

Situational Analysis Report

For Kimadia

USAID Contract number: RAN-C-00-03-00010-00

Prime Contractor: Abt Associates

Submitted by:
International Medical Corps

28 June through 11 July 2003

Baghdad, Iraq

Iraq Health Systems Strengthening (IHSS)

Abt Associates Inc.

4800 Montgomery Lane, Suite 600

Bethesda, MD 20814

SITUATIONAL ANALYSIS OF THE KIMADIA AND GOVERNORATE WAREHOUSES IN IRAQ.

A. PHASE 1:

GENERAL:

The aim of phase 1 is to conduct a system overview, documenting the existing, perceived, structures in the Kamadia and Governorate warehouses.

The aim of this report is to:

- Consolidate existing known information about Kimadia and Governorate warehouses

KIMADIA SYSTEM:

1. Locations:

Kimadia is a trading company belonging to the ministry of health. 2/3 of its work involves the import/storage and distribution of drugs and medical supplies. All medicines imported into Iraq (both public and private sector) are controlled by the Kimadia system. The Kimadia system is located at 5 locations in Baghdad (see map 1 attached).

i. Warehouse #1:

Warehouse # 1 currently acts as the Kimadia HQ. The complex consists of 6 separate warehouses containing medications destined for the public sector. There are 6 separate warehouses for:

- a. Vitality warehouse: antibiotics, etc.
- b. Tablets warehouse
- c. Ampules warehouse.
- d. Laboratory chemicals and agents
- e. Powders warehouse: suspensions, syrups, etc.
- f. Germocide warehouse. (Insecticides, pesticides, disinfectants etc.).

ii. Warehouse # 2: Is the IV fluid warehouse in Abu-Greb.

iii. Warehouse # 7: Contains Iraqi medical supplies for the Private sector, in Al-Askan.

iv. Warehouse # 4: Contains Iraqi drugs for the private sector, in Al-Doura.

v. Warehouse # 13: Contains imported medical appliances, in Al-Dabash.

In addition to this, vaccines are stored at the *Al-Amaria Institute for serum and vaccine production*

Kimadia (Warehouse # 1) and the central system

1. Types of inventory :

a. Kimadia warehouse complex (W.H #1) has 2 systems of recording the items coming in and out of the warehouse. The official inventory is at the “Storage Control Office” and it consists of 2 systems, the computer system, (updated supposedly daily however owing to the hostilities it is not upto date), and a paper “back-up” filing system. There is also an un-official record kept in the warehouse itself, maintained by the staff in each warehouse.

When any drugs or equipment enter or leave the warehouse, a bill is completed with 4 copies (blue, yellow, red and white). The first is for the client; the second is for the computer office, third for the paper store control office and the final copy remains in the warehouse that issued the bill. Each person receiving a bill is supposed to enter this data into the inventory system in his or her charge. Thus there are three independent and parallel systems for maintaining the accuracy of the inventory.

N.B: To date it appears from spot checks on 10 items, that the most correct records are kept in the store, the least updated are the computer files. See separate report.

2. Special facilities:

Warehouse systems:

Kimadia warehouses #4 and #1 were constructed in 1983 by a British Company. They contain a cooling system (requiring enormous power, hence it cannot run fully on the generator alone), fire alarms/sensors/extinguishers and a refrigerated room. According to the Distribution and storage manager, it has been very difficult to get spare parts for the warehouse systems during the period of sanctions.

3. Logistical Support, (e.g. vehicles, forklifts, etc.)

Vehicles in the warehouse: Each warehouse has a double sided electric fork-lift (they need 2 per warehouse); once again they require special parts which are very difficult to obtain and thus run on car batteries which require recharging every 40 minutes of use (charging takes 8 hours). Each warehouse also has a small diesel forklift. This cannot be used between shelves owing to the associated fire hazard. There are 2 minibuses per warehouse to transport staff to and from work, 1 pickup per warehouse for general errands

Power: The Kimadia warehouses run from a combination of the main electric grid and 3 Generators. There is one Generator serving each 2 warehouses in Kimadia #1. They have a power of 500KVA and consume approximately 7,500 litres of Diesel/week.

