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MEDITERRANEAN ACTION PLAN

Fourth Meeting of the Task Team on Implications
of Climatic Changes on the Syrian Coast

Damascus, 3-7 July 1992

REPORT

**OF THE FOURTH MEETING OF THE TASK TEAM ON
IMPLICATIONS OF CLIMATIC CHANGES ON THE SYRIAN COAST**

REPORT OF THE MEETING

Opening of the Meeting - Agenda item 1

The Fourth Meeting of the Task Team on the Study of the Implications of Climatic changes on the Coast of Syria, was opened by Dr Nafi Mahmoud Al-Shalabei, Deputy Director of the Meteorological Department, and Task Team Co-ordinator, who welcomed the participants and especially the external advisers, Dr L. Jeftic and Dr G. Sestini.

The meeting was held at the General Commission for Environmental Affairs. The meeting participants are listed in Annex I of this report.

Election of Officers and adoption of the Agenda - Agenda items 2 and 3

The meeting unanimously elected Dr N.M. Al-Shalabei, Co-ordinator of the Task Team as Chairman, M. M. Eido as Vice-chairman and Dr G. Sestini as Rapporteur of the meeting. Dr L. Jeftic acted as technical secretary of the meeting.

Following a discussion on the most suitable procedure of work for this meeting, the provisional agenda was amended, to include also a field excursion along the coast by helicopter organised by the Task Team Co-ordinator. A working time table geared to the objectives of the present meeting was agreed upon and the agenda adopted. The agenda appears in Annex II.

Presentation of the preliminary draft report - Agenda item 4

Mr Y. Awaidah distributed a copy of the first preliminary draft report. The contents of each section were briefly presented by the respective authors. In regard to chapter 1.3 (Assumptions and Methodology) Dr L. Jeftic distributed a table summarising the up-to-date figures for temperature increases, and rainfall prediction ranges, inclusive of an amendment especially made for the Eastern Mediterranean region of Syria (see Annex III).

It was agreed that Dr G. Sestini and Dr L. Jeftic would scan through each section of the report, to correct language and format and to note comments.

Aerial reconnaissance of the Syrian coast - Agenda item 5

Task Team members Messrs N.M. Al-Shalabei, M. Eido, I. Al-Deen Khalil, Y. Awaidah, L. Jeftic and G. Sestini departed from Damascus at 8.30 a.m. on an army helicopter, arranged for by the Institute of Meteorology and the General Commission for Environmental Affairs. The coastal zone was examined from a few km inland, flying northwards and along the shoreline, southward on return, starting from 10 km north of Lattakia. A stopover was made at Lattakia airport. The Task Team was able to note all the main features of the morphology, urban and tourist settlements, agriculture, the large industrial plants and their effects on air pollution.

Review of further work needed - Agenda item 6

The Task Team advisers presented their comments on the state of the preliminary report, noting that further work is needed on the part of the Task Team, namely on the implication of atmospheric warming for climate change, for ecosystems, agriculture, soils and erosion, as well on the section about conclusions and recommendations. After a discussion, it was generally

agreed that the most sensible, practical recommendation to be offered to decision-makers, for action during the next 10-20 years, when the trend of climate change may become better known, is the adoption and enforcement of integrated coastal planning and management (especially in view of the present serious environmental problems of the coastal region, and of the expansion of population, which could make them worse), and the initiation or strengthening of environmental monitoring, such as of pollution, soil erosion, beach stability, etc.

Future actions - Agenda item 7

In view of the need to prepare the final preliminary first draft by early August and distribute it to the other case studies Task Teams in time for the general review meeting in Malta (September 15-19, 1992), it was agreed that a properly formatted edition would be prepared in Athens, from the Task Team first version and that the Task Team co-ordinator would supply Dr L. Jeftic, by 25 July with all the missing parts.

Closure of the meeting - Agenda item 8

In his closing remarks, Dr L. Jeftic expressed satisfaction for the results of the meeting and the constructive spirit in which it was conducted. He also thanked the participants, Chairman and Rapporteur, the Government of Syrian Arab Republic and the staff of the General Commission for Environmental Affairs for technical and logistic assistance and their warm hospitality.

An exchange of courtesies followed after which the Chairman closed the meeting on 7th July 1992.

ANNEX I

LIST OF PARTICIPANTS AND TASK TEAM MEMBERS

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ANNEX II

AGENDA

1. Opening of the meeting
2. Election of officers
3. Adoption of the agenda
4. Presentation of the preliminary draft report
5. Aerial reconnaissance of the Syrian coast
6. Review of further work needed
7. Future actions
8. Closure of the meeting

ANNEX III

**SCENARIOS FOR THE PREDICTED CLIMATE CHANGE IN MALTA
DEDUCED FROM SCENARIOS SUGGESTED BY IPCC AND
THE UNIVERSITY OF EAST ANGLIA**

