PROPOSED LAYOUT FOR THE CLIMATE CHANGE BOOKLET

The overall key message is that climate change is an issue which needs to be considered as one of the drivers in any study of desertification. It aims to answer two major questions: (i) how severe is anthropogenic climate change likely to be and (ii) how will it impact on people?

The booklet will draw largely on recently completed and ongoing climate change EU projects – principally, MICE, STARDEX, PRUDENCE and ENSEMBLES:

http://www.cru.uea.ac.uk/cru/projects/mice/

http://prudence.dmi.dk/

http://www.cru.uea.ac.uk/cru/projects/stardex/

http://www.ensembles-eu.org/

Introduction (2 pages)

- Key factors and processes in climate-desertification inter-relationships
- Overview of Mediterranean climate and controlling influences
- Climate indicators for desertification studies

Observed climate variability (4 pages)

- Summary of recent/new analyses of trends and variability, focusing on extreme events and the last 40 years
- Causes of observed variations (focusing on large-scale circulation)
- The longer-term perspective (variability over the last 100/1000 years)
- Case-study events: recent drought, flood, heatwave events

Future projections (5 pages)

- Introduction to climate scenarios
- Current state-of-the-art in scenario construction, with examples of results
- Uncertainties and summary of relative confidence in scenarios for different variables/seasons (e.g., low confidence in summer rainfall changes)
- Key messages from the current generation of scenarios for the Mediterranean
- Current research and future developments (focus on higher spatial/temporal resolutions and move towards probabilistic scenarios, IPCC 4th Assessment Report)

Working with climate change scenarios (2 pages)

- Good practice guidelines
- Examples of impacts studies (e.g., fire, tourism, water management)

Decision and policy making (1 page)

- EU climate change mitigation and adaptation policy
- Research informing policy development (e.g., ADAM, PESETA)

Resources (2 pages)

- Datasets observed and simulated
- Websites (projects, and specific to Portugal, Spain, Italy, Greece)
- Software tools
- Further Reading