Additional Vehicles: Kimadia have 57 cold trucks with a capacity of 5, 7, and 12 tones and a total of 7 MOH land cruisers for General use. They have an additional 20 Cold trucks for the Governorates (total of 77). **The transport/movement unit** is responsible for providing all vehicle needs, however they have no mechanics (as previously under the agreement with the UN, the vehicles were under guarantee- this is no longer the case). The Transport/Movement unit has a total of 300 drivers.

4. Software systems used at each site

In Kamadia, the computer program used is the Micro-Drug (M-drug) system. They have recently started to use a second program made for the ministry of trade. Presently, they are using both programs to control the information simultaneously. The Kimadia staff seem to prefer the M-drug system.

N.B Other stores in Al-Dabash. Are still using only the M-drug program, claiming that the new program is troublesome

5. Staffing and organizational charts

Kimadia central headquarters was previously located in the building of the MOH in Baghdad. It constituted of 3 stories of offices and 1000 employees in this building alone. Kimadia has a total staff of 3,200 persons throughout Iraq. Each warehouse in the Kimadia complex has 1 pharmacist and 2-4 warehouse managers. In addition to this there are 2-6 other staff in each warehouse. For the organization structure, see fig. 1 (attached).

6. Overview of coordination

The individual departments within Kimadia are illustrated on figure 1 (attached).

The general director is responsible for everything in both the Kimadia central warehouses and the Governorate warehouses in Iraq. He has 3 direct assistants:

- i. Vice director: is responsible for running 7 departments on behalf of the G.D. (Planning and follow-up, Administration, Finance, Computer, Internal auditing, bureau for drug information and the department for estimation of need.
- ii. Import Manager: Is responsible for 3 departments
- iii. Distribution and storage manager

Imports: The **Distribution and Storage manager is responsible for 4 departments:**

- i. Department of drug distribution
- ii. Department of warehouses
- iii. Department for the distribution of medical supplies and
- iv. Department consisting of the Governorate branches of Kimadia

The **department of drug distribution** receives a yearly order from each governorate, for the needs of hospitals, clinics etc. within the Governorate. The drug distribution department collects all the orders and organizes the distribution of these goods, onto a computer file, according to the needs. The order is then sent to the **department of warehouses** which is responsible for organizing the logistics of the distribution operation, in coordination with the **transportation/movement unit**.

The **department for distribution of medical appliances** organizes distribution of all medical appliances (see * on diagram).

Additional problems:

The Kimadia staff feel that the Ministry of Health do respect them. The workers of Warehouse #13 all turned up for work throughout the bombing of Baghdad to try to get medical supplies out to hospitals using their own cars. They feel that the Ministry of Health didn't acknowledge their efforts and indeed is further disrespecting them by not including a representative from Kimadia in this plan for rehabilitation/development of the system.

Governorates:

Public sector:

Each Governorate has one small warehouse supplied by Kimadia. (Baghdad previously had 4 but now only 1 remains (Al-Qadamia)). The governorate warehouses are responsible for distribution to every hospital and clinic in their area. The governorate warehouses are small and are split into rooms for each type of medicine.

The pre-war distribution system in the Governorates (example from Nasyria)

