

COMMISSION ON NARCOTIC DRUGS

THIRD SESSION

LIMITATION OF THE PRODUCTION OF RAW MATERIALS

(Item 13 (a) of the Provisional Agenda)

The Assistant Secretary-General in charge of the Department of Social Affairs has the honour to transmit to the members of the Commission on Narcotic Drugs the following replies by Governments to the Questionnaire on the Limitation and Control of the Cultivation of the Opium Poppy and Production of Raw Opium, and the Control of other Raw Materials used in the Manufacture of Opium Alkaloids.

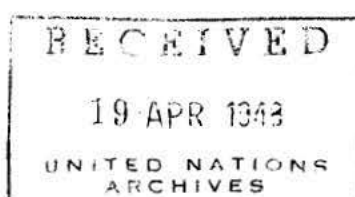


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COMMISSION ON NARCOTIC DRUGS

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REPLIES BY GOVERNMENTS TO THE QUESTIONNAIRE ON THE LIMITATION AND CONTROL OF THE CULTIVATION OF THE OPIUM POPPY AND PRODUCTION OF RAW OPIUM AND THE CONTROL OF OTHER RAW MATERIALS USED IN THE MANUFACTURE OF OPIUM ALKALOIDS
(DOCUMENTS E/251/Add.2, E/CN.7/63)

I

At its first session held at Lake Success (27 November to 13 December 1946) the Commission on Narcotic Drugs decided to issue, subject to the approval of the Economic and Social Council, to the Governments concerned a questionnaire calling for such information as would enable it to pursue the preparatory work with a view to the holding of an international conference on the limitation and control of the cultivation of the opium poppy and the production of raw opium and the control of other raw materials used in the manufacture of opium alkaloids (document E/CN.7/31). The Economic and Social Council approved the said questionnaire on 28 March 1947 (document E/399), and on 14 April 1947 the Secretary-General transmitted it (Circular letter Ref. 606-27-2-1 documents E/251/Add.2, (E/CN.7/63)) to Governments Members of the United Nations and to the following Governments which, though not Members of the United Nations, take part in the international control of narcotic drugs:

Albania, Austria, Bulgaria, Finland, Hungary, Ireland, Italy, Liechtenstein, Monaco, Portugal, Roumania, San Marino and Switzerland. In all, the questionnaire was submitted to sixty-eight governments. It was also sent to the President of the Allied Control Council for Germany, and to the Political Adviser to the Supreme Commander for the Allied Powers in Japan. Governments were asked to communicate their replies by 15 August 1947.

II.

So far the United Nations Secretariat has received replies from the following countries:

1. Opium-producing countries: Greece (15 August 1947),* Indo-China (4 November 1947), Japan and Korea (28 August 1947), Turkey (24 October 1947) and Yugoslavia (28 October 1947).

* The date in brackets is the date of the reply.

2. Countries using poppy straw for the manufacture of morphine: Australia (24 November 1947), France (10 July 1947), the Netherlands (8 October 1947), Switzerland (8 July 1947), and Czechoslovakia (13 August 1947).

3. Countries which have informed the Secretariat that opium is neither cultivated nor produced on their territories or that morphine and other alkaloids are not manufactured from poppy straw. The replies of these countries have been divided into two groups: Group (A), replies which are confined to the above-mentioned declarations, and Group (B), replies which also contain other information.

(A) Albania (21 July 1947), Saudi Arabia (8 July 1947), Austria (10 July 1947), Belgium (27 August 1947), Brazil (5 May 1947), Colombia (11 August 1947), Curacao (Netherlands, 8 October 1947), Egypt (21 August 1947), Ethiopia (27 September 1947), Finland (2 August 1947), Guatemala (6 June 1947), Haiti (7 June 1947), Iraq (29 June 1947), Ireland (19 June 1947), Iceland (14 May 1947), Lebanon (19 July 1947), Liechtenstein (10 June 1947), Luxembourg (29 April 1947), Norway (10 July 1947), New Zealand (6 June 1947), Dominican Republic (24 July 1947), United Kingdom (24 July 1947), Sweden (6 August 1947), Union of South Africa (18 June 1947), Venezuela (31 July 1947).

(B) Canada (26 August 1947), United States of America (15 July 1947), and the Republic of the Philippines (2 June 1947).

4. Countries which have informed the Secretariat that the questionnaire has been communicated to the appropriate authority or Ministry: El Salvador (13 June 1947), Mexico (19 April 1947), Nicaragua (17 April 1947), Germany (Director of Internal Affairs, Allied Control, 6 May 1947).

5. Countries which have replied merely by acknowledging receipt of the questionnaire: Monaco (9 May 1947).

6. No reply has been received so far from the following countries:

(A) Countries producing raw opium: Afghanistan, Bulgaria, China, India,* Iran, Siam and the Union of Soviet Socialist Republics.

(B) Countries utilizing poppy straw: Argentina, Chile, Hungary

* In a letter dated 23 August 1947 the Ministry of External Affairs of the Government of India informed the Secretary-General that the Government of India had been unable to collect the necessary documents which would have made it possible to reply to the questionnaire, but that steps were being taken to secure the required information.

and Poland.

(C) Other countries: Bolivia, Byelorussia, Costa Rica, Cuba, Denmark, Ecuador, Honduras, Italy, Liberia, Panama, Paraguay, Peru, Portugal, Roumania, San Marino, Syria and Uruguay.

III. REPLIES

The figures and references contained in the following replies refer to the questionnaire (documents E/251/Add.2 (E/CN.7/63)).

GREECE - 15 AUGUST 1947

(Permanent Greek Delegation to the United Nations)

TABLE A - UNTREATED RAW OPIUM

Cultivation of the Opium Poppy - Production and Use of Untreated Raw Opium 1937 - 1946

Year	Opium Poppy Area under cultivation	Untreated Raw Opium				
		(a) Total quantity produced	(b) Estimated total anhydrous opium content of (a)	(c) Estimated total morphine content of (a)	(d) Quantity transformed in the country into standardized raw opium	(e) Quantity used for other purposes
	Hectares	Kg.	Kg.	Kg.	Kg.	Kg.
1937	Nil	Nil	Nil		Nil	Nil
1938	E 5	17	E 9	E 1	No information	22 Kg. 500
1939-	4	15	E 8	E 1	No information	Nil
1940- 1945	No information	No information	No information	No information	No information	Nil
1946	E 56	295	E 152	E 9	No information	Nil

Notes on Table A

1. The dealers standardize the opium bought from the producers but we have no concrete data on the quantities so standardized.
2. The computation of the area under cultivation is based on information supplied by the authorities concerned.
3. Since the quantities produced in this area are small there is no appreciable difference in the quality.
4. Raw opium is not consumed in Greece nor is it used for the manufacture of prepared opium; it is only used by the State Narcotics Monopoly for the manufacture of pharmaceutical opium, opium extract and occasionally morphine. Thus, in 1933 the State Narcotics Monopoly purchased 22 kg. 500 for the above-mentioned purposes.

Special remarks

1. The annual statistical return of stocks sent in March 1947 to the Permanent Central Opium Board showed that the stocks of opium produced in 1946 held by dealers and producers amounted to 250 kilogrammes, whereas the above table for the cultivation of the opium poppy and the production of opium and also our annual report "on the traffic in opium, etc." give the figure of 295 kilogrammes. The difference of 45 kilogrammes is accounted for by the fact that, since the despatch of the statistical return referred to, additional information was received from the Serres Prefecture.
2. In connection with opium cultivation and production during the years 1940, 1941, 1942, 1943, 1944, 1945 and 1946, the following points should be noted:
 - (a) There is no information for the year 1940 as Greece entered the war in that year.
 - (b) There is no information for the years 1941, 1942, 1943 and 1944 because the opium-poppy growing areas were occupied by the Bulgarians.
 - (c) For the year 1945 - the first year after the country was liberated - it should be pointed out that the opium poppy was cultivated for the extraction of oil, but we have no information on the area under such cultivation because of the abnormal conditions due to the war and which still prevail.
 - (d) Finally, as regards the year 1946, the quantities shown are still held by the dealers or producers.

PART III - CONTROL

A. Opium Poppy and Raw Opium

1. The cultivation of the opium poppy in Greece is restricted. It is

/subject

subject to a system of licences issued by the regular State authorities and controlled by means of these licences.

Generally speaking, the cultivation and disposal (sale) of opium are subject to licences being obtained which are issued for that purpose by the prefect of the area where the crop is grown upon production of certificates issued by the agricultural authorities of the prefecture responsible for control.

In particular:

(a) The official who controls the cultivation of opium is the agricultural inspector of the prefecture in the area where the crop is grown. He is the head of the agricultural department of the prefecture. It is his duty to inform the legal authority concerned of any illicit increase in opium-poppy cultivation.

The control of opium forms part of the duties of the ordinary Government departments and entails no additional expense.

(b) Before harvesting his opium, the grower must obtain a licence issued by the agricultural inspector of the prefecture after the area under cultivation has been checked. In order to be entitled to hold and stock the opium he has produced, the grower must apply for a special licence issued by the prefecture on production of a certificate from the agricultural inspector of the prefecture showing the quantities produced. Finally, in order to sell the opium produced, the producer must obtain a further licence from the prefect; the transaction is entered in a register of persons stocking opium which is kept at the prefecture.

(c) The grower has the right to keep the opium he has produced in stock for a period of six months. If, during those six months, he does not sell the opium either to the State Narcotics Monopoly or to opium dealers, he must deposit his stocks in a bonded warehouse at the Piraeus Custom House or in the Salonika Free Zone. For the export of quantities that have not been purchased by the State ~~Narcotics Monopoly, a licence issued by the Ministry of Public Health is required.~~ The opium produced is stocked in cakes (pieces) weighing 500 to 1000 grammes, wrapped in the leaves of the poppy plant.

(d) Action for the prevention of clandestine poppy-growing is the responsibility of the agricultural departments and of the police authorities who notify the courts of all cases of illicit cultivation or illicit increases of cultivation.

C. General

1. The system of control ~~in force in the~~ country is strict because of

/the numerous

the numerous formalities that have to be complied with. Growers, therefore, find it difficult to comply with all the formalities and many of them are giving up opium-poppy growing as may be seen more especially from our annual report "on the traffic in opium, etc."

2. The system of control in force in Greece is, as we have just stated, surrounded by so many formalities that it is difficult for the growers to evade control. No extension of the existing controls is therefore contemplated.

