

Institutionalization of environment statistics

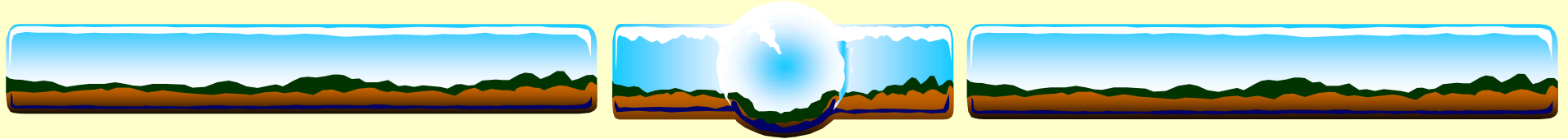
Khamis Raddad

UNSD and ECOWAS

Workshop on Environment Statistics

Dakar- Senegal

28 Feb.- 4March 2005



Legislation

a general statistical law. It includes by indirect way the environment statistics.

adjustments in the statistical law

In 2004 a new statistical law was released

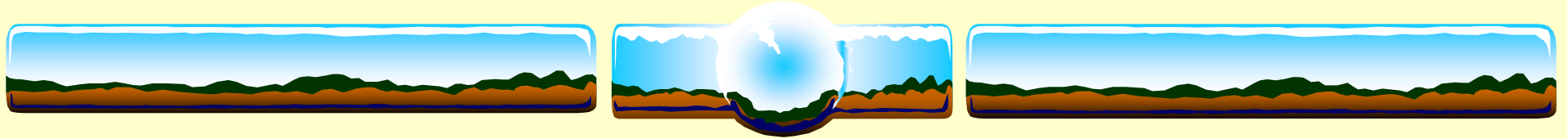
The importance of law

The first step of the work

in 1994 that the DOS initiate a new unit for environment statistics

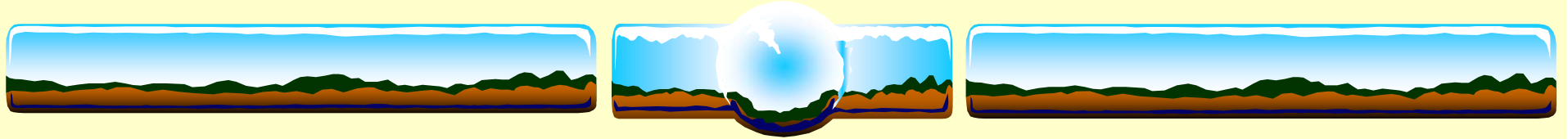
Preparatory team

A team of two DOS employees were located to start in the preparatory stage



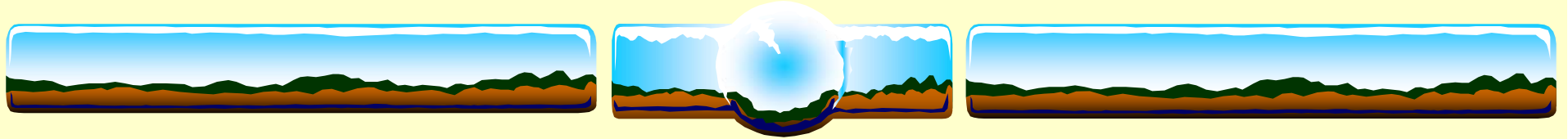
The agencies deal with environment

- The DOS team specify the main agencies that deal with environmental information and environment statistics**
- Three type of agencies deal with environment**
- About 45 agencies were specified**
- The DOS team visit all agencies to specify there needs in ---environment statistics and to study there activity and available data in environment statistics**
- the DOS mad a complete set of all data available in each agency**



Workshop and technical assistance

- The DOS received assistance form international expert**
- A workshop was conducted**
- The objectives of environment and main elements of environment to be covered were specified**



Sources of environmental data and statistics

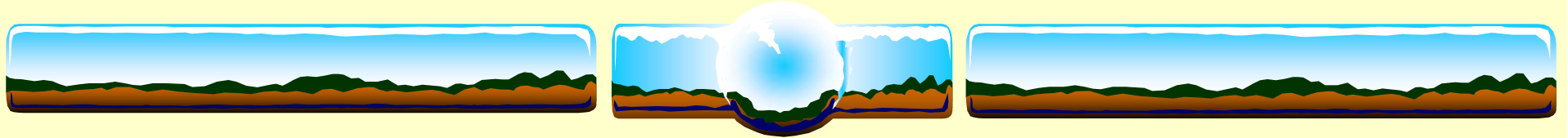
1. administrative records:

- Governmental agencies
- Available data in different directorate in DOS.
- Data available in international and regional

agencies

2- the data was collected through questionnaires, which are attached to other surveys

3- For special studies like hazardous waste. The surveys are conducted by the environmental section



Available data

Meteorological Department

Ministry of Agriculture

Laboratory of Residual Pesticides

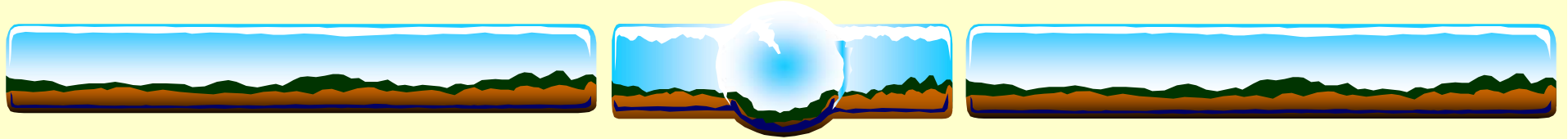
Ministry of Health: Environmental Health.

**Ministry of Agriculture: Directorate of
Forestation And Range**

Water Authority

**Annual Report of National Electric Power
Company**

**Report of Ministry of Energy and Natural
resources.**



**Annual Report of the Jordanian Phosphate Mining
Company**

Ministry of Agriculture

Department of Statistics

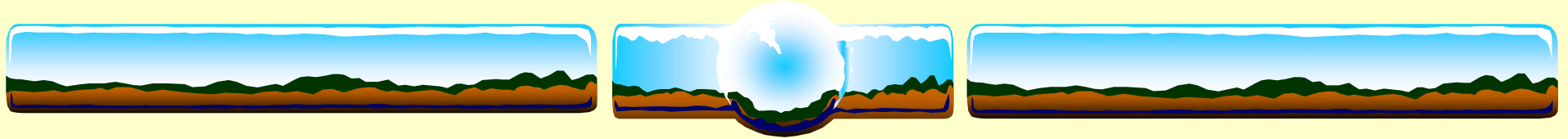
The Jordan Cement Factories.

National Cancer Registry

Ministry of health-disease control directorate

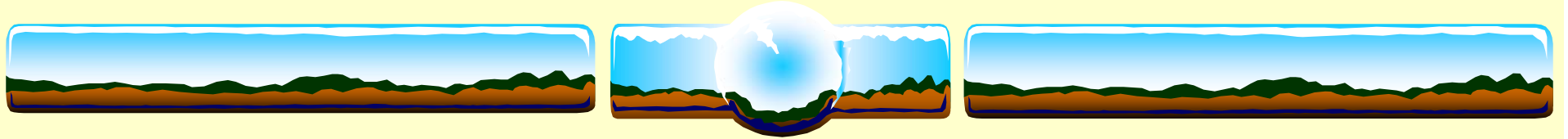
Traffic Department

.Royal Society For The Conservation Of Nature



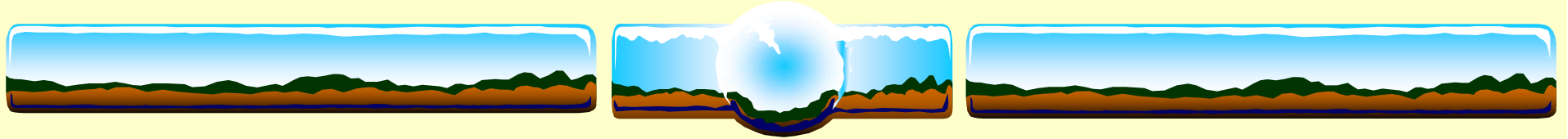
Activities in environment statistics

- 1- Collects the available data from different governmental agencies**
- 2- Data are also collected by adding a page to surveys already conducted by DOS**
- 3-The environmental section conducts surveys like hazardous waste survey and artesian wells survey.**