1. A representative from the hospital/clinic travels to the warehouse with paperwork identifying him as a legitimate representative and a list of the required/requested medications.
2. The manager of the warehouse reviews the paperwork and gives permission for the representative to receive medications.
3. The representative goes to the appropriate storerooms within the warehouse (syrups, tablets, etc.). The manager of the warehouse and each storekeeper has a table detailing how much of each medication each particular hospital is allocated. This amount is based on the number of patients the hospital serves and the number of medications the warehouse received from Baghdad. The representative receives the amount listed on the table and the storekeepers keep separate lists detailing how many medications are allocated.
4. The representative takes the lists from the storekeepers to the computer department. Electronic copies of these lists are made using FOXPRO coded/secure software.
5. The representative shows the lists to another warehouse official who checks for errors regarding medicine codes, prices, and quantity of medications allocated.
6. The representative takes the lists to the manager for his signature.
7. An accountant calculates the grand total for all medications received by the representative. The representative returns with a certified check for the amount made out to the Kimadia.
8. The electronic lists are copied four times. One copy is sent to the head Kimadia office in Baghdad and one copy is given to the accountant. The other two lists are kept by the representative.
9. The representative returns to each storeroom and gives the storekeeper a copy of the appropriate list as well as a receipt of payment. The representative then receives the medications.

Notes: The entire process usually took two days to complete and, barring any unexpected shortages from hospitals or clinics, takes place once a month. Since the warehouse was responsible for distributing to all clinics and hospitals in the governorate a schedule was developed to ensure all the representatives did not arrive on the same day.

Post-War Distribution System (example from Nasyria).

The medicines donated through humanitarian organizations were distributed free of charge. Only two copies of the lists were made – one for the hospital/clinic representative and one for the warehouse management.

16 Kamadia trucks hauling medicine recently arrived from Baghdad. This medication will be distributed using the pre-war system detailed above with one exception: there will be no accountant since the medications are distributed free of charge. The warehouse no longer has FOXPRO software and will instead be using MS Excel for record-keeping. IMC is donating a computer to the warehouse to assist in this process.

Private sector:

The private sector has 5 warehouses for distribution: Basrah, Mosul, Babil, Baghdad and Kirkuk?? In Baghdad the Warehouse #3 was looted and damaged, however it was previously responsible for distribution to Private stores in: Baghdad, Wasit, Diale and Umbar. The Basrah store distributes in turn to Basrah, Nasariah and Omara. The Babil store distributed to Babil, Nejev, Karbullah, Qadisia and Mothena. Mosul store distributes only to Mosul. Kirkuk covers Tikrit and Kirkuk. Any drugs imported into Iraq require MOH approval, which involves a lengthy process of testing samples. However, medical equipment can be freely imported.

To make an order a request is made by the medical centre to the local store. If the store doesn't have the necessary supplies, they will make a request to the Central Kamadia store.

Owing to the restrictions during the UN sanctions, looting during the recent months and use of huge amounts of supplies during the recent war, the level of supplies needs replenishing.

Warehouses looted : W/H #2 for I.V fluid, (in Abu-Greb) half looted and damaged, W/H #4 for Iraqi drugs for the private sector (at Al-Doura), completely looted and destroyed.

Al- Dabash warehouse complex # 13

Overview:

The Al-Dabash warehouse complex (# 13) is divided into 4 official departments, each of which works independently from the next, (see figure 2 attached). These departments are as follows:

- i. **Department of medical supplies/ appliances** (Manager "Dr. Sabri Al- Hakeem"- pharmacist, Assistant "Dr. Ahmed Mahmoud"). This department is concerned with all medical supplies and equipment, service equipment and all appliances, building equipment etc. All public hospital/clinic needs except for drugs are stored here in warehouse #13.
- ii. **Engineering and maintenance department** (Manager "Hamil"- Engineer): This department maintains all medical equipment for the MOH throughout Iraq
- iii. **Customs clearance department:** (Manager "Dr. Saad Al-Mafraji"- pharmacist). Organises all customs clearance for goods coming into the Kimadia system.
- iv. **Department of Transportation**

Warehouse #13 complex consists of a total of 25 warehouses: 17 for storage of medical supplies and equipment and serve equipment and the remaining 8 stores are for storing spare parts for the department of medical equipment and supplies.

