technology, Helwan Univ.
Mr. MAHMOUD BAHAA HASSAN AMER	Building Engineering	1991	Architect, Senior Designer, Technical Office, The Misr Concrete Development Co.

3. 研修コースの概要

(1) 建築技術コース

① コース目的

日本の建築技術とその成立条件に関する講義、討論、見学等を通して、研修員が建築技術に関する各国の抱える問題点を明らかにするとともに、それぞれの実情に即した建築技術の導入および定着の方法について考える機会を与えることを目的とする。

② 帰国研修員に期待される役割

自国の実情に即した建築技術の導入および応用方法の方向づけができる。

③ ニーズの継続性／変化

近年の急激な都市化にともない、各国の都市において土地の有効活用が重要となっている。あわせて、伝統的建築物の保存および現代建築の技術的開発も重要な課題である。

④ 今年度までの実施回数 15回(今年度実施済み)

⑤ 帰国研修員総数 207名

うち今回派遣国： エジプト 9名

ケニア 9名

⑥ 定員 13名

(2) 住宅建設コース

① コース目的

日本の住宅事情、および住宅供給に関する政策、行政機構等を紹介し、自国の住宅事情を改善するための政策を展開するに必要な知識を習得させることを目的とする。

② 帰国研修員に期待される役割

自国に有効な住宅政策を推進できる。

③ ニーズの継続性／変化

途上国の住宅事情については都市の人口増加および、さまざまな経済問題によりその改善が急務となっている。各国の住宅および住環境の改善のため、自国に効果的な政策の適用が必要である。

④ 前年度までの実施回数 17回

⑤ 帰国研修員総数 242名

うち今回派遣国： エジプト 6名

ケニア 8名

⑥ 定員 11名

(3) 住宅・住環境改善セミナー

① コース目的

わが国の住宅・住環境に関する経験や事業の進め方を紹介するとともに、研修員相互の情報交換を促すことにより、これからの開発途上国における住宅・住環境の改善方策について考える機会を与え、各研修員の資質の向上を図ることを目的とする。

② 帰国研修員に期待される役割

わが国のこれまでの経験や事業の進め方の中から、自国に有益な情報を伝えるとともに、自国の問題への解決策を提示することができる。

③ ニーズの継続性／変化

人口の急増や大都市集中を背景としてますます深刻化しつつある開発途上国の住まいや居住環境の改善が急務となっている。

④ 前年度までの実施回数 8回

⑤ 帰国研修員総数 71名

うち今回派遣国： エジプト 0名

ケニア 4名

⑥ 定員 8名

4. クエスチヨネア集計結果

(1) ケニア(婦国研修員)

(QUESTIONS)

1.PRESENT OCCUPATION

1-1. What is your present occupation? Please describe your responsibility in detail.

*1) I coordinate UNICEF project in November, Monbasa and Kisumu (urban basic services) such as education, nutrition and health, water & sanitation and child and maternal health.

2) Conduct public awareness workshops on water and sanitation in local authorities.

(NGURE)

*Heading a technical division of about eight officers, architects, quantity surveyors and one engineer.

(GATHECHA)

*Responsibility - Head of the Estates Development Section of the NSCF

- To initiate proposals on the development of the fund's plots/parcels of land.

- To conduct and/or evaluate technical feasibility studies on development proposals.

- To write terms reference and make recommendations for the appointment of projects consultants & coordinate their activities.

- To prepare tender documents, invitation of bids & their evaluation.

- To supervise & coordinate the fund's development projects to ensure best value for money.

(NZAINGA)

*The company that I am currently working for is known as The Housing Finance Company of Kenya Limited. This is the largest mortgage company in Kenya, established in 1965 to promote thrift and home ownership by Kenyans and plays a major role in pursuit of shelter. The company's share holding is as follows: - Public shares = 39.2%

Kenya government and commonwealth

development corporation = 30.4% each

HFCK operates on similar lines as building societies. It finances dwelling houses, flats, commercial properties and also sponsors estate development to ensure a continuous output of new houses.

The normal mortgage term's between 5-25 years repayable by equal monthly instalments consisting partly of capital and partly of interest. HFCK finances individuals, couples or companies with the main emphasis to urban areas where the demand is higher. The interest rates charged are mainly dictated by the market forces, thus they fluctuate from time to time. Borrowing by an individual or company is purely dictated by such factors as: -

(i) Affordability and ability to repay the loans

(ii) Mortgage value of the property against which loan is borrowed.

The company lends upto 90% of the mortgage valuation (as assessed by HFCK).

(KIARIE)

*Intershelter Consultancy Services is a firm of consulting architects who specialise in following

archs: - Working with local communities and NGOs in the area of shelter delivery using appropriate technologies. Shelter have housing, schools, health centers etc.

- Networking with national and international institutions with interest in human settlements.

- Providing training to building technicians.

- Providing normal architectural consultancy services.

(BUSOLO)

*My present responsibilities involve the overall direction of design in the department formulation and administrative and operational procedures concerning the implementation of building development projects

(SIKA)

* - Chief Structural Engineer

- Chief Superintending Structural Engineer

- Senior Superintending Engineer

- Superintending Engineer

- Engineer (Structural/Civil)

- Assistant Structural Engineer

(WAMAYA)

*Responsible for the implementation of building projects for 10 government ministries.
Implementation from compilation of brief to completion of the construction. During construction co-ordinating in supervision for the various disciplines. ie contractor & supervision team.
(NJERI)

1-2. Please describe your career path from the time of returning home up to now.

*1) I have worked as provincial housing officer in Mombasa for 6 years 1982-1988.
2) Chief Social Planner (urban development department) 1988-to-date
(NGURE)

*1984 - Assistant Architect

1987 - Architect

1991 - Supt. Architect (GATHECHA)

*1989 - 1992 - Director of Social Services and Housing, Nairobi City Council

1992 - 1993 - Consultant on Housing, Planning and Land policy & development

1994 - present - Senior Estates Officer, National Social Security Fund.

(NZAINGA)

*Upon return to Kenya in March 1991, I returned to the Ministry of Lands and Housing where I was working as an Estate Surveyor I.

In April 1991 I joined my present employer Housing Finance Company of Kenya and underwent an induction course for 3 months. Thereafter the company sent me on secondment to their subsidiary company by the name Kenya Building Society, dealing with housing development, I was posted as their Sales and Marketing Officer to establish a sales and marketing office using my professional expertise gained over the years. Working under the Project Manager, the main duties involved:-

- Marketing the company products i.e houses straight from the design stage to completion.
- Drafting suitable adverts for properties for sale.
- Processing applications for house allocations.
- Vetting applications with a view to determining affordability.
- Allocation of houses to eligible applicants.
- Instructing Advocates to prepare and process the relevant documents.
- Issue key, to the allottees upon completion of the houses.
- Write progress reports to the management.

In 1994 transferred back to HFCK and posted to Mortgage department as a Mortgage officer upto date. The duties involve the management of accounts in arrears through the following stages,

- Write reminder notices to account holders with small arrears balances.
- Instructing litigation advocates to recover the notorious debts.
- Auction where there seems to be no other remedy.

As the borrowers receive such notices, they report to our offices and we have to listen to their day to day problems which have caused such arrears. Wherever possible we accept proposals which sound workable and give them time to settle the debts. Currently the company is handling over 10,000 accounts but not all are in arrears.

(KIARIE)

- * - Promoted to Senior Superintending Architect, 1986 in Ministry of Works and Housing.
- Proceeded to University of London for a MSc. course in Architecture in 1989/90.
- Promoted to Chief Superintending Architect, 1989 in MOW & Housing.
- Left Government in 1994 (March) to start private practice under Intershelter Consulting Services where I am the Principal Architect/Director.
- Attended a 10-week course in Architecture in Sweden in March 1995.

