

# ジョルダン・カラク地域 総合開発計画調査報告書

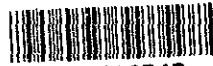
昭和61年1月

国際協力事業団



ジョルダン・カラク地域  
総合開発計画調査報告書

JICA LIBRARY



1029246[4]

昭和61年1月

国際協力事業団

|                     |     |
|---------------------|-----|
| 国際協力事業団             |     |
| 受入<br>月日 '86. 6. 24 | 307 |
|                     | 34  |
| 登録No. 12789         | PLC |

## はじめに

日本国政府はジョルダン国政府の要請に基づき、同国カラク地域総合開発計画調査に協力することを決定し、国際協力事業団をしてその実施にあたらせることとした。

国際協力事業団は、先きに国際協力事業団国際協力総合研修所 秋山国際協力専門員を団長とするコンタクト・ミッションを昭和60年3月に派遣し、ジョルダン政府関係者と協議を重ね、かつ、調査対象地域の現地踏査をした後、本調査にかかる基本方針について双方合意に達した。  
(本件コンタクトミッション報告書参照)

コンタクト・ミッションの合意事項に沿って、国際協力事業団は、昭和60年12月、再び秋山国際協力専門員を団長として3名からなる事前(S/W)調査団を派遣し、本格調査の調査分野、項目、ジョルダン政府のとるべき措置について、ジョルダン政府計画省及び都市地方環境省及び現地関係機関と協議し、それらをスコープ・オブ・ワーク(Scope of Work)として取極め、併せて、コンタクト・ミッションに引続き現地踏査、関連資料の確認及び収集を行った。

本報告書は、スコープ・オブ・ワーク合意までの協議過程を述べるとともに、現地踏査の結果もふまえて、今後の本格調査を実施する上での提言と留意点等についてとりまとめたものである。

本調査実施にあたり、種々のご協力をいただいた外務省はじめ関係各位に対し深甚なる謝意を表する次第である。

1986年1月

国際協力事業団

理事 中村 泰三

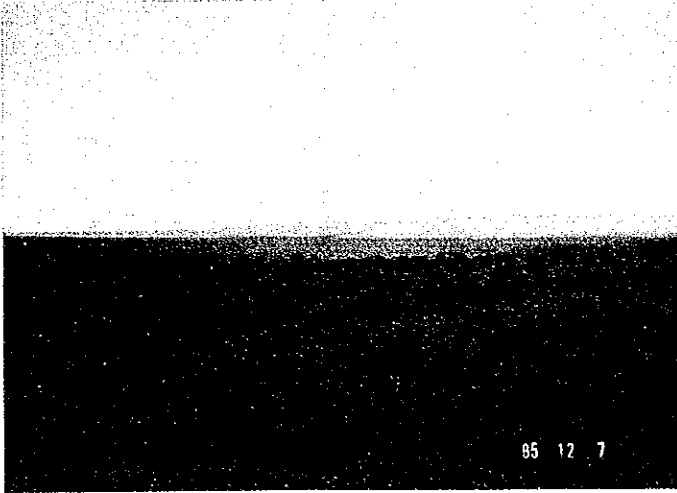


# 目 次

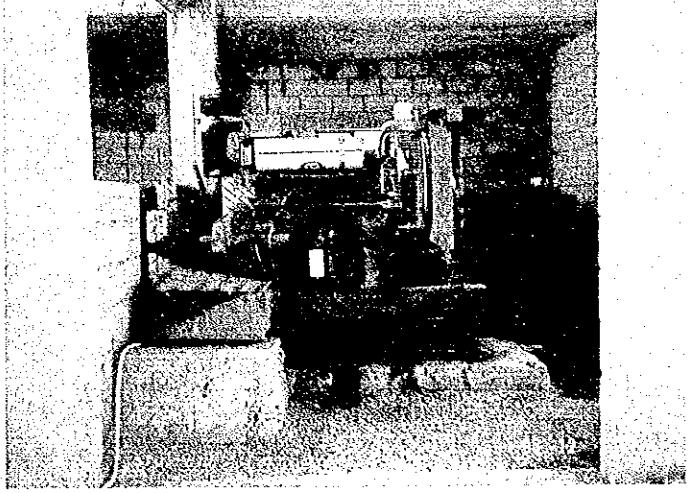
|                              |    |
|------------------------------|----|
| 第1章 調査の概要 .....              | 1  |
| 第1節 目的、調査団構成等 .....          | 1  |
| 第2節 調査団の提言 .....             | 1  |
| 第3節 Scope of Work .....      | 3  |
| 第4節 Minutes of Meeting ..... | 11 |
| 第2章 調査結果(調査団所見) .....        | 16 |
| 第1節 カラク地域の現状 .....           | 16 |
| 第2節 分野別所見 .....              | 17 |
| (1) 水 資 源 .....              | 17 |
| (2) 農 業 .....                | 18 |
| (3) 鉱 物 資 源 .....            | 19 |
| (4) 中 小 工 業 .....            | 20 |
| (5) 観 光 .....                | 20 |
| (6) そ の 他 .....              | 20 |
| 第3章 資 料 編 .....              | 21 |



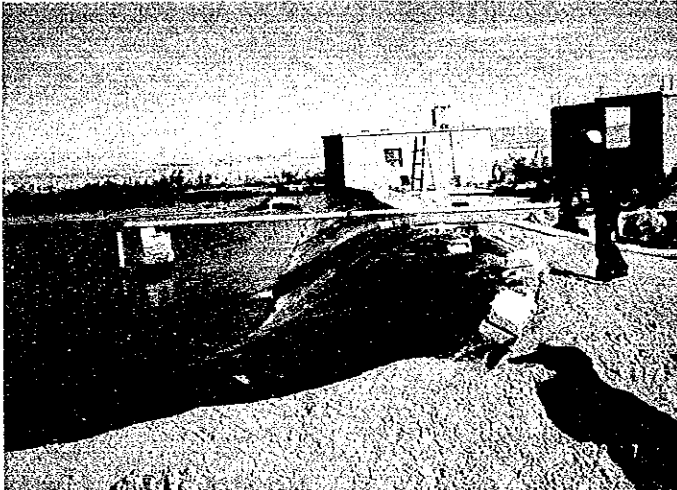




Karak 東部地域  
乾燥地 (デザート・ハイウェイの西側)



Karak 地域  
かんがいポンプ



Karak 地域  
貯水池



Karak 地域  
貯水池



Karak 地域  
ジャガイモ畑・かんがい設備



Karak 地域  
ジャガイモ畑・かんがい設備





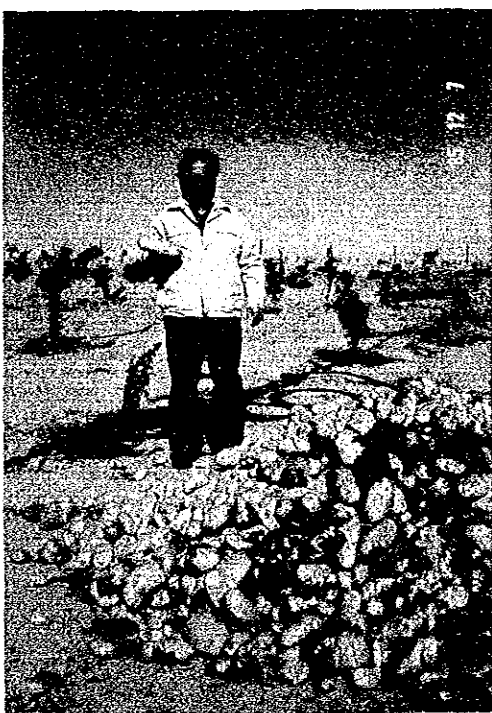
Karak 地域  
かんがいによるソラマメ畑



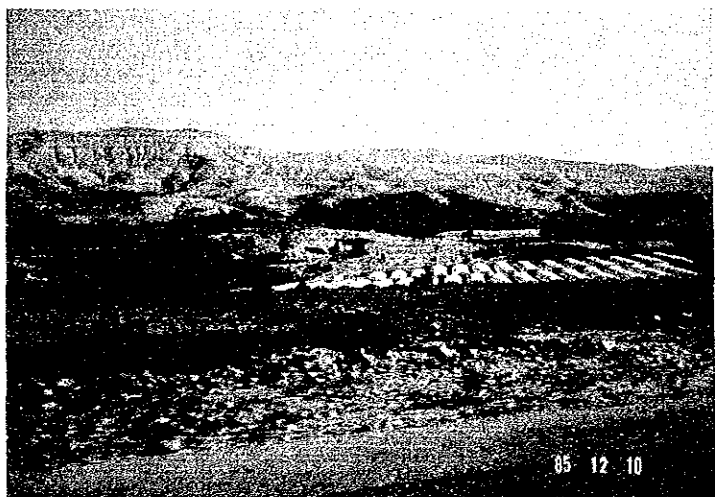
Karak 地域  
かんがいによるジャガイモ畑



Wadi ムジブの川筋  
河水のポンプ・アップによる野菜栽培  
(トマト・キャベツ他)



Karak 地域  
かんがいにより収穫された  
ジャガイモ

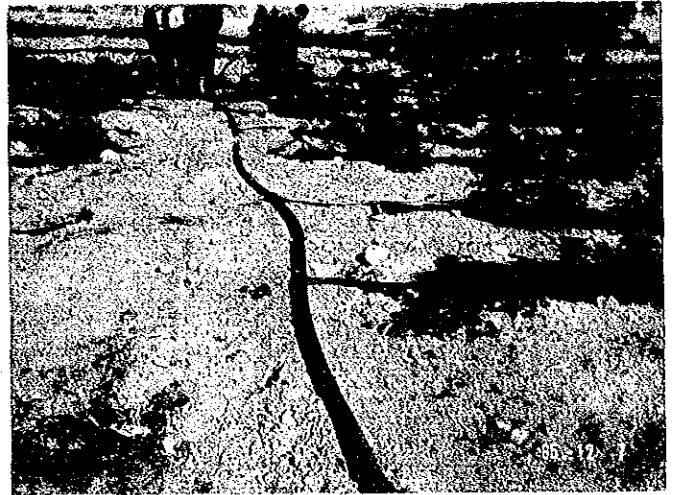


アンマン周辺の野菜ハウス栽培





Jordan Valley  
South Ghor 地域のドリッパかんがい



Jordan Valley South Ghor 地域  
ドリッパかんがい



同上 ビニール・ハウス



Jordan Valley South Ghor 地域の  
かんがい、農業地



## 第1章 調査の概要

### 第1節 目的、調査団構成等

#### 1. 目的

ジョルダン政府より要請のあった「カラク地域総合開発計画調査」に協力するために、本年3月に派遣したコンタクト・ミッションの調査結果を踏まえ、ジョルダン側政府関係機関と、調査内容及び方法について協議し、本格調査のスコープ・オブ・ワーク（S/W）を締結することを、目的とした。

