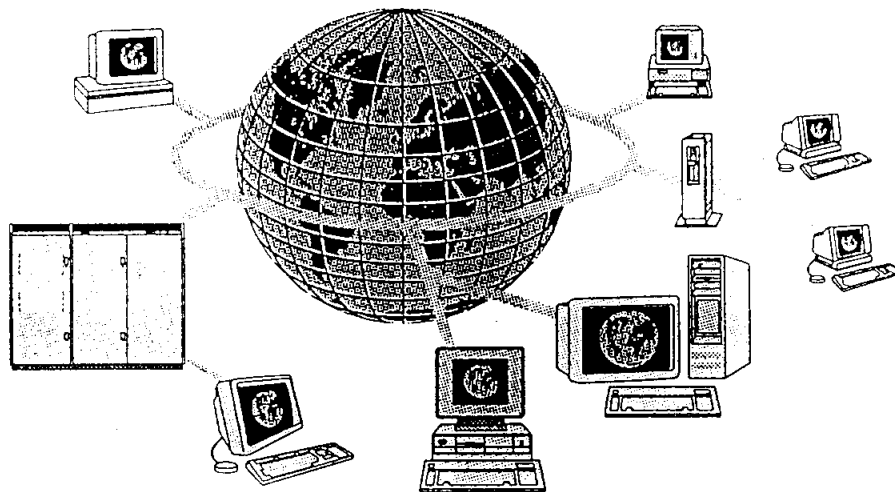


**ECONOMIC AND SOCIAL  
COMMISSION FOR WESTERN ASIA**

**REGIONAL TRAINING WORKSHOP  
ON POPMAP FOR WINDOWS AND INTERNET  
Damascus, 12-17 October 1996**



**FINAL REPORT**



**UNITED NATIONS**

Mention of firm names and commercial products does not imply the endorsement of the United Nations.

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## ABBREVIATIONS

ASCII	American Standard Code for Information Interchange
CAD	Computer Aided Design
CPUs	Central Processing Unit
DOS	Disk-Operating System
DX2	Duplex 2
DX4	Duplex 4
DXF	Duplex F
FTP	Final Transfer Protocol
IMPS	Integrated Microcomputer Processing System
LCD	Liquid-Crystal Display
MB	Megabyte
MHz	Megahertz
RAM	Random Access Memory
SVGA	Super Visual Graphics Array
SX	Simplex

## INTRODUCTION

1. The Economic and Social Commission for Western Asia (ESCWA), in collaboration with the United Nations Statistics Division, organized the Regional Training Workshop on PopMap for Windows and Internet, which was held in Damascus from 12 to 17 October 1996. The Workshop's objective was to strengthen the capacity of the national experts and organizations in the ESCWA region for better awareness, use and applications of the Geographic Information System (GIS) as well as the Internet. Training and hands-on practice sessions focused on PopMap for Windows, an integrated computer software developed by the United Nations Statistics Division for storing, presenting and disseminating socio-economic and other relevant data using maps, worksheets and graphs.
2. The United Nations Statistics Division provided two resource persons (one from the Software and Support for Population Activities Project funded by the United Nations Population Fund [UNFPA], and one Technical Support Services Adviser) to conduct the regional training on PopMap and related GIS topics, and to provide an introduction to Internet.
3. The Workshop was held at the Syrian Central Bureau of Statistics, and 23 nationals from eight countries in the region participated.
4. A social statistician (First Statistician) from the ESCWA Statistics Division was the Workshop Coordinator. The participants in the Workshop stated that they found the topics interesting, and the PopMap hands-on practice very useful. The version presented at the Workshop is still in development, but most features are already available and provided an overview of the software. All participants stated that this type of software was very useful in organizing, presenting and disseminating various population and socio-economic data. The participants were briefed on future technical support and the continued dialogue on software development activities.

### A. WORKSHOP PARTICIPANTS

5. The participants' qualifications and work experience were satisfactory (see annex I for the list of participants).
6. The ESCWA secretariat wished to express its appreciation to all the persons and organizations involved in the Workshop for their valuable assistance and cooperation, and to the Syrian Central Bureau of Statistics, especially the staff of the Computer Section, for their untiring support during the entire period, their kindness and their hospitality.

## B. THE WORKSHOP

7. Ibrahim Ali, Director of the Central Bureau of Statistics, opened the Workshop. In his opening remarks, he stressed the importance of training in computer technology and GIS. He said that cooperation between the Central Bureau of Statistics and the Statistics Division of ESCWA had been most fruitful.

8. The Chief of the Statistics Division of ESCWA welcomed the participants and focused on the importance of computer technology in supporting the work activities in the area of population, GIS, and data communications. He also mentioned the important contributions of software in data presentation and dissemination, and the need to share data between producers and users of information. He expressed the hope that the participants would benefit from this Workshop and make use of the software application.

## C. FACILITIES

9. The Workshop was held at the Computer Center of the Syrian Central Bureau of Statistics. The computing facilities met the minimum requirements to run Windows software. There was one training room with 12 486 SX computers (25 MHz) running Windows 3.1 English/Arabic. The computers were upgraded prior to the Workshop to 8 MB RAM. The Central Bureau of Statistics provided a Kurta 12x18 digitizer, overhead projector, a colour LCD projection panel, and a colour scanner. Several black and white dot matrix printers were also available.

10. The day before the Workshop staff from the United Nations Statistics Division and the ESCWA Statistics Division met at the Central Bureau of Statistics to test the computers and training equipment, and check the training materials for the Workshop. The computer configurations were optimized to provide maximum performance: hard disk integrity was inspected with Scandisk to repair any defective partition; and improvements were made for free disk space available as well as file defragmentation using DOS Defrag. Autoexec.bat and Config.sys files were optimized to provide better resources. Windows configurations were also enhanced using a video driver for SVGA resolution and greater colour depth, better disk caching (smartdrive) and faster RAM maximizer, 32 bit disk and file access and permanent swap disk.

## D. TRAINING MATERIALS

11. The duration of the Workshop was only for six days. To prepare for the Workshop, the ESCWA secretariat began work on the training programme and the list of materials needed for the project work well in advance of the Workshop. Thus, the participants were notified in advance about the required information.

12. The resource persons from the United Nations Statistics Division prepared 20-25 sets of training materials, and various hand-outs on related topics.