(BUSOLO)

*When I attended the course I was Superintending Architect. Since I returned I have been promoted

to Senior Superintending Architect and again to chief Superintending Architect which is the post I presently occupy. I am also the deputy to the chief Architect who is head of the Department.
(SIKA)

- * - Superintending Engineer
- Engineer

(WAMAYA)

*At the time of attending programme I was in charge of research & development & implementation of building projects for 1 Ministry. My present responsibilities are as above decribed.

(NJERI)

2. Evaluation of the training course

2-1. After returning home, was the course useful for your present job? List the topics which you thought were useful.

- * 1) After returning home, I found the course to be useful, but I could not applies what I learnt because Japanese technology is very advanced compared to Kenya.
- 2) Japanese goveremnt is able to finance its housing project especially for the less priviledged people, whild in Kenya funds are not always available.

(NGURE)

- * 1. Building legislation
- 2. Building materials
- 3. Case studies e.g. KAWPUNG improvement programmes.
- 4. Housing policy
- 5. Land readjustment projects
- 6. Urban redevelopment projects
- 7. Solutions for slum and squatter problems
- 8. Country reports

(GATHECHA)

*The course has been extremely useful to me in performing my job especially with the Nairobi City Council, Housing & Social Service Department.

The most important topics were:

1. Land Readjustment Programme (KUKAKU SEIRI) principal explained to the participants during the study tour of the Nagoya City Government.
2. Urban Renewal System in Japan, outline of the Nishi-Shinjuku Urban Renewal Project and the Role of the Local Government in the improvement of housing.

(NZAINGA)

- * - Japanese Housing Policy abd Technology
- Government active role in the provision and supply of housing
- Urban renewal

(KIARIE)

*My present job involves design of buildings, managing contracts, training of architectural technicians and giving professional advice on other issues related to the construction industry. Hence, 60% of what I learnt in Japan is very much applicanble in my present job.

Very useful topics include:

- 1) Housing and urban development
- 2) Architectural education
- 3) Building materials
- 4) Public housing construction
- 5) Constructural organization
- 6) Quality control

(BUSOLO)

*The course was very useful in my present job as I have an overview of the activities of the department and we have been in the process fo trying to reorganise our operations.

The topics which were most useful were:

1. Standard specifications
2. Japan's building permit system
3. Government building department
4. Building research finance
5. Architectural firms in Japan
6. Housing community development and conservation
7. Building physics and environmental research
8. Public housing construction
9. Computer aided techniques (SIKA)

*The course was useful as it broadened my knowledge in the following areas:-

- (1) Earthquake design options available - kind of foundations, roof treatment and the use of counterweights.
- (2) Design construction of Buildings where the surrounding has to be preserved i.e. railway lines, other tall buildings etc.
- (3) Quality control in the area of producing quality work. (WAMAYA)

*Yes! Topics that were useful were one's that covered.

- (1) Exposure to construction technologies.
- (2) Building materials
- (3) Structure of building industry in Japan.
- (4) Japanese architecture traditional & modern.
- (5) Planning of housing schemes etc. (NJERI)

2-2. Contrary, what are the topics which were useful and useless? Describe the reasons. useful topics (reasons)

*Japan new town development was useful although it is very advanced. Urban renewal planning was also useful. (NGURE)

*All above cases are related to housing directly. Country reports and land readjustment projects, urban redevelopment projects have given an insight and inspirations when tackling housing problems in the country e.s. Mathane UA Development programme. (GATHECHA)

*In my view none of the topics presented to the participants were not useful. But there were of course some topics which were more relevant to my situation than others. Apart from the above two(2-1) the others are: The Shin-Yamashita Urban Renewal Project-Yokohama, The lecture by Prof. Nagamine of Nagoya University on trials for improvement of living conditions in developing countries. (NZAINGA)

*Most of the subjects were useful (either directly or indirectly). The case studies approach gave us an opportunity to compare other peoples/countries experiences with our own experiences. (KIARIE)

*The useful topics are as shown above. They are of useful because of their relevance and applicability in Kenya. Topics not useful included 1) Structural design technology 2) Earthquakes 3) Standard specifications. Structural design technology was too complex. Earthquakes rarely occur in Kenya. Standard specifications were too high. (BUSOLO)

*(Useful to architects but not so to engineers)

Housing especially in regard to development of economic housing schemes. A structural engineer in this country does not play much role in determining the use of the building and the plans indicating what the building has to be used for. This is an architectural aspect. (WAMAYA)

*All topics were useful to enable understanding of the building structure in Japan. (NJERI)

useless topics (reasons)

*I do not think there were useless topics. But the topics should be relevant to our housing structure, especially (slums), upgrading, and urban renewal.

(NGURE)

*None. There were other related courses to housing that were conducted, eg.

- Urban and regional development in the third world countries.
- Historical changes in housing construction technologies and building materials.

(GATHECHA)

*All the topics discussed were useful.

(NZAINGA)

*There was too much concentration on examples from Asian countries which may not necessarily directly compare to our African context due to varied economic and political factors. For instance finance is a major handicap when it comes to provision of housing in a country like Kenya.

(KIARIE)

*I did not find any useless topic.

(WAMAYA)

*None was useless. They all tied well to enhance the understanding of Japanese building industry.

(NJERI)

2-3. Do you have any idea for the course to be useful?

*The course could be more useful if it can deal with the third world housing experience and how to plan for our towns.

(NGURE)

*The course is satisfactory as it was in 1984. Maybe a course on importance of Housing Data Bank and research into traditional building technology pertaining to the third world.

(GATHECHA)

*(Ways to improve the course)

1. Most of the participants did not compile their "country reports" in the format prescribed by JICA. I think every participant should be made to take the country report very seriously.

2. The study tour 20th-25th Feb. 1989 was too short. Suggest that this should be made longer.

(NZAINGA)

*As much as possible teaching material to be collected from various parts of the world. The length of the seminar is too short to be able to come up with concrete information or knowledge to improve housing & living environments.

(KIARIE)

*The course draws participants from all over the world who have very wide backgrounds. To be more relevant the course should split into regional blocks for example for Africa, Middle East, South America so that local issues are addressed. Otherwise sometime the course may be general.

(BUSOLO)

*The course should be split to accommodate the interests of architects and structural engineers. Design aspects of strength analysis of structures, and construction aspects should be reserved for the structural engineer. This should involve various structures just as the course involved some (hangars, domes, highest buildings).

(WAMAYA)

*More time may be allocated to enable a more thorough understanding of the various inputs in Japanese building structure.

(NJERI)

2-4. Please comment on the purpose, contents, applicants, number of the participants, and duration of the training course from the ex-participants' point of view.