#### 2. 団員構成

- 秋山伸一（団長） JICA国際協力専門員
- 金子洋三 JICA青年海外協力隊事務局
- 芦田典裕 JICA企画部地域課

#### 3. 日程

- 11/28（木） 東京発
- 30（土） アンマン着
- 12/1（日） 日本大使館で打合せ、先方政府表敬
- 2（月）～5（木） 先方政府と協議
- 6（金） 資料整理
- 7（土）～8（日） 現地調査
- 9（月） S/W、ミニッツ署名
- 10（火） 日本大使館に報告
- 11（水） アンマン発
- 13（金） 東京着

### 第2節 調査団提言

#### 今後の調査の進め方

- ① 本調査に対する先方政府の期待、熱意は、たいへん強く、上は大臣から下は各省職員まで、本調査の推移を注視している状況である。

従って、本調査については、適切に段階を踏まえ、分野を絞ったうえ、真に総合的且つ実行可能な地域開発計画を策定し、先方政府の期待に、十分応えうるよう、最大限の努力をすることが好ましい。

- ② 本調査団としては、カラク地域は、開発ポテンシャルが乏しく、核となるべきものも、当面、見当たらないことから、先方政府の指摘もあるとおり、水資源、農業、鉱物資源に限らず、中小工業、観光等も組み合わせた総合開発を考えるべきである、という印象を受けた。
- ③ しかしながら、先方政府の要請は、あくまで、カラク地域の「総合」開発計画の策定であり、各分野に於けるポテンシャルの確認は、本格調査の途上で、実施されるものと、認識されている。

本格調査を進める上で、あまり早い段階でのセクター絞り込みは、先方政府の要請に、あわなくなる可能性があるものと思われる。

- ④ 本格調査については、第一段階で、マクロ・地域経済専門家、リージョナル・プランナー等、全体を見れる人を、重点配置し、地域全体の、ポテンシャルの確認を、実施することが、望ましいと思われる。

また、水資源調査は、他のセクターの調査の基礎となると思われることから早い段階での調査が、望まれる。

第二段階では、セクター別に、掘り下げる事が、重点となろう。

最終段階では、地域全体の計画を、練り上げられる専門家が、重点的に、配置され、先方政府のニーズにあった、的確な提言を実施することが、望まれる。

特に、先方政府からは、General Land Use Pattern (S/W III-2. の Step 3-3.) を、重視している旨、発言があった。

- ⑤ 本件調査のカウンターパート機関は、都市地方環境省であるが、同省は、若干、頼りなさを感じざるを得ない。

一方、計画省は、事務面でも、しっかりしており、また、権限の面でも、都市地方環境省に比し、計画省が上位という印象を受けた。

従って、今後の調査は、常に、計画省と接触を保ちつつ、進められるべきものと思われた。

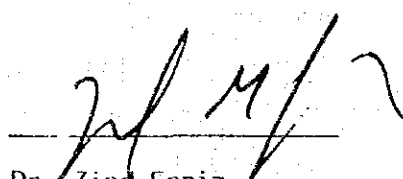


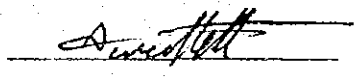
第3節 Scope of Work

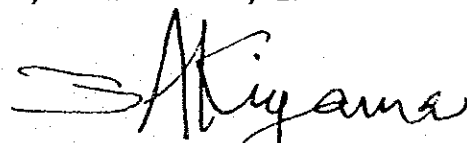
SCOPE OF WORK  
FOR  
THE STUDY ON INTEGRATED REGIONAL DEVELOPMENT MASTER PLAN  
FOR THE KARAK DEVELOPMENT REGION  
IN THE HASHEMITE KINGDOM OF JORDAN

AGREED UPON BETWEEN  
THE MINISTRY OF PLANNING  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

AMMAN, DECEMBER 9th, 1985

  
Dr. Ziad Fariz  
Secretary General  
Ministry of Planning

  
Mr. Awad Tell  
Under-Secretary  
Ministry of Municipal, Rural Affairs  
and Environment

  
Dr. Shinichi Akiyama  
Leader of the Preliminary  
Study Team  
Japan International  
Cooperation Agency

## I. INTRODUCTION

In response to the request of the Government of the Hashemite Kingdom of Jordan (hereinafter referred to as "the Government of Jordan"), the Government of Japan decided to implement the study on integrated regional master plan for the Karak Development Region (hereinafter referred to as "the Study"), in accordance with the Agreement on technical cooperation between the Government of Japan and the Government of Jordan signed on July 16th, 1985.

The Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Jordan.

The present document sets forth the Scope of Work for the Study.

## II. OBJECTIVE OF THE STUDY

To formulate a comprehensive and integrated development master plan for the Karak Development Region, for the purpose of reducing the socio-economic disparities between the region and the rest of the country by way of socio-economic development of the region.

## III. OUTLINE OF THE STUDY

In order to achieve the objective, the Study shall cover the following items:

### 1. General

- (1) The study area is the Karak Development Planning Region as defined by the Government of Jordan and shown on the attached map.
- (2) As main sources of the study, existing study reports and data will be fully utilized.

### 2. Major Items of the Study

Step 1. Analysis of the present situation for development.

The present situation of basic natural-physical

*Amrattat* SA  
→

condition, socio-economic situation and sectoral development will be analyzed. Past and on-going studies will be reviewed. Then, current constraints for development will be identified.

Step 2. Identification of the development potentials.

Development potentials in each sector as outlined below will be examined and identified from the viewpoint of utilizing local natural resources and establishing closer relationships between the economy of the region and that of the rest of the country.

1. Water Resources Development.
2. Agriculture.
3. Minerals.
4. Others.

Step 3. Preparation of overall development framework.

Within the framework of the basic national policies of Jordanian Government, development objectives and strategies of the master plan will be prepared.

The following steps are envisaged :

1. Setting of development objectives.
2. Preparation of socio-economic framework, and
3. General land use pattern.

Step 4. Preparation of an Integrated Development Master Plan.

Subject to the development strategies which are prepared in step 3, sectoral development plans will be established. Then, an Integrated Development Master Plan of the Study Area will be prepared.

Step 5. Identification of possible priority projects.

In view of the Development Master Plan prepared in Step 4, priority projects for the study area will be identified carefully.

*Accepted*

→

SA

Step 6. Preparatory Study of high priority projects.

High priority projects which are expected to be implemented during the next Five Year Plan will be selected with the consent of the Jordanian side and preliminary cost estimates will be made.

IV. STUDY SCHEDULE

The whole work will be completed within seventeen months.

V. REPORTS

JICA will prepare and submit the following reports in English to the Government of Jordan.

1. Inception Report (Twenty (20) copies). At the beginning of the field survey.
2. Progress Report (Twenty (20) copies).
3. Interim Report (Twenty (20) copies).
4. Draft Final Report (Twenty (20) copies).

The Government of Jordan will provide JICA with its comments within one (1) month after the receipt of the Draft Final Report.

5. Final Report (Fifty (50) copies).  
(Executive Summary Report, Hundred (100) copies within two (2) months after receipt of the Jordan Government's comments on the Draft Final Report.

VI. UNDERTAKINGS OF THE GOVERNMENT OF JORDAN

1. To facilitate the smooth conduct of the Study, the Government of Jordan in accordance with its laws and regulations, shall take necessary measures as follows:
  1. To secure the safety of the Japanese Study Team.
  2. To permit the members of the Japanese study team to enter, leave and sojourn in Jordan for the duration of their assignment therein, and exempt them from alien registration requirements and consular fees,
  3. To exempt the members of the Japanese Study Team from taxes, duties and other charges on equipment, machinery and other materials brought into Jordan for the conduct of the Study,

4. To exempt the members of the Japanese Study Team from income tax and other charges of any kind imposed on or in connection with any emolument or allowance paid to the members of the Japanese Study Team for their services in connection with the implementation of the Study.
  5. To provide necessary facilities to the Japanese Study Team for remittance as well as utilization of the funds introduced into Jordan from Japan in connection with the implementation of the Study.
  6. To secure permission for entry into all areas as required for the proper conduct of the Study.
  7. To secure permission to take all data and documents (including photographs) related to the Study out of the Jordan to Japan by the Study Team.
  8. To provide medical services as needed. Its expenses will be chargeable on the member of the Japanese Study Team.
2. The Government of Jordan shall bear claims, if any arises against the members of the Japanese Study Team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or wilful misconduct on the part of the members of the Japanese Study Team.
  3. The Ministry of Municipal, Rural Affairs and Environment (hereinafter referred to as "MMRAE") shall act as counterpart agency to the Japanese Study Team and organize the Coordinating Committee composed of respective governmental and non-governmental organizations for the smooth implementation of the Study.
  4. MMRAE shall, at its own expense, provide the Japanese Study Team with the followings, in cooperation with other relevant organizations:

*Amattat*  
→ JA

- (1) Available data and information related to the Study,
- (2) Counterpart personnel,
- (3) Suitable office space with necessary equipment,
- (4) Credentials or identification cards,

VII. UNDERTAKINGS OF JICA

For the implementation of the Study, JICA shall take the following measures:

1. To dispatch, at its own expense including accommodation, study teams to Jordan,
2. To perform technology transfer to the Jordan counterpart personnel in the course of the Study,

VIII. JICA and MMRAE shall consult with each other in respect of any matter that may arise from or in connection with the Study.

*Amruth*

*[Signature]*

*[Signature]*







第4節 ミニッツ

Minutes of Meeting  
on  
The Study of Karak Region Development Plan  
between  
Ministry of Municipal, Rural Affairs and Environment, Ministry of Planning  
and  
Japanese Preliminary Study Team

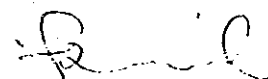
9 th December, 1985



Dr. Shinichi Akiyama (Leader of the  
Preliminary Study Team)  
Japan International Cooperation Agency



Dr. Ahmad Abu-Shaikha  
( Director, Regional Plan  
Ministry of Planning



Mr. Kamel Nuaman  
( Director, Regional Pla  
Ministry of Municipal,  
Rural Affairs and Envir

In response to the request by the Government of Jordan, the Government of Japan dispatched a preliminary study team ( here in after referred to as the Team ) headed by Dr. Shinichi Akiyama through Japan International Cooperation Agency to agree upon the scope of work on the study of the Karak Region Development Plan,

The Team stayed in Jordan from 30th November to 11th December, 1985 and had a series of meeting with the pertinent Jordanian officials from the Ministry of Municipal, Rural Affairs and Environment as well as the Ministry of Planning.