SCENARIOS	TIME HORIZON		
	2030	2050	2100
<u>IPCC GLOBAL</u> Temperature Sea level	+1.8 EC + 18 cm +/- 12 cm	- -	+2 to +5 EC + 65 cm +/- 35 cm
<u>IPCC Southern Europe</u> Temperature Rainfall Soil moisture	+2 EC winter +2 to + 3 EC summer + 0 to + 10% winter - 5 to + 15% summer - 15 to - 25% summer	- - -	- - -
<u>Univ. East Anglia Med</u> Rainfall	for each EC Global + 3% winter - 3% summer		
<u>UNEP Task Teams</u> Temperature Sea level	- -	+ 1.5 to + 3 EC + 24 to 52 cm	- -
<u>Univ. East Anglia for Syria</u> Temperature ⁽¹⁾ Annual Winter Spring Summer Autumn	+ 0.8 to + 1.2 EC ⁽²⁾ + 1.0 to + 1.6 EC ⁽³⁾ + 1.0 to + 1.2 EC ⁽²⁾ + 1.0 to + 1.2 EC ⁽³⁾ + 0.8 to + 1.0 EC ⁽²⁾ + 1.0 to + 1.2 EC ⁽³⁾ + 1.1 to + 1.2 EC ⁽²⁾ + 1.2 to + 1.6 EC ⁽³⁾ + 1.0 to + 1.2 EC ⁽²⁾ + 1.2 to + 1.4 EC ⁽³⁾	as for 2030	as for 2030
Rainfall ⁽⁴⁾ Annual Winter Spring Summer Autumn	0 to - 2 % ⁽²⁾ 0 to - 2% ⁽³⁾ + 2 to + 6% ⁽²⁾ 0 to + 2% ⁽³⁾ + 2 to + 4% ⁽²⁾ 0 to + 2% ⁽³⁾ 0 to - 22% ⁽²⁾ 0 to - 22% ⁽³⁾ - 2 to - 18 % ⁽²⁾ - 2 to 18% ⁽³⁾	as for 2030	as for 2030

SCENARIOS	TIME HORIZON		
	2030	2050	2100
<u>Operative Scenarios for Syria</u>			
Temperature ⁽¹⁾			
Annual	+ 1.44 to 2.16 EC ⁽²⁾	+ 1.2 to 3.6 EC ⁽²⁾	+ 1.6 to 6.0 EC ⁽²⁾
Winter	+ 1.8 to 2.88 EC ⁽³⁾	+ 1.5 to 4.8 EC ⁽³⁾	+ 2.0 to 8.0 EC ⁽³⁾
Spring	+ 1.8 to 2.16 EC ⁽²⁾ + 1.8 to 2.16 EC ⁽³⁾	+ 1.5 to 3.6 EC ⁽²⁾ + 1.5 to 3.6 EC ⁽³⁾	+ 2.0 to 6.0 EC ⁽²⁾ + 2.0 to 6.0 EC ⁽³⁾
Summer	+ 1.44 to 1.8 EC ⁽²⁾ + 1.8 to 2.16 EC ⁽³⁾	+ 1.2 to 3.0 EC ⁽²⁾ + 1.5 to 3.6 EC ⁽³⁾	+ 1.6 to 5.0 EC ⁽²⁾ + 2.0 to 6.0 EC ⁽³⁾
Autumn	+ 1.98 to 2.16 EC ⁽²⁾ + 2.16 to 2.88 EC ⁽³⁾ + 1.8 to 2.16 EC ⁽²⁾ + 2.16 to 2.52 EC ⁽³⁾	+ 1.65 to 3.6 EC ⁽²⁾ + 1.8 to 4.8 EC ⁽³⁾ + 1.5 to 3.6 EC ⁽²⁾ + 1.8 to 4.2 EC ⁽³⁾	+ 2.2 to 6.0 EC ⁽²⁾ + 2.4 to 8.0 EC ⁽³⁾ + 2.0 to 6.0 EC ⁽²⁾ + 2.4 to 7.0 EC ⁽³⁾
Sea level	+ 18 +/- 12 cm	+ 38 +/- 14 cm	+ 65 +/- 35 cm
Rainfall ⁽⁴⁾			
Annual	0 to - 3.6% ⁽²⁾ 0 to - 3.6% ⁽³⁾	0 to - 6% ⁽²⁾ 0 to - 6% ⁽³⁾	0 to - 10% ⁽²⁾ 0 to - 10% ⁽³⁾
Winter	+ 3.6 to + 10.8% ⁽²⁾ 0 to + 3.6% ⁽³⁾	+ 3 to + 18 % ⁽²⁾ 0 to + 6% ⁽³⁾	+ 4 to + 30% ⁽²⁾ 0 to + 10% ⁽³⁾
Spring	+ 3.6 to + 7.2% ⁽²⁾ 0 to + 3.6% ⁽³⁾	+ 3 to + 12% ⁽²⁾ 0 to + 6% ⁽³⁾	+ 4 to + 20% ⁽²⁾ 0 to + 10% ⁽³⁾
Summer	0 to - 39.6% ⁽²⁾ 0 to - 39.6% ⁽³⁾	0 to - 66% ⁽²⁾ 0 to - 66% ⁽³⁾	0 to - (110)% ⁽²⁾ 0 to - (110)% ⁽³⁾
Autumn	- 3.6 to - 32.4% ⁽²⁾ - 3.6 to - 32.4% ⁽³⁾	- 3 to - 54 % ⁽²⁾ - 3 to - 54% ⁽³⁾	- 4 to - 90% ⁽²⁾ - 4 to - 90% ⁽³⁾

(1) Temperature change calculated from East Anglia scenario

(2) Coastal plain

(3) Mountaineous region

(4) Percentage change in rainfall should be related to present value