2-4-1. purpose

- *The purpose is OK. The contents should be changed to suit the Kenya or third world countries. The number of the participants was OK. Duration of the training course should be at least six months. (NGURE)
- *Duration - 3 months is okay.
Number of participants - 15 to 20
Contents of the course - okay
The latter added course on improvement of housing and living environment should take care of human settlement management. (GATHECHA)
- *The purpose of this course ("seminar") is quite good. All developing countries continue to face a deterioration of housing conditions due to the rapid rate of urbanization and lack of resources and technology. The seminar made us focus on the problem and gave us a chance to look for solutions. (NZAINGA)
- *To increase their knowledge and understanding of the building industry and learn from each other and also from the Japanese experience. (BUSOLO)
- *The purpose of the course being the clarification of the problems in architectural skills & techniques found by the countries of the participants is valid objective and I think the course succeeded in a large measure in respect of this. (SIKA)
- *Too broad and encompass aspects that would be best left for those areas. The training of engineers and architects is different. There should be a course for engineers separated from architects. (WAMAYA)
- *Purpose applicable towards the need for exposure of our professionals. (NJERI)

2-4-2. applicants

- *Applicants should be urban planners, sociologists and architects. (NGURE)
- *In my view the criteria for selection was good. Those selected had various backgrounds and experiences which we shared. (NZAINGA)
- *The number of the applicants is okay. (BUSOLO)
- *It is not clear what is the question in this context. (SIKA)
- *The number of applicants was alright. The calibre of applicants was good in the sense that we had been in the construction/building industry for almost the same period enabling us to have a lot in common to share from our respective countries. (WAMAYA)
- *Maybe applicants could be of the same disciplines for every group of participants. ie architects on their own, electrical engineers etc. (NJERI)

2-5-3. number of the participants

- *The number of participants should be 20 - 25. (NGURE)
- *15 to 20 is a good number. There is a possibility of good interaction and exchange of notes amongst such a number. Such a number becomes kind of extended family. (GATHECHA)
- *Ten people from 9 countries participated in the seminar. The number was okay but another two or three additional participants could have been accommodated. I suggest 12 - 14 people would be ideal. (NZAINGA)
- *Too few. (KIARIE)

*Between 15 - 20.

(BUSOLO)

*The number of participants in the course I attended was okay.

(SIKA)

*As stated above the duration of the training course was okay. It allowed attention to be paid to each participants the duration of training is certainly too short for us to acquaint ourselves to the design aspects and have some experience. I propose a duration of six months where at least 3(three) is spent on some construction sites, one month for site investigation and two months on construction and evaluation of cost.

(WAMAYA)

*Size of group was alright. All were able to inter-relate properly in all aspects.

(NJERI)

3. Applicability

3-1. Since you returned from the training, have you had any opportunities to introduce actively your acquired knowledges and skills in the training to the others? If the answer is yes, how were their reactions to your introduction?

*No. There are no funds to implement.

(NGURE)

*Maybe not actively or directly. But there are times I have borrowed an idea here and there from the course. Political, cultural and social differences will hinder this. Case in point is Land Readjustment programme.

(GATHECHA)

*When I returned, with the help of the University of Nairobi (HRDU) I formed a team and developed a study based on the Kukaku Seiri Land Reajustment Policy which also combined Urban Renewal Programme. The Bahati Housing Redevelopment Proposal has been accepted as a riable and feasible project. I explained to the team on the merits of the policy and they all adopted it.

(NZAINGA)

*Not much. Reason being position held with the organization not senior enough to have ideas / knowldge acquired imported. Bureacracy as well.

(KIARIE)

*The course created an awareness of advanced technology. However the impact of such technology is limited to a small sector of the society. For instance, in Kenya there is limited scope in using prefabricated concrete elements for mass housing. Hence the applicability of training is limited. But the awareness creates potential for new innovaion.

(BUSOLO)

*Yes the reaction was positive. However, the difficulty in implementing some of the skills is one of funds and also the undisciplinatory nature of the professionals.

(SIKA)

*I shared the information in my group and they looked at me in some instances in disbelief e.g. type of foundations at Tsukuba Laboratory for the prototype building for earthquake design; reclamation of Kobe Island and use of office space in offices.

(WAMAYA)

*Yes, in the carrying out of my duties I make references to my exposure during this course. There is a general attitude by many wishing to have similar exposure.

(NJERI)

3-2. Do you think that the personnel changing policy adopts the system which considers the effect of the training in Japan?

Are there any possibilities that ex-participants are transferred to the sectors unrelated to their field?

*A participant tends to individualise the information he/she has gained from the course & he resigns from the department, he resigns with the information. If he stops handling a certain task that task no

longer benefits from his knowledge. Maybe a "local oriented course" could also help, where a good percentage of housing officers are included. (GATHECHA)

*My observation is that people have been transferred to area where their knowledge and training is not relevant. Most personnel changes are haphazard and detrimental to the institutions.

Yes, there are cases where ex-participants are made to transfer to areas where their training is not useful. (NZAINGA)

*Yes. (KIARIE)

*The first question is not clear. Yes, ex-participants may be transferred to the sectors unrelated to their work. (BUSOLO)

*In this ministry the possibility is very remote since most of the participants are very specialised. (SIKA)

*There has been talk of utilising the office space in a more economical manner but this has not been implemented. We have not heard yet of people in our department transferred to unrelated sectors in their field of specialising except in the past. (WAMAYA)

*Not in my department for architects since any transfer is always to architectural related fields. (NJERI)

4. Needs Survey

4-1. What is the biggest problem in your field?

What are the causes of it?

problem

*The biggest problem in my field is lack of funds. I concentrate mostly in the urban slum areas and whatever action plan we come up with, there no funds to implement it (NGURE)

* - Lack of adequate and reliable data bank.

- Low income levels whereby unsubsidised housing projects will not benefit the intended group. Thereby slums multiply instead of reducing..

- High cost of building materials and construction.

- Funds (GATHECHA)

*Since 1992 I changed my job. The training I had received was relevant to my former work where I was in charge of housing. In my present job I am now in charge of housing/building development projects. I now need further training in Architectural Engineering (Building Engineering) (NZAINGA)

*Having to deal with debt collection on a daily basis, the biggest problems encountered is to have to deal with day to day problems of the borrowers. They are always visiting the office unhappy with negative attitudes especially whenever rates of interest charges. (KIARIE)

*Lack of financial support in training and lack of collaboration with well established firms in supporting young firms to come. The course to have problems could be attributed to lack of information and coordination in the building industry. (BUSOLO)

*The biggest problem in this field is the adoption of the changes that are resulting from the liberalised economy. Management of the large number of projects in the fast changing economic landscape. (SIKA)

*We are concerned with the implementation of government projects. The structural adjustment programmes have caused a considerable scaling down of the government commitments in new projects which has resulted in idleness in offices. We are also not involved in the structures coming up in urban centers because these fall under the municipalities and cities; commissioning of government projects has also reduced the involvement of civil servants in "big" projects. There has

been that limitation of fully being involved in management of projects because of our counterparts - private consultants. (WAMAYA)

*Need for training and exposure to growing & changing technology. (NJERI)

Causes

*The people who live in the slum areas are poor. Poverty is the cause. (NGURE)

* - Poverty levels

- Maybe management

- Building materials - some research have been undertaken into cheaper walling and roofing.

(GATHECHA)

*The changing to a new job.(field)

(NZAINGA)

*Financial, social factors such as broken marriages; loss of jobs; fluctuation of interest rates; low incomes.

(KIARIE)

*The increase in the number of the very large projects we handle is a cause. The variation in prices due to the unstable financial conditions. Problems resulting from this and the other departments to vote adequate funds for its projects.

(SIKA)

*Policy on the design and implementation of projects has given the local government that mandate.

The government is unable to absorb all Civil/Structural Engineers and so work has to be given to the private consultants to keep the (graduates) employed.

(WAMAYA)

*My department head in best position to answer this.

(NJERI)

5. Understanding of Japan

5-1. Has your impression of Japan changed after visiting Japan? If the answer is Yes, how did it change?

*My impression of Japan changed after I visited Japan because I found out that Japan is a small country but is very advanced in practically everything. I was impressed by the high technology Japan has adopted.