The Japanese side and the Jordanian side confirmed the followings:

1. The target year of the Master Plan shall be the year 2005.
2. The Ministry of Municipal, Rural Affairs and Environment is designated as counterpart agency to the Japanese Study team and shall organize the Coordinating Committee. The Committee's tentative members are as shown in ANNEX 2. It will carry out the activities in close consultation and cooperation with the Ministry of Planning.
3. The Jordanian side indicated that the sectors outlined as " others " in Step 2 of the Study ( the Scope of Work, P 2 ) would include the followings:
  1. Small and medium scale industry.
  2. Tourism

The Japanese side took note of the above.

4. The Japanese side indicated that the composition of the Study team could be tentatively as follows:

SA

AL

↓

1. Regional Economist.
2. Regional Development Planner.
3. Water Resources Expert.
4. Agricultural Expert.
5. Mineral Resources Expert.

The Jordanian side requested the Japanese side to include experts as follows, and the Japanese side took note of it:

1. Project Analyst.
2. Small and Medium Scale Industry Expert.
3. Others necessary for the study.
5. The Japanese side requested the Jordanian side to provide all the data available related to the study, including those of the Hydrological and Water Use Study of the Mujib Water Shed, which is going on at present. The Jordanian side accepted.
6. The Jordanian side requested that a few counterparts should be trained in Japan for the purpose of technology transfer. And the Japanese side took note of it.
7. The Jordanian side requested the Japanese side to start the study not later than May 1986.

The Japanese side took note of it and indicated that they will make an effort to start the study as early as possible.

8. The Japanese side agreed to provide the study team with the appropriate number of vehicles as well as necessary equipment for the study while the Jordanian side agreed to bear the cost of operation and maintenance of the vehicles and the other equipment.

SA

FR

AL

**ANNEX 1. The List of Attendance.**

**( The Jordanian side ) :**

1. Dr. Ahmad Abu Shaikha, Director of Regional Planning MOP.
2. Eng. Zaidoon Rashdan, Regional Planning MOP.
3. Taher Jaradat, Researcher, Regional Planning MOP.
4. Osama Younis, Reseacher, Regional Planning MOP.
5. Kamel Nu'man, Director at Regional Planning MMRAE.
6. Dr. Ali Ehmeidan, Geographer, Regional Planning MMRAE.
7. Ahmad. A. Yousif, Sociologist, Regional Planning MMRAE.

**( The Japanese side ) :**

1. Shinichi Akiyama ( Head of the Team ).
2. Yozo Kaneko ( Member of the Team ).
3. Norihiro Ashida ( Member of the Team ).

SA

SA

ANNEX 2.

Tentative members of the Coordinating Committee:

1. Ministry of Planning ( Chairman ).
2. Ministry of Municipal, Rural Affairs and Environment ( Secretary ).
3. National Water Authority.
4. Jordan Valley Authority.
5. Ministry of Transport.
6. Ministry of Industry and Trade.
7. Ministry of Finance.
8. Ministry of Agriculture.
9. Ministry of Public Works.
10. Ministry of Social Development.
11. Ministry of Energy and Mineral Resources.
12. Ministry of Tourism and Antiquities.
13. Governor of Karak.
14. Governor of Iafila.

SA      JL

## 第2章 調査結果（調査団所見）

### 第1節 カラク地域の現状

#### (1) 地方行政区域の変更

今回のS/Wにおいて合意された調査対象区域は、コンタクト・ミッションのミニッツで確認された区域と全く同一であり、変更はない。

しかしながら、1985年8月及び10月に、地方行政区分の変更があり、ジョルダン河西岸地域を除く全国5 Regionのうちの、3 Regionが、2分割され、下記の如く、全国8 Regionとなった。

| （変更前）           |   | （変更後） |                           |
|-----------------|---|-------|---------------------------|
| 1. Irbid Region | → | →     | 1. Irbid Region 1985. 8.  |
|                 |   | →     | 2. Mafrag Region 1985. 8. |
| 2. Amman Region | → | →     | 3. Amman Region 1985. 8.  |
|                 |   | →     | 4. Zarqa Region 1985. 8.  |
| 3. Balqa Region | → | →     | 5. Balqa Region           |
| 4. Karak Region | → | →     | 6. Karak Region 1985.10.  |
|                 |   | →     | 7. Tafila Region 1985.10. |
| 5. Ma'an Region | → | →     | 8. Ma'an Region           |

これに伴い、本件調査対象区域は、従来の区分でいくと、Karak Regionの区域内に納まっていたわけだが、新しい区分に従うと、Karak RegionとTafila Regionの2 Regionにまたがった区域となる。

従って、本格調査においては、従来のKarak Governorとの連繫に加えて、Tafila Governorとの連繫も必要となってくる。

（Coordinating Committeeの、Tentative Memberには、Tafila Governorも付加した。）

#### (2) 地域開発協議会（Regional Development Council）

1986年から始まるジョルダン国新5ヶ年計画においては、1. マクロ経済開発計画、2. 各部門別開発計画とならんで、3. 地域開発計画が、3本柱のひとつとして、位置付けられており、この地域開発計画策定及び実施のための機関として、以下のようなRegional Development Councilが、組織された。

Higher Council for Planning

— 国政レベル

↑

|                                    |  |
|------------------------------------|--|
| Regional Development Council       | - 全国各 8 Region レベル                       |
| ↑                                  |  |
| Sub - Regional Development Council | - 各 Sub Region レベル                       |
| ↑                                  |  |
| 各 Unit 毎の Development Council      | - 各 Unit は、人口 2,500 ~ 3,000 人を<br>目途とする。 |

- ① 国政レベルでは、各省庁の次官クラスで、Council が構成されている。
- ② Regional レベルでは、Regional Governor 及び各省庁の出先機関の代表者クラスで、構成されている。
- ③ この Council 組織の機能としては、開発計画への、民衆参加を目的として、底辺レベルから、Project Proposal を、各々の上位 Council へ提出、スクリーニングを経て、上位 Council へ送られることとなっている。

### (3) 地域開発計画基礎資料調査

計画省 (Ministry of Planning) の、地域計画局 (Department of Regional Planning) では、新 5 ケ年計画の地域開発計画策定のための基礎データ収集のため、各省庁を通じ、あるいは自前の調査員を使って、別添(6)の項目の調査を行い、計画省のコンピューターに、インプットを終了している状況である。

しかしながら、農業部門のデータを提出してもらい、検討した限りでは、数字に整合性のないものもあり、精確度について、多少の疑問がある。同時に、この調査実施に際しての、調査員の訓練、各省への提出データの信頼度についても、多少の疑問があるように感じられる。

## 第 2 節 分野別所見

本調査の目的は、S/W 締結にあったので、分野別の問題には、特に深入りしていないが、計画省、都市地方環境省等との協議の中で、あるいは、現地調査の際に得た知見について、ここに記し、今後の調査の一助にしたい。

### (1) 水 資 源

水資源に関しては、1976年の西ドイツによる水資源調査のデータがあり、また全ての井戸、冷泉、温泉などの分布に関しては、水資源局 (Water Authority) が、詳細な分布図を有している。

地下水のポテンシャルについても、ある程度の推定を行っている場合もある。

調査対象地域内には、ダムもあり、蒸発逸失量等についても、ある程度のデータをとっている。

現在進行中のムジブ・プロジェクトは、本調査区域の約6割と重複しており、このプロジェクトから、最新のデータが得られることも含め、水資源のポテンシャルを、早期に算定し、様々な分野、地域との調整を行った上で、その配分計画を樹立することが、本地域の開発の鍵となるであろう。

## (2) 農 業

### ① 灌漑の実状

a) カラク州(旧区分)内のイリゲーションによる野菜栽培面積2,776haのうち、2,600haは、Ghor地域のSafi、Mazraahのものであり、今回調査対象区域であるハイランド(年間降雨量200~300%)でのirrigated vegetable growingは、量的にはあまり見るべきものはない。

b) しかしながら、今回視察したprivate farmerのファームのように、意欲的に、灌漑設備に投資鉦を行っている例も、少数ながら、見受けられる。

鉦 1984年開始、総投資額55,000JD(約US\$150,000)、内、40,000JDは、Agricultural Credit Foundationの15年ローン、総灌漑面積20ha  
ポンプ(ディーゼル)容量55kl/h(井戸の深さ220m)、灌漑水は、節水型のドリップ方式、露地栽培、品目は、ポテト、ソラマメ、タマネギ、果樹(アブリコット他)、チッシン肥料使用、

トラクターは所有せず賃借、ワーカー常備4人。

### ② ハイランドの土地利用

a) 比較的雨量の多い(といっても250~300ミリ/年)Karak, Mazar周辺の平坦地は、冬作の天水小麦地域として、ほぼ開発しつくされている感がある。

(収量 多い年で、1t/ha, 少ない年で、0.3t/ha)

b) カラク州Agriculture Office 談によれば、毎年、300~500haの植林(松、オリーブ、アカシア中心)が、傾斜地を中心に、行われている模様。

c) 地域の東側は、乾燥地(年間降雨量100ミリ以下)であり、羊、山羊等のgrazing landとして、利用されている。

d) 地域内に、Poultry farmは、相当数存在している模様(1983年カラク州全体で、2,900千羽)。

Cattle farmは、ほとんどなし。



### ③ Agriculture Research Institution

#### a) カラク州農業事務所 (農業省の出先)

Forestry, Animal Husbandry, Agriculture の、3部門あり。特に、リサーチは、行っていない模様。農業統計の収集、防疫・防除に関する仕事が主体。Agriculture Extension Worker は、12名 (主たる業務は、やはり、防疫、防除)。

#### b) Araba Agricultural Secondary School

農業部門ではなく、普通科60人/年、工学科20人/年、農業科40人/年の生徒。3年制。工学科は、トラクター、ハーベスター等の農業機械の保守を主体としている。農家出身の学生は少なく、卒業生も、Agriculture office, Agriculture Credit Foundation 等へ入って、役人となる。

#### c) 上記のような意味からも、州内に、果樹、野菜等の新品目導入のための、リサーチ・センター的機能をもった Institution の存在が、重要となろう。

(既存の Agriculture office, Agriculture School の拡充も考慮すべきと思われる。)

#### d) また、農家にとって、最重要なのは、農産物の、市場価格の動向であり、このマーケティングの面でのインフォメーション・サービスを果たす機能が、必要。

### ④ 提言

#### a) 本地域の農家の最大制約要因は、水である。

b) しかしながら、地下水利用のポンプ灌漑を考える時、現在の野菜の生産過剰の状況下では、投資効果にみあった収益を得るには、栽培品目について、よほど考慮しなければ、採算がとれない恐れが大きい。

c) ヒントとして、輸入依存度の高い、ポテト、タマネギ、リンゴ等の栽培が、考えられる。その他、花の栽培も、検討に値する。

d) 総合的な地域開発を考えると、生鮮野菜、果実のみを、考えるのではなく、農産加工品 (例えば、トマト・ジュース、フルーツ・ジュース、オリーブ油等) の製造といった、付加価値を付与しうるような品目を、考えるべきと思われる。

