

**INTERNATIONAL NARCOTICS CONTROL BOARD**

**Geneva**

**Report of the International Narcotics  
Control Board**

for 1973



**UNITED NATIONS**

*Mrs. Gnan*

E/INCB/21/Corr.1

INTERNATIONAL NARCOTICS CONTROL BOARD

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REPORT OF THE INTERNATIONAL NARCOTICS CONTROL BOARD FOR 1973

corrigendum

Page 22, paragraph 72, line 1

Between the words "countries" and "where" INSERT "and territories".

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REPORT OF THE INTERNATIONAL NARCOTICS CONTROL BOARD FOR 1973

corrigendum

Page 21

Title before paragraph 68 should read:

"MEASURES ADOPTED BY COUNTRIES AND REGIONS IN RESPECT OF DRUG  
CONTROL".

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**UNITED NATIONS**

**New York, 1973**

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#### ABBREVIATIONS

The following abbreviations are used except where the context otherwise requires:

<u>Abbreviation</u>	<u>Full Title</u>
Board	International Narcotics Control Board
1912 Convention	International Opium Convention signed at The Hague on 23 January 1912.
1925 Agreement	Agreement concerning the Manufacture of, Internal Trade in and Use of Prepared Opium, signed at Geneva on 11 February 1925, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1925 Convention	International Opium Convention signed at Geneva on 19 February 1925, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1931 Convention	Convention for limiting the manufacture and regulating the distribution of narcotic drugs, signed at Geneva on 13 July 1931, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1931 Agreement	Agreement for the Control of Opium Smoking in the Far East, signed at Bangkok on 27 November 1931, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1936 Convention	Convention for the suppression of the illicit traffic in dangerous drugs, signed at Geneva on 26 June 1936, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1946 Protocol	Protocol amending the Agreements, Conventions and Protocols on Narcotic Drugs concluded at The Hague on 23 January 1912, at Geneva on 11 February 1925 and 19 February 1925 and 13 July 1931, at Bangkok on 27 November 1931 and at Geneva on 26 June 1936, signed at Lake Success, New York, on 11 December 1946.
1948 Protocol	Protocol signed at Paris on 19 November 1948 bringing under international control drugs outside the scope of the Convention of 13 July 1931 for limiting the manufacture and regulating the distribution of narcotic drugs, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946.
1953 Protocol	Protocol for limiting and regulating the cultivation of the poppy plant, the production of, international and wholesale trade in, and use of opium, signed at New York on 25 June 1953.
1961 Convention	Single Convention on Narcotic Drugs, signed at New York on 30 March 1961.
1971 Convention	Convention on Psychotropic Substances, signed at Vienna on 21 February 1971.
1972 Protocol	Protocol amending the Single Convention on Narcotic Drugs, 1961, signed at Geneva on 25 March 1972.



## FOREWORD

The annual reports on the work of the International Narcotics Control Board are prepared in conformity with the 1961 Convention and earlier treaties on narcotic drugs \*/ which call for annual reports on the working of the international narcotics control system. Article 15 of the 1961 Convention prescribes that "The Board shall prepare an annual report on its work and such additional reports as it considers necessary".

This report is the last to be submitted by the present Board which entered into office in March 1971. As a result of the election held by the Economic and Social Council in May 1973 the membership of the Board for the next three-year period (1974/1977) will be: Mr. D.P. Anand, Professor M.A. Attisso, Dr. N. Barkov, Dr. R.A. Chapman, Professor R. de la Fuente Muñiz, Professor S. Kaymakçalan, Sir Frederick Mason, Dr. V. Olguin, Mr. M.R. Pollner, Professor P. Reuter and Dr. T. Shimomura.

During the course of each year the Board receives, by means of periodical formal reports and otherwise, a considerable body of documentation on most aspects of production, manufacture and utilization of narcotic drugs and on seizures in the illicit traffic. In its annual reports it provides for the information of the Economic and Social Council and its Commission on Narcotic Drugs, of governments and the public at large, a digest of this material and an assessment of the current situation; and it records the manner in which governments have complied with the terms of the international treaties on narcotic drugs. The reports also enable the Board to portray particular trends in various aspects of the problem relating to these substances and to propose remedial measures where these may seem desirable.

For a full appreciation of the narcotic situation during the year the Report should be studied in conjunction with three further documents which the treaties require the Board to publish each year, namely:

- (a) The "Estimated World Requirements of Narcotic Drugs and Estimated Production of Opium", with its four supplements containing additional and revised estimates received during each quarter of the year under review;

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\*/ A list of these treaties is found on page 3 of this report. Earlier reports of particular importance prepared by the Board and its predecessor body, the Permanent Central Narcotics Board, included: An analysis of the 1953 Protocol (Report of the Permanent Central Narcotics Board for 1964 - E/OB/20, paras. 4 to 25); An analysis of the 1961 Convention (Report of the Permanent Central Narcotics Board for 1965 - E/OB/21, paras. 7 to 103); A brief history of international control on narcotic drugs (Final Report of the Permanent Central Narcotics Board, November 1967 - E/OB/23-E/DSB/25, paras. 25 to 57); A study of the responsibilities of Parties and of the Board under the international narcotics treaties (First Report of the Board - E/INCB/1, paras. 1 to 5).

- (b) The "Statistics on Narcotic Drugs with Maximum Levels of Opium Stocks", which shows the licit movement of narcotic drugs from production of the raw material to consumption of the finished product, reviews trends in this movement, and reports quantities seized in the illicit traffic; and
- (c) The "Comparative Statement of Estimates and Statistics on Narcotic Drugs", which is a record of the movement of narcotic drugs in each country or territory, and also depicts how far governments have kept their manufacture, import, utilization and stocks within the limits established under the terms of the international treaties and how far they have accounted for the quantities available within their respective jurisdictions.

#### Membership of the Board

Article 10 of the 1961 Convention provides that the members of the Board shall be elected by the Economic and Social Council for a term of three years. At its resumed forty-eighth session (May-June 1970), the Council elected the following members who entered on their current term of office on 2 March 1971:

Professor Michel A. ATTISSO

Professor at the Faculty of Pharmacy of Montpellier (France); member of the Overseas Academy of Sciences; Lecturer at the School of Medicine of the Togo; Head Pharmacist of the University Hospital Centre of Montpellier (on secondment); Expert in pharmacology and toxicology for proprietary pharmaceutical preparations (French Ministry of Public Health and Social Security); Expert of the World Health Organization on the advisory panel on the International Pharmacopoeia and Pharmaceutical Preparations; former Chairman of the Scientific Council of the Organization of African Unity; Vice-President of the International Union for Health Education; Fellow (foreign) of the Academy of Pharmacy (Paris, France). Member of the Board since 1968. Vice-President of the Board.

Dr. Nikolai K. BARKOV

Senior Scientist and former Scientific Secretary, Institute of Pharmacology, Academy of Medical Sciences, Moscow; member of the Pharmacological Society of the USSR; member of the Moscow Pharmacological Society. Member of the Narcotics Commission of the Ministry of Public Health of the USSR.

Dr. Fortunato CARRANZA

Former Vice-Dean and former Dean of the National University of San Marcos; Honorary Professor, University of San Marcos; Chairman of the Fourth Congress of Chemistry, Lima, 1953; former Director of the Control Laboratories for Industrialization of the Coca Leaf, Peru; former member at various scientific congresses, national and foreign; Fellow of the Society of Chemical Experts of France; Founder and Director of the Chemical Society of Peru; member of various scientific and cultural institutes of Europe and the Americas; Commander of the Palmes Académiques, France, and of Palmas Magisteriales, Peru; Advisor to various meetings on narcotics held in Latin America under the auspices of the United Nations.

Professor Pietro DI MATTEI

Professor of Pharmacology, Faculty of Medicine of the University of Rome; Vice-President of the High Council of Public Health; President of the Accademia Medica de Roma; member of the Permanent Commission of the Official Pharmacopoeia; Fellow (foreign) of the Accademia nazionale dei Lincei; member of the Medical Academy of Paris; member of the Royal Academy of Sciences, Belgium; member of the National Academy of Pharmacy, Madrid; founder and director since 1965 of the National Centre for the study of Dependence on Drugs and Psychotropic Substances. Gold Medal of the Cultural Merit; Gold Medal of the Merit of Public Health; Commander of the Order of the Republic; Officer of the Légion d'Honneur; Gold Medal of the City of Rome for the Fight against Drug Abuse.

Professor Marcel GRANIER-DOYEUX

Member of the World Health Organization Expert Advisory Panel on Drug Dependence; Member of the World Health Organization Expert Committee on Dependence-Producing Drugs; former President, National Academy of Medicine of Venezuela; Vice-President of the National Academy of Physical, Mathematical and Natural Sciences of Venezuela; former Professor and Chairman, Department of Pharmacology and Toxicology, Faculty of Medicine, Central University of Venezuela; Fellow (foreign) of the Academy of Pharmacy (Paris, France); Fellow (foreign) of the Royal National Academy of Medicine (Madrid, Spain); Fellow (foreign) of the Brazilian Academy of Pharmacy; Fellow (foreign) of the Argentine Scientific Society; Fellow (foreign) of the Brazilian Society of Chemistry; Fellow of the Panamerican Academy for the History of Medicine; former President of the Venezuelan Society for the History of Medicine; Fellow (foreign) of the Brazilian Institute for the History of Medicine; Fellow (foreign) of the Academy of Medicine of Zulia; former President of the Venezuelan Society for Allergology; Associate Fellow of the Venezuelan Society of Neurology and Psychiatry; Fellow of the Panamerican Association of Allergology; Fellow of the Panamerican Medical Association; Honorary Member of the College of Pharmacy (Caracas, D.F. Venezuela); Fellow of the College of Physicians (Caracas, D.F., Venezuela); former Chief, Section on Pharmacology of the National Institute of Health (Venezuela); former Professor of Pharmacology at the Faculty of Pharmacy of the Central University of Venezuela and of the Faculty of Pharmacy of the Catholic University "Andrés Bello"; Comendador de la Orden del Libertador "Simon Bolivar" (Venezuela); Comendador de la Orden Hipolito de Unanue (Peru); Comendador de la Orden de San Carlos (Colombia); Oficial de la Orden del Mérito Carlos J. Finlay (Cuba); Grand-Croix de l'Ordre National du Mérite (France); Grand-Croix de l'Ordre Andrés Bello; Ambassador Extraordinary and Plenipotentiary. Vice-President of the Board from 1968 to 1972.

Sir Harry GREENFIELD, C.S.I., C.I.E.

Bank and company director in the United Kingdom. Formerly Chairman, Central Board of Revenue, Government of India, Delhi. Representative of India on the United Nations Commission on Narcotic Drugs in 1946. Vice-President of the Permanent Central Narcotics Board from 1948 to 1952 and its President from 1953 to 1968; Chairman of the Institute for the Study of Drug Dependence, United Kingdom. President of the Board since 1968.

**Professor Takanobu ITAI**

Professor of Organic Analytical Chemistry at Showa College of Pharmaceutical Sciences, Tokyo; member of the Central Pharmaceutical Affairs Council of Japan; Counsellor of the Pharmaceutical Society of Japan; member of the Food Hygienic Society of Japan; member of the Society of Japanese Pharmacopoeia; member of the American Chemical Society; former Director of the National Institute of Hygienic Sciences, Osaka Branch; former member of the Expert Committee on International Pharmacopoeia of the World Health Organization.

**Professor Sükrü KAYMAKÇALAN**

Chairman of the Department of Pharmacology, Medical Faculty of Ankara University; member of the World Health Organization Expert Advisory Panel on Drug Dependence; member of the Sciences Board, the Scientific and Technical Research Council of Turkey; member of the Turkish Academy of Medicine; member of the Turkish Pharmacopoeia Commission; member of the International Society for Biochemical Pharmacology; member of the New York Academy of Science; member of the American Association for the Advancement of Science; member of the Balkanic Medical Union; member of the Technical Committee during the Conference of the United Nations for the Adoption of a Single Convention on Narcotic Drugs, 1961. Member of the Board since 1968.

**Mr. E.S. KRISHNAMOORTHY**

Formerly Chairman, Central Board of Revenue, Government of India, Delhi. Representative of India on the United Nations Commission on Narcotic Drugs, 1952 to 1954 and 1960, and leader of the Indian Delegation to the United Nations Opium Conference of 1953. Former Indian Trade Commissioner with Japan. Former Indian Consul-General, Shanghai; member of the Permanent Central Narcotics Board from 1960 to 1968; Vice-President of the Drug Supervisory Body from 1963 to 1968. Member of the Board since 1968.

**Professor Paul REUTER**

Professor in the Faculty of Law and Economics, Paris; member of the Permanent Court of Arbitration, The Hague; member of the United Nations International Law Commission; member of the Permanent Central Narcotics Board from 1948 to 1968 and its Vice-President from 1953 to 1968. Member of the Board since 1968 and its Vice-President in 1973.

**Mr. Leon STEINIG**

Former Senior Member, Dangerous Drugs Section, League of Nations; in charge of the Branch Office of the Drug Supervisory Body in Washington, D.C.; former Director, Division of Narcotic Drugs; former Acting Principal Director and former Acting Assistant Secretary-General in charge of the Department of Social Affairs, United Nations Secretariat. Former Senior Advisor, Department of Technical Assistance, International Atomic Energy Agency; member of the Permanent Central Narcotics Board from 1963 to 1968. Member of the Board since 1968 and its Rapporteur from 1968 to 1970.