3. The texts of the current laws and regulations on control are contained in:

- (a) Law 2530/1932 (Articles 15 to 22);
- (b) Decree 2450/1940 (Article 4).*

PART IV - GENERAL DESCRIPTION OF THE INDUSTRY AND
PROBLEM OF CROP SUBSTITUTION

1. As the amount of opium at present produced in Greece is relatively small, its role in the economic and social life of the country is negligible. If the level of production were to attain that which existed before the 1932 Law "on the monopoly of narcotics, etc." was passed (it should be noted that production has fallen off considerably as a result of the numerous formalities which this law imposes on opium-poppy growing), we would have, on the one hand, a production which would satisfy the country's internal requirements and, on the other hand, an exportable surplus in case of over-production. This would help to improve the exchange position and would considerably alleviate the position of Macedonian growers in the areas adapted to opium-poppy growing.

For these reasons the Greek Government does not propose to substitute other crops for the opium poppy nor to develop industries to replace it. It intends, on the contrary, to maintain and expand the cultivation of the opium poppy in order to meet the country's requirements in opium preparations and even to secure a small exportable surplus comparable with that which existed before the severe restrictive measures at present imposed on poppy-growing were introduced.

2. It is precisely because of the present shortage and the difficulties which were experienced in obtaining opium or opium derivatives during the war that the Greek Government is now compelled to take steps to raise production to a reasonable level. In this connection it should be

* Abstracts of Law 5539/1932 and of Decree 2430/1940 (Article 4) are available in the archives of the United Nations Secretariat.

remembered that thirty years ago the production in the Serres Prefecture was about 30,000 kilogrammes.

A. Agricultural and Commercial Aspects

1. The total area under general cultivation in Greece is about 2,000,000 hectares. The proportion accounted for by opium-poppy growing is therefore extremely small.
2. There is no cadastral survey in Greece. Nevertheless, as mentioned above, the agricultural departments and the prefectures keep a register of the area under crops and the persons cropping it.
3. The opium-poppy is grown in the Serres plain especially along the banks of the Strymon which waters the plain. The soil is very fertile and is equally suitable for growing cereals (wheat, maize, etc.). The opium-poppy grows particularly well on this soil and benefits the grain crops which rotate with the opium-poppy on the same lands. The climate of this region is temperate.
4. Because of the comparatively small areas in this region under opium-poppy cultivation, the soil and climatic conditions do not vary very much and there are not many varieties of opium grown. Dealers, therefore, have no difficulty in standardizing the lots they purchase by mixing the opium produced without adding any extraneous inert substances.

Long experience enables them to estimate the anhydrous opium and morphine contents with a very small margin of error. In the past few years no official analysis has been made with a view to establishing the anhydrous opium content and the morphine content of the standardized opium.

Opium produced in the country is used for the preparation of pharmaceutical opium, of opium extract, and occasionally of morphine.

B. Social Aspects

- 1.2. The opium-poppy is grown in Greece by peasants who cultivate small patches of land for their own account. The total area under opium-poppy cultivation during the past year represents about 56 hectares. The average yield of raw, untreated opium is about 20 kilogrammes per hectare.

A detailed report on the subject is to be found in our "Annual Report on the traffic in opium, etc".

C. Economic and Financial Aspects

1. Owing to the small amount of opium produced, as already mentioned more than once, there is no opium industry of any size in Greece, so that it plays no really important part in the economic life of the country. The crop, nevertheless, is of great importance to the economy of the districts of Eastern Macedonia where the plant is to be found.

2. The production of poppy-seed oil amounts to 250 to 300 kilogrammes per hectare while the untreated raw opium yield is 20 kilogrammes per hectare. During the Bulgarian occupation, owing to the shortage of olive oil during the years 1941 to 1944, the cultivation of the opium-poppy increased greatly and the poppy was used for producing an edible oil.

3. The average wholesale export price before the war was about 900 drachmas per kilogramme. For the war years (1940 to 1945) we have no information because of the special conditions which then prevailed. During 1946 the price asked by producers was 120,000 drachmas per kilogramme for raw opium and the usual selling price in the wholesale trade was 360,000 to 400,000 drachmas per kilogramme of standardized opium.

In 1946 the State Narcotics Monopoly bought no opium in Greece. The prices given refer to raw opium of a 30 to 40 percent anhydrous content and of about 5 to 7 percent morphine content.

INDO-CHINA - 4 November 1947

(France. Ministry of Foreign Affairs)

INFORMATION ON THE SITUATION IN INDO-CHINA

Information on the cultivation of the opium poppy and the production of raw opium during the years 1937 to 1940 is given as an annex to the present memorandum in Tables A and B of the questionnaire drawn up by the Commission on Narcotic Drugs.

No information is given for Tables C and D, as Indo-China exports neither raw opium nor standardized raw opium, and manufactures no morphine or other opium alkaloids either from poppy straw or by any other method.

A. Agricultural and Commercial Aspects

In INDO-CHINA the opium poppy is found only in TONKIN and LAOS. The total area of INDO-CHINA is 711,000 square kilometres.

The area of TONKIN is 115,700 square kilometres.

The area of LAOS is 231,400 square kilometres.

The total area under opium poppy, with cultivation at its peak, may be estimated very approximately at 25,000 hectares.

As the total area of cultivated land is about 7,100,000 hectares, the ratio of the area under opium poppy is insignificant (0.37 per cent).

One cannot, therefore, conclude merely from the figures given that this crop is not of considerable economic importance to the country as a whole.

2. There is no cadastral survey - Cf. par. 3 below.

3. The opium poppy is grown in INDO-CHINA in Upper Tonkin and Laos generally, in the areas inhabited by the YAOS and MEOS tribes of Chinese extraction, and occasionally in the territory of the KHAS.

In TONKIN: Territory of HAGIANG, Province of SONLA, Province of LAI-CHAU, Province of LAOKAY. Occasional cultivation in the Province of YEN-BAY and the Territory of CAO BANG.

In LAOS: Province of UPPER MEKONG, Territory of PHONG-SALI, Province of LUANG-PRABANG, Province of XIENG-KHOUANG, Province of SAMNEUA. Very occasional cultivation in the Provinces of VIEN-TIANE and THAKHEK.

The features of the Upper Tonkin or Laos areas are the rugged mountains and almost impenetrable forests.

They form a wild mountain range in which the peaks reach heights of between 1,000 and 2,000 metres and are covered with thick forest.

The population is sparse and living conditions difficult. The

MEOS generally live more than 1,000 metres up on mountain peaks, on which, after clearing them, they set up their huts. They raise livestock and grow mountain rice or maize in the "rays". These are plots of ground on the mountain side, rarely more than two or three hectares in area, formed by burning the forest after the bigger trees have been felled. When the fertility of the soil is exhausted, the natives burn another part of the forest.

The opium poppy is grown on these plots, usually in rotation with maize. The poppy fields are therefore scattered among the mountains and not infrequently a grower has to walk for a whole day to reach his "ray". The villages, which consist of a few huts, lie one or two days' horseback journey apart from one another and are connected by paths which follow the steepest slopes of the hills and are transformed by rains into ravines.

It will be appreciated that in these conditions crops so primitively cultivated do not give a large yield and constitute no great danger; that they are particularly difficult to control, and that their rather small economic importance explains why no cadastral survey of these regions has yet been made.

4. Raw opium made from the juice of the poppies is kept by the producers, who dry it slowly, and, when it has lost part of its moisture, wrap it up in sheets of paper called "Chinese paper". This is made by primitive methods from a coarse pulp produced from bamboo and various lianas.

It is in this form that the opium is delivered in cakes of extremely variable size and weight to Government buyers or to smugglers.

B. Social Aspects

1. The system of land tenure is extremely rough and ready. For these tribes it consists of taking possession of the land they think best and abandoning it for other land when it is exhausted. They are semi-nomadic tribes living in a country and in regions where no registration will be made for a long time to come.

2. There is only one type of cultivation, that described above (A- paragraph 3) - very small scattered plots with a low yield: 3 to 4 kilogrammes of raw untreated opium per hectare (very approximately).

C. Economic and Financial Aspects

1. (a) In INDO-CHINA there is no opium industry, no factory for preparing raw opium for standardization purposes.

The problem is therefore an exclusively agricultural one. It affects a very small part of the population of LAOS, particularly those living in the mountains for whom poppy-growing is traditional. They consume part of their harvest and trade the rest to buy textiles, farm implements and shoddy goods, or in exchange for silver coins which they hoard.

(b) No information can be given under this head. There is no tax on opium nor on land under the opium poppy.

2. There is no trade in poppy seeds, and no manufacture of poppy-seed oil in INDO-CHINA.

Growers merely keep their seeds. They do no trade in poppy seed; any trading they may do is uncontrollable.

3. Prices paid by the Government for raw opium (in Indo-Chinese dollars)

1937	25 to 26 \$.	per kg.	1941	75 to 140 \$.	per kg.
1938	34 to 35	"	1942	160 to 180	"
1939	40	"	1943	190 to 220	"
1940	50	"	1944	250 to 350	"

1945 - 1946: political conditions made Government purchases impossible. According to information received, prices have increased almost ten-fold.

With the advent of the war the Government-General of INDO-CHINA found itself in a very difficult situation. As soon as they arrived in the country the Japanese became interested in opium, while the Chinese and Siamese smugglers tried to carry off a large proportion of the crop. As the demand grew, cultivation increased. To combat this tendency the Government came forward and bought all the amounts that could be found, but had to face severe competition from smugglers who were favourably placed because of the large profits they were able to earn in consequence of the high prices for monopoly opium.

In order to withdraw as much opium as possible from illicit circulation, the Government had to agree to large increases in the purchase price and supply the growers with the goods which they lacked and which were in short supply all over the country - textiles, iron tools, silver, metal.

It must be added, however, that amongst these primitive populations the lure of profit led to the raw opium being frequently adulterated by the addition of various substances, and lastly, that the larger amounts do not represent a corresponding increase in production.

TABLE A
UNTREATED RAW OPIUM

Year	Opium Poppy Area under cultivation	(a) Total quan- tity produced	(b) Estimated total anhydrous opium content of (a) (1)	(c) Estimated total morphine content of (a) (1)	(d) Quantity transformed in the country into stand- ardized raw opium	(e) Quantity used for other purposes (2)
	Hectares	Kg.	Kg.	Kg.	Kg.	Kg.
1937	10.000	20/25.000			Nil	26.172 31
1938	10.000	20/25.000			"	11.601 38
1939	10.000	20/25.000			"	3.996 39
1940	10.000	20/25.000			"	9.325 40
1941	20.000	50/60.000			"	27.966 41
1942	20.000	50/60.000			"	21.484 42
1943	25.000	70/75.000			"	46.120 43
1944	25.000	70/75.000			"	46.940 44
1945	25.000	70/75.000			"	17.416(3) (4)
1946	20.000	50/60.000			"	144(3) (4)

- (1) - No more accurate information can be given, as the raw opium produced locally has widely varying characteristics, the moisture and morphine content varying considerably with the area of production.
- (2) - Quantities used for the manufacture of MONOPOLY prepared opium in the course of the year under consideration, it being understood that these quantities are not all derived from the crop for that year.
- (3) - These amounts include deliveries of raw opium made to chemists for the preparation of drugs:
1945: 56 Kg. 500; 1946: 144 Kg.
- (4) - As a result of the political situation manufacture was completely interrupted from May 1945 to December 1946.

