CHAPTER 1

INTRODUCTION
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The Commission for Agricultural Meteorology of the World Meteorological Organization had, at the end of the Ninth Session in Madrid in 1986, completed 33 years in the application of meteorology to weather-sensitive problems in international agriculture. During this period, and under the leadership of six presidents, the Commission has initiated many programmes and instigated many changes and improvements in its field of expertise. The science and technology of agrometeorology, furthermore, has made great strides over this period. Accordingly, the Ninth Session of the Commission considered it expedient to reflect on its policies, programmes and progress over the past 33 years and, therefore, commissioned a Task Force of three members to undertake the preparation of a history of CAgM.

The importance of meteorology to agriculture, internationally, was probably recognized at least as early as 1735 when the directors of European Meteorological Services first met to discuss meteorology on an international scale. The first reference to co-operation between meteorology and agriculture was in correspondence between the International Meteorological Organization (IMO) and certain national institutes of agriculture and forestry, seeking an exchange of meteorological information and data. A formal Commission for Agricultural Meteorology of IMO was appointed in 1913 but a meeting was delayed by the First World War. The Commission was re-constituted in 1919 and held its first meeting at Utrecht, The Netherlands, in 1923. Subsequently it held six additional meetings; the seventh and last being at Toronto in Canada 1947. The policies and programmes of this last meeting of the IMO/CAgM laid the foundation of the new CAgM under WMO.

IMO underwent re-organization after 1947 and, in 1951, became the World Meteorological Organization (WMO), one of the specialized agencies of the United Nations. The Organization comprises of the Congress, the Executive Council, the six Regional Associations, the eight Technical Commissions of which the Commission for Agricultural Meteorology (CAgM) is one, and the WMO Secretariat.

At the first meeting of the Commission in 1953, it was concerned with justifying its existence, its terms of reference, and instruments and methods for taking observations that were of special concern to the solution of agricultural problems. Early Sessions also dealt at length with the gathering of information concerning specific local problems in Europe and North America and with processes for training and education in its specialized field.

Collaboration with agricultural interests was recognized as a necessity in order to successfully apply agrometeorological knowledge and information to agricultural problems. Collaboration and co-operation was difficult to achieve and the subject was discussed at several sessions up to and including the ninth when a comprehensive approach to the problem was initiated.

The consideration of problems in developing countries was often difficult and complex and improvement slow in materializing. Early sessions did however become involved with Unesco in problems of arid and drought-prone areas and locust control in Africa and in the Middle East. The Commission, through WMO, became involved with FAO and Unesco with inter-agency surveys on agroclimatology in the Middle East and the Sahel
Problems in the humid tropics were not discussed until the Third Session and positive action on agrometeorological problems in the tropics was not made until the Fourth Session when a working group and a rapporteur were appointed to look into two problems related to rice production in tropical areas.

The technical work of the first three sessions was performed mainly by working groups appointed at the sessions which undertook work between sessions. Although much of their work was undertaken by correspondence, each working group held at least one meeting in the WMO Secretariat. This was expensive, and in some cases ineffective. The idea of a specific topic being studied and reported on by a single individual (rapporteur) was introduced at the Fourth Session when nine topics were selected to be studied by an equal number of rapporteurs. Since then the number of topics being considered by working groups has decreased while those considered by rapporteurs has increased. This is also partly due to the financial implications associated with the working groups. The productivity per person as measured by published reports is greater for rapporteurs than for working groups.

Technical scientific lectures relating to agenda topics were introduced at the Second Session and have continued to the present time.

World food production was an important subject for discussion at the Fourth Session and the Commission strongly supported the Congress proposal to establish an Inter-Agency Co-ordinating Group on an Agrometeorological Programme in Aid of World Food Production. The Group consisted of representatives from WMO, FAO, Unesco and UNDP. Its establishment resulted in the formulation of policies and the expansion of programmes contributing to the development and strengthening of national agrometeorological services, both in developed and developing countries. The Programme continued through the Fifth, Sixth and Seventh Sessions.

The World Weather Watch (WWW) Programme was first reviewed by the Commission during the Fourth Session and interest in this programme was continued to the present. The Programme was of great importance to the development of agrometeorology especially in developing countries. Steps were taken to improve the exchange of information and data used by agrometeorology and to bring agrometeorological data and exchange requirements to the attention of the WWW Programme and concerned Commissions.

The Advisory Working Group also came into being during the Fourth Session. Up to that time most of the planning and advisory work of the Commission and its inter-sessional activities had been handled by the President, in consultation by correspondence with the Vice-President and the Secretariat. These responsibilities were becoming too onerous and complex to be dealt with by one person, especially in view of the many disciplines covered by the Commission, so it formed an Advisory Working Group to assist the President.
Members of developing countries were becoming, by the Fifth Session, more vocal in identifying their problems and seeking assistance for solutions. This lead to an increasing number of appointments of rapporteurs and members of working groups from these countries.

In the early 1970s anomalous weather world-wide led to a world food crisis and caused great concern to international organizations and national governments alike. In response, a number of comprehensive programmes by CAgM-V, -VI and -VII were developed dealing with the further strengthening of agrometeorological services in developing countries, crop/weather monitoring, food production and protection in developing countries, drought and agriculture, weather forecasts for agriculture, the organization of a number of symposia and training seminars, and increased co-operation with international agencies and institutes.

The anomalous weather of the 1970s resulted in 1979 in the establishment of the World Climate Programme (WCP) which brought a new dimension to the work of the Commission.

The last few sessions of the Commission had considered a number of topics such as the economic benefits of practical applications of agrometeorology, specialized services and weather forecasts for agriculture, weather advisory services to agriculture, crop/weather modelling, the use of remote sensing techniques, and such neglected topics as the meteorological aspects of forestry and fisheries.

In connection with the transfer of technology, one of the important considerations of the Commission from its inception, was concerned with educational matters as well as the holding of symposia, workshops, technical conferences, training seminars and, roving seminars. It was also concerned with collaboration with international agencies and institutes in co-operative projects, and also in training, technical assistance and project funding.

Technical matters and programmes, throughout the life of the Commission, have generally been handled by working groups and rapporteurs, task forces, and through specialized symposia. These were responsible for a large percentage of the Commission's technical literature most of which have eventually been published in various categories of WMO publications.

The terms of reference of the Commission, the Guide to Agricultural Meteorological Practices and the Technical Regulations have been considered by all Sessions and revised and updated and finally, another undertaking which has been considered at all Commission sessions is the matter of education and training. This has been considered from many angles, including training seminars, the preparation of training syllabuses and material, the granting of fellowships and encouragement of the development of training centres in both developing and developed countries.

In the course of this history, these topics will be traced from their origin, through one or more sessions with various degrees of emphasis, as dictated by the conditions at the time, to their ultimate fulfillment and conclusion and it will be to shown how they have had a profound influence on the development of agrometeorology at the national level in developed and, particularly, in developing countries.