(NGURE)

*Japan is a small country housing many people. After visiting Japan it gave me hope that with appropriate policy and management housing problems can be eradicated in the country.

(GATHECHA)

*Yes - very much. Basically the only knowledge I had about Japan and the Japanese people was from the 2nd World War related material - books, films, magazines etc. This was essentially a negative sort of impression. But after visiting Japan and associating with the Japanese people my impression was totally changed. Japan & its people are more friendly and more understanding than any of the other countries I have visited.

(NZAINGA)

*Before I visited Japan, I imagined it was just another Asian country with nothing much to offer. This is because until recently we had not heard and known much about Japan. Once I visited the country I was impressed by the level of : -

- Technological progress.

- Level of economic development especially since 1945.

- Very high population yet contained with comfort.

- Industrial growth.

- Homogeneity amongst the Japanese society. (KIARIE)

*My impression changed. My attitude to the possibility of the need to improve the organization of the building industry in Kenya to be more responsive to the available skills (technology) we have.

(BUSOLO)

*Yes. Their approval of solving the housing problems after the second world war. The development of the infrastructure and the attempts to preserve the environment in the face of development.

(SIKA)

*Initial thought:- Japan was developed and hence people would be anti-social - this was contrary.

Final impression:- As people were quite sociable and yet rich (developed).

Initial thought: - Tokyo should be a crowded city and filthy.

Final thought: - Tokyo crowded but clean and even has social amenities provided for.

(WAMAYA)

*Yes. There is a lot our professional can benefit in by relating to Japan. Many modes of technologies may be applicable to our situations. (NJERI)

5-2. What impressed you most during your stay in Japan?

*The high technology. Japanese people have respect and are polite.

(NGURE)

*A highly organised and quiet structure of the living environment. Each individual having a responsibility towards his neighbourhood. (GATHECHA)

*The Japanese people are very very friendly and understanding. They are very hard working. Above all they are very genuine people. What impressed me most and the lesson I learnt is that when a people are committed to hard work and devotion to the development of their motherland, they can overcome any obstacles. Japan has developed very rapidly despite the many problems they faced in the past. (NZAINGA)

* - Industrial development and high technology.

- The fact that the land is very small compared to existing population, yet the country is highly developed. (KIARIE)

*The commitment the Japanese have to their work. (BUSOLO)

*The system of transport, education, how much of the tradition is preserved in spite of western influence. (SIKA)

*That the people are housed in relatively very decent houses with water and electricity in every part I went despite the the population of 57 million on a size half my country.

People respect on another and rowdiness on the main streets and petty thieves is unheard of.

(WAMAYA)

*The way all aspects of various needs have been well addressed & catered for. The efficiency of all systems & the hardworking attitudes of the peoples of Japan. (NJERI)

5-3. Would you like to come to Japan again (as a participant), if there is a chance?

*I would like to come again and again. (NGURE)

*As a visiting manager to discuss one or two pressing issues. (GATHECHA)

*Yes - very much. In fact I hereby humbly apply to be considered for the next course in Architectural Engineering (Building Engineering) as I need these skills in my present job assignment.

(NZAINGA)

*Very much indeed especially now that I involved in Housing Finance. (KIARIE)

*I would very much like to come to Japan again. What I look forward is the possibility where ex-participants can join together or collaborate with Japanese firms in ventures for the benefit of Japan and Kenya. JICA could facilitate such joint ventures. (BUSOLO)

*Yes. (SIKA, WAMAYA)

*Yes! There is so much to learn & another chance would go far in adding to my exposure.

(NJERI)

6-1. JICA has been delivering magazines for participants and supporting ex-participants alumni associations as an aftercare service. Do you have any other request?

*I have never received the said magazines. I would like to be included in the list. You can organize more meeting with ex-participants. (NGURE)

*The services alumni association has been rendering is adequate. Maybe assistance in a phrase of a plot where all the activities could take place might help. (GATHECHA)

*Just to make another visit to Japan. Perhaps JICA could look into the possibility of partly financing willing ex-participants to make visits to Japan. For example JICA could offer accommodation at the Training Centres when these are closed and the ex-participants could meet the air fare. Thank you very much for the training you offered me. (NZAINGA)

*For my magazines please use: - P.O.Box 28732, NAIROBI
or P.O.Box 30088, NAIROBI
(KIARIE)

*My request is that JICA should facilitate where possible, consultancy firms in Kenya, run by ex-participants to join hands with consultancy firms in Japan with regard to exchange of technical information and collaboration in providing consultancy services. (BUSOLO)

*Some of the magazines do not come for certain periods. I find Japan very informative. (SIKA)

*I would suggest that magazines be sent that are relevant to the areas of discipline in addition to the ones being sent to us. I would be interested in the latest (new) products in the building industry. Solution to some problems which have difficult in solving using conventional methods, etc. (WAMAYA)

*Maybe include information on international training opportunities, scholarships & employment opportunities. Also more information on the building sector including building projects of notable technologies etc. (NJERI)

Thank you very much for your cooperation.

(2) エジプト(帰国研修員)

(QUESTIONS)

1. PRESENT OCCUPATION

1-1. What is your present occupation? Please describe your responsibility in detail.

*1) Project Sector:

- Revision of Projects design for housing, Public buildings, Service buildings, infrastructures
- Revision of bill of Quantities for the above mentioned projects
- Participation with the consultant engineers in solving the raised problems during the implementation of the projects
- Member of the pricing committee
- Evaluation of proposals for the execution of projects

Western Sinai Development Zone:

- Managing Director for the execution of projects in this zone
- 2) 1. Head of Design Section, Project Sector(1986)
2. Director of Design Department, Project Sector(1987)
3. General Manager, Project Sector(1994)
4. Managing Director, Western Sinai Zone(1995)

(HASSAN)

- *2) 1. Vice president Badr new Community Authority
2. Vice president Sadat new Community Authority
3. Vice president Mayo new Community Authority
4. MUCA

(AHMED)

*2) As I returned home in 1988, since 88 till 93, I was a town planner, and I participated in a group of regional planning for Greater Cairo.

From 93 till now, I am a head of department responsible for a planning project for M Mat Governorate.

(ALI AHMED)

*1) Planning, Design, Review and check of the projects that belong to the Ministry, and report to the first undersecretary in the fields of :

- Infrastructure planning and design, for the new urban communities in Egypt
- Structural design of public buildings, houses and civil structures
- Environmental aspects.

2) - 6/1995 up till now;

Senior civil/structural engineer, member of the technical working group - Minister's Cabinet

- 1991 - 1995;

Senior civil/structural engineer in the general organization for physical planning

- 1989 - 1991

Civil/structural engineer - general organization for physical planning - shared also in the design and site4 supervision of Ameria waste water pumping station - one of the biggest stations in the world

(ISMAIL)

*1) Follow-up the stages of construct

- 2) 1. Ex. Eng. For Treatment Station for sanitary drawings
2. High Ribs Building
3. Now Tourist Village in Sinai

(HUSSEIN)

*1) Site Engineer for Building

2) Building works like housing

Service buildings - markets - hospitals schools in new Brugle Arab City

(MOHAMED)

*1) I am a lecturer in the department of architecture. Topics of my teaching schedule for undergraduate students include : Urban and Regional Planning, Architectural Design, Building Construction and Architectural Drawings. I also present a course of National & Regional Planning for graduate students in Ain Shams University. I have an active role in scientific activities of the department (Seminars, workshops, organization of the library)

*2) Since I returned from Japan, I pursued my work in the department and participated in the following :
"The fourth National conference on environmental studies and research November '94. I submitted a paper entitled "the effective role of urban planning in protecting the environment"
"The conference on the future of new settlements organized by the Ministry of New Settlements and U.N. Center. I submitted a paper entitled "Industry and the tenth of Ramadan City", Cairo, May 1995.
(HANIA)

1) Architectural Design, Sanitary & Electrical Design For various projects. Furthermore, Planning by :

- ① Designing & making Freehand Sketches.
- ② Handing over the above mentioned sketches to my assistants (now, 2 draftsmen) in order to make Drawings & Details by using computer programmes, for instance, ACADR 12.
- ③ Supplying my assistants with all data or modifications & Following-up the intire work.
- ④ Revising the Final Drawings before sending them to the Client
- ⑤ Meeting & Persuading the Client in order to get his Approval
- ⑥ Sending the Approved Working Drawings to the Construction Site
- ⑦ Discussing any problem with our construction engineers staff before/during executing in order to solve it.
- ⑧ Offering Consulting Service & Assistance to our Various Divisions including observations & investigations.
- ⑨ Co-operating with our consultants concerning various projects.