1. Types of inventory and systems :

System failure:

There was originally a system controlling the whole system in warehouse # 13, issuing paper vouchers, receipts, etc. and this was efficient in maintaining storage controls in all of the warehouses. However, owing to the random and disorganized way that medical supplies and equipment were sent to Iraq in the recent months, it has proved to be very difficult to make the inventory. (e.g. trucks arrive and want to simply unload goods and leave, they don't even ask for documents to acknowledge receipt of the goods.

Also the goods are often in mixed and unlabelled boxes and owing to the huge quantities involved it has proven impossible to open every box to make an accurate record of the supplies. Items do not even arrive with a bill of loading which is usually essential.

These factors tempt the workers to become corrupt and do whatever they like. It is thus impossible for the Management staff to control their behaviour. Also the management are concerned of their security if they try to crack down on this behaviour.

The security situation cannot function properly until the items are correctly recorded on the inventory.

Inventory System: Warehouse # 13 previously used computers with the micro-drug program, backed up with inventory cards. Items were released according to the need.

Services:

The warehouses were built in the 1970s by local Iraqi builders and the electricity and cooling systems are thus outdated. The warehouses have fire alarms and extinguishers. The methods of storage are “untidy” despite allocating special stores for each category of items: in fact the different categories are mixed owing to lack of space. (The lack of space arises as there are large pieces of equipment, which cannot be stored on shelves like in Warehouse #1. The warehouse buildings themselves are well built and solid and lift systems operate between floors. There is a lack of shelving and general organisation in some warehouses, however this is mostly owing to the huge quantities of humanitarian relief supplies.

Supplies are split between warehouses for equipment relating to dentistry, disposable items, etc.

Electricity:

Warehouse #13 originally had 4 x 550 KVA Generators to power the complex in the absence of the electric grid. However currently 2 are not working and thus the complex is powered by 1 Generator at any one time, which is enough to supply the whole complex with power for lights and minimal air conditioning systems in the offices, however it is not sufficient to run the air-conditioning in the warehouses.

2. Logistical Support

i. The Department of medical supplies/ appliances has: 3 minibuses, 1 pick-up, 2 flat pick-ups, 2 coasters, 1 lorry and 3 diesel forklifts. They have approximately 15 computers.

3. Staffing and organizational charts

i. Organizational structure of the Department for Medical Supplies and Eqt.:
There are 300 employees in the department (15 computers).

There are 4 offices under the control of the department manager:

- a. First storage office – manager is a pharmacist
- b. Second storage office – manager is a pharmacist
- c. Storage Control Office – manager is a pharmacist
- d. Spare parts office – manager is an engineer

Each office is split into units based on the nature of the appliances, e.g. X-ray equipment, aesthesis, dentistry, etc.

The units are the operating blocks for the whole system in the complex. They receive orders from their managers and they distribute accordingly.

4. Overview of coordination

Coordination between the Department for Medical Supplies and Equipment and the Import department:

The re-supply system is slow and doesn't function efficiently. It is impossible to know the time that it will take for an item to arrive. The supply chain has previously suffered from gross corruption, e.g. by people ordering items for personal benefit, such as air-conditioning units ordered on mass only to be exchanged with a trader for an expensive car.

Coordination with the Governorates:

Originally (pre-war 2003) the Governorate stores made requests to Warehouse #13 on behalf of the hospitals in their area. However now the hospital representatives are coming directly to the warehouse which is causing problems as the warehouse staff cannot verify the identity of the persons. They are concerned, as they know how easy it is to forge documents and stamps and take supplies.

The hospitals have been authorised to approach warehouse #13 directly for supplies, however instead they have refused and have been sending patients to collect their prescriptions in person. On both occasions of IMC visits, there were crowds of people at the warehouse waiting to collect equipment. It is currently at the discretion of the staff to decide who will and will not receive items. There are huge supplies of equipment and Ahmad, the assistant at the Department for Medical Supplies and Equipment informed us that owing to lack of requests (possibly owing to misinformation that the central warehouses had all been completely looted) they have started to proactively initiate distribution to the Governorates themselves. Clearly the coordination system between the hospitals, Governorate branches of Kimadia and the Central Kimadia have broken down so that neither knows the other's needs or supplies. Another theory is that the new hospital administrators are inexperienced in the Kimadia system and administration in general and may not have the facilities to coordinate as normal, this would suggest training and support to the systems is needed.

