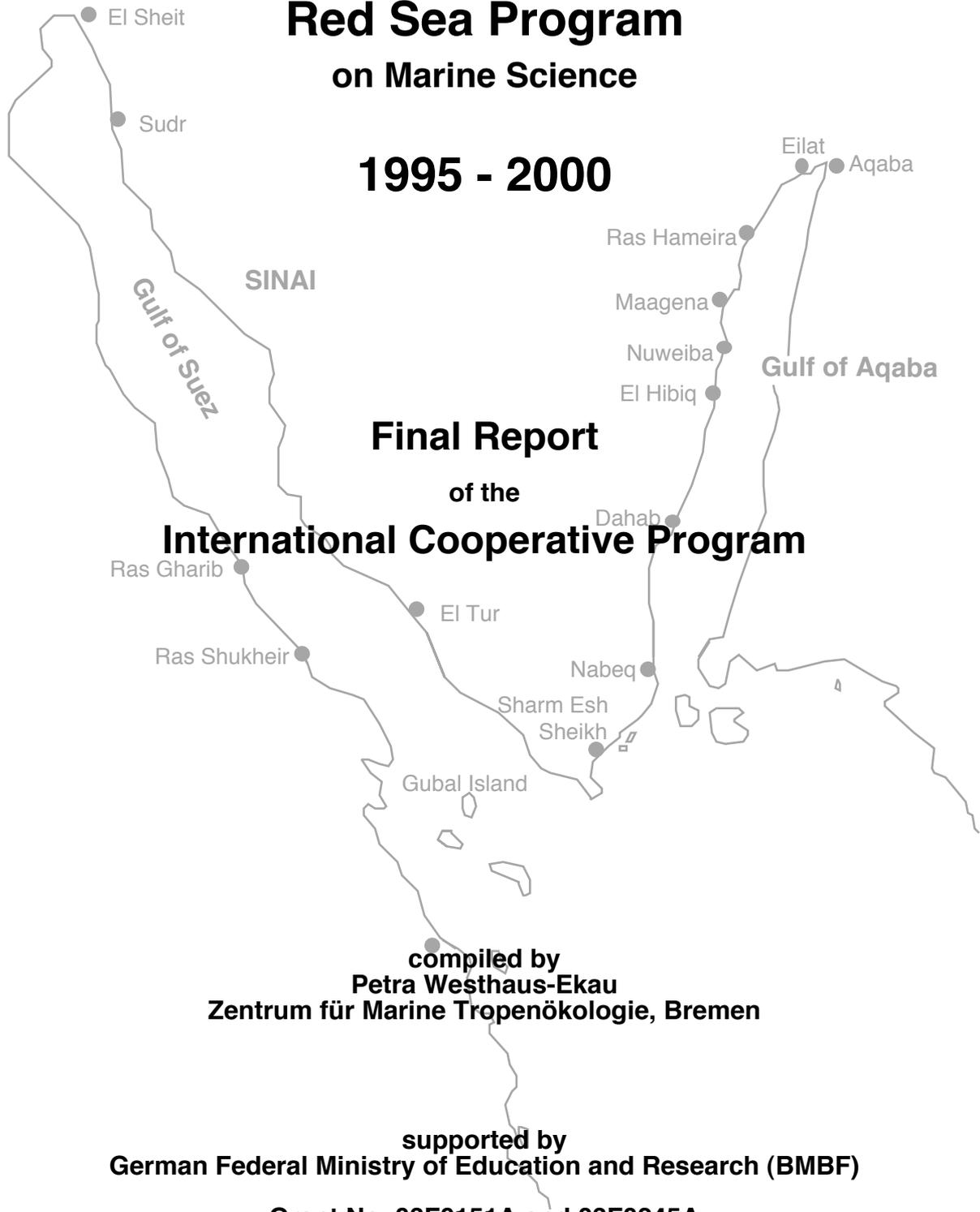


# Red Sea Program on Marine Science

1995 - 2000

## Final Report of the International Cooperative Program



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## Preface

The marine sciences offer unique opportunities both for interdisciplinary research and for the establishment of international cooperation. In both cases the special role of marine biology has its roots in the nature of the research object. The sea, particularly the Red Sea, strives with interesting forms of life, adapted to the most extreme conditions. Therefore, it is a ‘gold mine’ for scientists from all the life sciences. On the other hand a common goal – preserving and understanding a fragile ecosystem – and the special working mode of marine sciences – relying heavily on field trips in a vessel – persuade people to collaborate and to develop ties and friendships. With this in mind, I did not hesitate to step in, when Micha Spira approached me in 1995 with the idea of a multinational research project on the Red Sea with two goals: To conduct interdisciplinary research on many aspects of the Red Sea and to promote the peace process in the region. Immediately, we established contacts to leading Egyptian and Palestinian personalities: Prof. Hussein Badawi and Dr. Issa Khater, and at a later stage to Prof. Abu-Hilal in order to put the program on a broad regional base. Interdisciplinarity was fostered by the participation of a broad spectrum of specialists ranging from molecular biologists to physical oceanographers and marine geologists.

When the project started, my view on marine biology was quite limited. I had been before to many marine biological stations, including the IUI in Eilat, since the classical objects of study in neurobiology are marine organisms – squid, aplysia, barnacle, torpedo, limulus – and some of them, like the squid, can only be studied in well equipped stations. However, many other aspects of marine biology were new to me. This was an exciting experience. Not less interesting was the experience about the different approaches and methodologies in the different disciplines participating in the Red Sea Program. The experience that experiments involving cruises requiring sophisticated logistics, and the experience that success of the research plan depended on obtaining valid permits was new to me. Finally it was highly interesting to observe, how research organization and structure differs between the participating nationalities, and it was a challenge to find ways and procedures, which would match the requirements and conform with the regulations of all partners.

The scientific output has been rewarding. Many of our results would not have been possible to achieve without the international structures of the Red Sea Program. Scientific training and capacity building set milestones for future projects. Unfortunately, political developments have prevented, for the time being, success in the other important goal of the program, the furthering of the peace process in the region. However, as biologists we know that seeds have long life. Most seeds have the capacity to hibernate, others overcome long duration periods of drought. The deserts surrounding the Red Sea provide ample examples for that. We are confident that the Red Sea Program has generated seeds of that kind, which will flourish, when times have changed.