At its twelfth session, in May 1973, the Board elected Sir Harry Greenfield, President and Professor Reuter and Professor Attisso, Vice-Presidents. These mandates will end on the eve of the first session of the Board in 1974.

### Sessions in 1973

The Board held its twelfth session from 28 May to 7 June and its thirteenth session from 22 October to 14 November 1973. The Secretary-General of the United Nations was represented at these sessions by Dr. G.S. Martens, Director of the Division of Narcotic Drugs. The World Health Organization was represented by Dr. D.C. Cameron and Dr. T.L. Chrusciel, Senior Medical Officers, Office of Mental Health.

### Representation at International assemblies

The Board was appropriately represented by its officers and/or members of the Board and/or members of its Secretariat at the following international assemblies: United Nations: Fifty-fourth Session of the Economic and Social Council (New York, April/May 1973); twenty-fifth session of the Commission on Narcotic Drugs (Geneva, January/February, 1973); ad hoc Committee for the Far East Regions (February, October - November 1973); Inter-Agency Committee for the co-ordination of activities on Drug Abuse Control (Geneva, September 1973); Seminar for Law Enforcement Officers under the auspices of the United Nations (Lima, June 1973); Committee on Crime Prevention and Control (New York, May 1973); Workshop concerning the outline for a series of country studies on Drug Abuse and Controls (Rome, December 1972); Expert Group on Drugs in Modern Society, (Geneva, December 1972). World Health Organization: Twenty-sixth World Health Assembly (Geneva, May 1973); Fifty-second session of the Executive Board (Geneva, May 1973); Expert Committee on Drug Dependence (Geneva, November 1972 and October 1973); Working Group on Comparison and Evaluation of Methods of Treatment and Rehabilitation for Drug Dependence and Abuse (Frankfurt, March 1973); Working Group on Guidelines for Collaborative Reporting on the non-medical use of Dependence-producing drugs (Geneva, August 1973); Working Group on WHO Drug Dependence Research and Training Centres (Geneva, August 1973). United Nations Educational, Scientific and Cultural Organization: Meeting of specialists on Methodologies for Evaluation of Mass Media Programmes for Prevention of Drug Abuse (Paris, January 1973). International Council on Alcohol and Addictions: fourth International Institute on the Prevention and Treatment of Drug Dependence (Belgrade, June 1973); International Congress on Drug Education (Montreux, October 1973). Anglo-American Conference on Drug Abuse (London, April 1973). United States National Academy of Sciences: International Conference on Problems of Drug Dependence (North Carolina University, May 1973). Governmental Meeting of South American Experts on Narcotics and Psychotropics (Buenos Aires, November-December 1972). Ministerial meeting of South American Countries on Narcotics and Psychotropics (Buenos Aires, April 1973). Fourth Pahlevi Medical Congress (Shiraz, Iran, April 1973). International Arab Narcotics Bureau of the League of Arab States: Seminar on the Prevention of Drug Abuse (Beirut, December 1972). Thirty-third International Congress of Pharmaceutical Sciences (Stockholm, September 1973).

### Nomenclature of countries and territories

In referring to political entities, the Board is guided by the rules governing the practice of the United Nations and the nomenclature thus employed does not imply the expression of any opinion whatsoever concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

## THE EVOLUTION OF INTERNATIONAL CONTROL

1. Looking back over the sixty years of evolution of the drug control system, encouragement can be drawn from the fact that the forward momentum of international movement in this field has on the whole been well sustained. This is the more remarkable in view of the wide variation between the circumstances and outlook of the many countries whose participation is essential to the adoption of far-reaching international treaties. In the present stage of unequal economic and political progress it is hardly to be expected that, even in a field where the moral issues are such as to command general acceptance, an international gathering convened to study alternative policies should be able to arrive at a formal agreement capable of giving satisfaction to all concerned. On a number of issues compromise is inevitable; and the ultimate outcome cannot but be that while some of the participants may feel that the regime generally agreed upon is more exacting than they would wish, others will hold that it falls short of the standard which they regard as essential to public well-being. It is only natural that among the latter group there should subsist a measure of disappointment at what they would regard as lack of desirable progress in international legislation. It is particularly in respect of controls relating to what have for convenience been called psychotropic substances that some reservation is at present felt in certain quarters.
2. The Board has accordingly thought it right, before reporting on the current state of affairs under the treaties now in force, to glance briefly at the several stages in the progress towards adoption and implementation of these treaties so as to put the present situation into due perspective, in the hope that this may facilitate further advance along the road of finding an effective answer to a social problem which is of ever-increasing concern to governments.
3. A tendency towards over-indulgence in particular deleterious substances is a weakness as old as the human race. Until the end of the nineteenth century governments regarded it as a domestic problem with which they felt able to cope by means within their own authority.
4. By the first decade of the present century, however, it became clear that for a number of reasons including the rapid development of inter-communication between countries, certain such problems were no longer amenable to solution by individual governments acting alone but called for concerted action by several governments. It was this realization that led to the adoption of the 1909 Resolutions and the 1912 Convention. Before these could be given practical fulfilment after the First World War manufactured narcotic drugs had become even more freely available and were being extensively misused in a number of countries. So seriously was this regarded by governments that the subject found particular mention in the Covenant of the League of Nations and during its first Assembly in 1920 the League created the Advisory Committee on the Traffic in Opium and other dangerous drugs which then prepared the ground for the international conference leading to the adoption of the International Opium Convention signed at Geneva in February 1925.
5. Under the terms of this treaty the Contracting Parties undertook to provide regular information regarding the production and utilization of narcotic substances so as to enable immediate corrective measures to be applied in respect of actual or

potential centres of illicit traffic; and it set up a Permanent Central Board to supervise the operation of the system and in general to watch over the course of international trade in these substances.

6. By the time the Board entered upon its duties in 1928 the situation had become even more sombre. To give but one example, during the year 1927 and the first quarter of 1928 one manufacturing company exported no less than 860 kg of morphine, 2711 kg of heroin and 40 kg of cocaine to a single country; and a later study 1/ estimated that between 1925 and 1929 the quantity of such drugs diverted to illicit use amounted to nearly half the amount applied to medical purposes. The figures concerning opium were even more striking. From the reports of governments which at that time supplied information to the Board it appeared that of the 18,500 metric tons of opium produced in the period from 1934 to 1937 only 1,400 tons were used for medical purposes.

7. In considering these two sets of figures it is important to realize that they are no more than approximate. In arriving at its estimate of the illicit use of morphine, heroin and cocaine, the Board had to base its calculations on the reports of manufacturing countries; and these were far from complete, since the 1925 Convention only entered into force in 1928. In assessing the usage of opium it had no statistics of the large quantities of opium harvested in such regions as Manchuria and Jehol, of which account ought to be taken in order to arrive at a correct estimate of the volume of opium which forty years ago was available for non-medical purposes.

8. The application of the 1925 Convention had an immediate salutary effect. Yet the abuse of morphine, heroin and cocaine had reached such grave dimensions that additional measures were felt to be required and the 1931 Convention was created to limit manufacture of and trade in these substances to the quantities required for medical and scientific purposes.

9. Making due allowance for the partial cataplexy imposed by the Second World War the supervisory network established by these two treaties in combination was thereafter progressively extended: in administrative outreach by the formal adherence to the treaties of more and more Contracting Parties; and in scope by the adoption of the 1948 Protocol relating to synthetic substances and the 1953 Protocol to regulate opium production and stocks, making a total of nine treaties in all.

10. In 1961 the whole structure was consolidated in the Single Convention on Narcotic Drugs, a major piece of international legislation which forms the high-water-mark of joint response by governments to the challenge of the grave social problems inherent in the extensive and still growing misuse of dangerous drugs. If as the situation continues to unfold it may seem to some observers that this keystone of the international control system is deficient in certain respects the 1961 Convention must nevertheless be recognized as a signal success in the face of numerous and complex difficulties and a significant advance towards the goal of effective containment of the drug problem.

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1/ Permanent Central Narcotics Board - Report for 1966 (E/OB/22, para. 34)

11. In expression of the continuing concern of governments, two further steps along this road are now in process: the 1971 Convention on Psychotropic Substances is intended to apply international controls to central nervous system stimulants and depressants and hallucinogens which now lie outside the scope of the earlier treaties; and the 1972 Protocol seeks to strengthen certain provisions of the 1961 Convention.

12. Thus it is fair to say that international response to the problem has kept pace with the continuing change in its form and extent; and that if the apparatus of control still exhibits certain weaknesses and deficiencies these are attributable to the near-impossibility of achieving unanimity on counter-measures to a problem whose circumstances vary so widely from country to country.

13. Whatever these imperfections, the measures so far agreed upon unquestionably reflect the recognition by governments in general of the extent and immediacy of the problem and its grave significance for social welfare. They also plainly imply the readiness of governments to co-operate closely not only in devising new counter measures as the need may arise but also in the day to day controls which experience has shown to be necessary.

14. This last obligation is of vital importance for the self-evident reason that the international control system cannot operate in vacuo but requires the assured basis of an efficient system of regulation and reporting in all the countries to or through which these substances pass in the course of international trade. Stated more precisely the physical controls over dangerous drugs are applied by national administrations: the function of the international organs is so to enmesh the operation of the national systems as to create a comprehensive, world-wide network of control.

#### STATUS OF CONVENTIONS

15. At the date of the present report, twenty-four more countries deposited their instruments of ratification of, accession or succession to the following three treaties.

16. Haiti, Honduras, Laos, Nicaragua, Singapore and Tonga either ratified, acceded, or succeeded to the 1961 Convention: ninety-three countries are now Parties to this treaty. While welcoming these further accessions, the Board notes that some important producing or manufacturing countries are still not among them. Even though most of these countries are in fact applying the provisions of the treaty, they have not formally bound themselves to do so. The Board hopes that 1974 will see greater progress towards bringing all countries into declared association in this humanitarian agreement.

17. Up to 31 December 1972 the following nine countries had deposited their instruments of ratification of, or accession to the 1971 Convention: Bulgaria, Chile, Egypt, Finland, Panama, Paraguay, South Africa, Sweden and Venezuela. Only six countries followed suit during 1973: Brazil, Ecuador, Mauritius, Nicaragua, Spain and Yugoslavia. The Board would wish to see much more rapid progress towards the ratification or accession by forty States which is necessary to bring this important treaty into force. An account is given in paragraphs 55 to 67 of the co-operation so far given by governments in the treaty's control measures, which are being provisionally applied.

18. Ratification or accession by forty States is also required for the entry into force of the 1972 Protocol, which incorporates certain amendments to the 1961 Convention. Seventeen countries have so far ratified or acceded to the Protocol, including the following thirteen countries in 1973: Brazil, Costa Rica, Ecuador, Finland, Haiti, Ivory Coast, Japan, Jordan, Kenya, Malawi, Paraguay, the Republic of Korea and Tonga. The four other countries which have already ratified the Protocol are: Australia, Panama, Sweden and the United States of America.

19. In pressing for the greatest possible number of adherents to the treaties, the Board would wish to stress that accession is not an end in itself and that of even greater importance is the implementation of the treaty provisions. Accession should not be allowed to be a mere formality.

#### RECEIPT OF RETURNS

20. It is pertinent to recall that the data on which the Board relies for assessing and making recommendations upon any particular situation are mainly those furnished by governments in reply to questionnaires issued by the Board. It follows that if some countries co-operate only partially or even not at all, the Board is greatly hampered in the performance of its duties under the treaties.

21. The following countries have furnished incomplete returns on narcotic drugs for the last two or more years:

Afghanistan	Malawi
Bolivia	Mongolia
Burma	Nepal
Colombia	Paraguay
Equatorial Guinea	Sierra Leone
Gabon	Uruguay
Laos	Yemen Arab Republic

22. No data are so far available for the Democratic People's Republic of Korea, the Democratic Republic of Viet-Nam or the People's Republic of China.

23. The Board has continued its contacts with representatives of the People's Republic of China, for example during the twenty-fifth session of the Commission on Narcotic Drugs in Geneva in January 1973 and during the fifty-fourth session of the Economic and Social Council in New York in May. It is understandable that before defining its position in relation to the international treaties on drug control the Government would wish to complete its study of the treaties and particularly those which have been framed since 1949.

24. The Board hopes that closer relations will soon be established with the People's Republic of China so that it may receive information in regard to present controls over narcotic drugs in that country. In the meantime it would be grateful if the competent authorities would send such information as they may feel able to supply without prejudice to the ultimate decision of the Government in regard to acceptance of the later treaties.

25. It has long expressed the view that the collaboration of the People's Republic of China is essential to the satisfactory operation of the international drug control system and it feels that the experience which the authorities have gained in applying drug control in China would be of substantial service to the international community.

26. Viewing the position as a whole, it is satisfactory to record that out of a total of 940 reports receivable during 1973, 850 have in fact been received so that the overall rate of co-operation amounts to 90 per cent.