TABLE B

STANDARDIZED RAW OPIUM

Year	Total quantity produced	Consumption	Manufacture of drugs (3)	Quantity used in the country for:		Stocks at the end of the year	
				Other purposes (1)	Total quantity exported	In the hands of wholesalers	Held by the Government for other than Government purposes
1937	Nil			29.252	Nil		2,152 C.
1938	Nil			65.548	Nil		1,633 C.
1939	Nil			13.341	Nil		1,137 C.
1940	Nil			66.059	Nil		18,080 K.
1941	Nil		79.700	39.766	Nil		252
1942	Nil		55.700	Nil	Nil		105
1943	Nil		47.000	Nil	Nil		Nil
1944	Nil		104.600	Nil	Nil		Nil
1945	Nil			Nil	Nil		Nil
1946	Nil			Nil	Nil		Nil

- (1) Opium imported from Persia, Turkey or India for the requirements of the Monopoly.
- (2) The figures for 1937, 1938, 1939 are given in chests (Indian opium chest).
- (3) Amounts of raw opium delivered to chemists for the preparation of extracts and drugs because no supplies of official opium could be obtained from abroad.

TABLE A - UNTREATED RAW OPIUM*

Cultivation of the Opium Poppy and Production and Use of Untreated Raw Opium 1937-1946

1 Year	2 Opium Poppy		3 Untreated Raw Opium			
	Area under cultivation**	(a) Total quantity produced***	(b) Estimated total anhydrous opium content of (a)	(c) Estimated total morphine content of (a)	(d) Quantity trans-ferred in the country into standardized raw opium*	(e) Quantity used for other purposes****
	Hectares	kg.	kg.	kg.	kg.	kg.
1937	2036	21213	Nil	3124	Nil	21213
1938	1572	16455	Nil	2117	Nil	16455
1939	1481	27203	Nil	3046	Nil	27203
1940	1310	24435	Nil	2741	Nil	24435
1941	1159	19411	Nil	2248	Nil	19411
1942	1391	16242	Nil	"E" 1938	Nil	16242
1943	1512	17970	Nil	1796	Nil	17970
1944	1076	9650	Nil	"E" 1151	Nil	9650
1945	1885	9100	Nil	"E" 1083	Nil	Nil
1946	Nil	Nil	Nil	Nil	Nil	Nil

- * By Untreated Raw Opium is meant raw opium, stored or warehoused after harvesting, which has not undergone any process of standardization.
By Standardized Raw Opium is meant raw opium which has been conditioned, blended by mixing different kinds of untreated raw opium, or dried, or mixed with neutral substances, so as to secure a uniform composition.
- ** Indicate the method by which the area under cultivation has been ascertained.
- *** Furnish separately any available information regarding the different kinds and qualities of untreated raw opium and the purpose for which each kind or quality is used or marketed.
- **** Any amount of untreated raw opium used as such for consumption, or for making of "prepared opium" as defined in the Hague Convention of 1912, or for manufacturing drugs or for any other purpose should be recorded in this column. Any available information regarding the nature of these purposes and the amounts used for each of them should be given separately.

(Delegation of the United States of America to the United Nations)

JAPAN - 28 AUGUST 1947

TABLE A - OBSERVATIONS

** The area under cultivation is ascertained from records supplied to Local Governors under relevant law: Japanese Opium Law Enforcement Regulation Article 2. Cultivators of the opium-poppy shall report the area under cultivation to the Local Governor of the district in which they live.

*** All untreated raw opium produced in Japan averaged from 8 to 15 per cent of morphine content and all this opium was used in the manufacture of medicinal drugs.

**** No information available, as the untreated raw opium produced in Japan was mixed indiscriminately with untreated raw opium imported from other countries and manufactured into narcotic drugs.

Column (b) Estimate total anhydrous opium content of (a). No records available.

(c) Estimated total morphine content of (a). The figures for the years 1942, 1944 and 1945 represent the average morphine content over 6 (six) years, i.e., 11.39 per cent of the total quantity produced.

(d) Quantity transformed in the country into standardized raw opium - NIL. Untreated raw opium was never standardized in Japan.

(e) Quantity used for other purposes. Total amount of untreated raw opium was used in the manufacture of narcotic drugs.

Table B - standardized raw opium. For the whole period 1937-1946 the entry in this table is: NIL.

Table C - Exports of standardized raw opium. For the whole period 1937-1946 the entry in this table is: NIL.

TABLE D. POPPY STRAW USED IN MANUFACTURE OF MORPHINE
AND OTHER OPIUM ALKALOIDS, 1937-1946*

Note: This table should be used only by countries manufacturing morphine, codeine, etc., from the dried poppy plant (poppy straw) whether this manufacture is for domestic use only or also for exports.

1 Year	2 Area from which poppy straw was used for the manufacture of opium alkaloids	3 Total quantity of poppy straw used in the manufacture of morphine	4 Total quantity of morphine manufactured from (3)	5 Quantity of morphine manufactured from (3) used for:	
				Domestic needs	Exports
	Hectares	kg.	kg.	kg.	kg.
1937	2036	Nil	Nil	Nil	Nil
1938	1572	Nil	Nil	Nil	Nil
1939	1481	Nil	Nil	Nil	Nil
1940	1310	Nil	Nil	Nil	Nil
1941	1159	Nil	Nil	Nil	Nil
1942	1391	Nil	Nil	Nil	Nil
1943	1512	Nil	Nil	Nil	Nil
1944	1076	Nil	Nil	Nil	Nil
1945	1885	Nil	Nil	Nil	Nil
1946	Nil	Nil	Nil	Nil	Nil

* By "Poppy Straw" is meant all dry parts of the opium poppy (*Papaver Soniferum*) (including dry poppy capsules and poppy capsules and poppy chaff) remaining after the extraction of seeds from ripe poppies. Indicate separately the percentage (in terms of the basic anhydrous alkaloid) of morphine and codeine contained in 1000 Kg. of poppy straw. If codeine was extracted directly from poppy straw give amount of poppy straw used in this manufacture and the amount of codeine so manufactured.

TABLE D - REMARKS

1. The following table on Poppy Straw used as raw material for the manufacture of Poppy Straw extract and Poppy Straw powder without the separation of opium alkaloids is compiled from reports submitted by the ten (10) leading companies using such raw material and shows the total quantities used by those companies.

TABLE

1	2	3	4	5	
Year	Total quantity of poppy straw used	Total quantity of morphine manufactured from (3)	Total quantity of morphine manufactured from (3)	Quantity of morphine manufactured from (3) used for:	
				Domestic needs	Exports
	kg.	kg.	kg.	kg.	kg.
1937	101808	33	33		Nil
1938	120122	77	77		Nil
1939	114126	49	50		Nil
1940	175836	95	87		Nil
1941	190032	112	86		Nil
1942	255378	101	100		Nil
1943	227381	175	174		Nil
1944	410650	189	196		Nil
1945	345519	123	115		Nil
1946	390251	128	130		Nil

(a) Poppy Straw is not controlled, therefore no Government records are available for quantities used or consumed.

(b) No morphine or codein was manufactured from the Poppy Straw.

(c) The estimated morphine content in the table above is derived from the estimated figure of 2 kg. of morphine contained in 1000 kg. Extract of Poppy Straw produced, and 50 grammes of morphine contained in 1000 kg. of Powder of Poppy Straw produced.

PART I

See Tables A to D inclusive and the information in the form of "Remarks" appended to these tables.

PART II

1. Poppy Straw has been used as a raw material, without the separation of the opium alkaloids, in the manufacture of extract of poppy straw and powder of poppy straw.

(i) The ten leading companies using poppy straw in the manufacture
/of extract

of extract of poppy straw and powder of poppy straw are as follows:

- (1) Taisho Pharmaceutical Company
- (2) Kimeï Pharmaceutical Company
- (3) Daiwa Pharmaceutical Company
- (4) Nakakita Pharmaceutical Company
- (5) Tomimatsu Pharmaceutical Company
- (6) Taisei Pharmaceutical Company
- (7) Sasatora Pharmaceutical Company
- (8) Yamamoto Pharmaceutical Company
- (9) Extract of Poppy Straw Manufacturing Company
- (10) Nakajima Company

(ii) Processes used in this manufacture:

- (1) Alcohol and water extraction (Extract of poppy straw)
- (2) Grinding and powdering (Powder of poppy straw)

2. Price of poppy straw per metric ton (1.000 kilogrammes)

<u>Year</u>	<u>Unit Yen</u>
1937	29
1938	42
1939	105
1940	64
1941	52
1942	265
1943	266
1944	904
1945	1755
1946	1877

The above prices do not include transportation costs, figures of which are not available. Poppy straw not being controlled, the prices varied.

(ii) No morphine or codeine was extracted from poppy straw.

Remarks:

All poppy straw in Japan was destroyed in the months of July and August 1946.

PART III

A. Opium Poppy and Raw Opium

1. The cultivation of the opium poppy is prohibited.

- (a) Not applicable to Japan
- (b) Not applicable to Japan

/(c) Not applicable

(c) Not applicable to Japan

(d) Inspections are carried out by Narcotic Inspectors and Police Officials.

B. The sale, purchase and use of poppy straw are prohibited.

C.

1. (a) Prevention of cultivation of opium poppy.

(b) Prevention of thefts of narcotics from hospitals and Physicians.

(c) Suppression of drug addiction.

2. The narcotic control system is very efficient and effectively controls all narcotics in the legitimate trade. From now on the suppression of the illicit traffic in narcotic drugs will be undertaken by about 200 Japanese narcotic inspectors and Japanese police. Thefts of narcotics will be reduced by the use of better safeguards in hospitals and physicians' surgeries. The suppression of drug addiction will be facilitated by the passage of an "addict commitment" law at present under consideration.

3. Ministry of Welfare Ordinance No. 46 dated 24 November 1945 prohibits the planting, cultivation or growth of narcotic seeds or plants.

Copies of Ministry of Welfare Ordinance No. 25 dated 19 June 1946 have been attached to this reply to the questionnaire.

PART IV

I. The production of raw opium in Japan is not necessary on social, economic or financial grounds. When the cultivation of the opium poppy was prohibited, the farmers grew food crops, which, at present prices, bring them a better income than did the opium poppy cultivation.