2) From 1991 up to Now :

Architect, Senior Designer.

In Due Time (Soon) :

Architectural, Sanitary, Electrical Design Division Manager.

(BAHAA AMER)

2. Evaluation of the training course

2-1. After returning home, was the course useful for your present job? List the topics which you thought were useful.

* Of course, Yes. I believe that the main topic concerning earthquakes precaution is very important. Consequently, Egypt issued a general code for construction considering the probability of earthquakes.

- Firing resistance, is a profitable course saving money
- Using design criteria as inputs to a computer program to facilitate, update and considering all the effected parameter on design.
- Inter and intra-discussions between groups, builds up beside experience world wide.

(HASSAN)

* It was really useful for building instructions which improved my career in MUCA. (AHMED)

* The course was very useful in my job specially in increasing my experiences in the field of work, gaining too much knowledge as well as many other skills, in specialized readings and improving my English language.
(ALI AHMED)

* The topics which I thought were useful.

- Housing community development and natural environmental conservation
- Most recent structural design technology
- Robot applied technology in building construction
- Preservation of historic buildings (Sanneizaka town in Kyoto)
- Facility management (ISMAIL)
- * Yes, the course was useful.
 1. Using the building equipment technologies in part for high rise building & for tourists villages.
 2. Computer is very important for administration, and follow-up the construction steps. (HUSSEIN)
- * Yes after returning home the course was very useful for me because I knew about the housing policy the third world and I knew about the Japanese policy in expansion and housing system/ (MOHAMED)
- * Yes, the course was useful.
 - Housing policies in Japan. The role of BCJ and HUDC.
 - Advanced building technologies
 - Housing industry
 - Research and development in governmental and private sector centres
 - Urban renewal
 - Quality control (HANIA)
- * Yes, it was very useful, for instance, the following topics :
 - 1) International Technical Co-operation Activities in the Housing & Building Field.
 - 2) The Role of Public Housing in Disaster Prevention Policies.
 - 3) Standard Specifications.
 - 4) Government Buildings Department & Public Housing Construction.
 - 5) Architectural Firms in Japan.
 - 6) Building Physics & Environmental Research.
 - 7) Process Management, Facility Management & Quality Control.
 - 8) Highrise Building Construction Technology.
 - 9) Computer Aided Techniques.
 - 10) Present Situation & Problems on Construction Robots.
 - 11) Maintenance of Buildings.
 - 12) Group Study (SAKAKURA GROUP) :
 - a) Kitazawa Town Hall
 - b) Minami-Osawa Housing Complex (BAHAA AMER)

2-2. Contrary, what are the topics which were useful and useless? Describe the reasons. useful topics (reasons)

- *- Maintenance, it is really very important and vital but its application seeks continuous supply of fund
 - Maintenance prolong the life-time of the buildings. (HASSAN)
- * For the new methods of constructions. (AHMED)
- * All topics were ; useful ; because they transferred to me the most recent knowledge in the building engineering field. (ISMAIL)
- * The course was good and there were a lot very useful, but the time of course was very short to study the subjects deeply. (HUSSEIN)
- * Housing policy in Japan in the third world and visits for different sites and factories and the most modern system in development. There was nothing useless. (MOHAMED)
- * As for useful topics, the above mentioned topics being either directly related to my field of study and work, or represent features that are considered unique to Japan. The topic on computer aided technique was presented very weakly, it can be excluded from the course or given more

time and attention some topics of civil engineering that are not relevant to my scope of work I consider useless. (HANIA)

* The above mentioned topics especially Group Study & Various Observations were very useful.

Reasons :

1) A lot of through knowledge & Sophisticated Technology acquired in JAPAN obviously, enriched my experience, furthermore, I endeavor to make them successfully applicable in EGYPT whenever I get the chance.

2) Some of the above mentioned topics, for instance, No.4, 5, 7, 9, 11, 12 & 14 changed my idea about a lot of things such as :

a) How to deal with any problem.

b) How to think, act & Follow-up any task in order to get an accurate one by using the Control Cycle (Plan/Do/Check/Action)

Useless topics (reasons)

In my opinion, there was no useless topic but some topics were so useful that needed more intensive observations, discussions & applications upon completion of the training course

(BAHAA AMER)

2-3. Do you have any idea for the course to be useful?

* Since it is an overears course, I suggest some topics related to the design and execution of building at tropical regions. (HASSAN)

* Maybe more field studies could be useful and better than the theoretical studies.(ALI AHMED)

* For the course to be nore useful, I think, extending it by about one more month to practice the Japanese technology and live in the Japanese building career environment - that practice could be in a design office or in a construction site. (ISMAIL)

* I think you have to divide the subjects of the course in two way. One for designer engineer and the other for executive engineer and increase the time of the course. (HUSSEIN)

* I think building design should be very useful for me because it depends upon designing building for earthquakes. (MOHAMED)

* The participants can have access to specialized libraries and contact universities and architectural organizations. N.B. a visit to Tokyo university and AIJ was organized by JICA upon our request.

2-4. Please comment on the purpose, contents, applicants, number of the participants, and duration of the training course from the ex-participants' point of view.

2-4-1. purpose

* As the course was useful I think the prolongation of the course is necessary to improve the engineer idea about the new methods of architecture, and I think 10 persons will be enough. (AHMED)

* The purpose was just to gain knowledge on the subjects and get more about modern technology. (ALI AHMED)

* I believe that the course provides the participants with the latest information and knowledge concerning Japanese architecture and building technology. It also gives opportunity to go through new ways of thinking and new techniques in approaching building construction problems. (ISMAIL)

* Every thing was very good until the period of the course was very short, and there were many days free and holidays. (HUSSEIN)

* How to use the policy of buildings in the third world and if it is useful for that. (MOHAMED)

* The purpose of the course was clear and the goals were reached systematically and the knowledge acquired was of great benefit. The course presents a wide scope and the contents can be intensified to concentrate our specific aspects. (HANIA)

- * The purpose of the course is to provide the participants with the Latest information & knowledge concerning Japanese Architecture to play a greater role for further progress & advancement of Architecture & Building Technology in their respective countries. (BAHAA AMER)

2-4-2. applicants

- * Should fill their applications in letters and in fill details. (AHMED)
- * The applicants were doing just fine. (ALI AHMED)
- * It is quite suitable for architects and structural engineers. (ISMAIL)
- * I think you have to increase the time in field and study the design deeply. (HUSSEIN)
- * We should exchange the experience to be useful for that policy. (MOHAMED)
- * Although the presence of architects and civil engineers on the same course have complemented each other in some way, but I think a separate course for each group would be more beneficial for both. (HANIA)
- * I think ex-participants should be included to carry on their training, Furthermore, some advanced programmes which are especially prepared for them will be very useful. In my opinion, it will be more convenient if they can participate in that advanced programmes in spite of being over 40 years old. (BAHAA AMER)

2-4-3. number of the participants

- * As I've mentioned they mustn't be more than 10 persons. (AHMED)
- * The number was about 12, and I think it is enough. (ALI AHMED)
- * 10 - 15 participants, I think is the reasonable number. (ISMAIL)
- * It was reasonable. (HUSSEIN)
- * The number of the participants was appropriate (not too small and not too big) . (HANIA)
- * From 9 to 12 participants for each group (BAHAA AMER)

3. Applicability

3-1. Since you returned from the training, have you had any opportunities to introduce actively your acquired knowledges and skills in the training to the others? If the answer is yes, how were their reactions to your introduction?

