- I) 'Pure' water of the channel Dek Nullah,
- II) Wastewater of Ravi Rayon Limited,
- III) Wastewater of Ittehad Chemicals, and
- IV) Dek Nullah 'polluted' water after the discharge into it of wastewater from two industries, namely Ravi Rayon Limited and Ittehad Chemicals.

The analysis of these waters showed that sample I was the best in quality (medium-salinity and low-sodium water: C2-S1), sample II was of the quality class C3-S1 (high-salinity and low-sodium water), sample III was found to be of the poorest quality (very-high-salinity and very-high-sodium water: C4-S4), while sample IV was of relatively bad quality (high-salinity and medium-sodium water: C3-S2). Only the wastewater of Ittehad Chemicals had some sediment in it, the qualitative analysis of which showed the presence of oxalates, sodium, iron, and magnesium.

The study of planktonic biota in Dek Nullah 'pure' and 'polluted' waters showed that they were more diverse in the former than in the latter; indeed, unless Bacteria are classed as fauna, there was no representative of these last in the 'polluted' water.

The industrial wastewater effluents are being discharged into Dek Nullah, and this 'polluted' water is being used for irrigation by the farmers operating along its downstream course. The effects of this water on Rice germination were studied, and it was found that such germination was significantly greater in Dek Nullah 'pure' water than in its 'polluted' water.

Dek Nullah 'polluted' water may deteriorate further with time, as more and more wastes are added to it, and it may have deleterious effects on soils when used for irrigation purposes—causing salinity and sodicity problems unless proper management techniques are adopted.

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## **International Environmental Management Seminars**

An inquiry was recently conducted by the Center for Education in International Management (Centre d'Etudes Industrielles), Conches, Geneva, among environmental mangers in Europe and elsewhere, to determine the new focus of interest after seven years of offering courses on Environmental Management. Apparently this interest falls into two main categories:

- Specific technological issues such as Toxic Substance Control and Hazardous Waste Disposal, and
- Topics of Methodological and Social Orientation such as Environmental Impact Assessment.

The Center has, therefore, decided to run two consecutive one-week seminars next year, which can be attended either separately or together, in order to meet the specific interests of different participants. The seminars will be from 1-5 and 8-12 February 1982.

Application forms and further details can be obtained from the undersigned:

Michael G. Royston, Programme Coordinator IEMS Center for Education in International Management 4 Chemin de Conches, 1231 Geneva Switzerland.