

**GUIDELINES
FOR DISASTER PREVENTION
AND PREPAREDNESS
IN TROPICAL CYCLONE
AREAS**



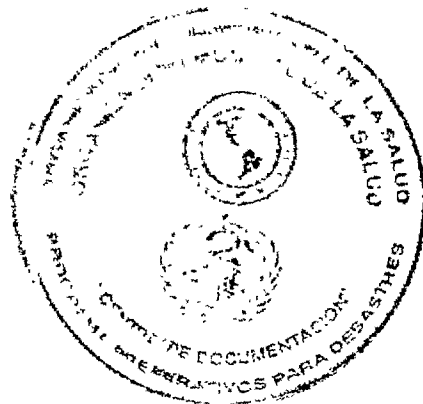
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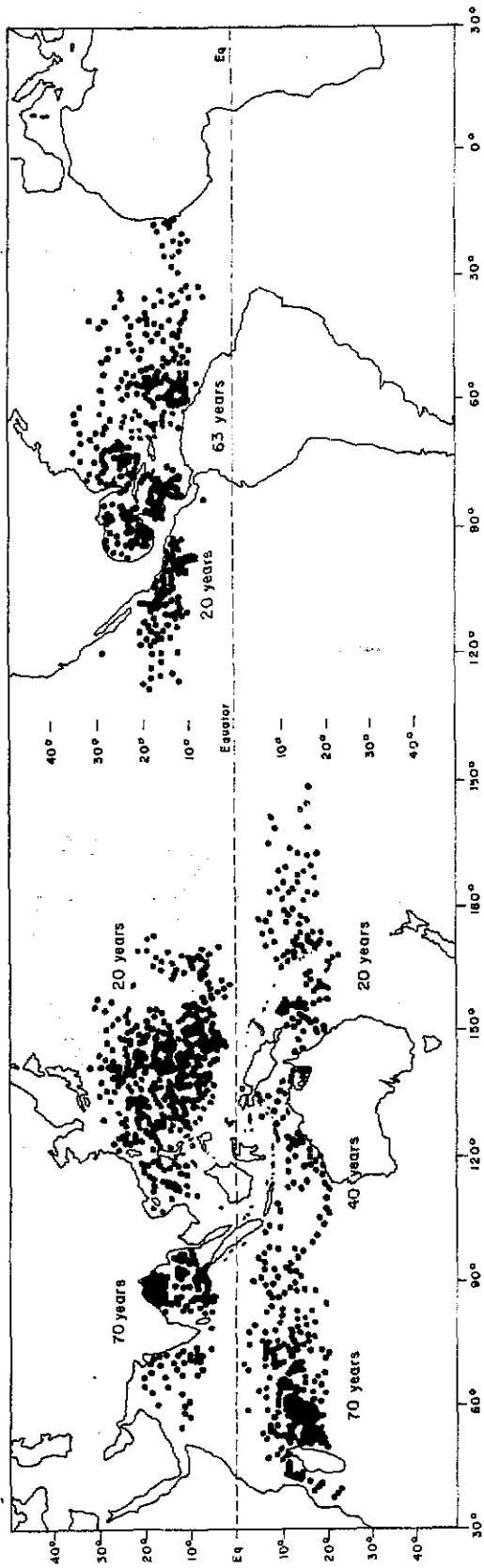


**WORLD
METEOROLOGICAL
ORGANIZATION**

**LEAGUE OF RED CROSS
SOCIETIES**

GUIDELINES
FOR DISASTER PREVENTION
AND PREPAREDNESS
IN TROPICAL CYCLONE
AREAS





Location points of first detection of disturbances which later became tropical cyclones

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Prepared jointly by:

the Economic and Social Commission for Asia and the Pacific
the World Meteorological Organization
and
the League of Red Cross Societies

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NOTE

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariats of the United Nations, the World Meteorological Organization and the League of Red Cross Societies concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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FOREWORD

In 1968 the Economic and Social Commission for Asia and the Pacific (ESCAP) and the World Meteorological Organization (WMO) jointly sponsored the establishment of an intergovernmental Typhoon Committee with responsibilities for promoting and co-ordinating the planning and implementation of measures required for minimizing typhoon damage in the ESCAP region. The Committee's programme included meteorological and hydrological activities, disaster prevention and preparedness and also training and research.