#### THE CURRENT SITUATION

27. The central purpose of international co-operation in the field of drug control has from the outset been to restrict the use of narcotic and similar dangerous substances to medical and scientific purposes; and the chain of legislation to date illustrates how this purpose has been continually thwarted by illicit trafficking and by consumers turning to other potential dependence-producing drugs. Misuse is still focused chiefly on three principal raw materials and their derivatives. These are opium, coca leaves and cannabis.

#### Opium<sup>2/</sup>

28. Because of the importance which the derivatives of opium retain in medical practice large-scale cultivation of the opium poppy is essential and, while manufacture has increasingly supplied itself from "poppy straw", that is to say mainly from the head of the plant, a variety of factors necessitate the continuing production of large quantities of opium by tapping the latex within the capsule. To guard against diversion of an agricultural crop of this kind calls for an elaborate series of security measures at all stages from the point of first production to the place of manufacture: at the field, during storage and in transit. The more numerous the areas of cultivation, the greater the risk. This evident fact, coupled with the high cost of effective security measures, has led to progressive concentration of poppy cultivation within producing countries and to reduction in the number of countries undertaking such production; and the adoption of international legislation to this end, as in the 1953 Protocol and again in the 1961 Convention, has further stimulated the process of concentration. In 1972 only five countries produced more than one ton each for approved purposes. Thus opium production is now geographically more concentrated and the pattern of trading in opium has been greatly simplified. Even so, constant vigilance is necessary to ensure that security measures are maintained at a high level of efficiency, both to guard against the spread of addictive resort to opium in the producing countries as well as in the interests of the world community. From the evidence available to the Board it seems that such vigilance is being displayed by the national control authorities in the countries where opium is licitly produced.

29. Supplies to international illicit channels now stem almost entirely from areas where governmental control is ineffectual or non-existent. In some of these areas, for example in South Central and South East Asia, the opium poppy has been a traditional crop for generations, and until recently opium was produced solely for domestic consumption, primarily as a household remedy for a variety of ailments.

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<sup>2/</sup> The opium situation is further considered on pages i to xiv.

Steepening demand for opium derivatives in the illicit market in recent years coincided with the tightening of controls over authorized poppy cultivation, and these and other external factors gave a powerful fillip to illicit and uncontrolled production and have created a situation which cannot be easily regularized. The national governments are greatly handicapped in imposing controls. The poppy fields are often in remote places which are difficult of access; the growers may be primitive tribal people not readily amenable to authority of the central government; opium may be their only cash crop; the region may be the scene of civil or military conflict. These and similar factors are to be found, singly or in combination, throughout the areas which constitute a substantial source of opiates moving in illicit channels.

30. It is hardly to be expected that the governments concerned could cope successfully with handicaps of this magnitude, particularly if as is often the case they are lacking in administrative and financial resources. Much external aid is being given by governments, bilaterally and multilaterally, and international organs, including the Board, are assisting as far as practicable. But much more help will be required in order to contrive and carry through effective counter measures and where the contributory factors are so deep-seated it will clearly continue to be needed for many years.

31. Licit trade in opium and opium products is effectively governed by the controls applied under the treaties and has presented few problems in recent years.

32. Illicit traffic on the other hand constitutes a great and growing menace to society. Being highly organized and involving, as it does, vast sums of money it entails a substantial diversion of human resources, both in those deployed in the traffic and in measures which society is required to take to protect itself. The latter are now extensive and varied and involve a high degree of co-operation on the international plane. Members of national preventive staffs work closely with one another, both in direct association and through links created by international bodies. This applies indeed not merely to the illicit movement of opium but to the whole field of illicit traffic in substances covered by the treaties. There is now in fact a growing number of combined operations directed to a common objective. Thus, Afghanistan, Iran, Pakistan and Turkey have been brought together in an Ad Hoc Committee of the Commission on Narcotic Drugs, now given the status of a Sub-Commission, to co-ordinate the national activities to counter drug abuse; an Ad Hoc Committee has also been formed between countries of the Far East; the member countries of the European Economic Community maintain a continuous joint study of all aspects of the drug problem within their combined jurisdiction; South American countries have also joined in a regional effort to combat illicit traffic; the International Criminal Police Organisation has long had a significant share in such conjoint action; the Customs Co-operation Council set up twenty years ago and now including some 70 countries, has agreed to include prominently in its purview the illicit traffic in narcotic drugs. An important contribution by the United Nations has been the establishment, with finance provided by the Fund for Drug Abuse Control, of a Central Training Unit for Enforcement Officers which provides training both in Geneva and at the Headquarters of the International Criminal Police Organisation and has also conducted regional training courses in Latin America and similar courses in Iran and Afghanistan.

33. The growing alliance of preventive forces of which these are the more outstanding examples is welcome as an essential element in the world campaign against the spreading phenomenon of drug abuse. It must be not only maintained but extended and

reinforced as and when shown to be necessary and to ensure the best chances of success it should at all times be concentrated as near as possible to the sources of supply.

34. Compared with the early years of international control, and even with the situation prevailing at the end of the Second World War, the use of opium as an indulgence has now greatly diminished. It is still practised by substantial numbers of people in various parts of the world and the total quantity so consumed is still disquietingly large. The Parties to the 1961 Convention are pledged to eliminate quasi-medical and non-medical consumption of opium and reports show that, with inevitable variations in pace and degree deriving from local circumstances, remedial efforts are being undertaken. Where non-medical consumption persists it is mainly in or near the areas of illicit or uncontrolled poppy cultivation; and in these places eradication will necessarily be slow by reason of the prevailing economic and social conditions. This would require administrative resources far beyond what are currently available. Moreover, until the poverty and primitive way of life of the inhabitants can be substantially relieved it would be harsh to deprive them of opium as a natural medicament.

35. Misuse of opiates is most pronounced in respect of heroin, there being relatively little addiction to morphine at the present time, while the erstwhile abusive resort to codeine - for example by way of cough mixtures and similar compounds - is less in evidence. The latter was in fact always minimal and was perhaps no more than an early example of the present recourse to whatever drug may be available and thus a preliminary symptom of the subsequent epidemic of multi-drug abuse. Heroin in fact retains its primacy in the field of abuse - not in quantity or in geographical spread, in which it is far exceeded by other drugs such as cannabis and the central nervous system stimulants and depressants - but in potency and in power of attraction. Abuse is still growing, though the rate of growth is less than that observable in respect of other dependence-producing substances. In some places there is reported to be a levelling-off and even a decline in demand, but it is too early to discern whether this may be a continuing trend, even in areas where its popularity may seem to be waning. In other areas, notably in certain Asian countries, there has been a disturbing rise in heroin consumption among populations whose drug of indulgence was formerly opium.

36. Side by side with measures to limit supply and prevent illicit movement much thought and effort have been expended in a number of countries in devising and implementing programmes of treatment and rehabilitation of those who have fallen victim to opiate addiction. Though the methods employed must of necessity vary with differing levels of economic and social development the knowledge accumulated in the execution of these programmes can have a general value and it is desirable that the sharing of experience which has already begun should continue, particularly where a measure of success can be claimed.

#### Coca leaves and cocaine

37. The circumstances of cultivation of the coca-bush have undergone few if any changes during the past three decades. Cultivation at present is confined to a few countries in the Andean regions of South America where the bush is indigenous. Production here is very extensive: far in excess of what is needed to supply the much-reduced demand for cocaine in medical practice.

38. Nor, apart from cocaine's still dwindling role in the pharmacopoeia, has there been a significant change in the usage of the leaves of the bush. The statistics available to the Board show that only 5 per cent of the quantity of coca-leaves produced passes into industrial use: for the licit manufacture of cocaine and for the extraction of a flavouring agent for beverages. But the statistical returns of producers are deficient - to the point of being no more than approximations - so that the Board's information in regard to production is far from complete. It follows that the quantity of coca-leaves produced for non-medical consumption is much larger even than would appear from the present statistics; and this must be a matter for profound disquiet.

39. It is now accepted opinion that protracted chewing of coca-leaves leads to physical debilitation; and when, as is all too often the case, it is accompanied by over-indulgence in the crude alcohol consumed in those regions, the effect can be disastrous to the individual and severely detrimental to the community of which he is a member.

40. The situation cries out for remedy, yet it is hard to see how effective reforms can be speedily brought about. United Nations organs have repeatedly striven to promote the adoption of remedial measures and have done so by various means at their disposal: by correspondence, by personal visits, and by holding seminars in the countries of coca cultivation. Within the last ten years the Board has sent three separate missions - in 1964, 1966 and 1973 - each of which has visited all the countries involved, namely Bolivia, Peru, Colombia and Ecuador, and has had long discussions with senior officials and with Ministers, including on two occasions the President of Bolivia. Coca cultivation has been prohibited in Colombia and Ecuador and there seems, and has indeed seemed for some years, to be a genuine disposition among members of the governments of the other two countries in favour of the changes which the Board would wish to see, but there is little evidence so far of any early possibility of positive moves in this direction. Due allowance must of course be made for the economic and political problems with which they are confronted, yet a beginning could certainly be made and the governments must continue to be pressed to undertake this.

41. The economic and other difficulties facing these countries are not to be underrated. As was recalled in the Board's report for 1972, coca-chewing is a traditional practice of very long standing among the people inhabiting the Andean uplands and they can hardly be weaned from it therefore except over a period of years. Even more formidable is the problem of raising their exceptionally low standard of living and of mitigating the natural hazards, such as droughts and earthquakes, which periodically befall them. Until substantial improvement can be effected in their economic and social level they can only with great difficulty be dissuaded from turning to the dangerous solace afforded by a natural product which is so freely available.

42. Yet despite the daunting difficulties it is essential that the campaign should be put in hand as soon as possible, the more so if final success is to be regarded as but a distant prospect; and it should be vigorously prosecuted without remission, in the interest first and foremost of the welfare of the local population, and furthermore because of the growing stream of crude cocaine from these areas into illicit channels. Following extensive misuse in the first decades of the present century which resulted

in its subjection to the controls imposed by the 1925 Convention cocaine virtually vanished from the international illicit market, but it has latterly reappeared on the scene as an ingredient of multi-drug abuse.

### Cannabis

43. As is well known, cannabis as a drug of abuse presents itself in several forms: the leaves of the plant, the flowering tops and the resin exuding from the flower-heads; and it is consumed in a variety of ways in different parts of the world. There is thus considerable variation in the strength of cannabis found on sale in the illicit market. One recent scientific report <sup>3/</sup> depicted a three-hundred-fold range in potency; from 0.14 mg. to 41 mg. of tetrahydrocannabinol. The range has now been greatly extended by the appearance in the illicit traffic of liquid cannabis with a very high content of tetrahydrocannabinol, seven to eight times that of the strongest resin. Following its first appearance, referred to in the Board's annual report for 1972, there have been reports of more seizures in 1973, indicating that it is finding its way to a number of countries. This development obviously carries grave implications, both for further expansion of the already massive volume of illicit traffic in this substance and for future patterns of cannabis abuse. For not only is this concentrated form easier and more economic to transport, it also lends itself more readily to concealment; and if the toxic elements should hereafter be more freely purveyed to individuals this might give rise to new and yet more dangerous forms of consumption.

44. In terms of quantity cannabis continues to be the major element in the illicit traffic and the total volume is expanding year by year. Its phenomenal growth, especially in the United States, but also more recently in countries of western Europe, is probably attributable in large part to the fact that the cannabis in illicit channels has hitherto been mostly of relatively low potency, leading to the widespread assumption, even among non-consumers, that it is a harmless drug.

45. There is continual variation in the routes followed by traffickers, both within individual countries and across national frontiers; and increasing ingenuity is shown in the methods employed by smugglers and in devices for concealment.

46. Two main streams can be discerned in the northward flow of cannabis across Europe: one from Africa through the Iberian Peninsula; the other from the Near East via the Balkan region. The preventive forces along these routes are commendably vigilant and many seizures are made; but reports that the illicit wholesale price remains steady even after larger than average seizures suggest that the volume of the stream is not thereby significantly diminished. This may be due in part to the growing number of new recruits to the ranks of professional traffickers, these being in outward appearance indistinguishable from ordinary tourists.

47. There seems to be no abatement in the long-standing traffic from eastern Mediterranean countries into Egypt; nor in the flow from Central America to the United States and beyond, and substantial seizures have been reported in the Caribbean islands.

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<sup>3/</sup> Professor J.W. Fairbairn: Nature (in press).

48. In a number of African countries south of the Sahara the use of cannabis has noticeably increased in recent years, particularly among young people in urban centres who are faced with the problems of unemployment and of detachment from their traditional environment. Some of them take cannabis in combination with alcohol and barbiturates, or with alcohol and amphetamines. The ready availability of cannabis also serves to attract a certain type of tourist and the numbers of such tourists have been growing for some time, particularly in Central and West Africa.

49. From West Africa it is reported that there is increased cultivation of cannabis, and that consumers are turning more towards the use of varied drugs, including barbiturates, thereby conforming to a trend which has long been observable in countries where addiction is more advanced.