### (3) 鉱物資源

鉱物資源については、1961~66年に、西ドイツの地質調査団が、詳細な地質調査と、鉱物資源探査とを実施して以来、天然資源局の努力の成果も蓄積され、その分布、量なども、概略おさえている。

しかしながら、現在の経済条件で、稼働可能なものは、リン鉱石のみである (これは、W1 Hassa 等で、採掘されている)。

非鉄金属資源では、当地域内に、銅、マンガン等が、分布しているが、これらの経済性は現状では、高くないと考えられる。

リン鉱石は、砂漠地帯に、広く鉱層として、分布するものであるが、この中には、放射性物質が、含まれており、Jordan Fertilizer Co. (Aqabaにあり、リン鉱石から、肥料等を、製造している)が、放射性鉱物の回収に関する、研究調査を、実施している。

この他、オイル・シェールのポテンシャルについても、検討が、行われているし、また、粘土、石膏等の、非金属資源の分布も、知られており、かつ、一部は、稼動されている。

これらの鉱物資源については、資料を解析し、将来の経済環境を推定し、開発の可能性を探ることのできる専門家を、本調査には、求めたい。

#### (4) 工 業

工業関係では、Rashadiyaのセメント工場、及び地域外にはなるが、死海沿岸のカリ製造工場以外には、現状では、見るべきものはない。

その開発には、機械修理等の、現存の中小工業の発展をはかるほか、農業や、鉱業に関する機械の製造修理等を中心にして、検討していくことが、必要であると、考えられる。

#### (5) 観 光

観光資源は、ジョルダン政府も、かなり期待をもっている。

「ジョ」国は、歴史的には、極めて古い時代(例えば、石器時代)からの住民の遺跡が、残存しているところであり、また、聖書の物語に関係する土地柄であり、ローマやイスラム等の遺跡が、多数ある。

また、「死海」のような、人体が浮くという、極めて特殊な経験ができる自然観光資源を有し、砂漠や、世界的断層地形(ジョルダン渓谷)を、眺めることも、可能である。

これらを整理し、観光拠点を作り、ホテルや、道路等諸施設を整備することによって、こうした観光資源を、生かしていくことが、可能となるであろう。

ジョルダン国全体の観光開発の中で、カラク地域をどのように位置付け、観光客を、いかにカラク地域に、足どめさせるか、などの点が、当地域の観光開発のポイントになるとみられる。

#### (6) そ の 他

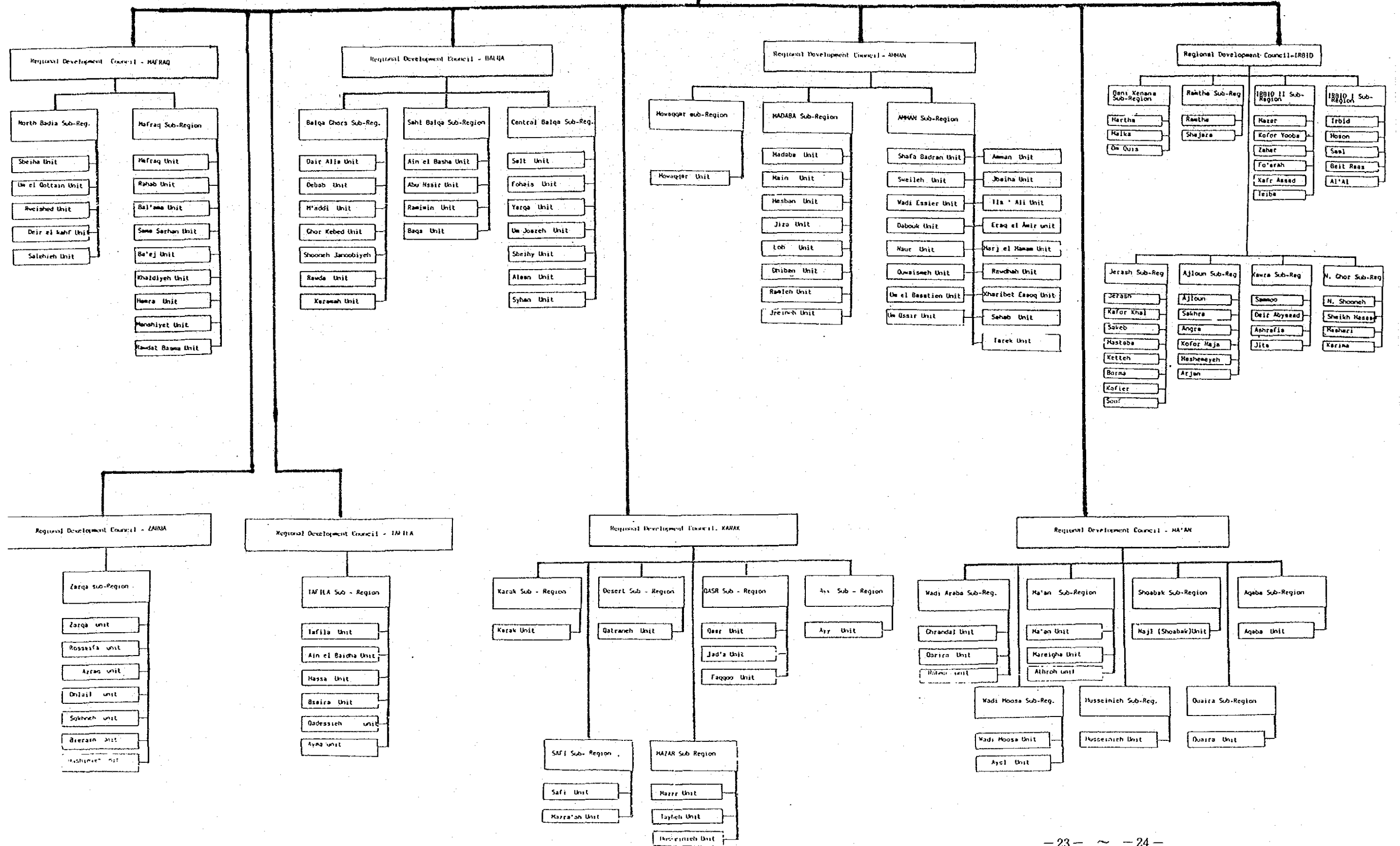
その他、都市開発、インフラ整備などについては、中核となるべき大プロジェクトが期待できないとみられるので、各分野を総合し、全体の有機的な結合において、その開発を、考えていかざるを得ないであろう。

### 第 3 章 資料編

- (1) Development Council Organization Chart
- (2) 新 5 ヶ年計画における Regional Plan の tentative な内容
- (3) List of Main Items covered by the Survey
- (4) Agriculture Sector の Data Output ( 調査団 集計 )
- (5) 従来 の 区分 地図
- (6) 新 区分 地図
- (7) Karak, Tafila の Region 内 の 区分 地図
- (8) Report on Data from Jordan's Ministries and Agencies

(1)

# HIGHER COUNCIL FOR PLANNING





(2)

## The Outline of The Karak and Tafila Rigonal Plan

### Chapter One

---

1. Introduction.
2. Social and Economic Indicators.
3. Development Potetiales.
4. Characteristics and Problems.

### Chapter Two

---

1. Gaols.
2. Dragnizational Measures.
3. General Guid Lines.
4. Investments Programes.

### Chapter Three

---

- Agriculture
- Water and Irrigation
- Mining and Manufacturing
- Energy and Electricity
- Tourism and Antiquities
- Transportion
- Communications
- Municipal and Rural Affairs.
- Youth and Culture
- Education
- Health
- Social Devolopment
- Housing and Governoment
- Information
- Islamic Affairs and Holy Places

(3)

List of Main Items Covered  
by The Survy

02 Social services

- 0201 Health
- 0202 Education
- 0203 Social development services

03 Infrastructure

- 0301 Roads and transport
- 0302 Housing
- 0303 Energy
- 0304 Telecommunication
- 0305 Water
- 0306 Sewage and Garpage

04 Institutional and Administrative Framework

- 0401 Public Institutions
- 0402 Pubpic Institutions - local council head's data-
- 0403 Private institutions
- 0404 Planing cluster
- 0405 List of all development projects for the locality which have been implemented or approved for funding during the past five years.
- 0406 Poposed development projects

05 Demographic Data

06 Migration

07 Private Sector Economic Activities

- 0701 Agriculture
- 0702 Commercial, Manufacturing, and handycrafts activities
- 0703 Tourism
- 0704 Quarrying and Mining

08 Role Women

(4) Agriculture Sector の Data Out-Put (調査団集計)

| Governorate  | pop, 1982 | 総面積ha     | 森林面積    | 耕地面積    | 灌漑<br>Fieldcrop | 天水<br>Fieldcrop | 灌漑<br>Vegetable | 天水<br>Vegetable | 灌漑<br>果樹 | 天水<br>果樹 |  |
|--------------|-----------|-----------|---------|---------|-----------------|-----------------|-----------------|-----------------|----------|----------|--|
| 1. Balqa     | 165,469   | 84,221    | 12,607  | 40,293  | 845             | 6,555           | 11,689          | 841             | 2,118    | 5,011    |  |
| 2. Karak     | 103,157   | 153,012   | 9,877   | 27,052  | 0               | 32,011          | 2,766           | 29              | 1,275    | 496      |  |
| 3. Ma'an     | 84,306    | 130,540   | 11,285  | 20,921  | 581             | 18,051          | 526             | 0               | 1,048    | 97       |  |
| 4. Zarqa     | 379,474   | 98,177    | 4,581   | 10,932  | 350             | 6,740           | 2,893           | 88              | 946      | 1,019    |  |
| 5. Mafrq     | 85,877    | 158,638   | 8,232   | 33,964  | 185             | 28,446          | 3,540           | 0               | 125      | 1,236    |  |
| 6. Amman     | 969,952   | 308,912   | 22,045  | 66,098  | 0               | 47,284          | 6,502           | 3,428           | 434      | 10,629   |  |
| 7. Irbid     | 580,208   | 255,378   | 39,347  | 82,652  | 4,165           | 29,002          | 11,781          | 5,298           | 7,357    | 23,993   |  |
| Total        | 2,368,443 | 1,188,878 | 107,974 | 281,912 | 6,126           | 168,089         | 39,697          | 9,684           | 13,303   | 42,481   |  |
|              |           |           |         |         | 174,215         |                 |                 |                 |          |          |  |
| Karak Gov. の |           |           |         |         |                 |                 |                 |                 |          |          |  |
| うち Safi      | 8,841     | 28,307    | 0       | 1,843   | 0               | 0               | 1,804           | 0               | 39       | 0        |  |
| Mazra' ah    | 5,592     | 3,595     | 364     | 820     | 0               | 0               | 786             | 0               | 31       | 0        |  |

