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UTILIZATION AND CONTROL OF WATER HYACINTH IN SUDAN

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PREFACE

Plant protection measures in tropical agriculture are prerequisites to insure and increase crop yields. In irrigated agriculture, water bodies like rivers and channels are parts of the production system needing proper management, in which control of aquatic weeds is an integral part. Management of aquatic weeds often become as important as that of terrestrial weeds. Their negative effects such as increased evapotranspiration, physical blockage of waterways, silting, and reduced flow of water for example justify control activities.

Therefore the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), GmbH, (German Agency for Technical Cooperation), assisted the Democratic Republic of Sudan in controlling one of the worst aquatic weeds known, the waterhyacinth, which was proclaimed a 'National Pest'. Initial assistance in 1972 to conduct chemical control measures expanded into a systems approach including the utilization of waterhyacinths.

Since 1976, the latter aspect steadily grew more important, as indicated by the establishment of a Waterhyacinth-Utilization-Project in 1978. The strong dependence of the Sudan on imported mineral-oil and derivatives had influenced this decision because, at this time, positive results on the use of waterhyacinth biomass for energy generation could be expected. The bilateral pilot project developed technologies on the utilization of waterhyacinth, which also could be transferred to other countries adapted to local conditions.

This book compiles selected results of the project activities and is intended to motivate readers towards interdisciplinary projects integrating agricultural and biotechnical approaches. It is hoped that many would be encouraged to explore by themselves the relevance and adaptability of the techniques described to their specific environments and socioeconomics conditions.

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