50. This association of cannabis with other drugs regarded by users as less dangerous is in fact a general phenomenon which, it seems, is becoming more and more prevalent; and it is giving rise to a growing belief among some observers that, whereas cannabis users may experience no urge to graduate to heroin, its hallucinogenic potential may well lead consumers on to the use of stronger hallucinogens. Further research will be needed to establish the validity of this theory, but it is perhaps not without significance that in their campaign against the illicit traffic stream which transits the Iberian Peninsula the Spanish authorities have lately reported sharp increases in the number of seizures of LSD and in the quantities seized.

51. The cannabis habit is spreading in South East Asian countries where opium has long been the traditional drug of abuse. Thus in Singapore, where the first recorded seizure of cannabis resin was reported in 1971, the government has for several years been concerned over the abuse of cannabis among the younger generation; and in the neighbouring country of Malaysia more than one ton of cannabis was seized in 1972.

52. Basic research on cannabis is growing very rapidly in a number of countries and the detailed data yielded thereby is gradually enhancing scientific knowledge of this substance; yet much has still to be learnt, especially in regard to effects of long-term consumption.

53. The need for fuller knowledge is rendered even more urgent by the newly-manifested availability of cannabis concentrate in liquid form, which evidently opens up disquieting, not to say alarming, new perspectives.

54. It is to be hoped that as these possibilities become more widely appreciated there may be some easing of the persistent pressure in some countries for a degree of tolerance towards cannabis consumption and for relaxation of the law, at least in regard to possession for personal use. In the meantime it is reassuring that all the governments concerned are firmly resisting any weakening of their present control regimes.

#### Psychotropic Substances

55. Over the past two decades the central nervous system stimulants and depressants and, more recently, powerful hallucinogens have aroused increasing concern as an element in the spectrum of drug abuse. The onset of this new development was not immediately perceived, being masked by the rapidly extending use of these substances

in medical practice. In 1956 the Commission on Narcotic Drugs 4/ called public attention to the dangers inherent in overindulgence in amphetamines and recommended governments to bring them under control; and in 1965 the World Health Assembly 5/ gave a similar warning in regard to the abuse of sedatives which it observed was approaching epidemic growth among young people in certain countries.

56. The Board also in the course of its annual commentaries on the international situation referred to the danger 6/ that addicts deprived of narcotic substances may turn to these uncontrolled drugs.

57. By 1965, as indicated in the Board's report for that year, the countries more directly affected had enacted legislation on the lines recommended by the international organs. But the checks imposed by these enactments proved inadequate and in 1966 the Commission on Narcotic Drugs unanimously recommended that national controls of dangerous psychotropic substances should be made mandatory by international agreement. This recommendation, which naturally had the full support of the Board, was fulfilled in 1971 by the adoption at the Vienna Conference of the Convention on Psychotropic Substances.

58. Thus the challenge presented by the new development has been progressively met by defensive measures, first on the national, then on the international plane. It should be added, however, that while less than three years have elapsed since the Vienna Conference, nevertheless it is nearly twenty years since the dangers of addictive resort to such drugs first became apparent to international bodies; yet by the end of 1973 only fifteen countries have formally ratified or acceded to the international legislation which has by common consent been found necessary. Making due allowance for the problems entailed for governments in adhering to so complex an agreement as the 1971 Convention a more expeditious response is surely called for.

59. No doubt in the countries immediately affected by abuse of these substances internal measures have for some time past been introduced to meet the domestic situation, but in the absence of international legislation these have not sufficed to prevent invasion by supplies from other countries.

60. It has also to be acknowledged that a large number of countries are complying in advance with the provisions in the Convention which require the supply of statistical information. No less than 83 countries have responded to a questionnaire issued by the Board in 1971 in pursuance of Resolution I of the Vienna Conference and Resolution 1576 (L) of the Economic and Social Council. Although the statistics so far assembled are still incomplete they nevertheless throw light on international trade in these substances. The fact that importing countries have provided figures more readily than manufacturing countries inevitably entails certain discrepancies in the totals, but these will be reconciled as the Board receives a wider response to its annual calls for information.

61. From the 1971 figures it is clear that the manufacture in that year of the more dangerous drugs listed in schedule I of the Convention was very small and included D.M.T. (Dimethyltryptamine), Mescaline and Tetrahydrocannabinol. Of these Mescaline was imported by sixteen countries from four exporting countries.

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4/ Document E/2891 - E/CN.7/315, para. 328.

5/ 18th World Health Assembly, May 1965, resolution 47.

6/ Documents E/OB/21, para. 164 and E/OB/19, para. 34.

62. Of the substances listed in Schedule II the most prominent was amphetamine with a total declared manufacture of 47,000 kg evenly divided between two countries; but almost 900 kg of this total was utilized in the manufacture of exempted preparations or of non-psychoactive products. Over 30 countries imported more than 1 kg of this substance from six exporting countries and the total declared exports amounted to 6,500 kg. Six countries exported a total of just over 5,000 kg of dexamphetamine to 25 importing countries. No manufacture of, and trade in, phencyclidine was reported.

63. Drugs included in Schedule III were imported by more than 30 countries, the most widely distributed substance being amobarbital with a total import of more than 20,000 kg. A similar quantity of glutethimide was manufactured and 70 per cent of this was by a single country.

64. Seven countries reported manufacture of substances listed in Schedule IV and 48 countries imported quantities exceeding 1 kg, the largest totals being those of meprobamate at nearly 112,000 kg and phenobarbital at nearly 80,000 kg.

65. The assembly of these statistics is a useful first step towards surveillance over the movement of drugs which the Vienna Conference scheduled as being of significance in this field. It may be that the figures supplied in respect of the year 1972 will prove to be somewhat ampler and therefore even more informative; but only when all manufacturing and importing countries have unreservedly responded to the Board's initiative will it be possible to present a complete and accurate picture of the licit international movement of these substances. It is to be hoped therefore that those countries which have yet to provide figures will do so without avoidable delay and that thereafter all national authorities will co-operate in submitting complete and accurate returns.

66. But more is required than a statistical survey. Even from the present limited evidence there are clear indications that, taken as a whole, abusive resort to these substances is not diminishing and that it is spreading to more countries, including some in Africa and in Asia. While it would seem that in certain places efficient police action combined with voluntary restraints adopted by doctors and pharmacists may have led to a fall in amphetamine consumption this is by no means a general phenomenon. It may be too that there are now fewer people prepared to incur the dangers of experimenting with LSD. On the other hand there seems little doubt that misuse of barbiturates is on the increase.

67. The situation should not be allowed to drift further and the Board trusts that all governments which have not already done so will urgently consider ratifying the 1971 Convention, remembering that abstention by a single country trading in these substances may result in evasion of internal controls in other countries.

MEASURES ADOPTED BY NATIONAL AUTHORITIES  
IN RESPECT OF DRUG CONTROL

68. Illicit production and distribution of dangerous drugs for non-medical consumption are effected through a series of transactions involving a number of countries, but the problems thereby created for the governments concerned are peculiar to each country and national counter-measures are naturally determined by the prevailing local circumstances.

69. The international treaties are designed to assist them in meeting these problems by first establishing close control over the various stages of trade in and distribution of these substances for licit consumption, and the basic responsibility for the operation of the control system provided by the treaties rests with the national authorities since they alone can regulate the movement of such substances within their respective jurisdictions. The supervision exercised by the Board is directed to ensuring that the treaty provisions are duly observed by all countries, for the evident reason that any illegal activities resulting from weaknesses in national controls not only harm the countries in which they occur but also undermine the effectiveness of the international network of which these controls form part.

70. While the obligations expressly assumed by Parties are to take certain defined action to guard against drug abuse it goes without saying that they should also take whatever additional measures may be needed to cope with particular problems arising from abusive consumption of dangerous substances within their national boundaries. Each Party is of course best situated to decide what steps are in fact called for and would be appropriate to its special circumstances. Where the degree of abuse is such as to give rise to public concern official measures are in a number of instances aided and supplemented by spontaneous action on the part of non-governmental bodies acting on behalf of the general community.

71. In some countries there is illicit traffic passing through their territories to destinations elsewhere; in others there may be illicit conversion of raw materials into intermediate or end products; in yet others, serious difficulties are presented by the existence of illicit or uncontrolled production of raw materials which may be diverted to illicit manufacture of dangerous drugs. All these likewise call for vigorous and sustained action by the national authorities to the limit of their capacity.

72. A brief summary is appended of the current situation in countries where the problems of drug abuse, or illicit traffic or uncontrolled production of raw materials, are most prominent and of the measures taken to meet these problems.

#### Afghanistan

73. The opium poppy grows freely in parts of Afghanistan and its cultivation has figured in the agricultural economy for generations. Originally production was mostly for domestic consumption but there seems also to have been some long-standing export to adjoining regions, though probably in limited quantities owing to the restriction imposed on the movement of men and goods by the nature of the terrain. As transport facilities improved in the post-war period it was clear that illicit traffickers would turn increasingly to this potential source of supply as a consequence of the progressive curtailment of opium production in Turkey; and this possibility was enhanced by the considerable inflow of foreign tourists seeking cannabis, which is readily available in its more potent forms in this part of South Central Asia.

74. Following its frequent expressions of concern the Board was, as announced in its 1972 Report, invited to send representatives to Kabul in January 1973 to review the situation at first-hand in consultation with the Government. The mission was given a frank and cordial reception by senior ministers, including the Prime Minister, and was enabled to have full discussions with the principal administrative officers concerned with the several aspects of the problem. These exchanges confirmed the

general impressions previously gathered by the Board and expressed in paragraphs 66-69 of its last Annual Report: the central Government recognizes the damaging consequences, international and domestic, of the present scale of contraband traffic in Afghanistan but lacks sufficient financial and administrative resources to institute effective counter measures. Co-operation with resident and visiting representatives of international bodies is proceeding and, following a number of missions to Afghanistan between September 1972 and September 1973, some headway is reported to have been made in strengthening means of law enforcement. Discussions are also in process between the Government and representatives of the United Nations and of the Food and Agriculture Organization with a view to initiating projects for crop substitution and community development. Meanwhile the Government is taking action against illicit traffickers and this has resulted in significant seizures of contraband.

75. The sum of these activities constitutes a welcome creative approach but the tasks still to be accomplished are heavy and complex and appreciable overall progress cannot be looked for without external aid, some of which could well be bilateral. In the opinion of the Government the most acutely difficult part of the problem is presented by the remote, and seasonally inaccessible, north-eastern province of Badakhshan.

76. Some check to fulfilment of the plans so far outlined seemed likely to result from the recent political changes, but the Board has since been advised on good authority that the new regime can be expected to be no less co-operative than its predecessor.

77. This is reassuring as far as it goes, but much more is required: a strenuous, uphill road lies ahead; and vigorous efforts, coupled with great tenacity of purpose on the part of all concerned, will be necessary if the present streams of dangerous raw materials - opium and cannabis - into international illicit channels are first to be stemmed and ultimately eliminated.

#### Iran

78. The Government continues to give proof of its readiness to co-operate in the international drug control system and to comply with all the provisions of the 1961 Convention which it ratified in 1972. Since poppy cultivation was resumed in 1969 it has been restricted to production of opium for domestic consumption and the area is annually regulated by reference to the quantity of opium in stock. The decision to reduce the area from 20,000 to 2,000 hectares was duly fulfilled and the area actually producing opium in 1973 was 2,250 hectares. At the same time the number of producing provinces was reduced from 19 to 14. Control over production is exercised by the Government Monopoly and the Board has so far received no indication of diversion to illegitimate purposes.

79. Registration of addicts is gradually being extended, rising from 110,000 to nearly 118,000 in 1973; but it is still far from complete and the Government estimates that the true total may be twice the latter figure. Most of them consume opium; nevertheless heroin addiction persists and there seems also to be some resort to psychotropic substances, mainly barbiturates, either in association with or in substitution for opiates.

80. Treatment and rehabilitation of addicts is likewise being pursued and nearly eleven thousand persons are reported to have been treated in 1972; but this number merely reflects the capacity of the present treatment centres and does not reveal the full dimensions of the need. Pending completion of the additional hospitals now under construction full use might be made of experience, obtainable through the United Nations Organization, in redemptive methods requiring less staff and accommodation which have been applied with some success in Hong Kong.

81. The frequent contraband seizures bear witness to commendable activity on the part of the preventive forces, but they also show that illicit traffic continues at a high level. All but five per cent of the consignments of opium seized in 1972 came from the east of the country; and most of the persons arrested also carried small quantities of cannabis.

82. By the courtesy of the Government the Board's mission to Afghanistan in January 1973 was enabled at the same time to visit Teheran to confer with ministers and high officials and with members of international organizations stationed in Iran regarding national and regional measures to bring the situation under effective control. The evidence is encouraging. A broadly-conceived campaign of economic improvement is being prosecuted and much has already been achieved; yet much still remains to be done. As in all countries where opium consumption is traditional its elimination is bound to be a long and complicated process, necessitating inter alia a comprehensive improvement in the rural way of life. Iran has already made substantial progress in this direction as well as in the diversification of agriculture and the experience gained thereby could be of service to other countries where similar programmes of economic reform are still at an early stage.

83. An effective instrument for such exchange of experience and for continuing co-operation between the Governments of Iran, Afghanistan, Pakistan and Turkey is the Ad Hoc Committee set up by the Commission on Narcotic Drugs and now transmuted into the Sub-Commission on illicit traffic for the Near and Middle East. In particular it is to be hoped that this body will be able to find speedy means of checking the east-west flow of contraband opium and cannabis across this region, which is now causing widespread concern to governments and the general public in many countries.