Basic principles to apply environment survey

- 1- specify the objectives of the survey**
- 2- Dummy tables**
- 3- Questionnaire design**
- 4- concepts and definitions**
- 5- survey population**
- 6- Sampling design**
- 7- Methods of data collection**



8- Training of enumerators and other field workers

9- The time reference

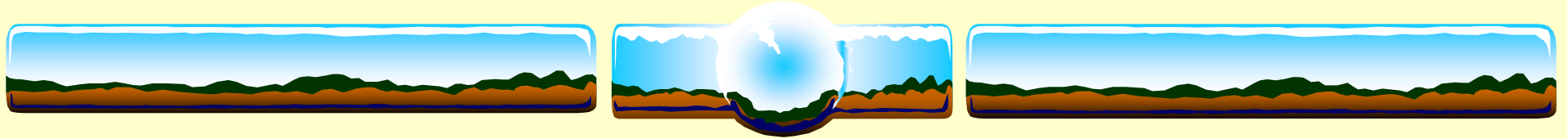
10- Pilot survey

11- Field work

12- Data processing and data entry

13- Preparation of tabulation report

14- Analysis of results



Classifications, methodologies, standards and coding systems

The DOS uses international classifications such as ISIC for economic activities, CPC for commodities, and FAO for land use

Data collection estimation compilation methods applied in data collection

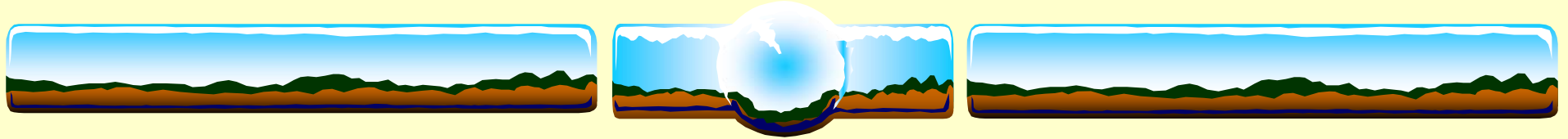
1- Laboratory data sheet

2-Annual reports

3- Monthly reports

**4- questionnaire attached to the economic enterprises
survey**

5- special questionnaires



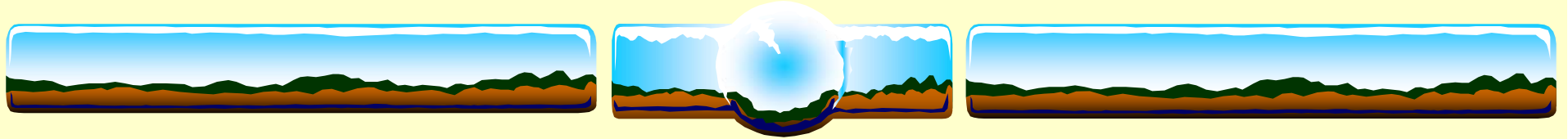
Frequency of data production

Publications and databases

Frequency, characterization of databases, compatibility

Future improvement

- 1-To cover water statistics in more detail**
- 2-Land cover and a more detailed survey on land use**
- 3-Improvement of the work on waste statistics**
- 4-Initiation of a GIS database**
- 5-It is very important to start environmental accounting
conduct some data analysis**
- 6-Improve the environmental indicators**



Case study

Main difficulties

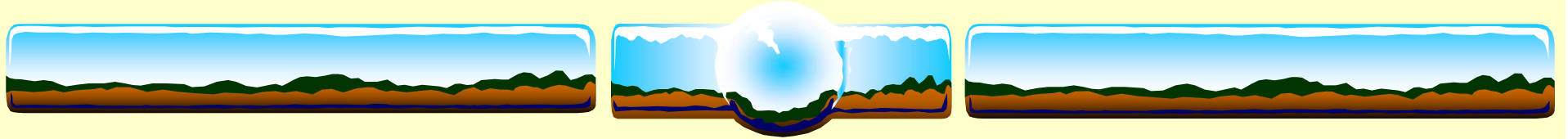
1- sensitive

2-expensive

3- it is a complex field

4- The manuals and tools used for this type of statistics are still incomplete

5-statistics needs experience and expertise in many fields



Recommendations

1- creation of a committee and to foster teamwork including NGOs that are active in this field

2- build a complete environmental statistical system including manuals, classifications, and guidelines

3-financial support

**The cooperation of the countries in the region is
4- required**