## E. TRAINING SCHEDULE

13. The six-day Workshop covered a broad range of topics: on GIS issues, PopMap for Windows software training and database application development, as well as an introduction to Internet. The schedule was tight, but manageable; it was revised in order to cover all the topics within a short duration.

14. To conduct such a Workshop in five days (the sixth and last day was reserved for the Internet and the closing ceremony) was manageable, but the participants had limited time to develop and enhance country applications. It was necessary for the training staff to work after the sessions to prepare and adjust the topics with hands-on practice for the next day.

### 1. *GIS: introduction and concepts (1 1/2 days work over 5 days)*

15. There was a general presentation of the Geographic Information System, followed by an overview of the various applications of GIS for population activities. Succeeding lectures covered: data sources and data input techniques; basic database and cartographic concepts; vector GIS capabilities; and the role of remote sensing (see annex III).

### 2. *PopMap (3 1/3 days) and MapScan*

16. PopMap for Windows 4.0 (beta version) and MapScan for DOS were presented and distributed. Software demonstrations, including an overview and explanations, were given. Participants learned to operate the PopMap software through hands-on practice sessions and some training materials (quick tour and step-by-step guide). The workspace between participants was extremely limited, making it difficult for the resource persons to reach most of the trainees. The hands-on practice proved very useful in familiarizing participants with PopMap's many features and user interface, and minimized the difficulties in reaching the participants during the Workshop.

17. Most participants came to the Workshop with some country data in printed form (tables or statistical publications) for the project work. Those from Jordan, Lebanon, Palestine, Qatar and the Syrian Arab Republic had national and/or area maps. The participants from Lebanon also had published tables on diskettes.

18. To ensure that data were available for all the participants, the project prepared sample country applications by collecting country statistical data and maps before the Workshop. These were distributed and updated by the participants in the Workshop.

19. The limited time and workspace precluded the participants from map digitizing using the available table(s), but most experimented on heads-up digitizing in drawing the Metaland map from a transparency

taped on the monitor. However, the limited computing resources (speed and RAM) made it difficult to perform heads-up digitizing with a scanned map loaded on the screen (screen refresh too slow, and memory problems).

20. Using MapScan, the paper maps brought by the participants were scanned and easily computerized. Administrative base maps of Jordan, Lebanon, Qatar and some sample maps for smaller areas such as Damascus and the Yarmouk Palestinian Refugee Camp in Damascus were created and imported into PopMap for Windows. Several other published country maps were also scanned and vectorized using MapScan.

21. Despite the limited time, most of the participants used PopMap to develop and/or enhance the statistical and cartographic databases and display thematic map outputs. This activity took up most of the time at the three days' session; hence a quick overview was done on the other features such as map layout and entering/importing/exporting data through the spreadsheet.

### 3. *Internet (1/2 day)*

22. The participants received a set of materials (publications, articles and how-to-use guide) on what is the Internet, including the various functions and steps to access and use the Internet.

23. A visit to the Syrian National Information Center was organized, and an overview of the Center was given as well as the status of the Internet connectivity in the Syrian Arab Republic and in the region, followed by a presentation of the Internet (history components and features).

24. A live demonstration was attempted, but owing to limited dial-up access and a difficult remote connection, the staff from the United Nations Statistics Division gave a simulated demonstration of the various Internet services (Email, FTP, Telnet, Web browsing, searching and retrieving information) and discussed Internet-related issues including: Web page creation, Web site presence, information and data dissemination. Prior to the Workshop, some sample Web sites were mirrored in New York and were used to demonstrate some of the Web features.

## F. WORKSHOP OUTPUTS

### 1. *GIS*

25. The participants gained a better understanding of the various issues and concepts of statistical and geographical data, and some applications that GIS technology could provide in their work.



## 2. PopMap

26. Almost all participants completed the hands-on practice using Metaland, the case-study in the manual. Those who came with country maps were able to use them (except Qatar); those without used the maps provided by the United Nations Statistics Division.

27. The outputs are listed below (see annex IV for the PopMap sample outputs).

28. However, owing to the limited performances of the computers (slow processor [486 SX 25 MHz] and limited memory [8 MB RAM])—and some limitations in the beta release of PopMap for Windows, the participants applied only some software functionalities. Several problems (mostly memory-related) were encountered while using the software; most occurred while drawing or editing maps with the Map Editor. These were caused by the limited editing capabilities of the beta version. These problems were sent to the development team to make sure that the final release of the software (due early 1997) would be free of these errors.

29. The participants produced and/or updated the following country/area applications. The participants returned with a copy of the country/area applications.

### (a) *Egypt*

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- Country map with 4 regions and 26 governorates.
- Statistical database with 1986 data for population, male/female literacy rates, households and public institutions. Population estimates for 1960, 1970, 1980 and 1990.
- The country map was compiled from the Africa Data Sampler and the African Medium Resolution Database provided by U. Deichmann. The ArcInfo line coverage was converted into AutoCAD DXF format and imported in PopMap Map Editor; and the referencing of the various areas and the topology building was redone in PopMap for Windows. More data were added into the database, and the Retrieval System was used to browse through the map, and create thematic maps. However, the size of the map did not allow the participants to load and edit the map on the computer.

### (b) *Iraq*

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- Country map with 18 governorates (paper map vectorized with MapScan).
- Statistical database with 1987 data for population, labour force, hospital, medical staff and schools.

### (c) *Jordan*

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- Country map with 8 governorates (participant's paper map was vectorized with MapScan).
- Statistical database with 1995 population, data on males and females.

### (d) *Lebanon*

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- Country map with 5 governorates and 26 districts (participant's paper map was vectorized with MapScan).

- Statistical database with 1996 population data, nationality and sex distribution.
- Some data were converted from IMPS output tables into Excel format, then pasted into PopMap for Windows database. Other output tables with data at the district and governorate levels could have been converted, but the table format (ASCII text files) and the limited time available allowed only some sample data.

(e) *Middle East and North Africa (UNICEF [United Nations Children's Fund]-MENA)*

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- The UNICEF-MENA database developed in 1995 during the Cairo workshop was converted from PopMap DOS, and updated with a new map to include the following: Algeria, Bahrain, Djibouti, Egypt, Iraq, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.
- UNICEF-MENA brought some sample data, but the limited time and the nature of the various files (undocumented relational tables) made it impossible to use the MENA data. For testing purposes, some sample data were converted in New York.