II.

(a) As a result of the war and the prohibition of the cultivation of the opium poppy, Japan must now import narcotics for the medicinal needs of its population.

(b) Not applicable

(i) Cultivation of the opium poppy is prohibited

(ii) The use of poppy straw is prohibited

A. 1. Not applicable

2. Not applicable

3. Not applicable

4. Not applicable

B. 1. Not applicable

2. Not applicable

/c. 1. (a)

- C. 1. (a) Of little importance
(b) None. No taxes levied upon opium. Opium was purchased by the Japanese Government directly from the farmers and sold at cost price to manufacturing companies approved by the Government.
2. The majority of the poppy seed was used each year for cultivation of the opium poppy plant, and the rest for the confectionary industry. No poppy seed oil was manufactured. The poppy seed therefore has no importance.
3. No raw opium, poppy seeds or poppy seed oil was exported.

(i) Average domestic prices of raw opium are as follows:

Year	Unit Yen (per kilogramme)	
1937	28	35
1938	35	50
1939	50	
1940	50	
1941	50	
1942	50	
1943	50	73.5
1944	73.5	100
1945	100	
1946	Nil	

(ii) Poppy seeds or poppy seed oil - the prices of the seeds are not known, and no poppy seed oil was manufactured.

(a) Raw opium was brought by the Government from the farmers at fixed prices. No wholesaler was involved.

(c) Farmers received a fixed price from the Government for their poppy crop.

The rising price paid by the Government for raw opium was determined by the price of wheat, the substitute crop for opium, which rose gradually during that ten-year period.

SOUTH KOREA - 28 AUGUST 1947
(United States Delegation to the United Nations)

Part II - Poppy Straw

Not applicable

Part III - Control

A. Opium Poppy and Raw Opium

1. Cultivation of the opium poppy is strictly forbidden in Korea.
 - (a) Not applicable.
 - (b) Not applicable.
 - (c) Not applicable.
 - (d) Articles in a farmers' magazine which has the widest distribution in Korea, spot announcements over the national radio network, newspaper articles and communiques to police units announcing the prohibition on opium poppy cultivation and production of opium.

B. Poppy Straw

Does not apply.

All sources of information advise that poppy straw has not been used as a source of opium products in Korea.

C. General

1. The chief difficulties have been encountered in reaching the opium-poppy growers with information. The areas where opium poppy was formerly grown legitimately are rugged, mountainous areas and the inhabitants are to a large degree uneducated. Despite all measures to inform them, it is believed that many are not yet aware of the prohibition on opium-poppy growing.
2. The Korean farmers are for the most part a law-abiding group, and once the restrictions are made known to them it is believed that control will be obtained. Further efforts expended along these same lines will accomplish the control now sought.
3. Copies of Ordinance No. 119 and Public Health and Welfare Department Order No. 3 are forwarded herewith. Other appropriate regulations are being drafted at this time for export and import and disposition of confiscated narcotics.

PART IV - GENERAL DESCRIPTION OF THE INDUSTRY
AND PROBLEM OF CROP SUBSTITUTION

I

The Japanese-controlled opium-poppy monopoly in Korea had set a goal of 54,000 kilogrammes of raw opium for 1943 - this fell far short of realization because of unusual weather conditions only. The economic

/stability

stability of Korea depends greatly upon her exportable commodities - opium is one of the comparatively few items that can be exported. The land upon which poppy is grown is not very adaptable for food crops. The "family system" of farming practised here provides an abundance of inexpensive labour. However, until such time as Korea may be designated an opium-producing country, farmers will be advised of the prohibition and they will be urged to grow millet, beans and potatoes on the land.

No reliable data can be furnished on the matter of substitution of food crops for opium crops. It appears from reports translated from Japanese that farmers were reluctant to grow opium poppy. The price paid by the Japanese Monopoly Bureau was pegged at approximately 1 yen for each percent of morphine per kilogramme of opium which contained more than 4% of morphine. (1 yen then was equivalent to approximately 48 cents American money). At present the crop is entirely diverted to illicit channels at comparatively fabulous prices.

II

A. Agricultural and Commercial Aspects

1. As a result of the last war Korea is being occupied by Allied Forces. In the American zone all cultivation of opium poppy and processing of any narcotic drugs has been prohibited. The only activity engaged in is the re-packaging of imported narcotics and narcotics taken from Japanese government agencies or Army and Navy stocks. All measures being made are directed at destroying opium-poppy fields.

B. Social Aspects

1. Most of the land in Korea is farmed by the owner and his family. The farms are small and intensively cultivated - much of the produce being market-garden items, principally for home consumption. The cash value of the crops is generally small.

C. Economic and Financial Aspects

1. (a) No data are available to substantiate a statement as to the economic importance of the opium industry.

(b)

	Amount in Yen Paid by Government for Raw Opium
1937	792,619.36
1938	781,914.26
1939	734,245.34
1940	1,348,813.11
1941	2,592,661.71
1942	2,797,802.10
1943	4,034,665.38
1944	Not available

1945 Not available
1946 Nil

2. No data are available on the trade in poppy seeds and poppy seed oil.
3. (i) Raw opium average prices and morphine content for years indicated are as follows:

	Average Price in Yen Per Kilogramme by Government	Average Morphine Content
1937	28.71	12.48%
1938	29.46	12.81%
1939	27.12	11.80%
1940	40.96	10.24%
1941	51.10	10.65%
1942	108.15	10.83%
1943	102.32	10.25%
1944	Not available	Not available
1945	Not available	Not available
1946	Nil	Nil

Note 1: The price paid for opium to the grower was 0.4 yen per gramme of morphine content in 1937, 1938 and 1939 for opium containing more than 4% of morphine. In 1940 the price paid was raised to 1 yen per gramme of morphine contained and the content of morphine reduced from 4% to 2%.

Note 2: The price was raised to encourage the production of opium to meet the demands of the expanding Japanese Empire. Much of the supply for Mongolia and other conquered parts of China normally came from Turkey and India, but this source was shut off.

Note 3: Only the government-controlled and operated opium monopoly association traded in opium, and processed it in any manner.

TABLE A - UNTREATED RAW OPIUM*

Cultivation of the Opium Poppy and Production and Use of Untreated Raw Opium 1937-1946

1 Year	2 Opium Poppy Area under cultiva- tion**	3 Untreated Raw Opium					
		(a) Total quantity pro- duced ***	(b) Estimated total anhy- drous opium content of (a)	(c) Estimated to- tal morphine content of (a)	(d) Quantity trans- formed in the country into standardized raw opium*	(e) Quantity used for other (not stated) purposes**** These figures show the amount of finished product	
	Hectares	Kg.	Kg.	Kg.	Kg.	Morphine Hydrochloride	Kg. Diacetylmorphine Hydrochloride
1937	2,556	27608.345	E 24800	3446.779	63.760		Nil
1938	5,007	26538.071	E 23850	3199.373	22.395	187.050	1,244.000
1939	6,596	26702.091	E 23870	3149.541	Not available	141.565	1,327.100
1940	7,293	32928.689	E 29600	3371.125	25.010	239.028	195.700
1941	8,432	50734.847	E 45600	5404.532	Nil	164.810	10.242
1942	6,665	25970.852	E 23370	2812.324	53.880	Nil	10.106
1943	7,503	29433.020	E 35500	4040.565	Nil		
1944	7,624	30146.724	E 34400	3933.937	Not available		Not available
1945	Not available	Not available	Not available	Not available	Nil	Nil	Nil
1946	Nil	Nil	Nil	Nil	Nil	Nil	Nil

* By Untreated Raw Opium is meant raw opium, stored or warehoused after harvesting, which has not undergone any process of standardization.

By Standardized Raw Opium is meant raw opium which has been conditioned, blended by mixing different kinds of untreated raw opium, or dried, or mixed with neutral substances so as to secure a uniform composition.

** Indicate the method by which the area under cultivation has been ascertained.

*** ~~Furnish separately any available information regarding the different kinds and qualities of untreated raw opium and the purpose for which each kind or quality is used or marketed.~~

**** Any amount of untreated raw opium used as such for consumption, or for making of "prepared opium" as defined in the Hague Convention of 1912, or for manufacturing drugs or for any other purpose should be recorded in this column. Any available information regarding the nature of these purposes and the amounts used for each of them should be given separately.

TABLE B - STANDARDIZED RAW OPIUM 1937 - 1946*

1 Year	2 Total quantity produced **	3 Quantity used in the country for (Not avail)				4 Total quantity exported **		5 Stocks at the end of the year**		*****
		** Consumption ***	**** Manufacture of drugs ****	** Other purposes **	****	*****	*****	*****	*****	
These figures are for finished products										
	kg.	kg.	kg.	kg.	kg.	kg.	kg.	kg.	kg.	
		Morphine	Hydrochloride	Diace-tyl mor-phine	Hydrochloride	Prepared opium	Prepared Opium	Morphine Hydrochlor.	Diacetyl Morphine Hydrochlor.	
1937	63.760	Nil		Nil	63.760	51.535	53.775	3.120		not available
1938	22.395	87.050		1244.000	22.395	18.675	88.835	4.165		not available
1939	45.380	141.565		1327.100	45.380	35.875	145.400	4.335		not available
1940	25.010	239.028		195.700	25.010	16.770	225.390	5.520		not available
1941	Nil	184.810		10.242	Nil	24.475	57.385	6.495		not available
1942	53.880	Nil		10.106	53.880	40.300	40.005	5.675		not available
1943	Nil	Nil		Nil	Nil	15.650	44.000	9.445		not available
1944	not avail.			not avail.			not available			not available
1945	not avail.			not avail.			not available			28851.542
1946	Nil	Nil		Nil	Nil	Nil	Nil	Nil		28851.542

* See Note (1) to Table A.

** Give, if possible, figures indicating for each year: (i) the anhydrous opium content, and (ii) the morphine content.

*** Where standardized raw opium is produced in several kinds or qualities, give, if possible, separate figures for each of them, indicating: (i) the amount of each kind or quality produced; (ii) the anhydrous opium content of each kind or quality; (iii) the morphine content of each kind or quality; and (iv) the purpose for which each kind or quality is used.

**** Indicate separately the form in which the opium was consumed and the normal method of consumption.

***** Give any available information regarding the percentage of codeine and thebaine contained in the opium used for manufacture in the country.

***** Give separately any available information regarding the nature of these purposes and the amounts used for each of them. Where "prepared opium" (as defined in Chapter II of the Hague Convention of 1912) is manufactured from standardized raw opium, indicate separately the amounts of standardized raw opium used for these purposes, the amounts of prepared opium resulting from such manufacture, and the amounts consumed in the country. This note does not apply to prepared opium made by the individual consumer himself, out of standardized raw opium supplied to him. In such cases the amounts of raw opium involved should be entered under "3-Consumption".