Karak Gov.

| Field crop(1982) | 小麦     | 大麦    | レンズ豆 | タバコ    | ヒヨコ豆  | その他 |
|------------------|--------|-------|------|--------|-------|-----|
| 灌漑 (トン)          | 0      | 0     | 0    | 0      | 0     | 0   |
| 天水 (トン)          | 10,214 | 2,957 | 578  | 0      | 145   | 101 |
| Vegetable (1982) | トマト    | ナス    | キュウリ | カリフラワー | その他   |     |
| 灌漑 (トン)          | 32,289 | 744   | 758  | 6      | 5,494 |     |
| 天水 (トン)          | 206    | 0     | 0    | 0      | 47    |     |
| Fruits (1982)    | オリーブ   | ブドウ   | カンキツ | バナナ    | その他   |     |
| 灌漑 (トン)          | 3,666  | 2,638 | 731  | 270    | 15    |     |
| 天水 (トン)          | 87     | 306   | 0    | 0      | 2     |     |

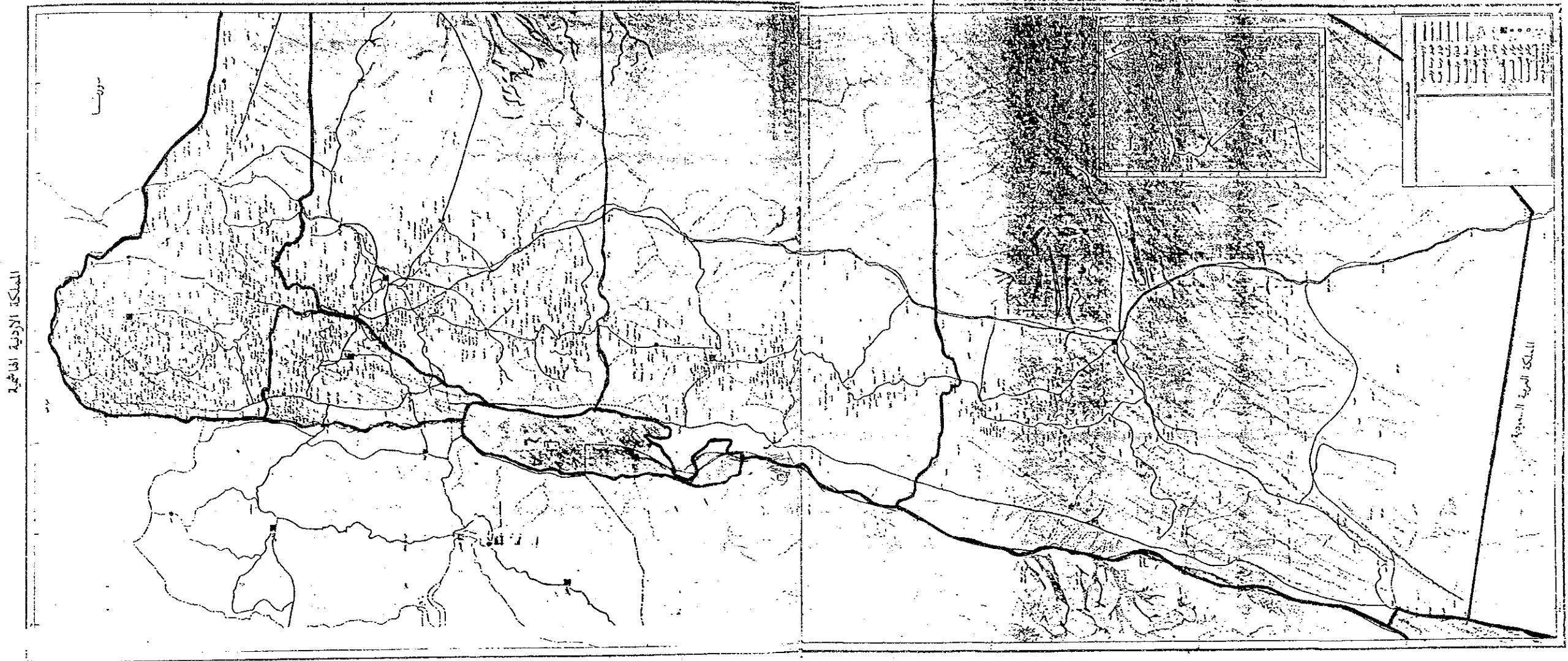
| Karak Gov. 全体の | ヤギ      | 羊       | 牛   | ニワトリ      |
|----------------|---------|---------|-----|-----------|
| 畜産 (1983年)     | 129,777 | 132,447 | 982 | 2,898,000 |

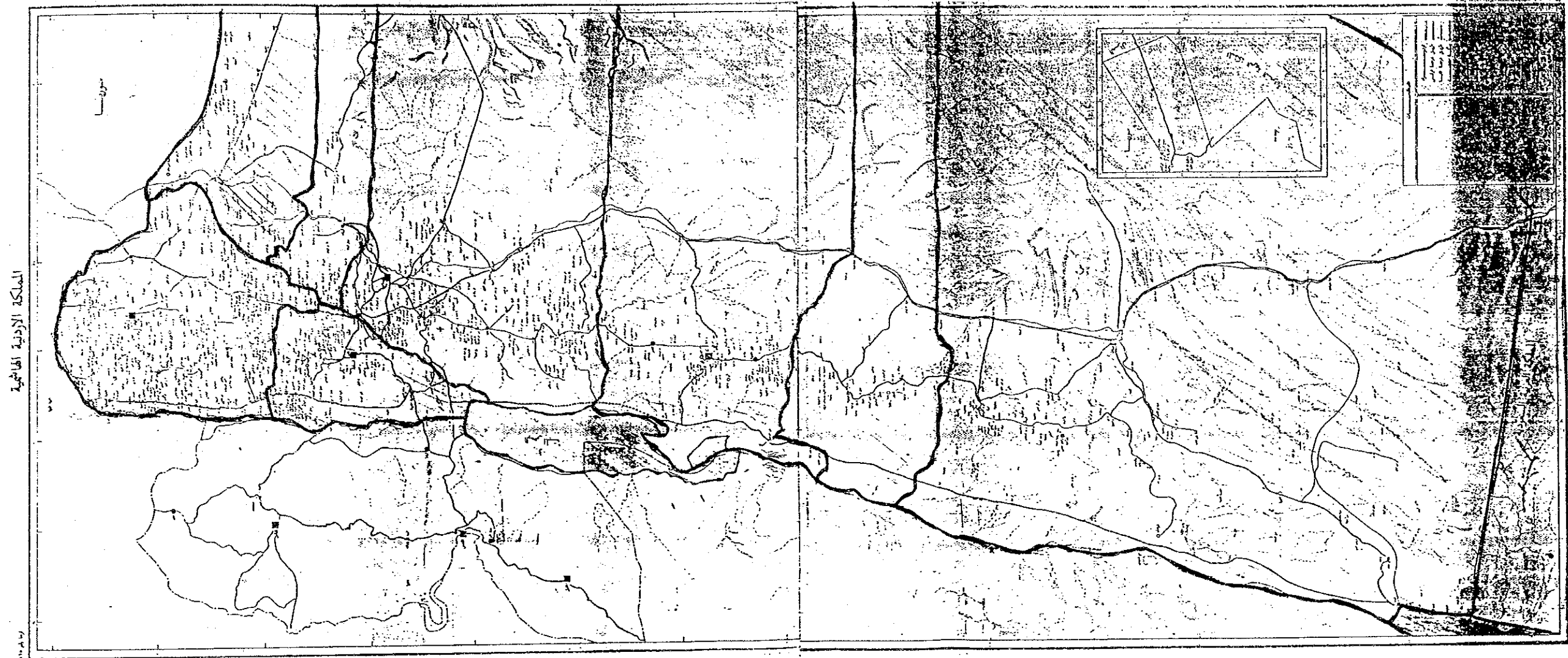
Source : 計画省 Survey data











(8)

REPORT ON DATA FROM JORDAN'S MINISTRIES AND AGENCIES

MALIK MUFTI

MINISTRIES DATA SUPERVISOR

REGIONAL PLANNING DEPARTMENT

MINISTRY OF PLANNING

JORDAN

MAY 11, 1985

## TABLE OF CONTENTS

|  |    |
|--|----|
| INTRODUCTION                             | 2  |
| MINISTRY OF HEALTH                       | 5  |
| UNRWA                                    | 7  |
| MINISTRY OF EDUCATION                    | 9  |
| VOCATIONAL TRAINING CORPORATION          | 11 |
| MINISTRY OF LABOR AND SOCIAL DEVELOPMENT | 12 |
| JORDAN ELECTRICITY AUTHORITY             | 13 |
| MINISTRY OF COMMUNICATIONS               | 14 |
| TELECOMMUNICATIONS CORPORATION           | 15 |
| JORDAN WATER AUTHORITY                   | 16 |
| MINISTRY OF PLANNING                     | 18 |
| AGRICULTURAL CREDIT CORPORATION          | 19 |
| JORDAN COOPERATIVES ORGANISATION         | 20 |
| CITIES AND VILLAGES DEVELOPMENT BANK     | 21 |
| HOUSING BANK                             | 22 |
| INDUSTRIAL DEVELOPMENT BANK              | 23 |
| MINISTRY OF AGRICULTURE                  | 24 |
| DIRECTORATES OF AGRICULTURE              | 25 |
| CONCLUSION                               | 26 |
| APPENDIX I: Villages missing JCO data    | 29 |
| APPENDIX II: New format for UNRWA data   | 32 |
| APPENDIX III: Code number changes        | 33 |
| APPENDIX IV: List of new villages        | 34 |
| APPENDIX V: Liaison officers             | 35 |

## INTRODUCTION

The National Localities Survey currently being carried out by the Regional Planning Department (RPD) of the Ministry of Planning consists of three major parts:

1. The Field Survey
2. The Survey of Ministries and Agencies
3. The Industrial Survey (for localities with populations of over 5000 people).

This report concerns itself with the survey of data collected by Jordan's various ministries and agencies.