(f) *Palestine*

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- Sample map for a section of the Yarmouk Palestinian Refugee Camp in Damascus with schools and buildings (participant's paper map was vectorized with MapScan).
- The sample application is based on a small portion of the Yarmouk Palestinian Refugee Camp in Damascus. No data were entered in the database.
- The map of the Refugee Camp was a cadastral blueprint in A0 format. Participants redrew a section's map features and, using MapScan, the new map was scanned and vectorized; various map layers were assigned; and the vector drawing was edited to correct a few unconnected lines. The AutoCAD DXF drawing output was then imported into PopMap for Windows where the corresponding labels of the various map features were assigned.

(g) *Qatar*

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- Partial country map with 10 municipalities and some sample zones. Attempts to use the participant's paper maps were unsuccessful because of the nature, style and scale of the thematic maps (small scale with many details, multi-coloured map with limited contrast). The participants tried to revise and update an older paper map vectorized with MapScan, but this was also impossible owing to the very limited map editing capabilities of the beta release version of Map Editor.
- A database with only area data.

(h) *Saudi Arabia*

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- Country map with 19 provinces (paper map vectorized with MapScan).
- Statistical database with population data, labour force, schools, hospitals, medical staff, number of doctors for 1409 H and 1413 H (A.D. 1988 and 1992).

(i) *Syrian Arab Republic*

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- The project's country application was used, and some sample test applications were developed for Damascus using a published map from the Ministry of Health.

- Participants from the Syrian Central Bureau of Statistics and the Ministry of Health who were familiar with PopMap for DOS and Atlas GIS for Windows experimented further with the various software options, including the option to import in PopMap BNA maps from Atlas GIS for Windows using the Atlas Import/Export utility.
- The limited performances of the computers, and the limited editing capabilities and data importation in the beta release of the PopMap Map Editor allowed the participants to use only some of the software functionalities.

### 3. *Internet*

30. One-half day was sufficient to provide an overview about the Internet, raise awareness and demonstrate some of the features. However, future training would be more effective and beneficial if the participating institutions have access to electronic mail and other Internet services.

### 4. *Evaluation questionnaires*

31. Evaluation questionnaires were distributed on the last day of the Workshop. The evaluation report is attached (annex 6).

## G. RECOMMENDATIONS

32. The recommendations covered the points listed below.

(1) *Workshop duration.* A minimum five-day training workshop is required to learn the features of PopMap and to have hands-on practice. However, if the Workshop includes developing real country database applications for several countries, five days are too short. There are important time-intensive factors to consider: participants' learning capacities and comprehension; nature of country data, which can demand close attention; and migration of substantial data not in acceptable electronic format. A five-day workshop should restrict the number of countries and participants in order to be cost-effective, ensuring proper training, application development and discussion of important topics relevant to the activities handled by the software.

(2) *Software training and GIS lectures.* Combining formal lectures on GIS-related topics with the software training enhances the participants' understanding of the concepts and awareness of numerous possible applications. Short-term training, however, requires allotting sufficient time for lectures, formal teaching, and hands-on practice in order to be effective. Participants' suggestions at this Workshop were: (a) to reduce the length of the lectures, or (b) to extend the length of the Workshop, or (c) to increase the number of work hours so participants had more time for hands-on practice.

(3) *Focusing on (a) subject-specialists/analysts or (b) technicians/specialists to benefit future workshops.*

- *Subject specialists/analysts.* The training will focus on a specific topic (such as gender issues or reproductive health) and the participants will concentrate more on how to use, present and analyse data than on how to develop a complete database (map drawing, editing and updating would almost not be covered). The organizers will have ready-made database applications (with predefined administrative structure and a standard statistical database structure covering a set of key indicators available at the sub-national levels). Prior to the Workshop, participants should provide the standard data dictionary (list of variables and the desired geographical breakdown: levels and administrative units). Participants will bring data file(s) to the Workshop based on the standard template (worksheet or database format). The objective of the training can be fulfilled if the participants work closely with the organizers several months prior to the Workshop. This activity can easily fit in some national and regional ongoing statistical data collection projects or activities coordinated by ESCWA, for example. Selecting the indicators and the geographical level has to be agreed in advance based on the relevance to the topic, and data availability. The corresponding administrative base maps should also be sent in advance to the organizers in order to prepare/update the digital versions for the Workshop.
- *Technicians/specialists.* The training will focus on the techniques of building and maintaining a geographic database. However, the limited time does not allow each participant fully to develop and use the country database. Substantive outputs in terms of statistical databases are more difficult to achieve, particularly when data are in published form, unstructured form (tables in plain ASCII text files), or in heterogeneous structure (one or several worksheets or database files without documentation).

(4) *Map and data preparations.* Giving two weeks advance notice to the participants on the essential country statistical and map data will ensure the collection of correct data. It will be cost-effective to request a specific set of variables in worksheet or database form for some specific geographical levels. This is very important for participants to return with meaningful country applications that can be shared with colleagues and other users in the country.

(5) *Computers.* The computers to be used should have the recommended configuration, and not the minimum required to run graphic applications in MS-Windows. The minimum reasonable configuration would be at least 486 DX 50 Mhz with 8 MB RAM. Slower CPUs, such as SX, DX2 and DX4 processors, are not advisable. Recommended are: 486 DX or Pentium 100 MHz or faster processors with at least 8 MB RAM, preferably 12 to 16 MB RAM or more; video board, driver and monitor should support SVGA (800x600) video mode and 256 colours.

(6) *Follow-up activities.* Participants will be informed on the final release of PopMap for Windows, and written orders will be required. Follow-up will be made on the application and sharing of

the newly-acquired technical expertise and software knowledge within and outside the organizations. Contact will be maintained not only with the trainees but with the heads of units/organizations.

(7) *Collaborative work between ESCWA and the Software Development Project of the United Nations Statistics Division.* Collaboration will be maintained for mutual updating on relevant developments both in software activities and data collected in the region. This will help update and enhance potential ESCWA statistical applications.

