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MEDITERRANEAN ACTION PLAN

Second Task Team Meeting on the
Climatic Changes on the Island of Rhodes

Athens, 24 June 1991

REPORT OF THE MEETING

I GENERAL

The Task Team on the Implications of Climatic Changes on the Island of Rhodes was established in October 1990 and the First Meeting of the Task Team was held in Athens on 23-24 October 1990 (see report UNEP(OCA)/MED WG.22/1, dated 24.10.90). The agreement between the Greek Ministry of Planning, Environment and Public Works and UNEP, which included all project undertaken by UNEP for the Island of Rhodes was signed in November 1990.

According to the workplan adopted at the First Meeting of the Task Team, the submission of the individual draft reports (chapters) was set for May 1991. Following personal contacts between the coordinators and the team members, the time for submission was set for the end of June, while a meeting was defined for June 24. In the letter of invitation, the following items of the discussion during the meeting were identified:

1. Information of the members on various items by the coordinators with discussion;
2. Short presentation by each member of the relevant chapter. Questions and discussion on each chapter;
3. Work plan of the Task Team after the submission of the report.

II MINUTES OF THE MEETING

1. The Meeting took place at the Conference Room in UNEP Offices in Athens. All members were present, except Ms Tsakiris who was unable to attend. However, she sent her short account of the chapter by fax.

2. The participants were initially addressed by Dr L. Jeftic, Co-ordinator of the Mediterranean Task Teams. He welcomed the participants, noted the progress of the Task Team work, expressed the hope that the future meeting will be done in Rhodes for the final presentation and said that he expected from Dr Wigley to inform him about a possible new scenarios on the Rhodes climate. Dr L. Jeftic informed the members about the Kastela Bay project in Yugoslavia, which can be used as an additional idea for the structure of the final report, and wished good work for the meeting.

3. The co-ordinators, Dr C. Perissoratis and Mr D. Georgas informed the participants of the following:

After an exchange of letters between UNEP and the Greek Meteorological Service, the latter made available all data regarding air temperature, precipitation and days of sunshine for Rhodes and surrounding islands. These data were officially forwarded to Dr Wigley and given to Prof. Dikaiakos to be used for the relevant chapter. These data are also available for all other members.

The trip of the Task Team to Rhodes, for field work seems difficult to be realised. The Ministry of Planning, Environment and Public Works (Mr Tsotsos) has indicated orally that it cannot provide, for the time being, funds for this purpose. The Prefecture of Rhodes, on the other hand, which was conducted through Ms Tsakiris, indicated that it might provide some subsistence but this was not certain. Nevertheless, more efforts will be spared by the Co-ordinators for the realization of the trip.

On the above, Prof. Dikaiakos noted that, in his opinion, the meteorological data given by the Greek Meteorological Service were not complete, because they provide only mean values of the parameters. Also Prof. Leondaris stressed the need of a visit to Rhodes island by the Task Team in order to obtain the necessary field observations.

Then, each Task Team member presented a short outline of his report.

III BRIEF PRESENTATION OF THE CHAPTERS

Chapter 2.1. - Geography and Geology

4. Prof. Leondaris said that he followed the division of the chapter as it was originally described and his text will be slightly over 10 pages and will be accompanied by two maps. In the text the general characteristics of the geological and geomorphological setting of Rhodes Island are given, followed by description of the geological formations, the stability of the slopes and the evolution of the lowlands. Also data are given on processes like coastal morphology and stability, subsidence and sedimentation. Finally, the impacts of a future climatic changes in the geology and the geomorphology of the island are cited along with suggested activity.

Chapter 2.2. - Climate

5. Prof. Dikaiakos described the present climate of the island, noting that there were no data on the winds. Rhodes has a typical Mediterranean climate with two seasons. The climate is affected by the cyclone which is formed in South Mediterranean and the anticyclone formed in central Europe. Rain is rare with local characters. The episodic rains can be heavy but short in duration. In the text, all other meteorological parameters are given, while at the end, the impacts of a future temperature increase in the today's climate of the island are examined.

Chapter 2.3. - Hydrology and water resources

6. Mrs Alexiadou said that there were many difficulties in collecting data for this chapter. There were only two studies referred only to the northern part of Rhodes. The main characteristic is the intense use of water in the island, which greatly affects the water balance. The hydrogeologically important geologic formations are examined as well as the important parameters of evapotranspiration, run-off, infiltration, etc. Two conclusions are reached, first that the water resources are diminishing more and more with time, and that the saline water front is gradually infiltrating more inland. The suggested actions include research for deeper water bearing horizons (for example within the limestone formation) location of fresh water springs at the nearshore areas and enrichment of water resources with technical works.

Chapter 3 - Ecosystems

7. Prof. Margaris considered his subject more relevant to the presentation of Mrs Alexiadou and asked to present his report. He initially handed the report to the coordinators and reported that he followed a slightly different structure in his chapter. He said that the great socio-economic changes in the Rhodes society greatly affected the islands ecosystems. In fact, for example, the water resources might be eliminated even before the climatic changes occur. He distinguished three ecosystems, forests, shrublands and wetlands, and he cited as a major problem the occurrence of fires. He also described the natural environment of Rhodes (flora, cultivated land, animal husbandry and water resources). Finally he suggested certain actions to be taken (for example forestation with local plant varieties, restriction of water use in agriculture, enforcement of alive tree growth, etc.).

Chapter 2.4. - Marine Physical Processes

8. Prof. Lascaratos gave a short account of the oceanographic parameters of the sea surrounding the island. He stated that the cyclone of Rhodes constitutes one of the most important oceanographic processes in the Mediterranean. On the other hand, a sea current is formed northern of Rhodes and goes into the Eastern Mediterranean through the Rhodes-Asia Minor narrow. Unfortunately there is no adequate data on the winds which can play an important role in determining the effects of future climatic changes in the oceanographic parameters.

Chapter 4 - Socio-economic Aspects

9. Regarding the chapter 4, the Co-ordinators referred to Ms Tsakiris' summary. According to this, in the population of Rhodes, there is a considerable increase in the population in the last decade (10%) which is directed toward the coastal and touristic centers with parallel decrease in rural areas. Employment is particularly high in touristic professions while local manufacturing industry is declining. In the island, there are notable needs of harbours, connections by boat with the nearby islands, water, electric power, etc.

10. The Co-ordinators thanked the participants and noted that the work is proceeding well. They made the remark that it will be important for each author to highlight not only the results and the suggested actions, but also the problems they encountered during their task such as lack of data, inaccessibility of sources, etc. The situation has to be presented in a realistic way so that the decision-makers can understand and take the necessary steps.

The participants agreed for the end of June deadline for their texts. Then the Co-ordinators will contact them at the end of September for eventual improvement of the texts, which will be returned to the Co-ordinators for the final draft to be presented in another meeting at the end of November. If, up to that time, there will be a need for another meeting or if the funds for the trip to Rhodes will be available, the members will be notified in time.

11. Drs Perissoratis and Georgas closed the meeting wishing everybody good vacations.

ANNEX

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