345. The Administration has promoted research into records, registers, making inventories, classification, restoration, conservation, protection and safeguarding of the assets which make up the Territory’s cultural heritage, due to their archaeological, historical, artistic, ethnological, urban or landscape value. The CIM has also promoted research into and the collection of cultural information on Macau, such as practices, customs, traditions and festivals, studying and disseminating the collected information. As examples of this there is work in course to establish a museum of the so-called “Ruínas de S. Paulo” (the facade of the ruins of the Mater Deit Church, which is a classified monument) and also the following publications: O Traje da Mulher Macaense - Da Saraça ao Dó das Nhonhonha de Macau (A work on the historical costumes of Macanese women) - 1989; Três Jogos Populares de Macau (Three Popular Games of Macau) - 1984; and P’ei P’chai (Review of Culture, 1991).

346. The coordination of scientific and technological investigation in Macau is not supervised by a single entity. Responsibilities for scientific investigation are dispersed among various governmental departments, and are carried out by services whose functions are primarily of a practical nature. Thus, there are various governmental departments in the Territory with competences in the area of the scientific and technological investigation, the following being the most important.

347. In the field of Transportation and Public Works. At the Department for Marine Affairs, the Training School for Pilots undertakes studies and researches in the area of maritime and port activities. It collaborates with the Polytechnic Institute of Macau. It has recently held an exhibition on contemporary maritime training and certification, and in terms of international cooperation it has signed an agreement with the Nautical School of the province of Canton. At the same time the Maritime Museum of Macau carries out scientific research in the area of marine archaeology, aiming at the restoration of sunken objects. It is currently preparing to sign agreements with the University of Macau, for the publication of books on the History of Macau, and with the Polytechnic Institute for the holding of exhibitions.

348. The Metereorology and Geophysics Services carries out shared scientific research with other services in the Pearl River Delta, namely Hong Kong and the province of Canton, on violent weather phenomena such as typhoons, floods, heavy rains and landslides. Seminars are held annually to present and discuss the research work produced by each body.
There is also an agreement with the Faculty of Sciences and Technology at the University whereby final year students produce research work in collaboration with the scientists of the Service. One of these pieces of research, on the quality of air in Macau, was presented at a Congress in Beijing, in October 1993.

349. The Civil Engineering Laboratory of Macau is a non-profit-making body with financial and administrative autonomy. Although it is part of the Administration, one third of its capital is held by the Government of Macau. This Laboratory cooperates with the University of Macau by making its premises and equipment available to the Faculty of Sciences and Technology for the holding of practical classes. The Laboratory carries out scientific research at the request of various bodies in order to control the quality of the materials used in civil construction.

350. In the area of culture. It is the responsibility of the CIM to "elaborate, promote and support study and research work, in the fields of history, arts, literature and cultural heritage" (art. 23, para. a), Decree-Law No. 63/89/M of 25 September). In this area CIM’s activities include the development of projects, the award of scholarships and the granting of subsidies.

351. The following are some examples of projects undertaken or completed during the year 1992:

(a) History: The Portuguese Quarter of Malacca; Macau. Cultural Interchange between East and West; History of the Archdiocese of Goa; Various Themes on the History of Macau; Macanese Families; The Cemetery of Chala; A Chronology of the History of Macau; A Translation, Annotation and Critical Edition of the Work, Ou-Mun Kei-Leok; A Selection of Bibliographic Sources and References on the Relations between Macau and Thailand; A Selection of Documents on Macau from the Historical Archives of Bombay;

(b) Sociology: The Present and Future of the Church in China and Macau; State, Society and the Development of Education in Macau; A General Survey of Macau;

(c) Ethno-linguistics: The Portuguese Language in the Orient; The Portuguese Heritage in Malacca;


(e) Literature: A Cultural History of Macau - An Annotation of Ancient Chinese Poetry on Macau; A Concise History of the Literature of Macau;

(f) History of art: The Art of the Society of Jesus in China.

352. Scientific research in the field of education is one of the main principles of the University of Macau. As we have already mentioned, the University of Macau is a new institution with eight research centres which cover the different subject areas that are taught: Business Research Centre; Research Centre on the Chinese Economy; Centre of Japanese Studies; Research Centre in Educational Science; Research Centre for Science and Technology; Centre for Juridical Studies; Research Center on East-West Relations; and the Macau Studies Centre.

353. In 1993, MOP 283,605 was distributed among projects that had already been approved, and at the planning stage, in the following academic areas: Faculty of Sciences and Technology - (The Environment,
354. Scientific research projects are also supported by the Macau Foundation which spent MOP 253,000 on such projects in 1993. Masters students at the University were awarded scholarships totalling MOP 676,600. The Institute of Software is also funded by the Macau Foundation.

355. In the field of protection and promotion of the environment and the quality of life of the population various actions have been taken to raise the interest and awareness of the community towards local and global problems.

356. In the area of basic sanitation, an incineration plant for treatment of solid wastes is already operational. A sewage treatment plant is currently under construction. Two other basic sanitation plants for the islands of Taipa and Coloane are currently being planned.

357. Actions to control environmental risk are also being undertaken, at the local and regional levels, both in relation to the use of energy resources and to urban and industrial development, aiming always at the achievement of quality of life in a sustainable environment.

358. The analysis and control of environmental pollution is also carried out by the local councils. The municipal laboratory of the Leal Senado carries out:

   (a) Systematic control and analysis of the quality of the water in the public water supply (4 to 6 samples per day);

   (b) Chemical control of the quality of the water in swimming pools, to verify the efficiency of the systems of circulation and renewal of the water (20 swimming pools);

   (c) Analysis of the quality of the water obtained from wells, in both Macau and the islands (115 samples per year);

   (d) Analysis of the coastal waters of Coloane island in support of the local council with the aim of controlling environmental pollution;

   (e) Analysis of the quality of air in Macau in collaboration with the Meteorology and Geophysics Service of Macau (samples at different times and frequencies).

359. The Portuguese Constitution also protects freedom of intellectual, artistic and scientific creation (art. 42).

360. The Copyright Code approved by Decree-Law 46,980 of 24 April 1966, published in the Official Gazette No. 2 of 8 January 1972, protects the intellectual property of any creator. The author’s right to dispose of, use or profit from his work is recognized regardless of whether it has been registered or undergone any other formality (arts. 1, 4 and 8). The author of intellectual property shall enjoy the right to assert his role as creator of the work and safeguard its integrity for the duration of his life (art. 55).

361. Law 4/85/M of 25 November follows the same pattern in offering protection against illegal copying of records and videos.