Annex I\*

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Annex II

**WORKSHOP TRAINING SCHEDULE**

<b><i>12 October</i></b>	<b><i>Introduction to Geographic Information System (GIS)</i></b>
<b><i>13-15 October</i></b>	<b><i>PopMap for Windows</i></b>
<b><i>16 October</i></b>	<b><i>Advanced GIS</i></b>
<b><i>17 October</i></b>	<b><i>Internet</i></b>

***12 October***    ***Morning session (9:30-10:30)***

Opening remarks

Introduction of the participants

Break (10:30-11:00)

***Afternoon session***

Geographic Information System - Lecture (11:00-13:00)

- Overview: Desktop mapping and GIS
- Basic concepts of spatially referenced databases
- GIS for population activities
- Implementation, institutional issues: choosing a software and hardware platform, training requirements, data sharing

Break (13:00-13:15)

PopMap for Windows: Overview and Installation (13:15-14:00)

***13 October***    Database Concepts - Lecture (8:30-9:30)

PopMap for Windows - Quick Tour (9:30-10:30)

- Getting started and navigating in PopMap for Windows
- Working with menus and learning the software retrieval features

Break (10:30-10:45)

- PopMap for Windows - Quick Tour, continuation (10:45-12:30)

Break (12:30-12:45)

- PopMap for Windows - Quick Tour, continuation (12:45-14:00)

- 14 October** Data Sources and Data Input - Lecture (8:30-9:30)  
 Developing an application: hands-on exercise using the Metaland application
- Data Editor (9:30-10:30): how to create a statistical database: structure and content; how to enter data for area statistics and community-based facilities
- Break (10:30-10:45)
- Map Editor (10:45-12:30): how to create a cartographic database: digitizing maps of multiple pages and different scales; locating references for geographic units and community-based services; importing and/or exporting geographic coordinates; reusing existing maps and sub-national maps
- Break (12:30-12:45)
- Converting PopMap DOS applications into Windows
  - Scanning maps and photos: vectorizing maps with MapScan, and using photos, text files and other multimedia objects with PopMap (12:45-14:00)
- 15 October** Cartographic Concepts - Lecture (8:30-9:30)  
 PopMap for Windows - Using country applications: development and maintenance
- Data Retrieval System: displaying statistical and facility data; producing thematic maps (9:30-10:30)
- Break (10:30-10:45)
- Using the spreadsheet to compute variables, merge and exchange data, produce graphs
- Break (12:30-12:45)
- Thematic maps, map layouts and available options (12:45-14:00)
- 16 October** PopMap for Windows - Review and Technical discussions (8:30-10:30)
- Data presentation and dissemination
  - Electronic atlases
  - Cost-effectiveness: ease of use of developing applications; minimal training requirement; portability
- Break (10:30-10:45)
- Advanced GIS applications - Lecture (10:45-12:30)
- Vector versus raster data, e.g., boundaries vs. remotely sensed images
  - How to combine heterogeneous data sets
  - Integrating survey data with census information
- Break (12:30-12:45)
- Country Experience: GIS in Qatar - Lecture (12:45-14:00)

**17 October**

**Internet (8:30-10:30)**

- How it all started; what it really is
- Basic explanations on accessing and using the Internet
- What can be done with the Internet
- How to make connections: what you need, choosing an Internet service provider

**Break (10:30-10:45)**

**Internet - continuation (10:45-12:00)**

- The World Wide Web: what it is; the web browsers, web sites, web publishing
- The future of the Internet

**Evaluation questionnaire (12:00-12:30)**

**Break (12:30-12:45)**

**Closing (12:45-13:30)**

**GIS LECTURES - BRIEF SYLLABUS**

**1. What is a Geographic Information System?**

Basic definitions - spatial data versus attribute data - exploring relationships - combining data sets - alternative names - GIS versus desktop mapping - contributing disciplines - application areas - origins of GIS - GIS capabilities - current state of the art

**2. GIS for Population Activities**

Use in census activities - spatial population information systems - GIS based analysis of population related issues - GIS applications in survey design, processing and analysis

**3. Data Sources and Data Input**

Primary data versus secondary data - sampling - meta-data: "data about data" - data sources: framework data, socioeconomic data, and environmental data - data input for attribute data - data input for geographic data: keyboard entry, digitizing, scanning - global positioning systems

**4. Representing the Real World in a GIS: Basic Database Concepts**

Database contents - discrete versus continuous data - objects versus fields - data model implementation: vector versus raster data model - specific vector data models: "spaghetti" model versus topological data model - which vector model? - storing attribute data

**5. Cartographic Concepts**

Referencing location on the earth's surface - the latitude/longitude reference system - the earth as a spheroid - map projections - distortion in map projections - specific map projections - the concept of scale - thematic mapping - cartographic abstraction - topographic versus thematic maps - types of thematic maps: choropleth maps, area class maps, isopleth maps, dot density maps

**6. Vector GIS Capabilities**

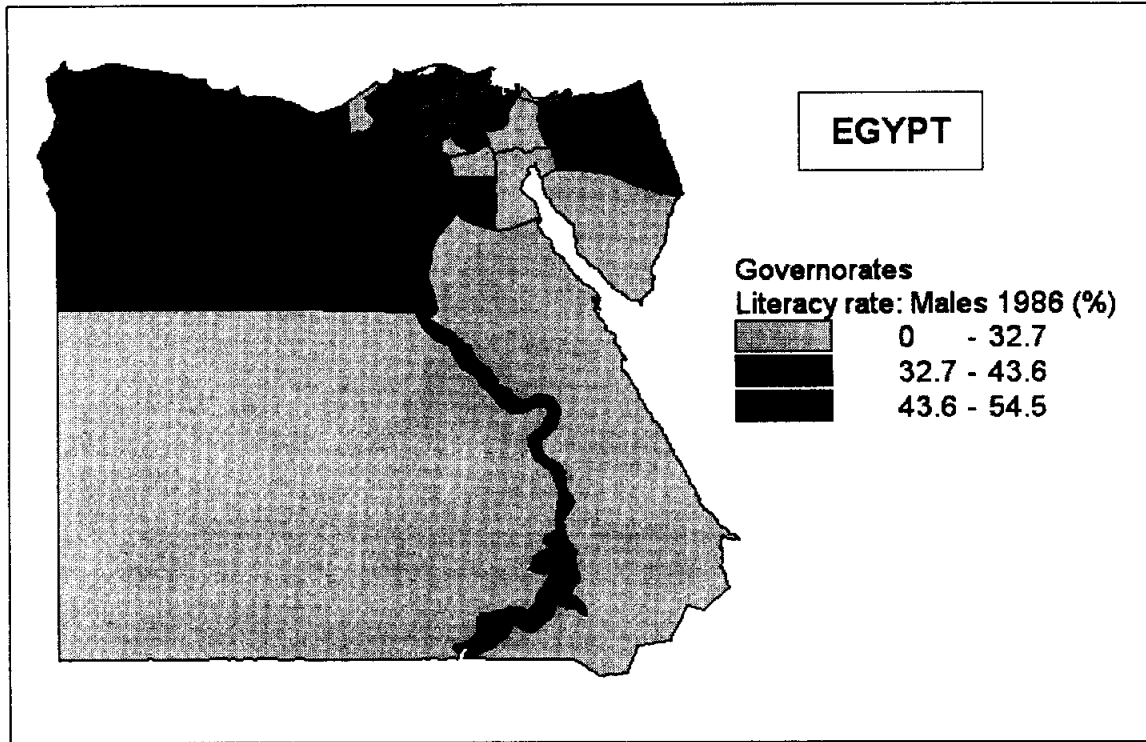
Points, lines and areas - spatial relationships - Thiessen polygons - buffer operations - line intersection - point in polygon operation - polygon overlay - the problem of incompatible reporting zones - basic housekeeping functions - network functions - raster GIS capabilities - raster/vector conversion - operations on raster layers: cell by cell operations (local), neighborhood operations (focal), operations that consider the entire data layer (global), region-specific operations (zonal) - visualization of raster data