Additional Problems:

Corruption:

There is a feeling from the Management staff that the system is very corrupt both above and below their authority. Several years ago, there was a plan to build new warehouses in Baghdad, however it took 5 years to simply survey the site and thus the plan was never completed as certain persons had a personal interest in prolonging the process.

Looting/ Theft:

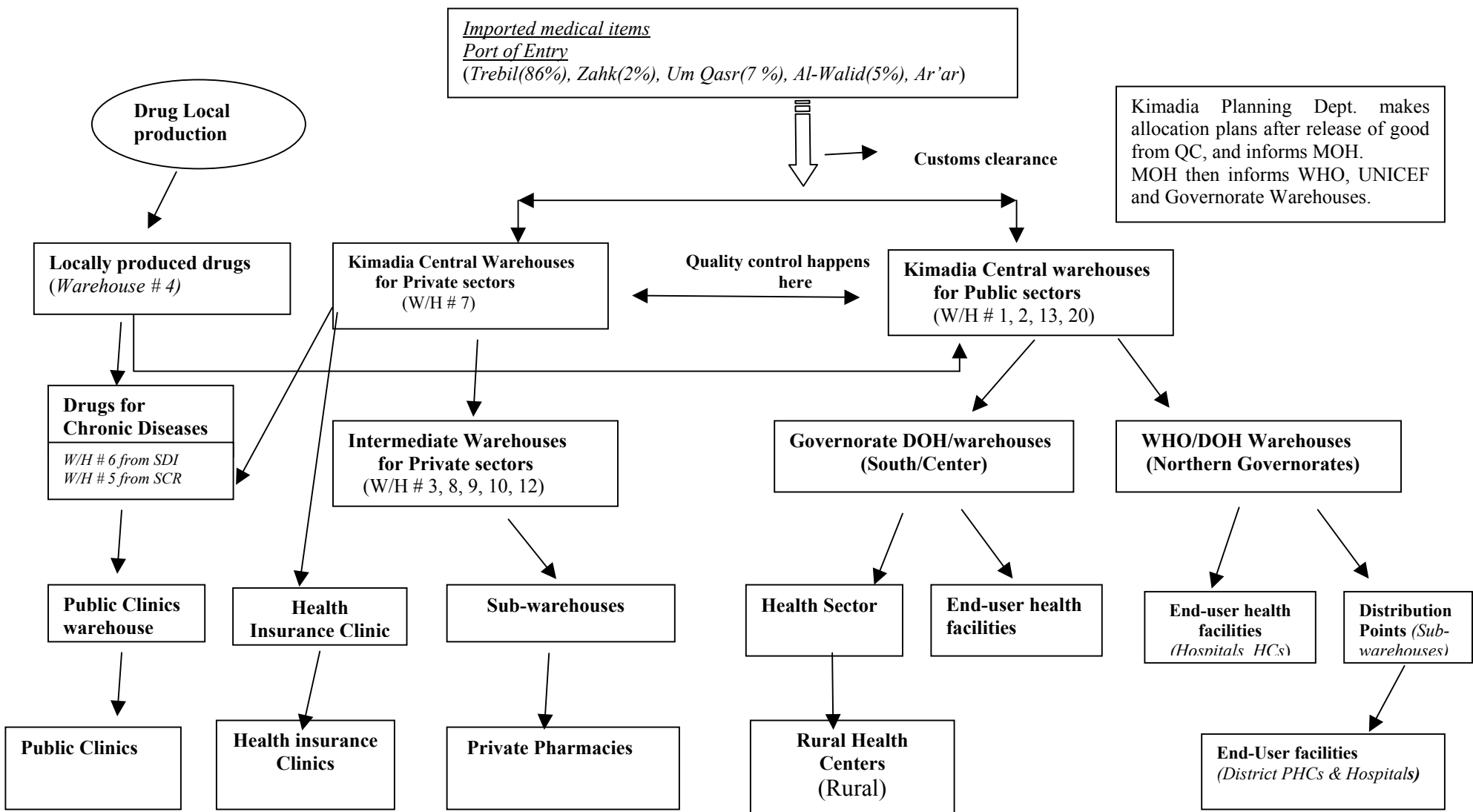
During the war and since the war, the office building was looted as was the furniture store (containing mostly air-conditioning units).