TABLE B (Continued)

***** Give any available information regarding the percentage of codeine and thebaine contained in the opium exported.

***** By "Wholesalers" is meant persons (including producers or manufacturers) who hold stocks for wholesale trade including manufacture. By "stocks held by the Government for other than Government purposes" is meant stocks held by the Government for export, for manufacture, or for domestic consumption in the country by the civilian population.

Any stocks of untreated raw opium which may exist at the end of the year should be given separately, as far as possible, for each year of the period. Such stocks should be stated in terms of the total anhydrous content of the opium.

TABLE C - EXPORTS OF STANDARDIZED RAW OPIUM *
1937 - 1946

Note: This table should be used only by countries exporting one kind or quality of standardized raw opium. Where a country exports more than one kind or quality of standardized raw opium separate tables should be drawn up for each kind or quality indicating its name and countries to which it was exported during the period 1937 - 1946.

Countries to which: exported	1937 kg.	1938 kg.	1939 kg.	1940 kg.	1941 kg.	1942 kg.	1943 kg.	1944	1945	1946
Kwantung Province (China)	6700.002	9010.149	8323.731	12498.126	20109.743	16838.772	17418.142			
Manchuria ---	17461.157	28668.158	4258.746	8500.617	17007.930	11031.529	8377.091			
Formosa -----	Nil	Nil	10059.070	7314.856	11472.694	8139.475	4777.452			
(a) Total quantity of standardized raw opium exported ---	24161.159	37678.307	22641.547	28313.599	48590.367	36009.776	30572.685not available....not available....Nil.....
(b) Estimated total anhydrous opium content of (a) -----	E19040.000	E33840.000	E20340.000	E25470.000	E43650.000	E32400.000	E27513.000not available....not available....Nil.....
Percentum mor- phine (anhydrous)	12.48%	12.81%	11.80%	10.24%	10.65%	10.83%	10.25%			
(c) Estimated total morphine content of (a) -----	3015.302	4826.591	2671.702	2899.302	51875.874	3899.858	3133.700			

* See note (1) to Table A

TABLE D - POPPY STRAW USED IN MANUFACTURE OF MORPHINE
AND OTHER OPIUM ALKALOIDS

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TABLE A - UNTREATED RAW OPIUM

1 Year	2 Opium Poppy	3 Untreated Raw Opium				
		(a) Total quantity produced	(b) Estimated total anhydrous opium content of (a)	(c) Estimated total morphine content of (a)	(d) Quantity trans- formed in the country into standardized raw opium	(e) Quantity used for other purposes
	Hectares	Kg.	Kg.	Kg.	Kg.	Kg.
1937	25.678	208.000			129.403	N11
1938	28.416	246.000			216.317	
1939	31.120	262.000		33.080	462.239	
1940	29.852	223.000		27.139	232.044	
1941	29.790	206.000		24.966	113.293	
1942	28.314	285.000		35.840	182.570	
1943	29.548	289.000		36.117	132.989	
1944	26.847	183.000		22.638	122.231	
1945	25.475	147.000		13.237	119.406	
1946	29.083	262.226		15.737	223.365	

(b) No estimate of total anhydrous opium content made in Turkey.

(c) These figures give the approximate morphine content of (a) as computed on the amount bought by the Agricultural Produce Department.

(Ministry of Foreign Affairs)

TURKEY - 24 OCTOBER 1947

TABLE B - STANDARDIZED RAW OPIUM

1 Year	2 Total quantity produced kg.	3 Quantity used in the country for			4 Total quantity exported kg.	5 Stocks at the end of the year	
		Consumption kg.	Manufacture of drugs kg.	Other purposes kg.		In the hands of wholesalers kg.	Held by the Govt. for other than Govt. purposes kg.
1937	208 000	N	I L		199 799	No estimate possible	134 528
1938	246 000				115 919		213 598
1939	262 000				338 479		325 426
1940	223 000				325 591		225 271
1941	206 000				199 752		124 401
1942	285 000				218 993		77 047
1943	289 000				153 187		49 271
1944	183 000				88 225		77 530
1945	147 000				162 005		32 185
1946	262 226				198 145		50 603*

* After subtraction of 6,802 kilogrammes for wastage. The differences between the stocks held by the Government and the quantities made into standardized raw opium within the country arise from the wastage occurring during the current year.

TABLE C - EXPORTS OF STANDARDIZED RAW OPIUM - 1937-1946

Countries to which exported	1937 kg.	1938 kg.	1939 kg.	1940 kg.	1941 kg.	1942 kg.	1943 kg.	1944 kg.	1945 kg.	1946 kg.
Argentina									1,000	
Austria	052									
Belgium	22,560	15,320	11,260	13,710					5,000	10,000
Czechoslovakia	17,615	3,325	13,815	140						
Denmark	560	160	400			400				
Finland						640				1,000
France	4,160	22,960	44,080	28,800						14,760
Germany	18,402	26,000	9,200	34,160	13,740	32,510	49,055	36,465		
Greece				300					200	
Hungary	398	150	540	586	242	543	086	500		
Netherlands (Indies)			16,000	24,000	14,080					
France (Indo-China)		001	16,000	20,960						
Italy	10,460	5,940	6,720	6,660	15,000		2,753			
Japan	12,300									
Kwantung	40,004	001								
Netherlands	009		2,000	2,000						
Norway	360	780	860		450					
Poland		100	100							
Spain					3,040	7,200	21,570			
Sweden	160	3,060	5,260	240						635
Switzerland	9,680	22,160	66,400	4,800	12,300	1,700	8,551	258	1,000	7,280
Union of South Africa							500			
United Kingdom	40,326	14,937	33,083	91,258	2,200		70,668	50,000	34,000	40,000
United States of America	22,750	1,022	112,759	92,975	138,700	176,000		1,000	120,805	124,470
Other countries	003	003	002	002			004	002		
Totals	199,799	115,919	338,479	325,591	199,752	218,993	153,187	88,225	162,005	198,145

YUGOSLAVIA - 28 OCTOBER 1947

(Delegation of the Federal People's Republic of Yugoslavia)

1. In our opinion the choice of the ten-year period 1937-1946 as a basis for a comparative picture of opium production in the various countries is incorrect. In the first place, it includes the war period, a period of five years for Yugoslavia and longer for other countries, during which conditions of production were upset by non-economic factors. Secondly, it is impossible for countries such as Yugoslavia to obtain exact details on conditions during that period. We therefore consider that a more appropriate period should be chosen to provide a picture of the production in the various producing and importing countries.
2. We consider that the importance of a country's opium production should not be considered solely from the standpoint of the ratio it bears to the country's production as a whole (or of the proportion of the national revenue represented by opium), but rather from the standpoint of the importance of opium production for the grower himself, and the difficulties and consequences which any reduction in opium production or its replacement by other crops would involve for him.

We would like to emphasize that the details given below were prepared with the greatest care and represent the greatest possible accuracy which could be attained; but this does not exclude the possibility that some minor corrections may have to be made if later investigations reveal errors or gaps.

TABLE A - UNTREATED RAW OPIUM

Cultivation of the Opium Poppy and Production and Use of Untreated Raw Opium 1937-1946

1	2		3			
Year	Opium Poppy		Untreated Raw Opium			
	Area under cultivation	(a) Total quantity produced	(b) Estimated total anhydrous opium content of (a)	(c) Estimated total morphine content of (a)	(d) Quantity transformed in the country into standardized raw opium	(e) Quantity used for other purposes
	Hectares	Kg.	Kg.	Kg.	Kg.	Kg.
1937	8,310	62,420	51,021	6,844	56,000	--
1938	7,360	53,200	43,624	6,384	47,900	--
1946	7,186	29,237	23,058	3,380	25,310	--

TABLE C - EXPORTS OF STANDARDIZED RAW OPIUM
1937-1946

Countries to which exported	1937	1938	1946
	Kg.	Kg.	Kg.
(a) Total quantity of standardized raw opium exported	48,611	29,915	24,028
(b) Estimated total anhydrous opium content of (a)	43,264	25,727	
(c) Estimated total morphine content of (a)	7,412.440	5,027	representing 347,184.82 morphine units.

PART II - POPPY STRAW

Poppy straw has never been used as raw material for the manufacture of opium alkaloids. The standing poppy is allowed to dry and after the seeds are harvested the straw is used for fuel.

PART III - CONTROL

A. Opium Poppy and Raw Opium

Opium poppy cultivation is spread out over the arrondissements, in accordance with the provisions of the Narcotics Law of 5-XII-1931.

The areas to be sown with opium poppy are determined by the authorities for each arrondissement, and by the arrondissements for each commune (People's Councils). These in their turn decide the area to be sown by each farmer. Opium poppy may not be sown without the permission of the competent authorities. The entire production is exported either in the raw or the treated state, with the exception of amounts retained, on the basis of annual official estimates, for domestic medicinal requirements. Opium manufacture and trade are controlled by the State. Every grower is required to hand over his entire production of opium to the State, which operates on the opium market through a state agency. All other trade in opium is prohibited by the law and considered as contraband. The producer can only sell his opium to the State purchasing agency, as no other legal trade exists. As there is no special control agency, and control is exercised by the people's councils, which have various other functions, it is impossible to give a separate figure for costs of administration.

The purchase, warehousing, distribution and export of opium are in the hands of the State. The amounts of raw opium for manufacturing purposes are supplied by the State.

Exported opium is packed in sheet-metal cases of 92 cm. x 46 cm. x 26 cm., reinforced by wooden boards 2.5 cm. thick.

There is no clandestine cultivation and therefore no need for counter-measures.

PART IV

The cultivation of opium has taken firm root in the Federal People's Republic of Yugoslavia. It has the following advantages:

Poppy is grown on land suitable for autumn crops. The most abundant and profitable of these is the opium poppy - the only autumn crop which gives two harvests from a single plot. Maturing early, it allows a second spring sowing, thereby increasing the yield. This is precisely why Yugoslav peasants favour poppy growing. The farmer is able to sell his opium crop in the spring, thereby obtaining money which is of great help to him, providing the resources which enable him to live until the other crops, such as
/cereals,

cereals, tobacco, vegetables, etc. have ripened. If he did not grow opium, he would fall into debt. The small bulk of opium makes storage facilities unnecessary so the peasant does not need to sink capital in building them, as has to be done for other agricultural produce.

The question of substituting other crops for opium poppy is a very complex one. Since the ratification of the Geneva Convention opium production has been falling. The decline in opium production and the fall in prices have had detrimental effects on the standard of life of our peasants and of all who were employed in opium production. The growers themselves have tried to replace the poppy by other crops, but all their efforts have been in vain. Experiments have been made with cotton, rape and other crops, but they have all failed: no other crop has succeeded in replacing the poppy which for dozens of years past has proved the most profitable.