**7. Census from Heaven? The Role of Remote Sensing**

Definitions - principles of remote sensing - aerial photography - satellite-based systems - the remote sensing process - digital image processing - analysis: measurement, classification, estimation - other systems: meteorological satellites, radar remote sensing, aerial video - socioeconomic applications - estimating population distribution using remote sensing - remote sensing for census mapping - remote sensing and GIS

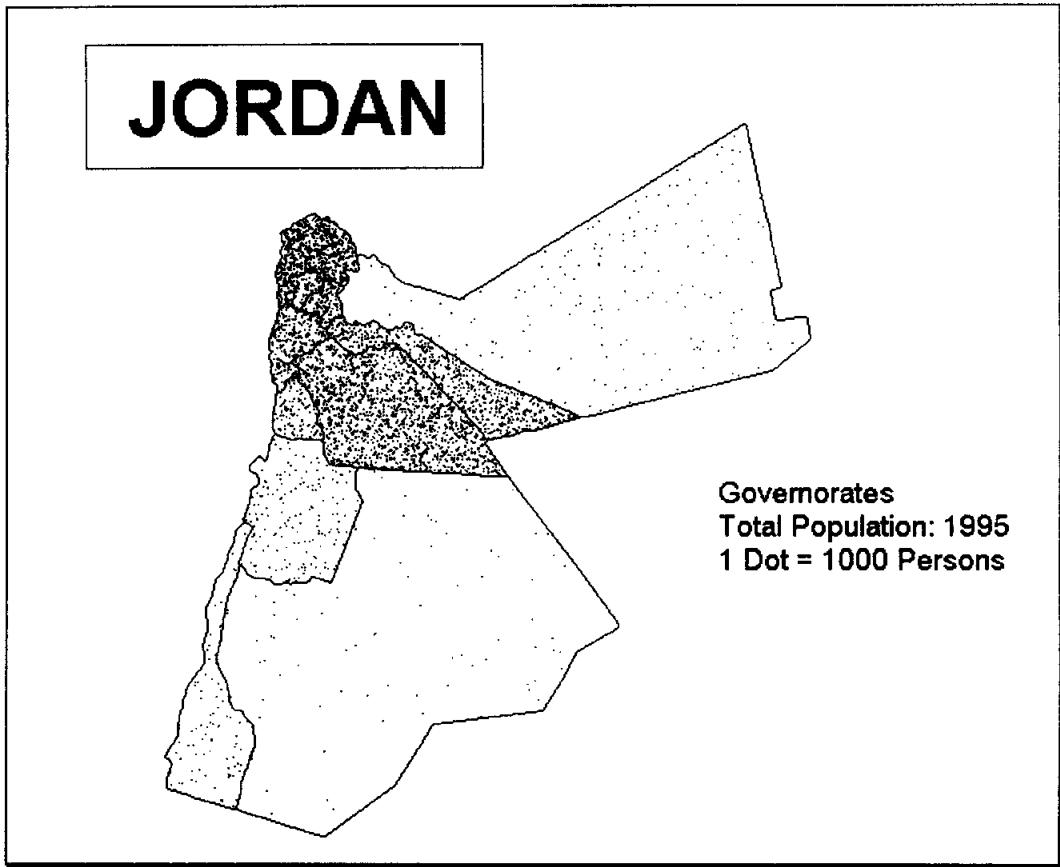
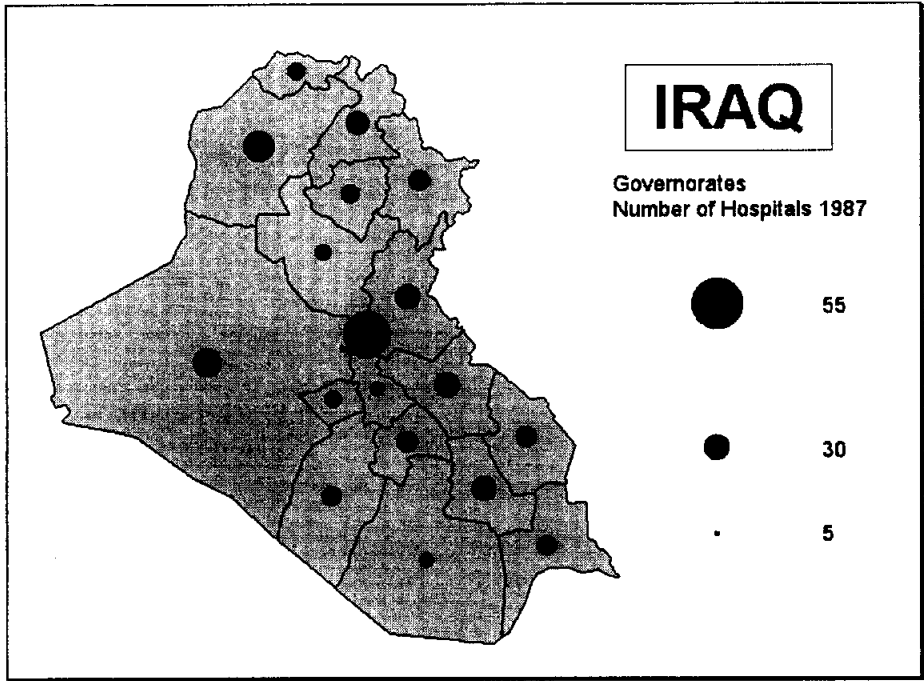
Annex IV\*

