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BIMODAL EOLIAN DESERT SAND SHEETS AND THEIR POTENTIAL SIGNIFICANCE FOR AGRICULTURAL DEVELOPMENT

PROGRESS REPORT

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Present status of the research

The research work will mainly consist of: field work earmarked to be done in northern Senegal, and empirical work in the wind tunnel of Ben-Gurion University in Beer Sheva, by means of simulation of the dynamics of the sandsheets existing in northern Senegal. Sand samples to be retrieved from the surface of the sandsheets of northern Senegal and from a selection of horizons below will be studied and classified for grain-size and for mineralogical and chemical identification; as also for wind tunnel testing and creep-growth trials in Israel. Also, preliminary measurements of sand transport rates will be made and their variation according to height.

During the field work, instrument systems will be set up to record wind strength and direction, rainfall, and dust deposition on a continuous basis under the control of Dr. Christian S. Diatta, the Director of the

Institute of Applied Nuclear Technology (ITNA), Cheikh Anta Diop University in Dakar.

Accordingly, the following stages of work are contemplated:

(1) Preparations for field work.

(2) Preparations for wind tunnel simulation work.

(3) Field work.

(4) Simulation work.

Hitherto stages one and two have been accomplished completely and successfully. We have met, however, with difficulties for performing the field work.

A few months before this research was originally approved, we got a letter from the Embassy of Senegal in Paris in which the Consul General gave us his assent to realize this research in Senegal. In addition, Dr. Christian S. Diatta, the Director of the Institute of Applied Nuclear Technology (ITNA), Cheikh Anta Diop University in Dakar, expressed his and his colleagues' wish to participate and to be involved.

The first field work was intended to be done at the beginning of 1988. Because of non-availability of Dr. Diatta and his colleagues at that time, this first field work was postponed to the end of May 1988. To our great surprise and regret, the Consul General of Senegal in Paris this time came back from his word and refused to grant Dr. Tsoar a visa entry on the grounds that, since January 1988, only the Senegalese Minister of Interior is authorized to grant visas to Israelis.

Soon after May 1988 Dr. Tsoar met with Mr. Anthony Rock, scientific and

technological attache at the U.S. Embassy in Tel Aviv, and informed him about this chain of events. In Senegal, Dr. Diatta met with the Minister of Interior who promised him that Dr. Tsoar will get a visa in the near future. We have current means of communication with Dr. Diatta, but up to now he could not convey the good news of a visa having been granted to Dr. Tsoar, though in all his letters he reiterates the great interest the Senegalese Government has in this project.

Plans for the future

Fieldwork can only be carried out during the dry period of the year which, in Senegal, is between November and May. We now plan our fieldwork there in late 1989. In case Dr. Tsoar will not get his entry visa to Senegal by that time, the fieldwork will be carried out by Prof. Anane-Fenin, and Dr. Diatta and his colleagues. It is suggested that Prof. Anane-Fenin visit Israel in September 1989 for discussion and fieldwork briefing.