Nevertheless, substitution would be possible from the standpoint of profitability; but it would necessitate considerable capital investment, involving large financial outlays over a long period of time. Capital would be required to execute irrigation works for the entire region, since the poppy is grown on dry soil. To encourage crop substitution it would be essential to provide facilities for cheap long-term credit to enable the farmer to replace his poppy crop smoothly and without financial loss. The creation of the conditions which would enable the poppy crop to be replaced is at once a financial, technical, scientific and political problem. Its taste and its morphine content make our opium the most suitable for the manufacture of medical drugs. It was never bought by foreign purchasers except for medical needs, and in Yugoslavia itself it is only used for medical purposes. Drug addiction cannot possibly spread, and opium is used for no other purpose.

If opium production is to be restricted to the quantities strictly necessary for the manufacture of medicaments, opium poppy cultivation should in that case be permitted solely in countries and regions which produce the best quality of opium, i.e. opium rich in morphine and where there is no danger of population becoming addicted to drugs.

No immediate or radical measures can be taken to restrict or prohibit opium production at once, as the opium question is for our country an economic and social problem of the highest importance, affecting some 35,000 farmers, who have no substitute at present for the income they derive from opium.

A. Agricultural and Commercial Aspects

1. The total area under opium poppy is very small in proportion to the
/total area

total area of the country under cultivation. If the question, therefore, were considered from this standpoint false conclusions might be drawn on the importance of opium production in Yugoslavia. The true significance of the problem, and its economic, social and financial implications, only appear if it is considered from the standpoint of the interests of the farmers, as described above.

During the war the area under poppy declined (although there are no exact details as to the decrease). This state of affairs was due to non-economic causes resulting from the occupation, such as: deportations to Germany, escapes to the maquis to fight the occupying power, and the excessively low prices due to the policy of exploitation followed by the occupation authorities.

2. In the Republic of Macedonia there is no cadastral survey of cultivated areas; or rather, such a survey exists in one or two districts at the most.

3. The areas under opium poppy cover the central and eastern part of Macedonia, including the following districts:

KOUMANOVSKI	Altitude 340-500 metres, fairly cold winter. Quality of opium: 10-12% morphine content.
KRATOVSKO-CAREVOLSKI	Similar climatic conditions to Koumanovski. Little opium cultivation. Quality of opium: 10-12% morphine content
SKOPSKI	Comprises the Skopliá plain, including the left bank of the Vardar. Altitude 400 metres. Quality: 11-13% morphine content.
OVCEPOLJSKI REGION	An area very suitable for poppy cultivation; altitude 350-500 metres. Quality: 12-13% morphine content.
TIKVESKO-VELESKI REGION	The most important opium-producing region altitude 200-400 metres. High quality opium with 12-14% and frequently over 14% morphine content.
STIPSKI	Area suitable for opium poppy cultivation. Altitude 300-400 metres. Good quality opium, with 11-13% morphine content.
KOCANSKI	Produces a fairly large quantity of lower grade opium, containing 10-12% morphine.
RADOVISKO-STRUMICKI REGION	Excellent climatic and soil condition for opium production. Quality: 12-13% morphine content.

GEVGELISKI

Soil conditions favourable for opium cultivation, but production is low. Mediterranean climate. High quality opium, with a morphine content of 12-14%.

4. The raw opium is kneaded and standardized into a type having 12-14% morphine content and 12-20% moisture. Standardization is carried out by the State opium purchasing agency. The opium standardized in this manner is used for export.

B. Social Aspects

In the People's Republic of Macedonia the land is cultivated by small farmers, particularly in the districts where opium poppy is grown. There are hardly any larger private or State farms, and where they exist they do not cultivate opium. We are therefore unable to make any comparison.

95% of the farmers sow an area of less than 0.2 hectares. The regions where opium poppy is grown are regions of small holdings which cultivate other crops only for their own consumption and market opium only in order to obtain the necessary funds to pay their taxes and buy absolutely essential articles.

C. Economic and Financial Aspects

1. The opium industry - that is to say the manufacture of opium - is of small importance as compared with other industries or branches of economy. No special tax is levied by the State on opium.
2. Poppy seeds constitute 25% of the value of the total opium production. Poppy seeds have no great importance for the country's trade, but they play a very important part in the oil industry, since they provide an important element in the local diet, particularly that of the Moslem population, which does not use pork fat. On the average 350 kilogrammes of seeds are extracted per hectare.

PART II. COUNTRIES USING POPPY STRAW FOR THE MANUFACTURE OF MORPHINE

AUSTRALIA - 24 November 1947
(Department of External Affairs)

Table D and Parts II and III of the questionnaire, which were deemed applicable to Australia have been completed and are forwarded herewith. I have also to transmit to you the following supplementary information:

At an early stage in the recent war, it appeared possible that Australia might be cut off from its normal sources of supply of essential narcotic drugs. Experiments under Government sponsorship and control were therefore carried out with a view to evolving a successful method of extracting morphine direct from locally grown poppy plants.

Unfortunately two years of drought conditions followed the initial plantings of opium poppies and the crops substantially failed. Sufficient material was, however, harvested and treated to demonstrate that the process of manufacture was practical and, although the conditions which gave rise to the project no longer existed it was decided to continue the experiments until sufficient data was available to ensure successful production in any future emergency.

Results showed that, while production under war-time emergency conditions was uneconomic, there was a possibility of establishing a peace-time morphine production industry provided that strains of poppy could be produced with a dried capsule content averaging at least 0.3 per cent of morphine.

The experiments, both in poppy growing and manufacture were conducted throughout under strict Government supervision and control, in accordance with the provisions of the Geneva Convention of 1925 and of the 1931 Limitation Convention.

No raw opium was produced, the experiments being confined to the extraction of morphine and codeine direct from the straw harvested from fully matured poppy crops.

The question of the continuance of experimental opium poppy cultivation is at present under consideration.

PART II - POPPY STRAW

1. (i) Felton, Grimwade and Duerdins Pty, Ltd., Melbourne, Victoria
- (ii) The process used which is a modified form of the "Kabay" process, is as follows:

The poppy straw is milled and the seed removed for the recovery of the oil. The powdered straw is mixed with an acid sulphite
/solution

solution which extracts the morphine whilst preventing losses by oxidation and by mould growth. The liquor is pressed out and the marc retreated, liquor and poppy passing countercurrent until sufficient strength in the liquor is obtained. The morphine is then extracted from the sulphite solution (after rendering it alkaline and filtering) by means of amyl alcohol. From this solvent it is transferred to sulphuric acid, the stripped amyl alcohol returning to the system. Crude morphine is precipitated from the acid solution, and then passes through the purification stages.

2.	(i)	E£.60		
	(ii)	Morphine	Codeine	
		1944/45	£1715	£17 (as a by-product)
		1946	E£1100	E£40 do.
3.	No exports.			

PART III - CONTROL

A. Opium Poppy and Raw Opium

No raw opium was produced. All opium poppy cultivation has been of an experimental nature only, and has been carried out under the supervision of Commonwealth and State Government authorities.

B. Poppy Straw

See answer to "A" above. Control is exercised over this raw material in the possession of the manufacturers in accordance with Articles 16 and 17 of the Limitation Convention of 1931.

C. General

See answers to "A" and "B" above.

TABLE D - POPPY STRAW USED IN THE MANUFACTURE OF MORPHINE AND OTHER OPIUM ALKALOIDS - 1937/1946

E/CN.4/107
Page 14

1 Year	2 Area from which poppy straw was used for the manufacture of opium alkaloids	3 Total quantity of poppy straw used in the manufacture of morphine and codeine	4 Total quantity manufactured from (3)		5 Quantity of Morphine and Codeine manufactured from (3) used for:			
					Domestic Needs		Exports	
			Morphine	Codeine	Morphine	Codeine	Morphine	Codeine
	Hectares	Kg	Kg	Kg	Kg	Kg	Kg	Kg
1937/1941	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
1942	15.6	"	"	"	"	"	"	"
1943	40	2475	0.680	"	"	"	"	"
1944	80	20380	2.778	"	3.050	"	"	"
1945	60	-	2.250	(I) 1.100	1.850	1.05	"	"
1946	160	14805	4.540	(II) 1.420	Nil	Nil	"	"

(I) Manufactured from balances of raw materials held over from 1943 and 1944 season crops, and from partly processed crude drugs, not finally converted in previous years.

(II) In the form of crude drugs. Held by the manufacturer for further experimental processing.

FRANCE

FRANCE - 10 JULY 1947

There are various varieties of opium-poppy (and, within these varieties, various strains). The best known and most important are the "common oil poppy" or "gray poppy" (*Papaver somniferum nigrum*), which is cultivated for oil extraction, and the "White poppy", "Medicinal poppy" or "Opium poppy" (*Papaver somniferum*, var. *candidum* or *album*), which has white flowers and seeds and is cultivated for opium production. This, however, is not an absolute distinction, for in some countries oil is also extracted from "Opium poppy", and opium is sometimes extracted from "Oil poppy".

A few hectares are under "White poppy" in France; the dried poppy head, which is entered under Table A of Toxic Substances, is used pharmaceutically for cough "mixtures". It may be sold by the grower only to licensed persons; that is to say, to pharmacists and authorized wholesalers.

In 1945 over 23,358 hectares were under "Oil poppy" or "gray poppy" in France. The seeds are used for the manufacture of poppyseed oil. Since 1942 one factory has been authorized to extract opium alkaloids from poppy heads. The area used for this purpose amounted to 6,000 hectares in 1944.

A small part of the oil poppy crop (6,000 out of 35,406 hectares in 1943), therefore, is used for the extraction of morphine. On the large farms the mechanical picking of the poppy heads brings along with the heads a large amount of poppy straw, which French manufacturers do not use for morphine extraction owing to its low alkaloid content. The raw material harvested in this way could not therefore be used; only small farms (of less than 20 acres) where picking is done by hand, produce useable raw material. For economic reasons France intends to develop the cultivation of the oil poppy, both for oil and for narcotics requirements, since opium imports are reserved for medicinal drugs.

TABLE D - Poppy Straw Used in the Manufacture of Morphine and Other
Opium Alkaloids

Manufacture only began in 1941 to 1942 (using poppy head and not poppy straw).