A first rough draft of the questionnaires was drawn up by the personnel of the RPD in September, 1984. On September 30, a general meeting was held in the Ministry of Planning to which representatives of all concerned agencies were invited. At the meeting, it was agreed that all the agencies would present their comments on the draft questionnaires to the RPD within two days. It was also agreed that a committee would be set up to draw up the final form of the questionnaires. This committee consisted of representatives of the following agencies:

1. The Department of Statistics
2. The Jordan Valley Authority
3. The Ministry of Education
4. The Ministry of Municipal and Rural Affairs and the Environment
5. The Ministry of Planning

Based on the original rough draft, and taking into account the comments some agencies did in fact eventually send in, the committee prepared the final version of the questionnaires. Thus, all the concerned agencies had the opportunity to influence the format and content of the questionnaires.

After the questionnaires were finalised, and the data collection process begun, a number of agencies nevertheless raised complaints about the design.

It was then decided at the RPD that each member of the RPD staff would take responsibility for one or two agencies. At that point, distributing the questionnaires to the agencies, overseeing the filling-in process, collecting the completed questionnaires, and checking them for errors all became the responsibility of each particular RPD staff member.

Midway through the process, and for a variety of reasons, it was decided that the entire ministries and agencies data collection process should be placed under the supervision of one Ministries Data Supervisor myself. The responsibilities of the Ministries Data Supervisor included the four data collection steps outlined above, and ended when the complete and corrected forms were handed over to the computer entry personnel.

For a number of agencies, the first three steps of the data collection process (distribution, filling-in, collection) had already been completed. All that remained was to check for errors, and where necessary to return incomplete questionnaires for correction. For some other agencies, virtually the entire process had to be carried out by the Ministries Data Supervisor. There is only one agency - the Ministry of Education - where the Ministries Data Supervisor played no part in any stage of the data collection process. Thus, I feel qualified to comment on the data collected from all ministries and agencies with the exception of the Ministry of Education.

It became clear very early in the survey that there were some important problems. These are:

1. The lack of a clear conception at the beginning of the survey about how the data collected will be used. Fortunately, it was decided to err on the safe side: whereas there may have been some questions asked which did not need to be asked, there do not appear to be any questions which were not asked which needed to be asked.
2. Questionnaire Design: in many cases the format of the questionnaires did not correspond to the format in which data is kept in the various agencies. Partly, this is because the agencies did not all take advantage of the opportunity given them to input into the initial design of the questionnaires.
3. The initial non-centralisation of the data collection process. As has already been mentioned, this problem was remedied with the appointment of a Ministries Data Supervisor, but not before considerable time and effort were wasted.
4. Lack of enthusiasm on the part of many agencies. It was not at all clear that all the key informants and liaison officers at the various agencies were aware or convinced of the importance of this survey. The level of interest ranged from the extreme cooperation evinced by the Ministry of Social Development (as it was then called) to the tepid efforts of the Jordan Water Authority.



Before discussing each particular agency, one last point needs to be made. In many places, I have written: "data seems reliable." This means that answers were given which seemed to make sense, and that the informants appeared to understand the questions. Beyond that, it is impossible to make any definitive statements about the reliability of the data. To guarantee the accuracy of each bit of information is beyond the scope of the project, and there is no alternative other than to take such data at face value.

NOTE: During the course of the survey, a number of new villages were discovered for which no questionnaires had been prepared. A list of these localities is given in Appendix IV. Questionnaires should be prepared for these localities and sent out to all the agencies surveyed for completion.

## I. MINISTRY OF HEALTH (01)

### A) Questionnaire Design

Originally, each medical facility was to have a column of data filled in for itself, and the questionnaire was designed accordingly. After printing the forms, however, it was decided to aggregate the data for each type of medical facility into one column. The only instance where data was not completely aggregated was in the case of hospitals, where three columns were filled out: one column for public hospitals, one column for private hospitals, and one (redundant) column for the totals of both sectors.

This aggregation did not present any problems in the vast majority of questionnaires, as most localities in the Kingdom do not have more than one of each type of medical facility. In the bigger localities, however, certain significant problems arose:

1. Questions 1.10, 2.12, and 3.5, regarding the ownership of the buildings in which the facilities are located, became meaningless in their original form. The questions were changed to read: "What are the numbers of (1) owned, and (2) rented buildings?" The Health Ministry informant was required to write the number of owned buildings in the single square provided, and to draw in another square in which to write the number of rented buildings. As might be expected, this led to much confusion, and the reliability of the answers to these questions, at least for the larger localities, is suspect.

At an early stage of the data entry process, it was suggested to the computer personnel that they not enter this data at all, but this suggestion went unheeded.

2. Question 4.6 was also rendered meaningless in its original form, and was amended to read: "What is the number of KCH centers which have Family Planning Centers?"
3. Question 1.8 meant that the informant had to somehow aggregate the occupancy rates he received from the various hospitals into one figure. Data is provided, but should be treated with some care.
4. Question 1.9 was amended to read: "What are the numbers of public and private hospitals?" This change presented no problems.

After some initial confusion, the semi-public University Hospital in Amman was considered a public sector hospital, and has been so entered.

5. Questions 2.2, 2.3, 2.4 and 2.5 were cancelled altogether, and no data is provided.

#### B) Data Collection

Except for the problems outlined above, the Ministry of Health data appears to be generally acceptable. The only answers which are demonstrably weak are those to questions 1.11, 2.13, 3.6 and 4.7, the questions asking about the catchment area of the various facilities. In most cases, the name of the particular locality was given as the catchment area. Clearly, the Ministry of Health does not have any systematic program of service allocation determination. In any case, these are the only questions in the Ministry of Health questionnaire which were never entered into the computer program. Their value for analysis is extremely limited.

## II. UNITED NATIONS RELIEF AND WORKS AGENCY - UNRWA (02)

### A) Questionnaire Design

The problems in the design of the questionnaire as it was printed were so intractable, that for computer-entry purposes an entirely new format was devised.

1. UNRWA defines a Medical Center as a facility consisting of a Health Clinic, a MCH center and some other services, where there is at least one permanent doctor. Thus, where a Medical Center exists, the Health Clinic and MCH center are part of it - sharing its staff and equipment. In this case, to answer completely Questions 1, 2 and 3 would lead to double-counting. For this reason, only the questions which were not already answered in previous sections were answered.
2. As with the Ministry of Health, each medical facility was to have a column of data filled in for itself, and the questionnaire was designed accordingly. After printing the forms, however, it was decided to aggregate the data for each type of medical facility into one column. This presented a problem only in the city of Amman, where there are four Medical Centers. Aggregation of data here affected Question 1.12, which was amended to read:  
"What is the number of owned buildings?"
3. The questionnaire only asked about registered midwives, ignoring the fact that most midwifery in UNRWA facilities (as elsewhere) is carried out by unregistered traditional midwives (Dayat). The answers given indicate the total number of both kinds of midwives. The number of Dayat is written in next to it. In any case, here is a breakdown of the midwife data:

| LOCALITY    | NUMBER   | REGISTERED<br>MIDWIVES | DAYAT | TOTAL |
|-------------|----------|------------------------|-------|-------|
| Amman       | 11101001 | 2                      | 5     | 7     |
| Talebiyya   | 11105048 | 1                      | 1     | 2     |
| Zarqa       | 12101001 | 0                      | 3     | 3     |
| Sukhne Camp | 12101021 | 0                      | 0     | 0     |
| Irbid       | 21101001 | 0                      | 3     | 3     |
| Hosn Camp   | 21101049 | 0                      | 2     | 2     |
| Jarash      | 22101001 | 0                      | 2     | 2     |
| Soof Camp   | 22101052 | 0                      | 0     | 0     |
| North Shune | 26101001 | 0                      | 1     | 1     |
| Waqqas      | 26101014 | 0                      | 1     | 1     |
| Kraymeh     | 26101019 | 0                      | 1     | 1     |
| Baq'aa      | 31101004 | 1                      | 6     | 7     |

4. Of the 16 doctors listed in answer to Question 1.6 for the city of Amman, four are part-time specialists.
5. The dentist listed in response to Question 1.9 for Talebiyya visits the Medical Center once a month.

#### B) Data Collection

Whereas the quality of the data is good, getting it entailed going through a sea of red tape. UNRWA refused to release any information until authorised to do so by the Ministry of Occupied Territories Affairs. This complicated and lengthened the data collection process.

### III. MINISTRY OF EDUCATION (03)

This was the only agency in which the Ministries Data Supervisor took no part at all. The responsibility for collecting and processing data from the Ministry lay with Mr. Taher Jaradat of the Regional Planning Department of the Ministry of Planning. Thus he is far more qualified to evaluate both the design of the questionnaire and the quality of the data than I am.

Nevertheless, from conversations with Mr. Jaradat, the following major problem areas became evident:

#### A) Questionnaire Design

1. No allowance was made in the design of the questionnaire for co-educational schools. Some co-ed schools were entered as boys' schools, while others were entered as girls' schools. In his correction of Balqa governorate questionnaires, Mr. Jaradat counted all co-ed schools as girls' schools.
2. Most secondary schools also have preparatory and primary sections. In order to avoid double counting, data was filled in for the questions relating to secondary schools, and only data specific to the other sections was filled in. Thus, if there is a secondary school with a preparatory section, the answer to Question 6.1 (the number of preparatory schools) was given as zero, but then information regarding the number of students was provided (Question 6.3).
3. There was some confusion about how to deal with schools which operate a shift system, with a morning and an evening shift. Mr. Jaradat reports that each shift is considered a separate school.

#### B) Data Collection

After the completed questionnaires were returned, glaring contradictions became apparent between the data provided by the Ministry of Education and the data compiled by the Directorates of Education in the various governorates. There was also much data that was clearly erroneous. Mr. Jaradat therefore redid the entire section of the survey

which dealt with Balqa Governorate. The updated information is presently being entered into the computer. The other four governorates (Amman, Irbid, Kerak and Na'an) have still to be revised, though it is almost certain that they share many of the errors which appeared in Balqa.

The main mistake made in the data collection process seems to be that the Ministry of Education's central office in Amman was asked to provide the data. It would have probably been wiser to go straight to the Directorates in the various governorates.

#### IV. VOCATIONAL TRAINING CORPORATION (04)

##### A) Questionnaire Design

There are no problems with the design of the questionnaire.

##### B) Data Collection

There are only seven localities where the VTC is operational. Data collection proceeded smoothly, and the quality of the information seems very good.



V. MINISTRY OF LABOUR AND SOCIAL DEVELOPMENT (05) - 0203

A) Questionnaire Design

There were no problems in questionnaire design.

B) Data Collection

It is safe to assume that the data collected is of a high level of reliability.

VI. MINISTRY OF LABOUR AND SOCIAL DEVELOPMENT (05) - 0401

A) Questionnaire Design

The only drawback in the design of this questionnaire is that no questions were asked about financial assistance provided by the Ministry other than direct loans.

Questions 2.4 and 3 were considered by the Ministry informant to be too vague and unspecific. The answers to these questions were not computerised and do not seem to be of any practical value for this project.