#### Pakistan

84. Government policies in respect of dangerous drugs have always closely matched those followed in its neighbour India and they derive from the same traditional attitudes of official restraint supported by public disapprobation of abusive indulgence in these substances. In recent years, however, the situation has been complicated by the heightened significance acquired by uncontrolled poppy cultivation within and beyond the north-western frontiers of Pakistan and by the considerable flow of potent forms of cannabis from the same general region. As has been recognized in earlier reports of the Board the authorities were conscious of the implications which these developments have for Pakistan and they have endeavoured to modernize and reinvigorate their apparatus of controls. They also realized the importance of co-operation with their counterparts in adjoining countries and they were represented in the Ad Hoc Committee which has now become the Sub-Commission on Illicit Traffic in

the Near and Middle East. But the preventive forces have hitherto been hampered by lack of adequate sea and land transport and other essential equipment and the country's straitened finances would not enable the deficiency to be supplied without substantial external aid.

85. The deficiency is now within sight of being remedied. Fortified by assurances of substantial material and financial aid from the United States and with continuing access to expert guidance from the organizations of the United Nations family the Government has embarked on a radical reconstruction of its narcotics control administration, which is being given new leadership and substantial budgetary resources. Among other reforms, an intelligence system is being set up, the preventive forces are to receive modern equipment and the penal sections of the law are to be strengthened.

86. As a further measure of reform the progressive abolition of poppy cultivation which it is hoped will be completed in the near future is to be accompanied by reorganization of the agricultural economy in the affected areas. At the same time the quasi-medical consumption of opium, which is still substantial, will be eliminated through extension of the national health service; and medical treatment and rehabilitation are planned for those who have become dependent on drugs.

87. The President of Pakistan has publicly proclaimed the country's determination to succeed in carrying through this ambitious programme and has reaffirmed his Government's readiness to co-operate with the international community in rooting out the social evil of drug addiction. Public opinion which is naturally inclined to favour such a policy is to be mobilized in its support with a view to ostracizing contraband dealers and their associates.

88. Neither the President in his public declaration of the programme of reforms, nor the new head of the narcotics administration in his discussion with the Board during its autumn session in Geneva, is under any illusion as to the magnitude of the tasks which are being undertaken, particularly in suppressing, in those parts of the country where the government's authority is less than absolute and economic conditions are relatively low, a contraband traffic which carries high financial rewards.

89. The Government will need and should have every support and encouragement in bringing its programme to fulfilment.

#### Turkey

90. In 1973, for the first time for many years, there was no authorized production of opium: the culmination of the Government's recently adopted policy of progressive reduction of output. The passing of the decree of 29 June 1971 was an historic action, connoting as it did not only the termination of the Government Opium Monopoly established in 1933 but also the abandonment of an agricultural crop which has been cultivated in this country for centuries. It has been followed up by the inauguration of a multi-project development plan designed to raise the economic and social level of the region where poppy planting has been prohibited. The plan covers various aspects of agriculture, animal husbandry and rural industry and provides also for additional irrigation and the improvement of roads and other public services. While some of the projects are short-term others are scheduled to extend

over five years. The fact that budgetary provision has been made and that where necessary construction contracts have already been signed offers assurance that the programme will be duly fulfilled. In the meantime, and until they have found new means of livelihood, former opium farmers are to be indemnified for the loss of earnings from this source and in order to induce them to surrender the whole of their crops the rate of compensation is calculated on the basis of the total quantity of opium delivered to the monopoly within the last two years. How far this inducement will suffice to extinguish private hoards of opium has yet to appear. Nor can it be taken for granted that agriculturists throughout the country will observe the ban on poppy cultivation. In discussion with the Board's mission to Turkey in January 1972 the heads of the relevant departments were confident that the ban can be consistently enforced. Whether or not this confidence is well-founded it is clear that the Government has embarked on an arduous programme in which it will need a generous measure of encouragement and practical help over a long period. Weaning a conservative peasantry away from a form of agriculture so deeply rooted in tradition is in any circumstances a considerable undertaking; when the traditional product commands a high price in the illicit market and the illicit traffickers are numerous, ingenious and persistent the task becomes monumental; and it is only achievable by thoroughgoing changes in the existing patterns of agriculture. Each of these changes will of course be exposed to the hazards, normal and abnormal, which continually beset agriculture in all countries, so that those entrusted with the reforms can hardly escape a long series of frustrations and disappointments. The Government, however, is undaunted by the prospect, and is committed to a policy of firmness and vigilance. Vigilance will in fact be necessary on all fronts. So long as any substantial possibility of clandestine poppy cultivation remains the gendarmerie will need to maintain a country-wide lookout for hoards of opium, since the opium poppy can be grown in twenty or more provinces. Moreover, as stated in the Board's 1972 Report, there is a persistent risk of Turkey becoming a highway for illicit traffic in cannabis and morphine base moving across the country into Europe from sources beyond the frontiers of Turkey, and all the national preventive forces will be required to join with their counterparts in other countries in the Near and Middle East in suppressing this traffic.

### Nepal

91. In a recent announcement by the Prime Minister the Government of Nepal declared its intention to prohibit both the cultivation of the opium poppy and the cannabis plant and the export of opium and cannabis. Legislation is to be introduced to this effect and measures are to be devised to assist farmers adversely affected by the bans. This is a welcome initiative and it will be particularly welcome to India, whose programme of gradual elimination of non-medical consumption of cannabis has been hampered by a heavy inflow of the drug in its several forms from Nepal in recent years.

92. By what means the new legislation is to be enforced has not yet been made clear. The task will be far from easy. The area of cultivation is extensive; the terrain is unfavourable to vehicular movement; the frontier with India is long and open, offering little impediment to smugglers; and the financial rewards of smuggling are large.

93. A clearer understanding of the present situation of the probable course of future progress may become possible when the Board has had the personal discussions which it has long sought to have with the Government and to which it was orally invited by the Minister of Health in May 1973. Having now received a formal invitation, the Board has undertaken to send a mission to Khatmandu for this purpose during the month of December.

94. Meanwhile the Government has of its own accord sought technical assistance from the United Nations, first in drafting appropriate legislation and more recently in designing consequential measures such as crop substitution. In so doing it has demonstrated its resolve to make its new policy effective; but it would be unrealistic to suppose that success is attainable except by long, sustained effort over a number of years, having regard to the lure of easy gains which the natural facilities for smuggling in this region hold out to a farming population little above subsistence level.

#### Thailand - Burma - Laos

95. Opium has been produced in this part of South East Asia for generations, but at first this production had little more than local significance, being mainly for consumption by the producers themselves as a household remedy for natural ailments such as intestinal disorders. As time passed some of it began to find its way into illicit channels, despite the difficulties of transport in what was then for the most part an undeveloped and sparsely inhabited region of hill and forest.

96. In recent times, however, the area surrounding the conjunction of the frontiers of these three countries has become a major source of illicit supply by reason of a combination of factors including the growing world demand, the shrinking of supplies from Turkey, the presence in this area of guerilla groups supporting themselves from the proceeds of various forms of contraband and the continuing armed conflict in South East Asia. Not only has the supply of illicit opium been greatly expanded, factories have also sprung up for its conversion into morphine and heroin, which can be carried more easily and with less risk of detection.

97. The situation is thus compounded of rural poverty, social disturbance and political unrest, as well as individual cupidity and the other usual ingredients of contraband traffic. So complex and deep-seated a problem cannot be easily or quickly resolved. Remedies have to be sought firstly in effective containment by co-ordinated operations of the three national preventive forces, coupled with long-term measures for rural uplift, medical treatment of drug-dependent persons and a rise in the general level of education.

#### Thailand

98. Extensive illicit cultivation of the opium poppy still persists in the Northern part of Thailand as in the adjoining districts of Burma and Laos. Some part of the opium produced in this general region supplies a large addict population in Thailand, but a significant portion is converted into morphine or heroin. Some of this too is locally consumed, but a great deal of both the opium and the morphine and heroin are channelled through Thailand into the international illicit traffic.

99. Opium poppy cultivation has been illegal in Thailand since 1959, but the difficulty of access and remoteness of this part of Thailand have hampered the national authorities in their efforts to exercise effective control, and the hill tribes who inhabit the area have continued to produce opium both for their own consumption and as a cash crop. Much of it passes to the several insurgent groups operating in this area, who finance themselves from contraband traffic in this opium or in the opiates which they obtain from it.

100. In endeavouring to discourage poppy cultivation the national authorities have with substantial external assistance, both multilateral and bilateral, been carrying out an important pilot programme of crop substitution. Problems have inevitably been encountered both in finding suitable alternative crops and in ensuring that the substitute crops are marketable and yield an adequate financial return to the cultivators; but these are being steadily overcome and the organizers are now sufficiently encouraged to feel confident that poppy cultivation in this area can in time be replaced by other forms of agriculture acceptable to the inhabitants. This is heartening news - the more so because the lessons learned from this experience can be applied in similar projects in other countries. The Thai authorities have also, - again with help from outside sources, - strengthened their enforcement agencies, which have in consequence achieved significant success in combating the illicit traffic in opium and opiates. Much of the traffic is centred round the junction of the frontiers of Thailand, Burma and Laos and co-operation between the preventive forces of all three countries is obviously essential; and recent major seizures confirm that the national forces are now working more closely together.

101. Since Thailand has many opium addicts and since an increasing number of young people have become dependent on morphine and heroin the overall programme for drug abuse control which is being co-ordinated by the United Nations Organization includes treatment and rehabilitation under the guidance of the World Health Organization. It is intended also to provide means of drug education with assistance from the United Nations Educational, Scientific and Cultural Organization.

#### Burma

102. The impression gathered by the Board's mission in July-August 1972 as to the Government's constructive response to the challenge presented by massive illicit traffic within, and more especially immediately beyond, its frontiers have been fully borne out by subsequent events. Since then Burma's preventive forces have intensified their activities and have collaborated with those of Thailand, with encouraging and occasionally spectacular results. At the same time dissident elements in the northerly provinces seem to have been less in evidence, giving hopes of a more favourable outlook for governmental schemes directed to social and economic betterment.

103. These developments are wholly welcome. On the home front they may be further stimulated by the recent appearance of heroin addiction among certain sectors of the population. Externally they could well open up encouraging perspectives for increased conjoint operations with the preventive forces of Laos and Thailand. From all points of view they deserve to be supported by external aid in whatever form may be acceptable to the Government.

## Laos

104. The Government hopes in time to play a due part in programmes for drug abuse control of which the foundations have been laid in Thailand with some initial success; and already, under the direct leadership of the Head of State and with bilateral external aid, it has embarked on its own programme of crop substitution, treatment of addicts and sterner measures against the illicit traffic. To this end it enacted a law in 1971 limiting opium poppy cultivation and prohibiting the manufacture, consumption, sale, purchase and possession of opium and opium derivatives; and in June 1973 it became a Party to the 1961 Convention. In so doing it has firmly established its credentials and qualified itself for further external financial and technical aid in due course.

## Republic of Viet-Nam

105. To swell the distresses occasioned by years of armed conflict this country is now burdened with a large addict population. If as stated by its observer to the twenty-fifth session of the Commission on Narcotic Drugs, there are now approximately a hundred thousand opium addicts and between eleven and fifteen thousand persons addicted to morphine or heroin the burden is indeed a heavy one.

106. Effective measures of drug control can hardly be expected until there is much further easement of the present deeply troubled conditions, but so grave a situation clearly should not be allowed to drift indefinitely and the Board hopes that the Government will maintain, and so far as possible increase, the efforts it is making to cope with the problems of drug abuse and illicit traffic.

## Hong Kong

107. The geographical situation of Hong Kong makes it almost inevitably an important centre for illicit traffic in opium and opiates from South East Asia and this activity continues, together with conversion into heroin, despite intensive action by a well-trained preventive force. There is also a substantial local consumption. Heroin remains the chief drug of abuse although opium is still smoked by many elderly addicts. Treatment and rehabilitation centres are maintained and it may be necessary to enlarge their capacity. Research is inter alia proceeding into possibilities of treatment by acupuncture.

108. At the invitation of the Government a mission of the Board will visit Hong Kong in December 1973.

## Lebanon

109. Implementation of the cannabis crop substitution project agreed upon between the Government and the United Nations Fund for Drug Abuse Control is shortly to be undertaken with expert assistance from the Food and Agriculture Organization and the United Nations Organization, and aerial photography has already been carried out during the harvest in September 1973. The Board trusts that completion of this project will both aid and encourage the Lebanese authorities in continuing their efforts to suppress cannabis cultivation and induce the growers to turn to other means of livelihood.

110. For the time being, however, Lebanon remains a copious source of supply of cannabis and cannabis resin to the international illicit traffic and the Government should therefore intensify its campaign against the traffickers.

#### Morocco

111. Cultivation of the cannabis plant is prohibited, yet illicit cultivation nevertheless persists. Much of the output is sold clandestinely in the local market, but large quantities still find their way into international illicit channels. The Board hopes that the Government will persevere in its efforts to suppress this activity throughout the country. The ban on production will not suffice without additional counter-measures: so long as the demand continues ways and means will always be found to meet it unless the campaign against traffickers is intensified and vigorously pursued.