- *- Implementations of earthquakes code.
 - All the building at Sinai are safe. (HASSAN)
- * I've administratively trained my employees and it was very useful to them to have the new technology. (AHMED)
- * Yes I did, and my colleagues were interested in the subjects and contents of the training course. (ALI AHMED)
- * Yes, of course, I have been introduced some of my acquired knowledges and skills to my colleges and junior engineers. They were much impressed and still continuing asking me about Japan & the Japanese people and technology. (ISMAIL)
- * The course increased my knowledge and skills. It was very useful for me and my organization so my organization nominate me for to be a manager. (HUSSEIN)
- * NO there was no opportunity to introduce actively my knowledge and skills because our country has a limited policy in building and housing. (MOHAMED)
- * YES, I have introduced my knowledge to others for example. In the course of "National and Regional planning that I present for the students preparing for a masters degree in urban planning in Ain Shams University I introduced the Japanese experience focusing on projects of Rokko and Port Island, new cities and Kansai airport---Shinjuku and Makuhari. (HANIA)
- * Yes, several times,

Their Reactions :

- 1) The majority of them were very enthusiastic to accept my introduction & so keen to know more details about a lot of things.

2) Few of them were rather negative to assimilate my introduction. (BAHAA AMER)

3-2. Do you think that the personnel changing policy adopts the system which considers the effect of the training in Japan? Are there any possibilities that ex-participants are transferred to the sectors unrelated to their field?

• Adoptability of personnel changing policy

* Of course, yes. (HASSAN)

* No. (AHMED)

* To a great extent, the personnel changing policy adopts the system which considers the effect of the training in Japan. (ISMAIL)

* No. (HUSSEIN)

* I think that is a good policy. (MOHAMED)

* No, I do not think so. (BAHAA AMER)

• Possibility of transfer to unrelated sector

* No. (HASSAN)

* No. (AHMED)

* It is almost impossible and not logic, that an ex-participant is transferred to the sectors unrelated to their field.

* I don't think so. (HUSSEIN)

* I'm my opinion, there is no possibility (BAHAA AMER)

4. Needs Survey

4-1. What is the biggest problem in your field?

What are the causes of it?

• Problem

* Maintenance of existing building and infrastructures is extremely limited due to shortage in financing some time transfer responsibility (ownership) of the project. (HASSAN)

* I have no problem in the field of my work what so ever. (AHMED)

* The biggest problem in our field is mainly the implementation of our projects, that's because we still get in the way of developing countries, with some shortage in funds. (ALI AHMED)

*- The negative effect of urbanization and new buildings on the natural environment

- Weakness of buildings (non engineered in some squatter districts or built in places subject to natural hazards or engineered but suffered the lack of quality control) and they are in need to be rehabilitated to withstand the hazards. Similarly those built according to the old Egyptian code of practice that neglected seismic forces in the design.

- Deterioration of the historical buildings and monuments. (ISMAIL)

* My problem not now but in future because I am nominated to be a manager of a big field (tourist village & high rise buildings) , and I need to be qualified to this position. (HUSSEIN)

* I think that building works do not go so good because Egyptian citizen doesn't like to go out of the main city like Alex, or Cairo etc. (MOHAMED)

*- The improvement of housing quality and quantity.

- The implementation of urban renewal projects (HANAI)

* I think the biggest problem is merely how to co-ordinate the procedure of various projects throughout the company from start to finish without any deficiency, anywhere. (BAHAA AMER)

• Causes

*- Limited funds

- Ownership (HASSAN)

* No. (AHMED)

- *- Lack of strong relationship between building laws and codes of practices and the environmental conservation aspects.
 - Lack of the quality control in the ordinary buildings
 - Some buildings built informally in hazardous areas such as in flood streams.
 - Lack of appropriate maintenance technology of the precious historical buildings and monuments.
 - Insufficient experience in the structural design and the new construction techniques of the earthquake resisting structures. (ISMAIL)
- *- There is not a special place to study the management of construction field.
 - There is no time to study the computer to use in field such as a primary course (HUSSEIN)
- * I think because the Egyptian citizen has an traditions to be as one family in the same place so he doesn't like to live in another city so far away from his own family. (MOHAMED)
- *- Lack of finance and experiences in implementing urban renewal projects.
 - Lack of administrative and legislative bodies responsible for the implementation of such projects. (HANIA)
- *1) Some of the project managers & their Staff used to work separately without co-operation with the other projects or divisions & never try to think or act from the standpoint of others.
- 2) Only Few of projects or divisions are well-organized, well-informed & very well-co-ordinated. (BAHAA AMER)

5. Understanding of Japan

5-1. Has your impression of Japan changed after visiting Japan? If the answer is Yes, how did it change?

- * Yes, forty years after the second world war Japan create incredible changes to the best. (HASSAN)
- * After visiting Japan and seeing high civilization and technology for sure my impression has been completely changed. (AHMED)
- * I think after my visit to Japan, and my close contact with the Japanese society, as well as the technical and professional progress, I felt also that Japan is a very organized country and each member of the society is acting seriously in his work. (ALI AHMED)
- * Yes, a little bit. I had expected to see 100% Japanese life style in Japan, but I was surprised seeing the effect of the western civilization start mixes with the Japanese one, I hope that Japan could keep its unique oriental style. (ISMAIL)
- * Now Japan is famous for a technologies in every thing. Japanese are very polite people. (HUSSEIN)
- * Yes because I imagined that the second world was given the Asian people the say to better but after visiting Japan I saw that the Japanese citizen like this job more than his own life. (MOHAMED)
- * Although in Egypt we know how much the Japanese people are organized and respect their work, but going through the experience I discovered that their love and commitment was even stronger than what one would expect and imagine. Also the Japanese people compliance to high standards of behavior & ethics. (HANIA)
- * Yes, From the First day in Japan my impression has changed into a distinctive one more marvelous than any anticipation I had before. (BAHAA AMER)

5-2. What impressed you most during your stay in Japan?

- * City of science, where solving problems and industrial development took place there. (HASSAN)
- * The improvement of the high policy as well the peoples good manners and conduct and high technology. (AHMED)

- * The advanced technology coping with different organization system, using applied technology in many aspects in life, seriousness and accuracy. (ALI AHMED)
- *- The hospitality, politeness and the oriental good traditions of the Japanese people.
 - The superior technological miracle that the Japanese people could make.
 - The consideration of the natural environment preservation and the social effects in the architectural planning and design of all projects. (ISMAIL)
- * Japan with a good atmosphere and clean streets. Japanese like their work very much, they respect the system for every thing. (HUSSEIN)
- * The discipline and the systematic way in daily life. (MOHAMED)
- * The people, the culture, the technology. Also that I never felt unsafe in Japan or unattended to by the members of JICA was beyond my expectations. (HANIA)
- * I have been deeply impressed by Japanese people, the most well-behaved people I have ever met & their hospitality. Furthermore, how they work steadily & co-operatively. (BAHAA AMER)

5-3. Would you like to come to Japan again (as a participant) , if there is a chance?