B) Data Collection

Again, the data is of good quality, and can be considered reliable. The only question where the data is dubious is 1.2. Some governors reported virtually no visits to the field, while others reported visits of two person-hours per week to most localities. This data should be treated as suspect.

## VII. JORDAN ELECTRICITY AUTHORITY (06)

### A) Questionnaire Design

There were no problems in the design of the questionnaire.

### B) Data Collection

The JEA keeps good records of its electrification campaign, and the data would appear to be highly reliable.

However, since the pace of the electrification campaign is very fast, data tends to become obsolete rapidly, and regular periodic updating is necessary.

## VIII. MINISTRY OF COMMUNICATIONS (07)

### A) Questionnaire Design

1. The questionnaire did not take into account the possibility that there could be more than one post office in a locality, so only one box was provided for Question 1.
2. In the cases where there was more than one post office, it became difficult to give one answer in the box provided for Question 3.
3. Question 2 asks whether the building in which the post office is situated is owned or rented. In some cases, the "post office" consists of a window of a shop or private building, rendering the question meaningless.

In all the above cases, additional explanatory notes were pencilled in by the MOC informants when necessary.

### B) Data Collection

The data seems reliable.

IX. TELECOMMUNICATIONS CORPORATION (08)

A) Questionnaire Design

There were no problems in the design of the questionnaire.

B) Data Collection

The quality of the data seems to be very good, as the questions are straightforward and the TCC keeps updated records.

## X. JORDAN WATER AUTHORITY (09)

### A) Questionnaire Design

Of all the different questionnaires prepared for the survey, this is surely the most poorly designed. The major problem areas:

1. The distinction between "local" and "distant" sources of water in Question 1 is ambiguous. Does a distance of  $3/4$  km. make a source local or distant? Answers varied, but were corrected so that if any distance at all was recorded in answer to Question 2, the source was considered distant.
2. There seemed to be some confusion regarding the meaning of "Collection Wells" in Question 1.3.
3. Questions 2 and 3 point up a fundamental flaw in the design of the questionnaire: what is meant by a "primary source of water?" In some cases it was given as either a mother well or spring. In other cases, one of the major JWA pipelines pumping water throughout the country was specified. Thus, the answers to Question 2 vary, sometimes giving the distance from the locality to the mother source, sometimes giving the distance from the locality to the nearest big pipeline from which water is tapped. The answers to Question 3 show the same ambiguity: in some cases the name of the mother well or spring is given, while in others a pipeline is specified.

### B) Data Collection

The data collection process took an extraordinarily long time, second only to that of the JCO. Unfortunately, the quality of the data is not commensurate to the length of time it took to obtain it. In part, the blame lies with us, for we should have checked with the JWA to see what kind of records they keep. In the event, it transpired that the JWA has records only for localities in which it has constructed pipeline networks.

The JWA informants sometimes had personal information about other localities, and where possible they jotted this down. For many locations without JWA-constructed water networks, however, there is simply no data.

The questionnaires for these localities have been filled in with zeros.

In conclusion, then, the only data in this section of the survey which can be considered even remotely reliable are the answers to Questions 3 through 6 for the localities in which the JWA has built pipelines. Even if some of the data in Questions 1 and 2 is correct, it is difficult to see what use can be made of it. In fact, the usefulness of the entire questionnaire is dubious.

NOTE: The locality of Al-Faqir (26101037) has turned out to be part of Kraymeh (26101019) municipality. The same data has been entered for both localities, and so is double-counted. This fact should be remembered when a final list of localities is drawn up.

## XI. MINISTRY OF PLANNING (10)

### A) Questionnaire Design

This part of the survey consists of population figures for the years 1979, 1982, 1985 and 1990, derived from Department of Statistics data and filled in by members of the NVS project team here at the Ministry of Planning.

## XII. AGRICULTURAL CREDIT CORPORATION (11)

### A) Questionnaire Design

On the whole, there were no major problems in the design of the questionnaire. The only minor points worth mentioning:

1. Since the ACC does not send personnel into the field, the answers to Question 1.3 were given only in settlements which have a branch office.
2. The ACC apparently gives out two major kinds of loans: short-term (seasonal), and middle-term loans. When answering the questions, the ACC informants wrote in the discrete amounts of both kinds of loans beside the questions, and entered the totals in the boxes provided.
3. Since the ACC does not offer technical assistance, Question 3 was unnecessary.

### B) Data Collection

The data seems reliable.



### XIII. JORDAN COOPERATIVES ORGANISATION (12)

#### A) Questionnaire Design

In addition to monetary loans, the JCO also provides assistance in kind: tons of barley, bran, etc. This form of assistance was not anticipated, and so no boxes were provided for answers in the questionnaire. The JCO informants wrote in such data under Question 2.4.

Otherwise, there were no significant problems in the design of the questionnaire.

#### B) Data Collection

Even though the JCO took longer than any other agency to return the completed forms, the quality of their data appears fairly reliable. The only place where the data is questionable is Question 1.3. Here the answers seem arbitrary, with some governorates reporting weekly visits to most localities, and others reporting almost none.

Due to time constraints, the JCO informants were unable to fill in data regarding in-kind assistance for all localities, but expressed a willingness to do so when asked. Appendix I to this report consists of a list of localities for which such data is missing. If the decision is made in the future to complete this information, the man to call at the JCO is Mr. Hussein Bitar.

#### XIV. CITIES AND VILLAGES DEVELOPMENT BANK (13)

##### A) Questionnaire Design

1. Since the CVDB does not have branch offices, Questions 1.1, 1.2 and 1.3 only applied to one locality -- the city of Amman.
2. Question 3 was unnecessary because the CVDB does not offer technical assistance.

Otherwise, there were no significant problems in questionnaire design.

##### B) Data Collection

The data seems reliable.

## XV. HOUSING BANK (14)

### A) Questionnaire Design

In this case, the entire format of the questionnaire turned out to be virtually useless. The major problem points:

1. The Housing Bank is only active in 103 localities, so 915 questionnaires were prepared needlessly.
2. Question 1.3 only applied to localities where the Housing Bank has branch offices, since HB personnel do not make field trips.
3. Question 2.2 was cancelled altogether for lack of data.
4. Questions 2.1 and 2.3 have answers. The main problem here, and it is a major one, is that the Housing Bank does not know the final destination of the money it is lending out. When receiving a loan, a person is asked to give the name of a post office through which he can be contacted. For a variety of reasons, the town in which the post office is situated may differ from the locality in which the loan recipient actually resides. In addition, while the loan recipient may live in the same locality, he may intend to use the loan funds to build in another locality altogether. For lack of better information, however, it was decided to take the locality in which the post office is located as the destination of Housing Bank loans. Thus, this data is guesswork at best.
5. Question 2.4 was answered in all cases with the meaningless statement: "Loans for housing purposes."
6. Question 3 was not answered at all, as the Housing Bank does not offer technical assistance.

### B) Data Collection

The quality of the raw data itself (branch offices, employees, loan amounts) is excellent.

## XVI. INDUSTRIAL DEVELOPMENT BANK (15)

### A) Questionnaire Design

In general, the design of the questionnaire was satisfactory. The only problem is that Questions 1.1, 1.2 and 1.3 apply only to the city of Amman, since the IDB does not have any branch offices.

Question 3 was unnecessary because the IDB does not offer technical assistance.

### B) Data Collection

There were no noteworthy problems in data collection, and the data seems reliable.

NOTE: It would have been wiser, before the questionnaires were prepared, to have asked the IDB about the number of localities which it services. Since the IDB is only active in 123 localities, 395 questionnaires were prepared needlessly.

regularly so that at least future Plans are prepared in a more rational way than in the past.

---

APPENDIX I

LIST OF SETTLEMENTS FOR WHICH JCO DATA IS MISSING

- |  |                                    |
|--|------------------------------------|
| 1. 11101001 - Amman                    | 36. 12101009 - Wadi Qattar         |
| 2. 11101003 - Qweismeh                 | 37. 12101010 - Awajan              |
| 3. 11101004 - Jweideh                  | 38. 12101011 - Gharisa             |
| 4. 11101007 - Um El-Kindam             | 39. 12101012 - Tafeh               |
| 5. 11101019 - Tayybeh                  | 40. 12101013 - Msheirfeh           |
| 6. 11102001 - Na'ur                    | 41. 12101014 - Hashemiyeh          |
| 7. 11102002 - Um El-Summaq             | 42. 12101015 - Dleil               |
| 8. 11102009 - Manshiyyeh               | 43. 12101016 - Um Saleeh           |
| 9. 11103001 - Sahab                    | 44. 12101017 - Doqara              |
| 10. 11103002 - Msheirfet Rakkad        | 45. 12101018 - Qasr Hallabat       |
| 11. 11103003 - Rajib                   | 46. 12101019 - Iskan Al-Hashemiyeh |
| 12. 11103004 - Khashafiyet Al-Shawabke | 47. 12102001 - H. Azraq            |
| 13. 11104003 - Faisaliyyeh             | 48. 12102002 - S. Azraq            |
| 14. 11104005 - W. Rajm Al-Shami        | 49. 12102003 - Ain Al-Baida        |
| 15. 11104006 - E. Rajm Al-Shami        | 50. 12102004 - E. Hallabat         |
| 16. 11104010 - Um Batama               | 51. 12102005 - Mazare' E. Hallabat |
| 17. 11104017 - Al-Zamilat              | 52. 12102006 - Hazcem              |
| 18. 11201001 - Wadi Sir                | 53. 12102007 - Qasr Amra           |
| 19. 11201002 - Bassa                   | 54. 12103001 - Birein              |
| 20. 11201003 - Iraq Al-Amir            | 55. 12103002 - Marhab              |
| 21. 11201004 - Zibdeh                  | 56. 12103003 - Um Rummaneh         |
| 22. 11201005 - N. Rabahiyyeh           | 57. 12103004 - Rajm Shok           |
| 23. 11201013 - Abu Sus                 | 58. 12103005 - Saroot              |
| 24. 11201017 - Um Abhara               | 59. 12103006 - E. Masarra          |
| 25. 11201020 - Al-Rajaja               | 60. 12103007 - Kamshe              |
| 26. 11201021 - Al-Dibbeh               | 61. 12103008 - 'Alook              |
| 27. 11201023 - Marj Haman              | 62. 12103009 - Qaniyyeh            |
| 28. 11201029 - Dhira'                  | 63. 12103010 - Tawahin Al-Adwan    |
| 29. 12101001 - Zarqa                   | 64. 12103011 - W. Masarra          |
| 30. 12101002 - Sukhne                  | 65. 12103012 - Maqam 'Isa          |
| 31. 12101003 - Jreiba                  | 66. 12103013 - Sehra               |
| 32. 12101004 - Russeifa                | 67. 12103014 - Bireh               |
| 33. 12101005 - Ihaou                   | 68. 12103015 - Shomar              |
| 34. 12101006 - Abu Zighan              | 69. 12103016 - Um Makman           |
| 35. 12101008 - Sayeh Al-Dhiyeb         | 70. 12103017 - Hod 'Uqla           |

APPENDIX I -- Contd.