#### South American Mission

112. The Board has long been deeply concerned over the continuing over-abundant cultivation of coca leaves in the Andean region, and the increased quantities of cocaine entering the illicit traffic, and it readily responded to the invitation of the Governments of Bolivia, Peru, Ecuador and Colombia to send an advisory mission to these countries early in 1973.

113. The mission's chief impression was that there is urgent need for more vigorous and purposeful efforts on the part of the Governments of Bolivia and Peru to restrict the plantations of coca-bush and on the part of all the Governments to co-operate more closely with one another in checking illicit traffic. It found that in practical terms the application of restraints to coca-cultivation in Bolivia and Peru has hardly begun and that there is little or no co-operation between the frontier officials of adjoining countries. The mission felt that more progress would be achieved if in each country there were a clearly defined programme under continuous review by a special body required to submit periodic reports to the Government and to advise on what further action, including legislation, might be necessary from time to time; and if these bodies were to meet at suitable intervals in regional conferences to harmonize their programmes and to devise concerted measures as needed. The Governments could count on advice and practical assistance from United Nations organs in furthering review and reinforcement of the national control mechanisms. The importance of periodic regional conferences was recognized at the conference of South American countries which met in Buenos Aires in 1973 and has agreed to meet again next year, while the value of transfrontier co-operation is too obvious to need to be stressed.

#### Bolivia

114. The general low economic level of the population, plus the fact that coca-cultivation is the main source of income of thousands of small farmers impart a high degree of intractability to the problem in Bolivia. The mission found that since the two earlier missions in 1964 and 1966 little progress had been made. Basic legislation and regulations are still lacking and there is an absence of proper co-ordination between the Government departments involved.

115. Following the present mission, however, the prospect now seems somewhat brighter. The personal interest of the President has been aroused; a national commission has been set up; the law is being reframed. Attention needs to be focused on illicit manufacture of, and traffic in, cocaine; and plans should as soon as possible be drawn up for control of coca plantations and progressive reduction of the crop.

116. This is a considerable undertaking, beyond the resources of this economically isolated country and external aid will be necessary if it is to be achieved.

#### Peru

117. Here too the problem is deep-seated and not amenable to other than long-term solution.

118. During its stay in Lima, the mission was enabled to have a series of discussions with Ministers and senior officials of all the relevant departments of Government: Foreign Affairs, Interior, Agriculture, Health and Industry and Commerce. It seems that studies which have so far been carried out have failed to provide a basis for a constructive programme of remedial measures, so that the hopes of early positive action which were expressed in the Board's annual report for 1972 have not materialized. The mission accordingly recommended further studies with the assistance of experts from the United Nations Organization and a request for such assistance has since been addressed to the United Nations Fund for Drug Abuse Control and is now under consideration.

#### Ecuador

119. The gradual improvement in the drug control structure of Ecuador continues. In the course of its visit the mission was told that co-ordination and control of the system is to be vested in a national commission attached to the President's office and that the Commission will include representatives from the Ministries of Public Health, Education, Defence and Interior. It also learned that misuse of cannabis is spreading and that increased quantities of cocaine are entering the illicit traffic. Evidently what is now required is closer collaboration with the preventive forces of adjoining countries in this region.

#### Colombia

120. The main significance of Colombia in respect of drug controls in South America derives from its geographical situation which offers facilities for illicit transit to other countries. At the time of the mission a new law was reported to be before the Congress, providing stiffer penalties for illicit production, trafficking or possession and it is to be hoped that this fresh deterrent will prove of value in checking the movement of contraband across the country.

#### European Economic Community

121. In the two years which have elapsed since the countries of the European Economic Community agreed to unite their efforts to cope with the drug problem steady progress has been made. Joint action under the several heads of the multi-disciplinary programme adopted at a conference in Rome in October 1972, to which reference was made

in the Board's last report, appears already to be showing good results. This is timely, for the dimensions of the problem are expanding. The flow of cannabis into and across Europe is considerable and the size of individual consignments which are seized suggests that the traffickers are optimistic of avoiding detection. There are indications also that heroin is entering Europe from the Far East.

122. On the other hand the former considerable stream of opiates through Europe to North America seems to have abated.

123. Still greater vigilance is evidently called for; and still closer co-operation between preventive services. Recent successes against the contraband traffic indicate that transfrontier co-operation is already good and a greater measure of it, particularly at ports of entry, would surely be fruitful.

#### United States of America

124. The Government's vigorous response to the challenge of drug abuse which was outlined in the Board's last report has been more than maintained in the current year. On the home front the central administration has been architected on new lines and given new leadership, both to improve enforcement and extend treatment and rehabilitation; and the pattern of activities in all disciplines, - from law enforcement to research, - has been extensively revised.

125. At the same time bilateral assistance to other countries willing to collaborate in the world campaign against the drug menace and participation in multilateral assistance directed to the same end have been continued and even expanded, though already on a generous scale.

126. In evidence of the high degree of importance which the Government attaches to this subject the co-ordination of all national measures relating to the "demand" element of the problem, - treatment, rehabilitation, research and education, - has been centred in the White House, while the direction of international measures is in the hands of a special Cabinet Committee under the chairmanship of the Secretary of State.

127. The momentum thus imparted to the campaign, national and international, is considerable and is having major tangible effects. Even so the President acknowledged in a press conference in September that much further effort is still needed.

#### CO-OPERATION OF INTERNATIONAL BODIES IN DRUG ABUSE CONTROL

128. Individual action by governments against drug abuse would fall short of its purpose unless supplemented by international co-operation, not only in combating the illicit traffic but also in probing the underlying causes of this social phenomenon.

129. This co-operation is permanently expressed in the series of narcotics treaties in which the Parties have agreed to harmonize their actions and share in a common system whose effectiveness increases in proportion to the number of participants.

130. The 1961 Convention assigns specific functions to the Commission on Narcotic Drugs, an intergovernmental body, and to the International Narcotics Control Board; the Convention also entrusts responsibilities in this field to the General Assembly, the Economic and Social Council and the Secretary-General. Advice on medical questions is available to the Commission and to the Board from the World Health Organization.

131. Aside from the obligations assumed under the treaties international co-operation may also be extended directly through bilateral or regional agreements, or indirectly through the Specialized Agencies. Such action supplements the operation of the treaties and is often essential to fulfilment of their objectives, - for example by the adoption of multi-disciplinary programmes combining more effective application of the law with economic betterment.

132. The raw materials of drugs which are abused derive largely from areas where the Government is unable to exert full authority, perhaps because of remoteness or inaccessibility, and where also the economic level may be low and may afford the producers no other cash crop. The application of effective control in such areas may call for equipment or trained personnel beyond the resources of the Government. To meet such situations the United Nations Fund for Drug Abuse Control was created in April 1971, its function being to support essential measures up to the point where the national authorities can continue them unaided.

133. In certain instances such aid may be given bilaterally by a more highly developed country.

134. International co-operation is also provided by Specialized Agencies, such as the World Health Organization, the United Nations Educational, Scientific and Cultural Organization, the Food and Agriculture Organization and the International Labour Organisation, which provide such aid in this special field as may fall within their particular competence. Another example is the United Nations Social Defence Research Institute which is carrying out a series of selected country studies on drug abuse and the campaign against drug addiction.

135. Outside the United Nations family the Customs Co-operation Council and the International Criminal Police Organization, two virtually world-wide bodies, are stimulating and co-ordinating the efforts of their members against the illicit traffic.

136. There are also numerous instances of valuable assistance contributed by groups of countries; such as the League of Arab States; the members of the Colombo Plan and the European Economic Community, not to speak of the members of the Sub-Commission on Illicit Traffic in the Near and Middle East and the Ad Hoc Committee for the Far East Region, of which particular mention has been made elsewhere in this report.

137. The sum of their efforts represents a powerful reinforcement of the general campaign and is abundantly welcome.

## THE ROLE OF THE BOARD

138. From the beginning, the central function of the Board and its predecessors has been to ensure the implementation by States of the obligations they assume on becoming Parties to the treaties. When the first Board, - the Permanent Central Board, - began its work, it soon became apparent that a number of States, though ready to co-operate with the Board, were not in a position to set up the administrative apparatus needed to operate national controls and consequently to participate effectively in the international control system. This inability was due to the underdeveloped state of large territories and to their general lack of the economic resources and qualified personnel. Until recently the international control organs were virtually powerless in the face of such a situation: there could be no question of setting in motion against such States the procedures provided for in the treaties; the only remedy lays in patient endeavour to bring about administrative improvements in the States concerned, a gradual and extremely slow process.

139. Since then there has been an awakening of the world's conscience; development aid has become a basic instrument of international policy and for some time past such aid has in certain instances included the provision of technical advice on narcotics control. The establishment of the United Nations Fund for Drug Abuse Control, however, has opened up wider prospects and while aid often retains its traditional form it is now expected to attempt more radical changes and to seek to solve difficulties once thought to be insuperable.

140. The view is now gaining ground that in many cases international aid offers the most effective means of securing a reasonably satisfactory application of the treaties and achievement of the major objectives of the international community in this field. This conclusion must not, however, be taken to imply that treaty obligations have become obsolete or that States requesting aid can abstain from assuming their responsibilities until the aid arrives. On the contrary, the most generous aid would be rendered nugatory unless it engendered in those receiving it a strong desire and determination to fulfil the objectives for which it was granted.

141. It has been thought necessary to re-state these self-evident truths because they bear upon a particular aspect of the Board's control function which is assuming growing importance. When in the exercise of its general supervision the Board finds that a certain country is failing to comply with the provisions of the treaties it is in duty bound to examine the underlying circumstances; if it concludes that the Government is doing everything within its power and that the failure arises from factors which could be remedied by the grant of external financial or technical aid it must satisfy itself that the necessary conditions exist for profitable use to be made of the aid if it were forthcoming. These are judgements which are far more difficult than simple findings that the treaties have been breached and they are judgements which it is generally agreed that the Board is well placed to make.

142. Once a recommendation of this kind has been made it is then for the appropriate international agencies, in consultation with the national authorities, to assess the nature and extent of the aid required and to set out the terms under which the grant should be made.

143. At a later stage it may be necessary for the Board to look at the situation afresh in order to ascertain how far the objectives of the aid have in fact been realized.

144. In this process the Board is enabled to amplify and reinforce its central function of bringing about a better fulfilment of the provisions of the treaties.

#### THE SECRETARIAT

145. This report would be incomplete without a special tribute to the quality of the Board's secretariat. Like its predecessors the present Board would not have been able to accomplish its constantly growing burden of work but for the loyal and steadfast co-operation of all the members of its staff. In addition to their technical qualifications, they are at all times conscious of the great social importance of the tasks assigned to the Board and its companion organs in this field and they are imbued with a high sense of public service.

146. These qualities are the more valuable in a secretariat in the somewhat detached position entailed in maintaining the quality of independence which is essential to the work of the Board, and which was reaffirmed by the Economic and Social Council in May 1973 I.

#### FUTURE PERSPECTIVES

147. That the problem of drug abuse will persist for many years can hardly be doubted; and it may not improbably endanger still larger numbers of people and spread to areas which up to now are not, or are hardly, affected. The international community cannot therefore abate its defensive precautions but must rather intensify its vigilance.

148. The first essential is to reinforce the defence measures which have proved their worth: to strive for wider and more faithful application of the existing treaties; to gather and make maximum use of the detailed information which they are designed to yield; to build up the efficiency of the national control measures enjoined by the treaties; and to press continually for full and unreserved co-operation between all those engaged in applying these controls.

149. Co-operation of this quality is in fact the supreme requirement: co-operation bridging national frontiers, over-riding inter-departmental jealousies, dispelling misunderstandings, uniting all concerned in the defence of society against a growing and dangerous scourge.

150. Co-operation is most of all imperative in adjacent countries which share common problems, and regional associations for this purpose are everywhere to be encouraged.

151. Gaps in the legislative framework should obviously be filled as expeditiously as possible. The immediate need is to hasten the coming into force of the 1971 Convention, since evidence continues to accumulate that particular stimulant, depressant and hallucinogenic drugs are looming more and more largely in the pattern of drug abuse. Similar considerations argue for the early ratification of the 1972 Protocol.

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I/ Resolution 1775 (LIV).

152. While maintaining society's defences at maximum strength investigation should continue into the nature and origins of drug abuse, for the subject is almost infinitely complex and only on the basis of ample knowledge can effective remedies be sought.

153. Finally, great as are the efforts being made by authorities, national and international, the world campaign against drug abuse can only succeed if it is everywhere sustained by the force of public opinion and no effort should be spared to arouse the concern of society as a whole and enlist it in its own defence.

(signed) Harry Greenfield  
President

(signed) Joseph Dittert  
Secretary

Geneva, 14 November 1973.

THE SUPPLY OF OPIUM FOR LICIT MANUFACTURE

AN ASSESSMENT

1. The Preamble to the 1961 Single Convention on Narcotic Drugs makes clear that one of its principal underlying purposes is to ensure the availability of narcotic drugs for medical use in the relief of pain and suffering. This important requirement has always been present in the mind of the Board in its annual assessments of the world opium situation.