In its early years the Typhoon Committee placed greatest emphasis upon the improvement of meteorological and hydrological facilities which are essential to the timely forecasting and warning of typhoons, floods and storm surges. In 1971 the Committee decided that, whilst maintaining its work programme in meteorology and hydrology, additional attention should be given to disaster prevention and preparedness. A survey covering the seven member countries of the Committee was carried out and, as a result, the Committee decided to ask WMO, ESCAP and the League of Red Cross Societies (LRCS) to form a joint mission to visit the member countries. The objectives of the joint mission were on the one hand to gather information on the national arrangements for disaster prevention and preparedness and on the other hand to provide advice on all aspects of this vast subject.

In 1973 and 1974 the joint mission visited five member countries of the Typhoon Committee and, on the visit to Japan, was greatly impressed not only by the organization for disaster prevention and preparedness in that country but also by the mass of documentation that had been produced to describe and explain every facet of the organization. The joint mission therefore recommended to the Committee the compilation and publication of a manual providing countries, in particular developing countries, with guidance for the organization and operation of effective disaster prevention and preparedness systems.

The Typhoon Committee approved this recommendation and invited WMO, ESCAP and LRCS, with the help of the Typhoon Committee Secretariat (TCS), to prepare a suitable manual. These organizations accepted the task and accordingly set up an editorial board. At its first meeting (February 1975) the board drew up a detailed synopsis of the contents of the *Guidelines* — as it soon came to be called — and assigned responsibility for the preparation of the different parts. One of the early decisions was that the *Guidelines* should take into account experience acquired not only in Japan but also in other countries with advanced systems of disaster prevention and preparedness.

The sources from which information in the *Guidelines* has been culled are thus numerous and widespread, of national and international origin, as the bibliography at the end of the volume shows. The actual writing of the text was carried out by staff members of the organizations or by consultants engaged specially to prepare certain parts.

We believe there is a very great need for a publication of this type, synthesizing as it does the fruits of long, and sometimes bitter, national experience in facing the tragedies brought about by natural disasters. Because it brings this information together for the first time, we recognize that there may be shortcomings, omissions and, possibly, errors of fact in the publication. The comments of those who will use the *Guidelines* on how it can be improved and made more useful would be very welcome. It can then be revised after a few years and a new edition prepared.

In the meanwhile it is hoped and expected that the *Guidelines* will receive the widest possible distribution amongst those in governmental or non-governmental bodies with responsibilities within the national disaster prevention and preparedness systems.

In carrying out the invitation of the Typhoon Committee to produce these *Guidelines*, we acknowledge with gratitude the co-operation of the Office of the United Nations Disaster Relief Co-ordinator (UNDRO). We also express our thanks to the editorial board, consisting of Mr F. P. Alves (WMO), Mr. M. Kawamura and Mr. P. Rogers (ESCAP), Mr. S. Kilde and Dr. K. Seevaratnam (LRCS) and Dr. S. N. Sen (TCS), to Mr L. van Essche (UNDRO) for participating in meetings of the editorial board and for reviewing drafts; and to Mr. P. J. Meade (WMO consultant) who undertook the editing of the *Guidelines*.

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MEANINGS OF TERMS USED IN THE GUIDELINES

Note. – In the numerous and varied activities associated with disaster prevention and preparedness, a number of terms and expressions are entering into common usage. In the interests of uniformity and in order to avoid confusion, it is desirable that each of these terms and expressions should have a meaning that is widely accepted. The office of the United Nations Disaster Relief Co-ordinator (UNDRO) is considering this subject and, as an interim measure, has provided the following list of terms together with their meanings. Throughout this publication these terms have been used with the meanings suggested by UNDRO

Prevention

Disaster prevention may be described as measures designed to prevent natural phenomena from causing or resulting in disaster or other related emergency situations.

Prevention concerns the formulation and implementation of long-range policies and programmes to prevent or eliminate the occurrence of disasters. On the basis of vulnerability analyses of all risks, prevention includes legislation and regulatory measures, principally in the fields of physical and urban planning, public works and building.

Preparedness

Disaster preparedness may be described as action designed to minimize loss of life and damage, and to organize and facilitate timely and effective rescue, relief and rehabilitation in cases of disaster.

Preparedness is supported by the necessary legislation and means a readiness to cope with disaster situations or similar emergencies which cannot be avoided. Preparedness is concerned with forecasting and warning, the education and training of the population, organization for and management of disaster situations, including preparation of operational plans, training of relief groups, the stockpiling of supplies and the earmarking of the necessary funds.