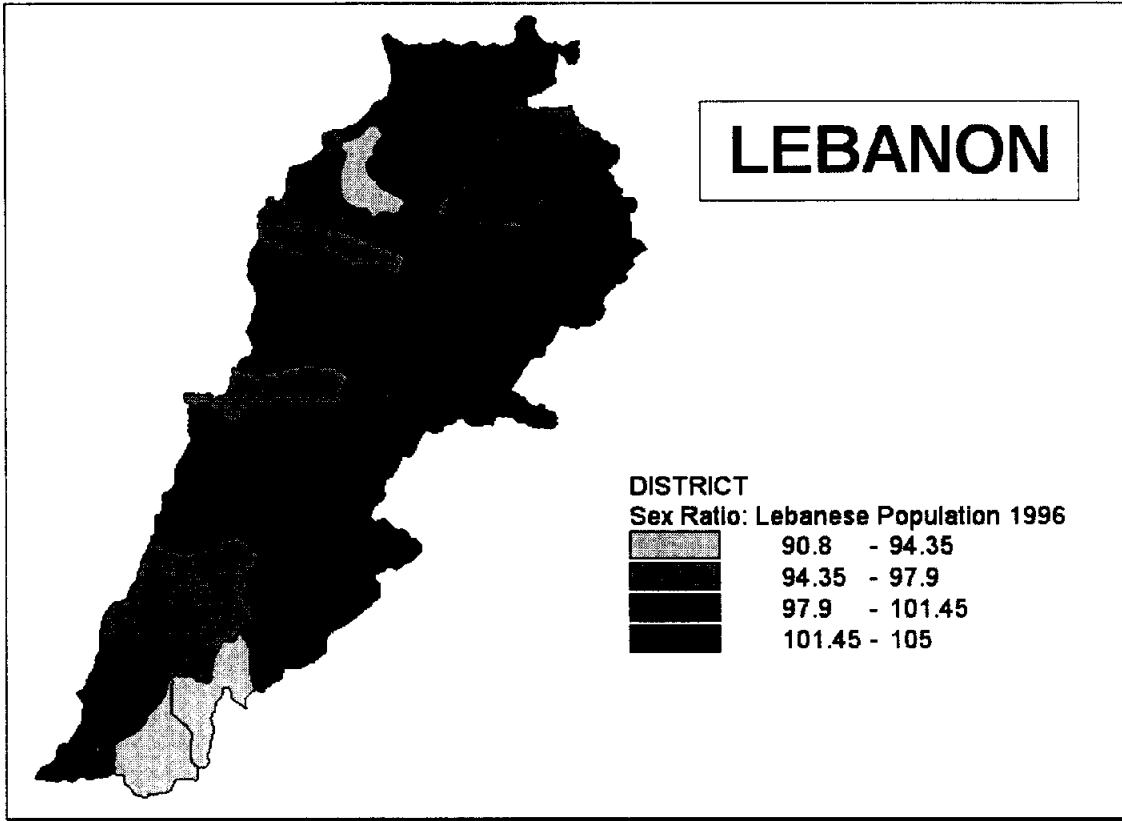
**SELECTED OUTPUTS FROM THE POPMAP PROJECT WORK OF THE PARTICIPANTS**



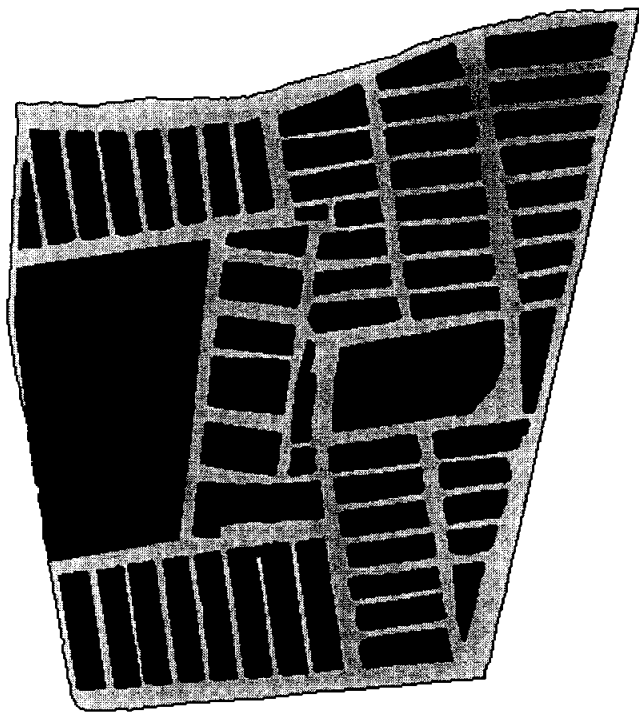
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\* Issued as submitted. These maps are the work of the participants in the Workshop. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitations of its frontiers or boundaries.





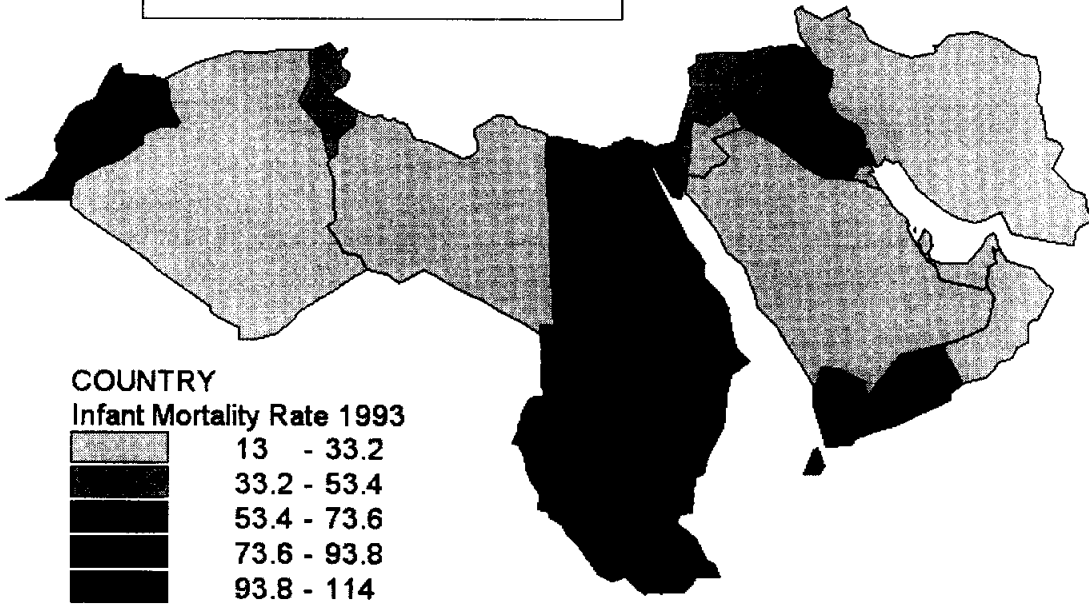
# Yarmouk Palestinian Refugee Camp: sample