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 71. 21101001 - Irbid              | 112. 24101001 - Ramtha          |
| 72. 21101011 - Mghayyer           | 113. 24101002 - Turra           |
| 73. 21101014 - Sal                | 114. 24101003 - Dhneibeh        |
| 74. 21101016 - Bushra             | 115. 24101004 - Shajara         |
| 75. 21101017 - Sareeh             | 116. 24101005 - Amrawa          |
| 76. 21101018 - Howwara            | 117. 24101006 - Bwaida          |
| 77. 21101036 - Hosn               | 118. 24101007 - Bariqa          |
| 78. 21101037 - Na'imeh            | 119. 24101008 - Khanasari       |
| 79. 21101039 - Katm               | 120. 24101009 - Sweilmeh        |
| 80. 21201020 - Tantoor            | 121. 24101010 - Ksheirfeh       |
| 81. 21301001 - Ebder              | 122. 24101011 - Al-Akidir       |
| 82. 21301002 - Um Qais            | 123. 24101012 - Khosha          |
| 83. 21301004 - Hatem              | 124. 24101013 - Hamra           |
| 84. 21301005 - Habras             | 125. 24101014 - Fa'             |
| 85. 21301006 - Hartha             | 126. 24101015 - Harsh           |
| 86. 21301007 - Rafid              | 127. 25101029 - Asim & Dhofar   |
| 87. 21301008 - Sahn Al-Kafarat    | 128. 26101001 - N. Shune        |
| 88. 21301009 - Samar              | 129. 26101002 - Ma'adh          |
| 89. 21301010 - 'Aqraba            | 130. 26101003 - Adasiyyeh       |
| 90. 21301011 - Kufr Sun           | 131. 26101004 - Baqura          |
| 91. 21301012 - Mukhaibeh Fawqa    | 132. 26101005 - Manshiyyeh      |
| 92. 21301013 - Mukhaibeh Tahta    | 133. 26101006 - Tal Al-Arba'in  |
| 93. 21301014 - Malka              | 134. 26101007 - Al-Haraweh      |
| 94. 21301015 - Mansoora           | 135. 26101008 - Basila          |
| 95. 21301016 - Yabla              | 136. 26101009 - Qlai'at Al-Jaww |
| 96. 21301018 - Mzcireeb           | 137. 26101010 - Shaikh Muhammad |
| 97. 21301019 - Dar El-Basha       | 138. 26101013 - 'Iraq Al-Rushda |
| 98. 21301020 - Seifen             | 139. 26101014 - Waqqas          |
| 99. 21301003 - Jahfiyyeh          | 140. 26101015 - Jisr Al-Kajane' |
| 100. 23101033 - Khnaizeer         | 141. 26101016 - Mashare'        |
| 101. 23101034 - Um Batime         | 142. 26101018 - Karkama         |
| 102. 23101037 - Hamid             | 143. 26101019 - Krayneh         |
| 103. 23101038 - Karam             | 144. 26101020 - Abu 'Abide      |
| 104. 23101041 - Dugurseh          | 145. 26101021 - Zamaliyyeh      |
| 105. 23101042 - Saha              | 146. 26101022 - Wadi Yabes      |
| 106. 23101052 - Nahda             | 147. 26101023 - Marze           |
| 107. 23102003 - M. Hayyan Rweibid | 148. 26101027 - Madrasa         |
| 108. 23102004 - M. Hayyan Rweibid | 149. 26101028 - Madarej         |
| 109. 23102012 - Mazra'a           | 150. 26101029 - Jisr Sheikh Hus |
| 110. 23103001 - Sama Sirhan       | 151. 26101030 - Sakhineh        |
| 111. 23103005 - Mghayyer Sirhan   | 152. 26101031 - Ghussein        |

APPENDIX I - Contd.

- 153. 26101032 - 'Aramsheh
- 154. 26101033 - Abu Sido
- 155. 26101034 - Khirbet Murshid
- 156. 26101035 - Seil Al-Himmeh
- 157. 26101036 - Maraihe
- 158. 26101037 - Faqir
- 159. 26101038 - Balawneh
- 160. 26101039 - Abu Hbeil
- 161. 26101041 - Qarn
- 162. 26101042 - Abu Fallaj
- 163. 26101043 - Slikhat
  
- 164. 41102001 - 'Ayy
- 165. 42101017 - Hasa
  
- 166. 52101008 - Shareeh



APPENDIX II

NEW FORMAT OF UNRWA DATA FOR COMPUTER ENTRY

1. MEDICAL CENTERS

- 1.1 What is the number of Medical Centers in this settlement?
- If the answer is zero, go to Question 2.
- 1.2 Is there a pharmacy? (1) Yes (2) No
- 1.3 What is the number of MCH centers?
- 1.4 Is there a Family Planning Center? (1) Yes (2) No
- 1.5 Is there a dental clinic? (1) Yes (2) No
- 1.6 Is there a medical laboratory? (1) Yes (2) No
- 1.7 What is the number of doctors?
- 1.8 What is the number of nurses?
- 1.9 What is the number of technicians?
- 1.10 What is the number of dentists?
- 1.11 What is the number of midwives?
- 1.12 What is the number of maids?
- 1.13 What is the number of patients (per month)?
- 1.14 What is the number of owned buildings?

2. HEALTH CLINICS

- 2.1 What is the number of Health Clinics in this settlement?
- 2.2 How many days per week is the doctor present?
- 2.3 What is the number of MCH centers?
- 2.4 Is there a Family Planning Center? (1) Yes (2) No
- 2.5 What is the number of nurses?
- 2.6 What is the number of technicians?
- 2.7 What is the number of midwives?
- 2.8 What is the number of maids?
- 2.9 What is the number of patients (per month)
- 2.10 What is the number of owned buildings?

APPENDIX III

LOCALITIES FOR WHICH THE CODE NUMBER HAS BEEN CHANGED

| <u>LOCALITY</u>    | <u>OLD NUMBER</u> | <u>NEW NUMBER</u> |
|--------------------|-------------------|-------------------|
| SALEN              | 11105036          | 11103010          |
| SANNA              | 21102002          | 21101052          |
| KHREISAN           | 23101057          | 23102014          |
| AL-GHADIR AL-ABYAD | 23103010          | 23101060          |
| AL-BUSTANEH        | 23201032          | 23102015          |

In the computer, data for these localities has been entered under the new number. The questionnaires have been filed under the old number.

APPENDIX IV

LIST OF NEW VILLAGES

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1) 11101029 - Marj El-Faras       | 27) 25101049 - Abu Zeitoun       |
| 2) 11105056 - Rojmi Igab          | 28) 25101050 - Khshelbeli Foqa   |
| 3) 12101020 - Qasr Hallabat W.    | 29) 25101051 - Haneish           |
| 4) 12101021 - Mukhayyam El-Sukhne | 30) 25101052 - Jebb              |
| 5) 12103018 - Um El-Biar          | 31) 25101053 - Steb              |
| 6) 12103019 - Kheleh              | 32) 25101054 - Zeizafouneh       |
| 7) 13101045 - Manshiyyet Ma'ieu   | 33) 26101044 - Hamamreh          |
| 8) 13101046 - Wasiyyeh            | 34) 26101045 - Ba'leh            |
| 9) 13102044 - Fazr                | 35) 26101046 - Jesorah           |
| 10) 13102045 - Rashadiyyeh        | 36) 41101042 - Rashadiyyeh       |
| 11) 13102046 - Nuzha              | 37) 41101043 - Damekhi           |
| 12) 21101051 - Wasfiyyeh          | 38) 41101044 - Wasiyyeh          |
| 13) 21103011 - Za'tarah           | 39) 41201020 - Majdoline         |
| 14) 21103012 - Al-Ibrahemeh       | 40) 51101028 - Tnai'a            |
| 15) 22101053 - Hamteh             | 41) 51201020 - Haddadeh          |
| 16) 22101054 - Aleimon            | 42) 51201021 - Muthallath Shobal |
| 17) 22101055 - Khirbet Qara       | 43) 51201022 - Maqdes            |
| 18) 22101056 - Qure'              | 44) 51201023 - Haleileh          |
| 19) 23101061 - Shbeika            | 45) 51201024 - Smar              |
| 20) 23102013 - Nyau               | 46) 51301015 - Iskan El-Hay      |
| 21) 23201035 - Ma'zuleh           | 47) 52101012 - Ras Aseimer       |
| 22) 23201036 - Hamra' Sahiem      | 48) 52101013 - Ein El-Qatar      |
| 23) 23201037 - Ghadier El-Kuqa    | 49) 52102015 - Khirbet El-Khali  |
| 24) 23201038 - Harara             | 50) 52103008 - Reishel           |
| 25) 23201039 - Manshiyyet El-Qanu |                                  |
| 26) 23201040 - Feisaliyyeh        |                                  |

APPENDIX V

LIAISON OFFICERS AT THE AGENCIES SURVEYED

| <u>AGENCY</u>                             | <u>LIAISON OFFICER</u> | <u>TELEPHONE</u> |
|---|------------------------|------------------|
| 1) Ministry of Health                     | Dr. Muhammad Musa Isa  | 669161           |
| 2) UNRWA                                  | Dr. Muhammad Khalaf    |                  |
| 3) Ministry of Education                  | Dr. Harun Al-Rabadi    |                  |
| 4) Vocational Training Corporation        | Abdul-Aziz 'Ayyash     |                  |
| 5) Ministry of Labor & Social Development | Samir Qusus            | 673191           |
| 6) Jordan Electricity Authority           | Fawzi Kharbat          | 815615           |
| 7) Ministry of Communications             | Almad Bayer            | 624301           |
| 8) Telecommunications Corporation         | Awni Al-Shawaheen      | 630321           |
| 9) Jordan Water Authority                 | Saqr Salem             | 666111           |
| 10) Agricultural Credit Corporation       | Shafiq Bani-Hani       |                  |
| 11) Jordan Cooperatives Organisation      | Hussein Al-Bitar       | 665171           |
| 12) Cities and Villages Development Bank  | Dr. Mahmud Al-Zu'bi    | 668151           |
| 13) Housing Bank                          | Abdul-Aziz Haikal      | 667126           |
| 14) Industrial Development Bank           | Mazen Shaker           | 642216           |
| 15) Ministry of Agriculture               | Karim Nsheiwat         | 639391           |



JICA