Research still to be carried out:

1. Further research into the other branches of the Dept. for distribution of medical appliances, namely the Engineering & Maintenance dept., Customs clearance dept and the Dept. of transportation. What is the mandate and scope of each department. Complete the section from Warehouse #13
2. Visit warehouses #2, #7 and #4 and research to complete each section.

3. Visit the Import department, and vice-directors' departments (estimation of need, planning and follow-up, auditing, etc.) to understand the full system in as much detail as possible.
4. Visit 3-5 Governorate warehouses to confirm information given and expand on it.

ANNEX 1 : SCHEMATIC DIAGRAM ON THE STAGES OF MOH/KIMADIA DISTRIBUTION SYSTEM OF DRUGS, MEDICAL SUPPLIES AND EQUIPMENT



Annex 2 : Warehouses and sub-warehouses in the Health Sector

I. MOH/Kimadia Medical Central Warehouses

WAREHOUSE #	WAREHOUSE NAME	LOCATION	TYPE OF SUPPLIES STORED	DISTRIBUTION SECTOR
1	Al Shahid Hani Tobiya	Al Adel	Drugs and laboratory supplies /reagents	Public
2	Al Shahid Suhail	Al Daswa	IV Fluids	Public
4	Al Semod	Al Dora	Locally manufactured drugs (received from Samara Drug Industries)	Private
7	Al Iskan	Al Iskan	Imported medicines	Private
13	Al Dabbash	Al Kadhimyah	Hospital supplies/ Equipment and Spare parts	Public
20	Institute of Vaccines and Sera	Al Ameria	Vaccines and Sera	Public

Source: MOH/Kimadia and WHO.

II. MOH/Kimadia Intermediate Warehouses for Private and Semi-private sector (supplied from Warehouses # 4 and # 7)

WAREHOUSE #	WAREHOUSE NAME	LOCATION	DISTRIBUTION TO
3	Al-Dora	Baghdad	Baghdad, Wasit and Anbar
5 & 6	Al-Shahid Rieth Al-Ta'I	Al-Karrada, Baghdad	Drugs for chronic disease and rare drugs pharmacies
8	Al-Basrah	Basrah	Basrah, Missan and Thi-Qar
9	Ninewa	Ninewa	Ninewa
10	Al-Tameem	Kirkuk, Tameem	Tameem and Salahadin
12	Babylon	Babylon	Babylon, Kerbala, Najaf, Qaddisiyah and Muthana

Source: MOH/Kimadia and WHO.

III. Estimated number of warehouses and sub-warehouses receiving SCR 986 inputs as of 1997 – 99

Type of warehouse	Total Number Countrywide	Total Number Centre/South	Comments related to northern governorates
MOH/Kimadia Central Warehouses for Public Sector in Baghdad	9	6	3 (one in each of the three northern governorates)
MOH/Kimadia Central warehouses for Private Sector	2	2	Not applicable
Kimadia Intermediate Warehouses for Private and Semi-private Sector	5	5	Not applicable
Governorates DOH Warehouses	21	18	3 (one in each of the three northern governorates)
Sub warehouses for private pharmacies	70	70	N/A
Sub warehouses for Publics Clinics	15	15	N/A
Sub warehouses for Health Insurance Clinics	15	15	N/A
Health Sectors	107	70	37
Subtotal	244	201	43

Source: MOH/Kimadia and WHO.