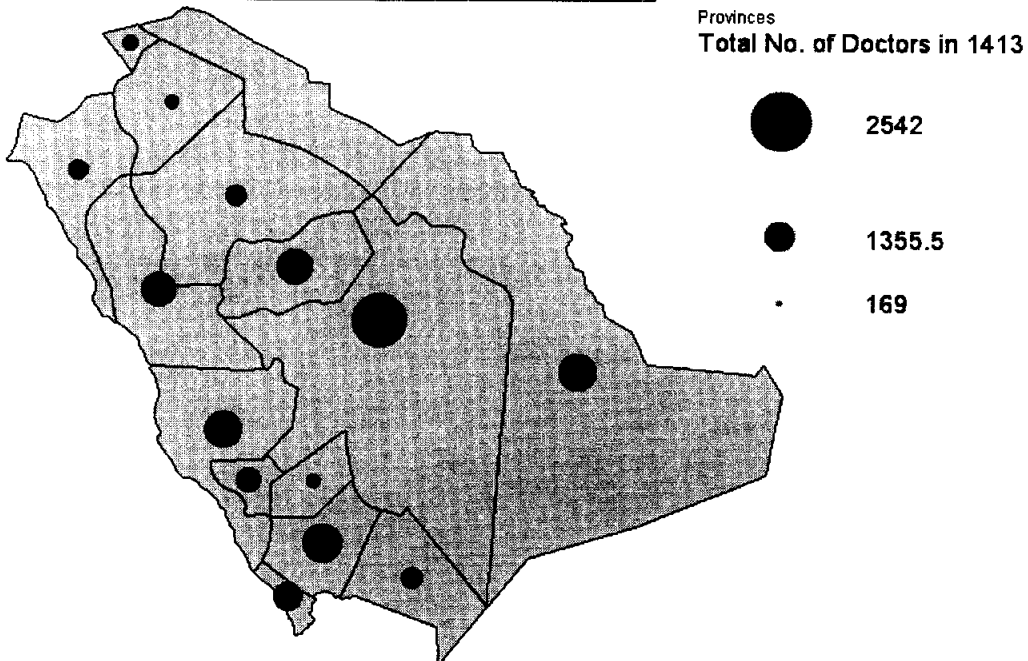
- buildings
- Administrative Boundary
- areas
- Administrative Boundary
- camp
- Administrative Boundary



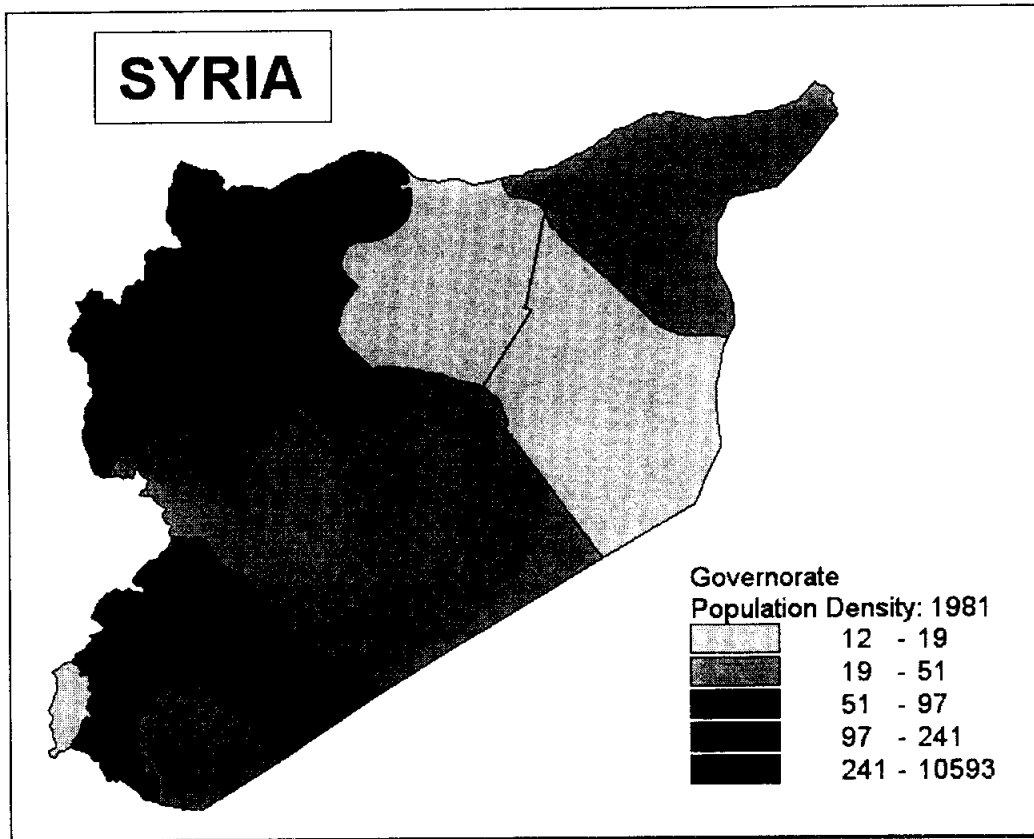
# UNICEF-MENA



# Saudi Arabia



SYRIAN ARAB REPUBLIC





الجمهورية العربية السورية  
رئاسة مجلس الوزراء  
المكتب المركزي للإحصاء

SYRIAN ARAB REPUBLIC  
OFFICE OF THE PRIME MINISTER  
CENTRAL BUREAU OF STATISTICS (CBS)



الأمم المتحدة  
اللجنة الاقتصادية والاجتماعية لغربي آسيا  
(الاسكوا)

UNITED NATIONS  
ECONOMIC AND SOCIAL COMMISSION FOR  
WESTERN ASIA (ESCWA)

## شهادة حضور

### CERTIFICATE OF ATTENDANCE

This is to certify that .....  
attended the Regional Training Workshop on PopMap and  
Internet held in Damascus, Syrian Arab Republic from 12 to  
17 October 1996.