2. From time to time some concern has been expressed by Governments and in other quarters as to the adequacy of supplies for this purpose and the Board has on each occasion made an ad hoc study of the situation. One such occasion was in 1970.<sup>1/</sup> To obviate the risk of a shortage of material for manufacture of morphine and codeine which would be detrimental to public welfare, the Board then suggested that it would be advisable for the manufacturing countries to prepare long-term estimates of their requirements of raw materials, so that producing countries could plan their future output to meet foreseen demands.

3. Within the last twelve months a sharper note of concern has made itself heard in several manufacturing countries. The Board has accordingly carried out a thorough examination in the light of data supplied by Governments<sup>2/</sup> and the facts revealed by this enquiry are set out in the following paragraphs.

4. It is important to note that since the Board has no data for the People's Republic of China, the Democratic People's Republic of Korea and the Democratic Republic of Viet-Nam it was not possible to take their requirements and resources into account.

OPIUM AND OPIATE REQUIREMENTS FOR MEDICAL AND SCIENTIFIC PURPOSES<sup>3/</sup>

(1) Consumption

5. Under the treaties, the term "consumption" means the quantity supplied to any authorized person, enterprise or institute for retail distribution, use in medical treatment or scientific research.

6. The quantities of opium and other opiates required for medical and scientific purposes are set out in table I, which shows the total consumption of these narcotic drugs over the period 1963-1972.

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<sup>1/</sup> E/INCB/9, para. 22.

<sup>2/</sup> Those data are published by the Board in two documents:

(a) "Estimated world requirements of narcotic drugs and estimates of world production of opium in 1973" (E/INCB/18) and "Estimated world requirements of narcotic drugs and estimates of world production of opium in 1974" (E/INCB/22); (b) "Statistics for narcotic drugs in 1972 and the maximum levels of opium stocks" (E/INCB/23).

<sup>3/</sup> For the purposes of this study the term "opiates" means opium alkaloids and poppy straw alkaloids and their derivatives under international control.

7. In addition to opium, the consumption of which varied between 26 and 40 tons, five other substances were consumed in quantities of more than 2 tons. They are: codeine, ethylmorphine, dihydrocodeine, pholcodine and morphine. Outstanding among these is codeine of which large quantities were consumed for therapeutic and scientific purposes. Morphine, though consumed in small quantities, nevertheless occupies a prominent place.

TABLE I TOTAL CONSUMPTION OF OPIUM AND OPIATES

Kilogrammes

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Opium	32757	37205	45986	40118	28365	30723	30348	28149	26053	32788
Codeine	106859	107532	114877	124204	117045	142522	142789	157615	150159	154451
Ethylmorphine	7387	7160	7040	7689	7473	8994	9346	9403	9250	8644
Dihydrocodeine	4373	5196	5747	5760	5031	7432	8131	9568	8597	7902
Pholcodine	2578	2127	2348	2455	2922	3714	4173	4282	4147	4304
Morphine	3283	3618	3596	3223	2425	2554	2335	2468	2255	1889
Hydrocodone	718	727	801	779	833	909	823	873	867	953
Oxycodone	575	575	553	552	580	607	663	747	1034	858
Thebacon	123	102	120	101	90	98	96	89	72	65
Hydromorphone	65	67	62	56	57	71	42	56	42	61
Benzylmorphine	98	77	80	71	53	69	59	49	38	44
Heroin	54	59	65	62	60	68	55	46	44	42
Acetyldihydrocodeine	33	27	15	31	38	43	42	34	17	31
Oxymorphone	10	11	16	18	27	19	22	66	3	17
Nicomorphine	4	4	6	7	8	9	11	14	14	12
Nicocodine		3	7	2	2	3	2	2	1	-
Normorphine	-	-	-	-	-	-	1	-	-	-
Codeine-N-Oxide	4	2	2	-	1	1	-	-	-	-
Metopon	-	1	-	-	3	-	-	-	-	-

(2) Morphine, an intermediate product between raw materials and finished products

8. Morphine is a basic stage between opium or poppy straw and the other opiates, since most of these are directly or indirectly obtained from it. The process of extracting morphine also yields codeine and thebaine as by-products, thebaine being in its turn completely converted into other opiates.

9. To study opiate requirements therefore means, in practice, to study morphine requirements since all substances derived from opium and poppy straw are at present connected in one way or another with morphine.

10. In view of the fact that the quantities of morphine manufactured in the course of any year are practically equal to those used during that same year<sup>4</sup> (in other words, stocks as a general rule vary relatively little from one year to another), the estimation of morphine requirements may more simply be a matter of estimating morphine manufactured.

11. A chronological list showing the total quantities of morphine manufactured annually since 1951, from both opium and poppy straw, is given in column 3 of table II. The figures in the list are plotted in the graph below by points which are joined by curve 3.

12. The average annual increase in morphine manufacture over the period under consideration has been calculated by fitting a trend line to the plotted points, using the method of least squares (line 4).

13. It will be seen that, on average morphine manufacture increased by 5 tons a year, though certain years saw an increase larger than this figure, compensated by a shortfall in other years.

RAW MATERIAL RESOURCES

14. The raw materials from which opiates, and particularly morphine, are manufactured are opium and poppy straw, poppy straw concentrate being only an intermediate stage in the extraction of morphine from the straw. For the sake of simplicity, morphine obtained from poppy straw and poppy straw concentrate will be referred to in this paper as straw-morphine and morphine obtained from opium will be referred to as opium-morphine.

15. The quantities of morphine extracted from these raw materials and their respective proportions in the total amount of morphine manufactured are given in the first two columns of table II. The two series are also represented in the graph on the following page (curve 1 for straw-morphine; curve 2 for opium-morphine).

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<sup>4</sup>/ See document "Statistics on narcotic drugs for 1972" (E/INCB/23, table V)

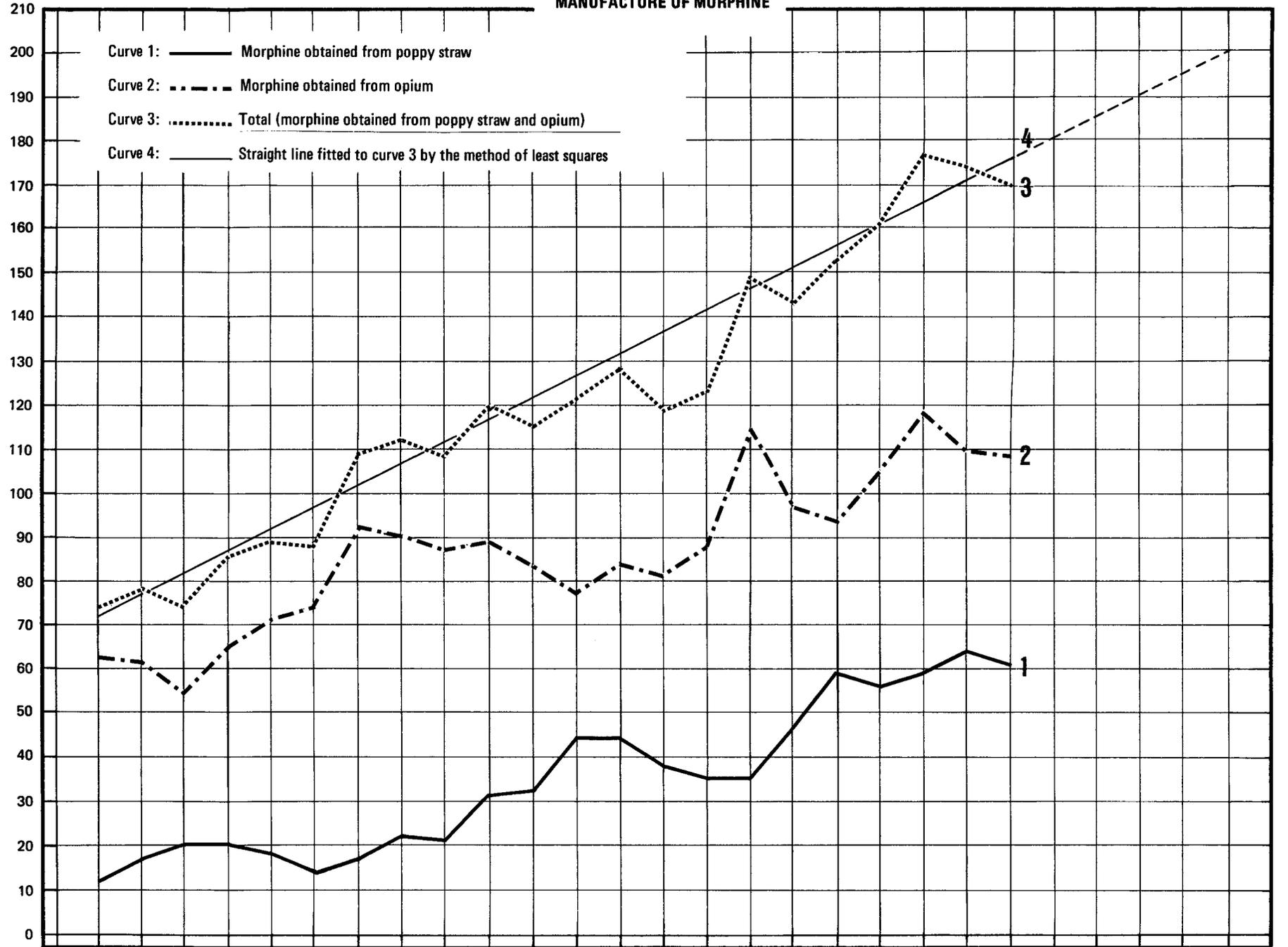
TABLE II

TOTAL MANUFACTURE OF MORPHINE

Year	Column 1		Column 2		Column 3
	Morphine manufactured from Poppy straw		Morphine manufactured from opium		Total
	Tons	% of column 3	Tons	% of column 3	Tons
1951	12	16	62	84	74
1952	17	22	61	78	78
1953	20	27	54	73	74
1954	20	24	65	76	85
1955	18	20	71	80	89
1956	14	16	74	84	88
1957	17	16	92	84	109
1958	22	20	90	80	112
1959	21	20	87	80	108
1960	31	25	89	75	120
1961	32	28	83	72	115
1962	44	36	77	64	121
1963	44	34	84	66	128
1964	38	32	81	68	119
1965	35	29	88	71	123
1966	35	24	114	76	149
1967	46	32	97	68	143
1968	59	39	94	61	153
1969	56	35	105	65	161
1970	59	33	118	67	177
1971	64	37	110	63	174
1972	61	36	109	64	170

# MANUFACTURE OF MORPHINE

tons



— Δ —

1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978

16. The appearance of the curves is striking, because the ascending segment in one of them almost always corresponds to a downward segment in the other. This reflects the substitution of the two raw materials in morphine manufacture, which can be explained only by a long and detailed study taking into account not only the decisions made by the countries producing the raw materials but also the pattern of the international opiate trade. The substitution of one raw material for another does not take place solely when a manufacturing country decides to replace one by the other; it is also a matter of the source of supply chosen by the opiate-buying countries in the light of economic or short-term factors, etc. It may happen, for instance, that a country which formerly imported morphine from a supplier who extracted it from straw decides itself to manufacture the morphine it needs by importing opium for the purpose. Opium then replaces straw as the raw material of morphine. The situation is usually the other way round, however, as the straw is a by-product which is obtained after the seeds or the opium and the seeds have been harvested.

17. These reservations having been made, two conclusions may be drawn from a study of the data:

(1) The general trend which emerges from these curves indicates a quantitative increase in the utilization of both opium and straw. Straw-morphine, however, increased its relative share in total morphine manufacture from 19.7 per cent during 1951-1959 to 35.8 per cent during 1968-1972.

(2) Of importance in this increase (both in absolute and relative terms) has been the expansion of straw production in the Soviet Union and of exports of straw from Turkey.

18. From 1957, when the Soviet Union first began to use straw as a raw material, up to 1966, the amount of straw-morphine manufactured never exceeded 2 tons, but by 1967 it rose to 7.4 tons and the following year to 13.9 tons, thereafter remaining at that level. From 1968 to 1972, the Soviet Union alone produced 21.2 per cent of the total morphine manufactured from straw. Turkey has played a leading role in supplying straw to morphine manufacturers, particularly in the Netherlands and Czechoslovakia. In 1969, 1970 and 1971, its exports of straw accounted for more than a third of the total amount used for extracting morphine. Since Turkey has decided to ban all cultivation of the opium poppy as from 1973, importers who used to obtain their straw supplies from that country will have to look for other sources of supply. In this connexion it should be noted that Indian poppy straw has up to now been virtually unused for the extraction of its alkaloids. To enable it to be used in future would entail a certain measure of adaptation.