- * Of course, yes.
 - To update my career
 - To gain world-wide experience
 - To build-up friendship (HASSAN)
- * Yes, I would like to visit Japan again for short period such as for two to three weeks. (AHMED)
- * Yes, I would like very much. (ALI AHMED)
- * Sure, I like to go to Japan again :
 - To update and improve my knowledge ; for the technology development in Japan is accelerating very rapidly. (ISMAIL)
- * Yes, I should like to come again. That is really my dream now because I need deeply to study every thing about overview of building equipment technologies, and the management of construction field. I will be happy if there is chance. (HUSSEIN)
- * I hope that if there is a chance.
- * Yes, I would like to go to Japan again. (HANIA)
- * Yes, I would be very pleased if I can visit Japan again especially as a participant to carry on my training in Building Engineering Technology. Actually, I wish to go to Japan Soon. (BAHAA AMER)

6-1. JICA has been delivering magazines for participants and supporting ex-participants alumni associations as an aftercare service. Do you have any other request?

- * Magazines are not regularly delivered to me. I hope continuous receiving of this magazines.
- * I will be in need of decoration magazines and furniture and architecture internal and external magazine.
- *- I think that JICA can share in organizing periodical short period seminars (complementing the training courses) in Cairo, to handle some topics that have shown problems in our country or in Japan ; by dispatching experts from Japan ; to transfer the technology and help solving those problems. The Egyptian alumni association, that I am a member of it, can share in these seminars organizations.
 - It will be nice to send some specialized magazines in the field of building engineering to be in the alumni library. (ISMAIL)
- * Yes, if there is any magazines speaks about buildings. (HUSSEIN)
- * I hope more magazines and another visit if it is possible. (MOHAMED)
- * Updating on the efforts and activities of BCJ and HUDC. (HANIA)

* Thank you very much For (Look Japan) the marvelous magazine which actually provides me with the Latest information. & Knowledge about Japan.
I would like to inform you that from March 1995 (Volume 40, No. 468) till now, I am afraid I did not receive any issue. I would appreciate it very much if you kindly carry on delivering the above mentioned magazine, I remain,
(BAHAA AMER)

Thank you very much for your cooperation.

エジプト
(技協窓口)

FOLLOW UP TEAM
FOR JICA EX-PARTICIPANTS
OF
GROUP TRAINING COURSES
IN THE FIELD OF
ARCHITECTURAL ENGINEERING 2

QUESTIONNAIRE
FOR
THE TECHNICAL COOPERATION DEPARTMENT

- NEEDS SURVEY.....4 SHEETS
- EVALUATION / AFTER CARE SURVEY.....4 SHEETS

* Group Training Courses in the field of ARCHITECTURAL ENGINEERING

1. Architectural Engineering(Building Engineering)
2. Housing
3. Improvement of Housing and Living Environments

**QUESTIONNAIRE
NEEDS SURVEY**

(For The Technical Cooperation Department)

It is much appreciated if you would complete this questionnaire and forward to the JICA office in order to accomplish our mission. Please use additional sheet of paper and attach it herewith, if necessary.

Name of Your Organization: Ministry of Foreign Affairs(International Cultural Relations Department)

1. Importance of training for the field concerned

1-1. What priority does this particular field occupy in your country's development plan?

1-1-1. priority

Top priority.

1-1-2. goal

To achieve step forward towards containing over-population problem through construction and development of new communities..

1-1-3. proportion of the budget for this field against the national budget

2. Human Resources Development Plan

2-1. Please describe the principle for human resources development.

Training

2-2. Is there any project to promote human resources development of this field?

As mentioned in the Ministry of New Communities Report.

2-3. Is human resources development programme of the field included in your education system?

Yes.

2-4. How is the human resource development policy formulated?

2-4-1. Is it arranged by government? Or is it formulated only on the each Ministry basis?

*According to the State Plan.

2-4-2. How is the distribution of human resource budget decided?

*According to the Ministries and public sector proposals and according to the Minister's Cabinet.

3. Assistance from foreign countries except Japan

3-1. Are there any assistance from foreign countries except Japan?

*It's normal to seek for assistance from all of our friend countries as human resources development concerned especially, from developed countries such as U.S.A. and Europ beside Japan of course, but in different sectors.

3-2. If any, what is the position of the human resources development in the assistance?

*Top priority.

3-3. If any, What are the contents of the assistance?

*Infrastructure and training for advanced technology.

Thank you very much for your cooperation.

QUESTIONNAIRE
EVALUATION / AFTER CARE SURVEY
(For The Technical Cooperation Department)

I. Evaluation of the training course

1-1. Do you think the training courses are effective for the human resources development of the field?

Yes.

1-2. Please comment on the purpose, content, applicants, number of participants, and duration of the training courses.

1-2-1. purpose

Architectural Engineering

Sufficient

Housing

Sufficient

Improvement of the Housing and Living Environments

Sufficient

1-2-2. content

Architectral Enginnerig (Building Enginnering)

Housing

*A normal level of technology and it doesn't meet the requirments of Egypt.
Therefore it's hoped for the next.

Improvement of Housing and Living Environments

*Course to be more advanced and computerised data to help in construction works in the new communities.

1-2-3. appricants

Architectural Engineering (Building Enginnering)

*They were committed and keen to gain new knowledge and experience.

Housing

Improvement of Housing and Living Environments

1-2-4. number of participants

<u>Architectural Engineering (Building Engineering)</u>	
<u>Housing</u>	*It's hoped to increase the number of participants.
<u>Improvement of Housing and Living Environments</u>	

1-2-5. duration

<u>Architectural Engineering (Building Engineering)</u>	
<u>Housing</u>	*Appropriate.
<u>Improvement of Housing and Living Environments</u>	

1-3. Considering the importance of the field under your country's development plan, do you think that more participants in the field should be sent to the training courses in the future?

Yes, if they respond to the actual requirements as mentioned before and concentrating on development and construction of new areas and communities.

2. Selection of participants

2-1. How do you select organizations for delivering G. I?

According to the G.I. mentioned in the booklet.
According to the objectives of the course.
According to the qualifications required for the applicant.

2-2. Please describe the system of selection of participants and the point to be taken care of.

Ministry of Foreign Affairs → Ministry of New Communities and Ministry of Housing
→ Ministry of Foreign Affairs

3. Applicability

Do you have any plan to enhance the effective use of the knowledge ex-participants acquired?

According to the requirements of the competent authorities.

4. Request for after care services

JICA has been delivering magazines for participants and supporting ex-participants alumni associations as an after care service. Do you have any other requests?

No, thanks.

Thank you very much for your cooperation.

エジプト
(関係機関)

FOLLOW UP TEAM
FOR JICA EX-PARTICIPANTS
OF
GROUP TRAINING COURSES
IN THE FIELD OF
ARCHITECTURAL ENGINEERING

QUESTIONNAIRE
FOR
THE RELEVANT ORGANIZATION

- NEEDS SURVEY.....7 SHEETS
- EVALUATION / AFTER CARE SURVEY.....3 SHEETS

* Group Training Courses in the field of Architectural Engineering

1. Architectural Engineering (Building Engineering)
2. Housing
3. Improvement of Housing and Living Environments

QUESTIONNAIRE
NEEDS SURVEY
(For The Relevant Organization)

It is much appreciated if you would complete this questionnaire and forward to the JICA office in order to accomplish our mission. Please use additional sheet of paper and attach it herewith, if necessary.