مدير المكتب  
DIRECTOR  
CENTRAL BUREAU OF STATISTICS

.....  
هذه شهادة بأن .....  
قد حضر/ حضرت حلقة العمل الاقليمية للتدريب على برنامج بوب ماب (PopMap) لقراء  
البيانات السكانية الجغرافية والانترنت (Internet) التي عقدت في دمشق بالجمهورية العربية  
السورية خلال الفترة من ١٢ إلى ١٧ تشرين الأول / أكتوبر ١٩٩٦.

رئيس شعبة الإحصاء بالاسكوا  
CHIEF, STATISTICS DIVISION  
ESCWA

## Annex VI

### **WORKSHOP EVALUATION REPORT**

The Regional Training Workshop on PopMap for Windows and Internet lasted six working days and had 23 participants. Nineteen participants completed the evaluation questionnaires which produced these results:

#### Background of the participants

67% are involved in data collection — 90% in data processing — 79% in analysis — 74% in data dissemination.

74% often use word processing — 47% spreadsheet — 64% database — 61% statistical packages — 58% graphics presentation — 37% mapping/GIS.

11% never used a word processor — 18% spreadsheet and database — 6% statistical packages — 21% graphics presentation — 32% mapping/GIS.

78% never used email — 67% never used any communication software — 83% never used Internet.

#### The Workshop

100% stated they benefited from the Workshop.

Participants benefited more from the practical project work (45%) than the formal teaching (22%). However, 33% of the participants benefited from both.

95% found the Workshop relevant to their current work.

In rating the different aspects of the Workshop using the range 1 to 5 (1-Poor, 5-Excellent), the mean scores are:

Content of teaching	3.89	(good/very good: 79%)
Quality of teaching	3.95	(good/very good: 79%)
Help received during project work	4.16	(good/very good: 79%)
Relevance of teaching for project work	4.16	(good/very good: 79%)

The majority of the participants (84%) rated the level of the Workshop “about right”, 16% found “too simple”, 53% found the duration of the Workshop “about right”, 47% wanted a longer Workshop.

53% of the participants found the balance between formal teaching and practical work good, and 37% found too much time was spent on formal teaching and not enough on practical training and applications.

74% of the participants rated the Workshop facilities adequate, 26% inadequate (mostly the computer performances and/or the training room).

Ideas, suggestions, comments and criticism that could help improve possible future similar workshops:

- More hands-on practice on PopMap (5)
- Practical application was not sufficient, and did not cover all aspects and uses of PopMap (5)
- Lectures are too long for the duration of the Workshop (4)
- Better and faster computers to be used for the applications (4)
- More comfortable room with sufficient space, and less noise from the street (3)
- Allow more time for Internet, and organize the Workshop in a location where Internet already works (3)
- For programmers or staff using PopMap in their work, it would be good to remain in contact for exchanging experience and information (1)
- Smaller number of people (1)

The Topics: GIS, PopMap for Windows (beta version) and Internet

In rating the different aspects of the software, the 1 to 5 range was applied (1-Poor, 5-Excellent), and the mean scores are:

	<i>Data editor</i>	<i>Map editor</i>	<i>Retrieval system</i>
Ease of use	3.79	3.89	3.72
Easy to learn	4.06	4.17	4.29
Performance	3.79	3.79	3.89
Tutorial	4.00	3.87	3.86
Documentation	3.75	3.88	4.00

The participants evaluated the usefulness of the different topics covered for future work as follows:

<i>Topic</i>	<i>Very useful</i>	<i>Useful</i>	<i>Not useful</i>
GIS	63.2%	36.8%	0%
PopMap	68.4%	31.6%	0%
Internet	44.4%	44.4%	11.1%

In general:

- Good and interesting, but need further practice and application for a period of time (4)
- Beneficial for the scope of applications, and the possibility to analyse information (3)
- Further practice and exposure on using new technologies and scientific packages, as well as on latest achievements in other countries (2)
- Good presentation and good ability to understand (1)
- Better knowledge of electronic drawings and population and geographic data distribution on maps (1)

The participants provided the *intended use and applications* as follows:

## **GIS**

- Population activities, health, education, urban planning, safety (5)
- Mapping production, digitizing, hydrology, topography, geology, environment, industry, trade, tourism, telephone lines, safety, pollution (4)
- Better knowledge of population distribution in order to decentralize services (2)
- School mapping (1)
- Teaching (1)
- Help for decision and policy makers (1)

## **PopMap for Windows**

- Population activities (5)
- Demographic atlas and thematic mapping (5)
- Help for making comparisons, studying phenomena and identifying health, social and economic problems by showing differences in figures and percentages on maps (4)
- Statistical application (3)
- Public health activities (1)
- Atlas and school maps (1)
- UNICEF mid-decade goals and indicators in Middle East and North Africa region (1)

## **Internet**

- Gain benefit from the experience, and the scientific and technical information available in other countries (6)
- International facility to exchange information between users in different countries (5)
- Searching and retrieving information on a wide range of topics (4)
- Email (1)
- Increasing need for national databanks and information servers (1)
- Useful information in helping to complete the development of the Egyptian National Information Centre and EgyptNet (1)

84% feel comfortable enough to provide training and technical support on use of PopMap; on GIS, 63% feel confident enough to provide information about GIS; and 74% feel the same about Internet.

Suggestions on topics for future workshops

The participants would like to include these topics in future workshops:

- More details on GIS, including more on GIS applications and orientation (3)
- Experience of every Arab country and to what extent each country has recorded achievements in the respective fields (3)
- Internet practice (3)
- In addition to the ready-made map, use already reviewed and prepared examples for further and easier applications (2)
- Basic concepts of relational databases (1)
- Structured language (1)
- Graphical system (1)
- Simultaneous translation (1)

For information only: some of the software used in the office for statistical data processing

1. Spreadsheets: Excel (6), Lotus (1)
2. Databases: FoxPro (2), Access (3), Oracle (2)
3. Integrated packages: IMPS (7), Epi-Info 6 (1), ISSA (1)
4. Statistical packages: SPSS-PC (4), SAS (1)
5. Mapping: Atlas GIS (2), other software (1)
6. Other software: various in-house software and programming languages (Cobol, Fortran) Around 30% of the participants have access to a computer with a CD-ROM drive.