19. The other major poppy straw-producing countries are Hungary, Poland, Czechoslovakia, Yugoslavia, Romania and France.

20. Table III lists the countries which processed over 1,000 tons of poppy straw in the period from 1963 to 1972.

TABLE III

## POPPY STRAW USED FOR THE MANUFACTURE OF MORPHINE

Tons

YEAR	NETHER- LANDS	USSR	POLAND	HUNGARY	CZECHO- SLOVAKIA	YUGO- SLAVIA	FRANCE	ROMANIA	GERMAN DEMOCRATIC REPUBLIC	OTHER COUNTRIES* WHICH USED LESS THAN 1,000 TONS EACH	TOTAL
1963	3 802	4 026	4 125	5 800	4 681	-	148	716	2 079	687	26 064
1964	1 662	3 842	4 721	5 200	5 059	-	79	1 024	1 230	1 097	23 914
1965	3 666	1 875	4 683	4 016	5 223	-	5	863	700	882	21 913
1966	3 521	2 732	4 707	4 910	4 216	91	321	1 379	794	761	23 432
1967	6 231	3 890	4 170	4 519	5 195	164	379	1 500	414	939	27 401
1968	5 396	6 488	4 745	4 988	5 078	1 073	292	1 430	-	830	30 320
1969	5 198	7 153	3 043	3 911	5 176	1 366	192	1 323	-	912	28 274
1970	6 392	6 673	3 524	3 254	6 407	2 898	606	759	-	804	31 317
1971	6 973	10 193	4 702	3 412	5 244	2 803	573	1 517	-	467	35 884
1972	6 815	5 394	5 184	4 128	3 694	1 960	1 209	974	-	1 098	30 456

\* Argentina, Australia, Bulgaria and Norway.

21. In recent years the supply of opium for morphine manufacture was provided by three major producers - India, Turkey and the USSR (where the entire production is used within the country). The production figures for each of these countries for the years 1963-1972 are given in table IV.

22. Three other countries - Yugoslavia, Bulgaria and Japan - produced small quantities of opium (a total of 600 kg in 1972 for the three countries), while production in Iran and Pakistan is entirely for domestic consumption.

TABLE IV  
OPIUM PRODUCTION IN INDIA, THE USSR AND TURKEY

Tons

Year	India	USSR	Turkey	Total
1963	538	172	263	973
1964	501	188	73	762
1965	486	177	78	741
1966	339	201	126	666
1967	368	181	104	653
1968	585	116	111	812
1969	868	217	117	1202
1970	794	227	51	1072
1971	883	144	124	1151
1972	991	114	66	1171

RESERVE RESOURCES

23. Under the terms of the Conventions, reserve stocks do not include "special stocks" and retailers' stocks; such stocks are not included in the statistics reported to the Board.

24. The main reserves of opiates consist of stocks of opium, codeine, morphine and poppy-straw concentrate held by producers, manufacturers and wholesalers. Smaller stocks are held of the other opiates. Table V indicates the relative size of these reserves. Column 6 gives the overall figures, expressed in terms of the morphine equivalent, for the stocks held at the end of each year.

25. Opium stocks have dwindled appreciably from 1963 to 1972 while morphine requirements have continued to rise. In column 2 of table V, opium stocks are shown as a percentage of the quantity of opium used annually for the extraction of alkaloids. It will be seen that whereas opium stocks covered more than two years' requirements in

1963, they could not meet even one year's needs from 1966 onwards. However, the reduction recorded during the earlier years of this period was deliberately sought by Governments and resulted from decisions to run stocks down to a lower level in view of both economic considerations and lower requirements at the time.

TABLE V

STOCKS OF OPIUM, CODEINE, MORPHINE AND CONCENTRATE OF POPPY STRAW

Year	Opium Tons	Opium stocks as a percentage of the opium used for the extraction of morphine %	Codeine Tons	Morphine Tons	Concentrate of poppy straw Tons	Total stocks in terms of approximate morphine equivalent Tons
1963	1785	215	55	26.9	-	260
1964	1442	180	53.7	23.6	-	222
1965	1386	162	49.4	19.8	3.5	210
1966	907	84	53.9	20.5	3.2	167
1967	853	88	65.5	21.8	9.1	177
1968	737	80	59.6	21.7	10.5	160
1969	750	68	61.1	20.9	10.5	162
1970	614	51	60.9	20.2	9.4	147
1971	648	59	69.5	20.3	6.9	158
1972	737	62	68.5	19.6	9.1	166

26. Subsequently, however, opiate requirements grew at a rate superior to that of opium production and, although greater use was being made of straw (in both absolute and relative terms), the total supply fell below the demand and the gap had to be filled by making substantial inroads on opium stocks.

27. The stocks fulfil two important functions:

(a) First, inasmuch as opium production is periodic while morphine manufacture is a continuing process, the stocks built up after a harvest must provide a regular supply for such manufacture until the following harvest. In view of the numerous operations required to process the opium after harvest, it becomes available for export only by May. Consequently, the stocks in existence on 31 December of a given year must ensure a steady supply for at least the first five months of the following year.

(b) The stocks should also be sufficient to provide a reserve which might be used in the event of a poor harvest.

28. The opium stocks available at the end of 1972 (see column 2 of table V) were roughly capable of meeting requirements for the first seven months of 1973. As for the total stocks of opium, codeine, morphine and poppy straw concentrate, in terms of a common unit of measurement they represented at the end of 1972 the equivalent of 166 tons of morphine, or 97.7 per cent of the morphine manufactured in that year.

29. On 31st December 1972, the total stocks of opium and opiates, reduced to a common unit of measurement, represented 97 per cent of the total annual consumption of the substances included in table I. This analysis, however, disregards the special stocks held by States and, as we shall see later, these stocks could play an important role.

#### EVALUATION OF FUTURE OPIUM AND OPIATE REQUIREMENTS AND RESOURCES

30. Evaluation of future opium and opiate requirements can be made either from the estimates of opium production and of requirements furnished by Governments or by extrapolating the trends observed in the statistics for past years.

##### 1. Evaluation of opium and opiate requirements and resources for 1973 and 1974 based on the estimates furnished by Governments

31. The requirements consist first of the opium needed for the extraction of the alkaloids and, secondly, of the opium needed for medical purposes in the form of medicinal opium, tinctures, extracts, etc. The latter opium requirement may be evaluated at about 40 tons per year. Medical requirements in Iran and quasi-medical requirements in Pakistan have not been taken into consideration as they are covered by local production. As far as opium for the extraction of alkaloids is concerned, experience has shown that estimates of these requirements often exceed the quantities which later are actually used. Two reasons may account for this difference: on the one hand, countries include a safety margin in their estimates of requirements in order to be able to meet unexpected demands; and on the other, some morphine manufacturing countries which use both opium and poppy straw, not knowing beforehand which of those raw materials will be available, sometimes submit opium estimates that are high enough to cover all their morphine requirements. It often happens that the full amount of this opium estimate is not used because of the supply of poppy straw available.

32. Experience has shown that the difference between estimates and statistics varies from year to year but averages 18.5 per cent of the actual amount used.

33. With regard to resources, only the harvest in India, the USSR and Yugoslavia can be taken into consideration, as Turkey will stop producing opium from 1973 onwards and Yugoslavia will do likewise in 1974.

34. As the USSR is not a Party to the 1953 Protocol, it is not bound to furnish estimates of its opium production. After reaching a peak of 226 tons in 1970, production in the USSR dropped in 1971, and by 1972 was down to 114 tons. This decline might be due to weather conditions but also to a long-term policy directed towards the progressive substitution of poppy straw for opium as the raw material for the extraction of morphine. For the purposes of the present projection, it may be assumed that production in the USSR could be close to the average production for the years 1968-1972, i.e., 163 tons.

TABLE VI

PROSPECTIVE BALANCE-SHEETS OF OPIUM FOR 1973 AND 1974

Tons

REQUIREMENTS	1973	1974
1. Estimates of opium required for extraction of alkaloids (figures furnished by governments)	1383	1472
2. Estimates of opium required for extraction of alkaloids amended to take into account the difference between estimated and actual requirements (see paragraphs 31 and 32)	1167	1242
3. Medical consumption	40	40
I Total 1 + 3	1423	1512
II Total 2 + 3	1207	1282
RESOURCES		
4. Production of India (see paragraph 35)	856	1139
5. Production of the USSR (hypothesis - see paragraph 34)	163	163
6. Production of Yugoslavia (see paragraph 33)	4	-
III Total 4 + 5 + 6	1023	1302
BALANCES		
IV Balances, based upon estimates furnished by governments (Total I minus Total III)	-400	-210
V Balances, based upon estimates as amended to take into account the difference between estimated and actual requirements (see paragraphs 31 and 32) (Total II minus Total III)	-184	+ 20

35. As to India, its production of opium has, because of weather, been showing differences from the estimates. Since 1965, the date on which such estimates were first furnished by Governments, these differences have been sometimes negative (the maximum was -23 per cent in 1965) and sometimes positive (the maximum was +19 per cent in 1971). If the period 1965-1972 is taken as a whole, however, it will be found that the average of these differences is +7 per cent. In table VI, the production figure for 1973 represents the actual harvest while that for 1974 is an estimate confirmed by the Government of India in November 1973 after the adoption of the crop plan.

36. The various elements of the prospective balance-sheets for 1973 and 1974 are shown in table VI.

37. It emerges from this table that the 1973 and 1974 situations will be different. For 1973 there would appear to be a deficit of between 400 and 184 tons. In 1974 there might be either a deficit (210 tons) or a surplus (20 tons). However, in view of the fact that the estimates of requirements allow for margins, the 1973 deficit might well be closer to the lower figure (184 tons) while an equilibrium between requirements and resources might be expected in 1974. As we saw in paragraph 31, however, the estimates of opium requirements allow in part for the expectations of certain manufacturing countries regarding the quantities of poppy-straw which will become available in the future. This means that any variations in the availability of such quantities of poppy-straw is bound to reflect itself in the actual demand for opium.

2. Evaluation of opium and opiate requirements based on extrapolation of past trends and determination of corresponding resources

38. Assuming that the factors which influenced the growth of opium and opiate requirements in the past will continue to have the same influence in the near future, extrapolation of the straight line No. 4 fitted to the curve No. 3 in the graph can provide an evaluation of morphine manufacture during the period 1973-1977. The figures obtained in this way are given in the first line of table VII.

TABLE VII

Tons

	1973	1974	1975	1976	1977
Projected morphine manufacture	181	186	191	196	201
Straw-morphine	64.8	66.6	68.4	70.2	72
Straw required for the manufacture of straw-morphine	34 085	35 032	35 978	36 925	37 872
Opium-morphine	116.2	119.4	122.6	125.8	129
Opium required for the manufacture of opium-morphine	1 162	1 194	1 226	1 258	1 290

39. In table VII, the figures on the first line represent an evaluation of total requirements of morphine, irrespective of the raw materials from which the morphine is to be extracted. On the basis of these figures, an attempt has been made to deduce the quantities of raw materials required for this manufacture. The breakdown between the raw materials is, however, difficult to determine since it is not yet known what proportions of opium and poppy straw will actually be used. Without prejudging what the breakdown will be, table VII then proceeds to give, for purely indicative purposes, the quantities of straw-morphine and opium-morphine required on the assumption that their shares in the total would be 35.8 per cent and 64.2 per cent respectively, i.e. the average percentages noted between 1968 and 1972. The figures for such a breakdown are given in the second line (straw-morphine) and the fourth line (opium-morphine).

40. On the basis of average yields, it has been estimated that one ton of morphine can be obtained from 10 tons of opium or 526 tons of poppy-straw. The quantities of poppy straw and opium required for the manufacture of morphine have been deduced in this way. They are given in the third and fifth lines of table VII.

41. It will thus be seen that - assuming the breakdown adopted with the reservations indicated in paragraph 39 - the present rate of growth of opiate requirements, which is estimated at 5 tons of morphine a year, would need only an average annual increase of approximately 1,000 tons of straw and 32 tons of opium. This projection of morphine requirements does not, however, allow for any rebuild-up of stocks which might be deemed necessary by Governments, in which case the increase in production would have to be larger.

#### CONCLUSION

42. In the preceding paragraphs the Board has endeavoured, on the basis of the data furnished by governments, to judge how the opium and opiates situation may develop in the near future. In addition to these data it has been necessary to formulate and give consideration to a number of hypotheses. One of the most important of these concerns the quantities of poppy-straw which may become available for morphine manufacture (see paragraph 39 above). Moreover many factors which could affect future prospects are not yet accurately predictable: for example, only the general lines of scientific research are discernible at the moment and the results cannot be foreseen. Subject to these reservations, the present study may serve as the basis for a continuing scrutiny of the situation as it develops during the years immediately ahead.

43. It appears from the study that whereas the 1973 production schedule will not in itself suffice to meet the demand, the 1974 schedule might be expected to lead to a possible equilibrium. Nevertheless, any concern which might conceivably arise from shortfall in production during these two years could be eased by the fact that following discussion with the Government of India, the Government of the United States proposes to release part of its special stocks to manufacturers in the United States, thus enlarging the possibilities of opium procurement by other

countries. Nevertheless, bearing in mind the continued increase in medicinal requirements resulting from the extension of public health services it would seem prudent to examine the future planning of normal resources of raw materials with a view to providing not only for meeting these requirements but also for rebuilding stocks.

44. In circumstances so complex and so liable to change it is clearly desirable that the situation should be kept under continuous review and that the countries directly concerned should jointly endeavour to ensure that there shall at all times be an adequate supply of raw materials for the manufacture of substances required for medical purposes.

(Signed) Harry Greenfield  
President

(Signed) Joseph Dittert  
Secretary

Geneva, 14 November, 1973.

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