Göttingen, December 2000

Prof. Dr. Dr. h.c. Erwin Neher  
Chairman, Scientific Steering Committee



## **Introduction**

### **The Red Sea Program - a unique experience**

**Gotthilf Hempel**

**(International Coordinator)**

The idea of the Red Sea Program came from a few Israeli and German scientists interested in the organisms and ecology of the Gulf of Aqaba and the Red Sea. A program was then developed in close consultation between Egyptian, Israeli, Palestinian and German scientists and science administrators. The German Ministry for Science and Technology agreed in 1995 to support the proposed multinational program in the region with the dual objective of fostering top class science and promoting the peace process in the region through better mutual understanding. Soon after training of students and young researchers in marine science became a further objective in order to strengthen the academic and research capacity in the region and to develop further competence within the German science community.

RSP and related activities ( except "Meteor"-expedition) received 12.8 Mio DM from the German Government. The technical and financial management of RSP was in the hands of the RSP Secretariat at the Center for Tropical Marine Ecology. It was supervised by the Scientific Steering Committee chaired by Prof. Erwin Neher and worked in close contact with the National Coordinators (Fig. 1). An international review group evaluated RSP in its third year and proposed its continuation for two more years (RSP II). Three General Assemblies were held in Egypt, Israel and Germany. A Final Scientific Symposium was planned for November 2000 in Aqaba, Jordan, but had to be postponed until 2001, i.e. after the official end of RSP II on December 31, 2000.

One of the goals of RSP was to link the existing research facilities in the region in order to provide scientists and students from the various participating nations access to neighboring institutions. However, due to the political difficulties in the region, this goal was not fully achieved.

During the first phase of the project, more than 70 scientific partners from several Israeli and German institutes and universities worked together, as well as scientists from several Egyptian National Institutes of Oceanography and Fisheries (NIOF) and the Palestinian Al Quds University (Fig. 2).

After a period of affiliated status over the years 1997-1998 scientists of the Aqaba Marine Science Station (MSS) formally joined RSP II as active partners, recruiting research students from the mother universities in Amman and Irbid (see Annex 1, All Research Participants of RSP).