Area from which poppy straw was used for the manufacture of opium alkaloids (hectares)

1941/42 - 600
1942/43 - 4000
1943/44 - 6000
1944/45 - 5000
1945/46 - 5000

/Total

Total quantity of poppy straw used in the manufacture of morphine
(metric tons)

1941/42 -
1942/43 - 270
1943/44 - 465
1944/45 - 591
1945/46 - 1306

Total quantity of morphine manufactured (kilogrammes)

1941/42
1942/43 - 270
1943/44 - 1147
1944/45 - 1371
1945/46 - 3379

Quantity of manufactured morphine used for domestic needs
(kilogrammes)

1942/43 - 642
1943/44 - 1147
1944/45 - 1371
1945/46 - 3317

Quantity of manufactured morphine used for export (kilogrammes)

1945/46 - 62

Average percentage of anhydrous morphine base: 2.5 per thousand
kilogrammes of poppy.

Average percentage of natural codeine base: 0.05 per thousand
kilogrammes of poppy.

PART II - POPPY STRAW

Poppy straw used as raw material for the manufacture of opium
alkaloids.

In France only the poppy head (oil poppy) is used.

- Only one factory: The Francopavot Company, with head offices at
Paris, 22 rue de Fossés St. Jacques and works at Massy (Seine et Oise),
collects and treats poppy for the manufacture of opium alkaloids.

- Manufacturing process. The shelled and chopped poppy is percolated
through an appropriate solvent in extractors. The juices are concentrated
by distillation, thus enabling the solvent to be recovered and leaving
behind a total raw extract. This extract contains about three per cent
of morphine and a small amount of the other alkaloids. It is used like
opium as a raw material for the preparation of morphine and its
derivatives.

/- Price of poppy

- Price of poppy straw per metric ton, including the cost of transportation to factory

- 1942/43 - 6140
- 1943/44 - 7511
- 1944/45 - 12130
- 1945/46 - 29280

- Cost price of one kilogramme of morphine contained in the raw extract (franco)

- 1942/43 - 8000
- 1943/44 - 9070
- 1944/45 - 12600
- 1945/46 - 18500

- Morphine exports:

The 62 kilogrammes of morphine exported were delivered to the following countries:

- 13 kg. 500 to Denmark
- 48 kg. 500 to Argentina

The areas sown with oil poppy for oil extraction were:

- 1943 - 35,406 hectares
- 1944 - 30,265 "
- 1945 - 23,358 "

PART III - CONTROL

A. Opium Poppy and Raw Opium. There is no raw opium harvested in France.

B. Poppy Straw. Only one firm (the Francopavot Company) is authorized to collect poppy heads for the direct extraction of alkaloids.

As soon as the poppy heads enter the factory, they come under the system of narcotics control obtaining in France, as required more particularly by Articles 16 and 17 of the 1931 Convention: quarterly and even monthly reports, detailed reports on manufacturing processes, inspections, etc.

C. General

I. Control has not given rise to any difficulties. It is considerably facilitated by the fact that only one factory processes a license.

II. Control has proved fully effective. The complicated nature and the size of the machinery used for extraction make clandestine manufacture practically impossible. The bulky nature of the raw material (200 times greater than that of opium) provides an almost absolute guarantee:

/2,000 kilogrammes

2,000 kilogrammes of straw (500 kilogrammes of poppy head), i.e. the produce of one hectare, take up a space of more than twenty-four cubic metres and supply only one kilogramme of morphine.

The control is identical with that applied to all narcotic drugs. It was investigated on the spot by a member of the Opium Section of the League of Nations, whose report concludes as follows:

"The investigation gave the impression that the system was functioning with both the rigour and the elasticity required; that the Narcotics Bureau was in a position to follow the movement of manufacture and deliveries at any moment, and that it had succeeded in persuading manufacturers to conform to the control imposed by the Convention".

III. The regulations in force for the purposes of this control are the general regulations applying to all narcotics; which were communicated to the League of Nations. The Francopavot Company is required to submit monthly reports to the Narcotics Bureau on receipts and deliveries of poppy heads and on the products manufactured.

NETHERLANDS - 8 October 1947
(Netherlands Delegation accredited to the United Nations)

PART I - STATISTICAL INFORMATION

TABLES A, B and C. Nil.

TABLE D:

		Domestic needs		Exports
Not available	nil	not avail.	not avail.	nil
Approx. 235 Hect.	142490 kg.	288 kg.	288 kg.	"
" 165 "	82250 kg.	164 kg.	154 kg.	"
" 50 "	24650 kg.	42 kg.	42 kg.	"

NOTE: The Information Table D refers to the chaff of the poppy heads and not to that of the whole poppy-plant.

PART II - POPPY STRAW

1. (I) Poppy-head chaff is processed by the Netherlands Cocaine Works, Ltd. Amsterdam, and by the Netherlands Pharmaceutical Chemical Products, Ltd.
(II) Apeldoorn. Both of them use their own manufacturing process.
2. The prices of poppy-head chaff and of morphine are still fluctuating a great deal. No poppy straw being available at this moment it is impossible to give any prices. Any estimate for the 1947 production would be too rough to be of any value for the purpose of this return.
3. Nil.

PART III - CONTROL

- A. 1. The cultivation of the opium poppy is unrestricted.
- B. In 1943 and 1944 the collection of poppy-head chaff and the extraction of morphine was the concern of the Government who entrusted the latter process to manufacturers against payment. This Government enterprise has been abolished.

In 1945 no poppy-head chaff was collected.

Since 1946 poppy-head chaff has been subject to control from the moment it is shipped from the agricultural centres to the manufacturers. The latter have to report any quantity of raw material received to the Public Health Inspector, and are under the obligation of maintaining a special system of bookkeeping for poppy-head chaff and the morphine extracted therefrom. Experts of the Public Health Institute are in charge of the analysis.

- C. Control over the production of blue maw seed, which is grown throughout the country, is hardly possible owing to the larger number of growers of whom there were not less than 3,000 in 1946. These farmers regard the straw as worthless and they always burn it.

PART IV - GENERAL DESCRIPTION OF THE INDUSTRY
AND PROBLEM OF CROP SUBSTITUTION

The Netherlands is the principal blue maw seed producing country in the world, and has been so already for a number of years. The area under poppies greatly varies as will be seen from the following table:

<u>Year</u>	<u>Hectares</u>	<u>Year</u>	<u>Hectares</u>
1937	440	1942	6602
1938	2175	1943	7827
1939	2741	1944	6030
1940	1228	1945	2433
1941	41	1946	6548

The substantial differences between these figures are largely due to the fluctuation of the prices of blue maw seed varying from fl. 15.- to over fl. 100.- per kilogramme. In 1945 and 1946 the basic price was fl. 85.- per kilogramme.

During the war the production of blue maw seed was marked by a striking increase due to the fact that oil from blue maw seed, in addition to that crushed from cabbage seed, was used as a raw material for margarine works. Fertile soil, free from weeds, is the most favourable one for the cultivation of blue maw seed which gives the best results on clay grounds.

Important growing centres are the Provinces of North Holland and Zeeland (especially the western part of the latter, Zeeland Flanders and the Isle of South Beveland).

Poppy is an annual plant, usually sown in April. For each Hectare, 2 kg. of seed is required for sowing. Great care has to be exercised in nursing the young plants. Caution is also required in thinning the nursery-fields which has to be done at the right time; it has been found that non-thinned fields yielded better crops than those where surplus plants had been removed.

Blue maw seed crops are harvested about mid-August. The dried crop may be either stored or threshed immediately.

The yield of blue maw seed averages 1200 kg. per Hectare.

The factors to which the superior quality of Netherlands-grown blue maw seed must be attributed are not known up till now although there is no doubt that, in addition to the type and condition of the soil, the climatic conditions (dampness and temperature), it must be due to the expert knowledge of the growers which is usually passed from father to son.

The bulk of blue maw seed, not having undergone any manufacturing process, is sold to bread and pastry bakers, because of its sweet walnut-like taste.

/Besides,

Besides, it is sold to oil crushers who sell the oil to margarine works and to paint and dye manufacturers.

Netherlands blue maw seed has always found a ready market in foreign countries as will be seen from the Export Table given below.

Year	<u>Export (in tons)</u>			
	U.S.A.	Germany	Belgium	Great Britain
1931	2924	1066	----	87
1933	2469	913	113	55
1935	1579	426	29	44
1936	1993	529	75	49
1938	3070	712	143	76
1940	1486	169	86	39

These countries demand high standards of quality as well as of purity. The purifying process is a rather costly one because it is a slow process.

The oil crushed or extracted from blue maw seed is a superior edible oil. It is also used by the manufacturers of high-class paints for artists.

Prior to the war, the chaff, largely consisting of poppy-head chaff, which is left after the threshing process, used to be burned. During the war, however, when no opium was imported, the experiments, which had been started in 1937 and 1938, with a view to win morphine from poppy-head chaff, were continued with practical results. Before the war the outcome of these experiments was unsatisfactory inasmuch as, owing to the voluminous character of the chaff, - for one ton of which a space of 10 cub. metres is required, - and due to the low morphine content, the cost-price was too high for an economically justified production. During the war the price factor played a minor part, and the present opium price level is so high and the foreign exchange problem so serious that it is not only justifiable but even necessary to continue the manufacture of opium from a domestic product which prior to the war was regarded as a waste product to be destroyed.

During the war poppy-head chaff was collected on behalf of the Government. The heads had to be severed from the stalks whereupon the heads were threshed, and the chaff had to be turned over to the Government by which the high costs of cutting were defrayed.

Although since the war the importation of opium at considerably increased prices has been resumed to a limited extent, Netherlands pharmaceutical works have become so experienced in the extraction of morphine from the poppy-heads of blue maw seed plants that they have taken in hand the systematic manufacture of this product. Their manufacturing plants are now being extended to such a measure as will allow them to absorb the complete 1947 crop. The quantity of morphine to be
/extracted

extracted from 1 ton of poppy-head chaff is estimated at 1 to 2 kilogrammes while the crop of blue maw seed gathered from an area covering 1 Hectare yields over 1/2 ton of chaff. The annual production of morphine is estimated at an average of 2,000 kilogrammes, of which 500 kilogrammes will be required for domestic use, thus leaving 1,500 kilogrammes available for export. Although it is impossible to enter into any prognostication with regard to the expected price level, there is sufficient reason to expect that the Netherlands will derive some benefit from the future export of morphine.

From a technical point of view, it may be said that the difficulties encountered in the production of morphine from poppy-head chaff, when it was in its infantile stage, have now been overcome. A problem which is still to be solved is that of cutting the price of the raw material and of rationalizing the supply of the latter. The amount of work involved in the pre-war method of severing the poppy-heads from the stalks is too expensive to meet post-war conditions, the more so as the Government subsidy to defray those expenses has been abolished. As early as before the war satisfactory results had been obtained, however, by making use of a device in the threshing machine for the mechanical separation of poppy-head chaff.