· Name of Your Organization: Ministry of State for New Urban Communities

(QUESTIONS)

1. Systems and the current condition of your organization

1-1. Please answer about the basic status of your organization (Basic Information concerning needs survey -attached next pages)

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1-2. Please comment on the personnel sufficiency of the field and level respectively in your organization.

1-2-1. Qualification for recruitment

The procedure for recruiting is well established in a way that permits only qualified people to apply for the training courses.

1-2-2. Number of staffs (Describe according to educational careers)

Technical staff in the Ministry's main sectors is about 3000.

1-2-3. The sort of occupation (Planning, operation, and so on.....)

About 10% of the total number is working in planning, design and research, where the rest is working in the fields and development sites.

1-2-4. Sufficiency

The Ministry is quite satisfied with the training programmes for its staff and would like to increase the number of trainers in different disciplines.

(NEEDS SURVEY)

1. THE SYSTEM AND PRESENT SITUATION OF YOUR ORGANIZATION

1-1. Which sub-sectors receive higher priority for development in your organization?

- Provision with infrastructure (water-waste water, road, electricity-telecommunications...etc.)
- Provision with basic services.
- Provision with affordable housing.
- Facilitating transport connections between the new communities and the existing ones.

1-2. What are the problems in developing those areas? (human resources, funds, technology, organization system etc...)

Main problems according to priority:

- Human resources.
- Organization system.
- Funds.
- Appropriate technology.

1-3. What are the problems in developing those areas? (human resources, funds, technology, organization system etc...)

Human resources: qualified personnel for certain jobs.

Funds: Availability of enough funds in proper time.

Organization system: need to modernize management systems and create full coordination between different departments.

Appropriate technology: kind of technology suitable for our economic, social and environmental conditions.

1-4. Are there any specific plans concerning the problems described above?

1-4-1. What are the main projects in this sector during the past 3 years?

Provision with infrastructure:

Road networks - water treatment plants - sewage disposal and treatment plants -
Communication facilities and networks

Basic services: Schools - hospitals - administration buildings.

Affordable housing: *trying to facilitate the conditions for acquiring units of the existing
housing

stock.

*construction of new elaborated housing types for low income groups.

1-4-2. How about projects in the next 5 years?

- Maximizing efficiency of the new urban communities
- Provision of rapid transit facility to connect the new communities.

2. LEVEL OF TECHNIQUES

What are the required techniques of his/her field in this coming 3 ~ 5 years?

3. EMPLOYEE TRAINING

3-1. the available training programmes in your organization

3-1-1. Are there any training facilities in your organization? If any, please describe briefly.

The Ministry has a training organization consisting of 71 centers all over Egypt.

These centers provide:

- | | |
|----------------------------------|------------|
| a) Vocational training | 66 centers |
| b) Heavy Machinery | 2 center |
| c) Management and spec. training | 1 center |
| d) Instructors training | 2 centers |

3-1-2. the number of trainers in the facilities.

Since 1975, the average number of trainers is about 14 thousand trainers annually.

3-1-3. Describe the training for the trainers

Training for trainers is done through specialized course in building construction activities including heavy machinery. Training is done in three Levels: primary, secondary and advanced.

3-2. Overseas training programmes

3-2-1. Please describe the overseas training programmer briefly. (ex: Ph. D, Master degree)

Overseas training programmes are mainly short term ones and have no academic degree. However, there are some few cases where participants had the chance to acquire an academic degree.

3-2-2. What is expected to be attained from the overseas training programme?

It is expected to acquire certain knowledge, techniques and information, that could help the trainee to develop his skills and improve his performance.

3-3. Human resource development plan in your organization.

3-3-1. What type and what extent of human resources are you planning to develop in this five years? (Field and class)

*type

We are focusing on developing the abilities of our staff technically and administratively.

*extent (how many)

About 10 participants each year.

4. REQUEST FOR TRAINING IN JAPAN

What do you expect from the training in Japan?

4-1. field

Major fields: Urban planning and development/ Infrastructure facilities services/
Planning for risk management/Building Cons. techniques/Computer aided
design(Architecture & Civil Eng.)

4-2. level of the participants

First priority: junior engineers
Second priority: middle management
Third priority: top management

4-3. targeted class

5. REQUEST FOR TECHNICAL COOPERATION TO JAPAN

If there are any request for technical cooperation except training in Japan, please describe in detail. (ex: third training program, second training program, expert dispatching, project type cooperation)

- Technical assistance for Construction Equipment Center in 10th of Ramadan:

- * Upgrading the trainers ability
- * Equiping the new workshops

Thank you very much for your cooperation.

QUESTIONNAIRE
EVALUATION / AFTER CARE SURVEY
(For The Relevant Organization)

1. Evaluation of the training course

1-1. How do you evaluate the ex-participants' acquisition from the training in your organization?

All participants have to submit a report indicating their activities during the training course. The fellowship committee, in the Ministry, reviews these reports to evaluate the benefits gained from the course.

1-2. How do the training courses work for the actual activities in your organization?

The training courses are very useful for the actual activities in the Ministry, indirectly through upgrading the participants abilities which is reflected later in their performance and for the general performance of the Ministry.

1-3. Considering the direction of future development and the purpose of activities of your organization, do you want your employees to participate in these training courses?

Yes, we should like our employees to participate in these training courses, taking into consideration our objectives for future development.

1-4. Please comment on the purpose, contents applicants, number of participants, and duration of the training courses.

purpose

The subject has to be closely related to the fields of activities in the Ministry and also to the participant's background and specialization.

The fellowship committee has the task of discussing and deciding these two objectives.

contents

We think that the practical component in the training courses should be increased because most of the participants have enough theoretical knowledge.

applicants

Applicants are selected in a way that guarantees their eligibility to benefit from the course.

number of participants

We think that it should be left to the programme organizer to decide according to his previous experience.

duration of the training courses

For junior staff it could reach three months, but for medium and top management, we think it should not be more than two weeks.

2. SELECTION OF PARTICIPANTS

How do you select applicants in your organizations?

Copies of the application conditions are directed to relevant departments to be announced for employees. Those who are for condition can apply to the head of the department. Applications from different departments are collected and discussed by the fellowship committee to decide the most suitable candidate. The selected candidate is informed and also the concerned official authorities.

3. EVALUATION FOR EX-PARTICIPANTS

3-1. Do you evaluate the ex-participants after training?

See No.1-1

3-2. If do, please describe how to evaluate.

See No.1-1

2. Selection of participants

2-1. How do you select organizations for delivering G.I?

The organization that are specialized in the relevant topic for training is selected for delivering G.I. For example, if the topic is dealing with urban planning, the concerned authorities should be, the General Organization for Physical Planning and the New Urban Communities Authority.

2-2. Please describe the system of selection of participants and the point to be taken care of.

In addition to the academic degree, the participant has to have enough background in the proposed field of training. He should have an excellent grade in the annual evaluation report for the past two years and should be less than 50 years. He should be one of the permanent staff for more than two years and should have a clean administrative record.

3. Applicability

Do you have any plan to enhance the effective use of the knowledge ex-participants acquired?

This issue is now under discussion.

4. Request for after care services

JICA has been delivering magazines for participants and supporting ex-participants alumni associations as an after care service. Do you have any other requests?

Organizing ad-hoc training courses for ex-participants in their country as a short refreshing course.

Thank you very much for your cooperation.