The Central Agricultural Research Institute at Wageningen is now engaged in selecting blue maw seed species by their alkaloid content with a view to improve the morphine content without detriment to the yield of seed.

SWITZERLAND - 8 JULY 1947
(Swiss Office for Liaison with the United Nations)

PART I

Table A	Untreated raw opium
Cultivation of the opium poppy	Production and use of untreated raw opium
Table B	Standardized raw opium
Table C	Exports of standardized raw opium

Tables A, B and C do not require to be completed, as Switzerland does not grow the poppy for the production of raw opium or manufacture standardized raw opium.

Table D	Poppy straw used in manufacture of morphine and other opium alkaloids.
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PART II - POPPY STRAW

- (i) F. Hoffmann-La Roche & Cie., Bâle
(ii) See annex, Patent No. 186,666, Class 116 H, of 1 December 1946
- (i) Not known
(ii) Not known
- (Not known)

PART III - CONTROL

A. Opium Poppy and Raw Opium

In Switzerland the poppy is not grown for the production of raw opium, but exclusively for the production of oil. Thus, even before 1940 it was grown only in very small quantities, and it was only during the war, owing to difficulty of supply, that it was produced in greater quantities.

Thus, in Switzerland poppy-growing does not require official control within the meaning of narcotics legislation. There is an obligation to report to the authorities any cultivation of the poppy, but this is only to enable an accurate check to be made of the prospects for the supply of oil.

- (a)
- (b) In view of the above these questions may be passed over.
- (c)
- (d)

B. Poppy Straw

Formerly, once the heads were emptied of their seeds, the poppy plant was destroyed by the grower himself. It was only after the company mentioned under 1 (i) had announced through the farmers' associations, that it was open to buy poppy straw, that is to say, heads with stems of about 10 cm.,

/that that part

that that part of the plant was ~~sent to it~~ after removal of the oil seeds. This delivery is unrestricted. The firm in question must notify the authorities how much poppy straw it obtains in this way, and how much morphine it extracts therefrom. The provisions of Articles 16 and 17 of the International Convention of 13 July 1931 for limiting the manufacture and regulating the distribution of narcotic drugs are enforced.

C. General

1. No difficulty is encountered in the application of the system of control.
2. The system of control makes it possible effectively to supervise the manufacture of morphine. It does not need to be improved in any way. As oil is now in larger supply, poppy-growing will probably decline, and very likely will shortly cease altogether.
3. Annexes: Federal Law of 2 October 1924 on narcotic drugs; Order of 23 June 1925 on traffic in narcotic drugs.

PART IV - GENERAL DESCRIPTION

OF THE INDUSTRY AND PROBLEM OF CROP SUBSTITUTION

I. As has been said under Part III, A. 1., the poppy is not grown in Switzerland for the production of raw opium. Consequently, the cultivation of this plant - or the abandonment of its cultivation - is of no importance at all in Switzerland from the social, economic or financial points of view, and the problem of crop substitution does not arise. The industry has used home-grown poppy straw because it was quite by chance that it had occasion to do so. There can therefore be no question of giving financial assistance to growers who give up the cultivation of the poppy.

II. As pointed out in Part III, C.2, and as is shown by Table D for 1946, the cultivation of the poppy is decreasing as a result of larger supplies of oil, and will probably cease altogether within the near future.

Consequently, the delivery of home-grown poppy straw for the manufacture of morphine will diminish and will also eventually cease.

A. Agricultural and Commercial Aspects

1. See Table D
2. There is no cadastral survey of the areas where the opium poppy is grown, but it is compulsory to report the areas under poppy growing. This, however, is only to facilitate control of the country's oil supplies, and with the return of normal conditions of supply the obligation will lapse.
3. The cultivation of the poppy is fairly evenly distributed over the country as a whole, except for the mountainous regions, which are not suited for it.

/4. No special

4. No special method has been adopted with regard to the cultivation, properly so-called, of the poppy since its purpose is not the production of opium.

B. Social Aspects

1. In Switzerland the system of land tenure is quite unsuited to the type or system of cultivation required for the poppy.
2. Only small areas are involved, varying in size with the size of the farms.

<u>Year</u>	<u>Number of Poppy Plantations</u>
1943	30,000
1944	35,000
1945	40,000
1946	11,000

C. Economic and Social Aspects

1. (a) There is no opium industry in Switzerland. From the financial point of view poppy-growing is of no importance whatever for the economic life of the country.
(b) There is no opium produced and therefore no tax levied.
2. See Table D (Annex 1)
3. There is no such domestic trade, as raw opium is not produced. No prices can therefore be given. Prices of poppy seeds: not known.

TABLE D - Poppy Straw used in Manufacture of Morphine and other Opium Alkaloids (1937 to 1946*)

1. Year	2. Total Area of Cultivated Land in the Country	3. Area of Land used for the Cultivation of the Poppy (included under Column 2)	4. Production of Poppy Seeds ***	5. Production of Poppy Oil (extracted from 4) ****	6. Quantity of Poppy Straw used in the manufacture of morphine	7. Quantity of Morphine manufactured from Poppy Straw (6)
	Hectares	Hectares	Kg.	Litres	Kg.	Kg.
1937					3,980	10
1938						
1939	209,301					
1940	212,498	143	141,000	42,300		
1941	253,511	541	540,000	162,000		
1942	299,419	680	580,000	204,000	42,220	166
1943	341,056	827	326,000	247,800	98,464	376
1944	354,394	1,027	1,026,000	307,800	167,235	633
1945	355,293	1,113	1,050,000	315,000	545,486	1,753
1946		410	405,000	121,500	589,420	1,809

* It is not possible to reproduce here the columns given under 5 in Table D in the questionnaire (domestic needs, and exports), as no such figures are given in the annual statistics.

** Only part of the poppy straw is used for the manufacture of morphine.

*** Estimated

**** Estimated, and including the producers' domestic consumption

CZECHOSLOVAKIA - 13 AUGUST 1947
(Czechoslovak Delegation to the United Nations)

In answer to the questionnaire the Government of Czechoslovakia can only supply information as from the year 1945. For the war years the Czechoslovak authorities have no information, as the manufacture of morphine from poppy straw - the only method of preparation used in Czechoslovakia - was at that time under the control of the German invaders, both in the Czech lands (Bohemia, and Moravia-Silesia) and in Slovakia. The Germans took by force from the Czechoslovak authorities all statistical documents relating to narcotic drugs and used them as waste paper. At that time the factory of Hlohovec used not only poppy straw of local origin but also straw from Bohemia and Moravia-Silesia or Germany. Also, the raw morphine produced had to be sent, for further conversion, to the firm of E. Merck at Darmstadt and to the I. G. Farbenindustrie.

PART I - STATISTICAL INFORMATION

In Czechoslovakia raw morphine is manufactured only from poppy straw.

TABLE D. POPPY STRAW USED IN MANUFACTURE OF MORPHINE
AND OTHER OPIUM ALKALOIDS, IN CZECHOSLOVAKIA,
1945-1946

1. Year	2. Area from which poppy straw was used for the manufacture of opium alkaloids Hectares	3. Total quantity of poppy straw used in the manu- facture of mor- phine Kg.	4. Total Quantity of morphine manufactured from (3) Kg.	5. Quantity of morphine manufactured from (3) used for:	
				Domestic needs Kg.	Exports Kg.
1945	225	350 000	370	370	Nil
1946	450	700 000	712	649	63

PART II - POPPY STRAW

1. (i) Poppy straw is used for the manufacture of alkaloids by the National Company of Chemical and Pharmaceutical Factories at Hlohovec (Slovakia) and by the National Company of United Pharmaceutical Factories in its works at Chrast near Chrudim in Bohemia.
(ii) The Hlohovec factory uses the "Kabay" process and the Chrast factory the "Roche" process.
2. (i) The price of poppy straw per metric ton, including the cost of transportation to the factory is about 4,500 Czechoslovak crowns.
(ii) The cost price of one kilogramme of morphine extracted from poppy straw is about 11,000 Czechoslovak crowns, and that of codeine about 12,000 Czechoslovak crowns.
3. In 1946, 70 kilogrammes of crude morphine (morphine base 63) were exported to Sweden.

PART III - CONTROL

B. Poppy straw.

The supplies of poppy straw in factories are controlled in respect of quantity by agencies of the public health services responsible for the general control of the manufacture of narcotic drugs.

PART III. OTHER COUNTRIES

CANADA - 26 AUGUST 1947
(Department of External Affairs)

"Under the provisions of the Opium and Narcotic Drug Act of Canada it is unlawful to cultivate, gather or produce opium poppies except under the authority of a licence issued by the Minister of National Health and Welfare. No such licence has ever been granted as Canada is not a manufacturing country of basic supplies of narcotic drugs, but is classified rather as a consuming country, importing all requirements of raw opium and opium alkaloids, whether needed for medicinal or scientific purposes. The questionnaire therefore is not applicable to Canada as this country does not come within the categories specified."

UNITED STATES OF AMERICA - 15 JULY 1947
(Delegation of United States of America to the United Nations)

PART I - STATISTICAL INFORMATION

The opium poppy is not cultivated and raw opium is not produced in the United States. Prior to the recent war poppy seeds were imported in considerable quantities for culinary purposes and extraction of the oil. The inability to procure sufficient imports of these seeds after the outbreak of the war and the high prices offered for the small quantities of seed which could be procured induced certain farmers in the State of California to make scattered plantings of poppies. This was not then prohibited by any law. These plantings began in 1941 and the areas cultivated were gradually increased until in 1943 some 480 hectares were under cultivation. A Federal law for the control of this cultivation, enacted late in 1942, did not become effective until in 1943 after the crop for that year had been already planted. This crop the owners were allowed to harvest. In 1944 certain of these farmers made further plantings, contesting the constitutional validity of the Federal law. Prosecutions were instituted, the law was upheld in the courts, and the poppies were confiscated and destroyed. There have been no plantings since 1944, and there are no accurate figures available for the acres planted during 1941 and 1942, though these were less than those for 1943. Statistical Table A has been completed and is attached.

PART II - POPPY STRAW

Poppy Straw is not produced in the United States and is not used in this country for the manufacture of opium alkaloids. A few years ago
/small and

small and insignificant experimental plantings were made by Government agriculturists on Government farms and the poppy straw harvested therefrom was utilized for experimental use in the perfection of poppy straw extraction processes for use in the event of any national emergency which should prevent the importation of adequate supplies of opium. Neither the poppy straw nor the small quantities of alkaloid produced entered into commercial channels in any way. Hence, there are no cost, price, or export figures to report. Statistical Table D has been completed and is attached.

PART III - CONTROL

The cultivation of the opium poppy and the manufacture of derivatives therefrom are now subject to Federal control under the Opium Poppy Control Act of 1942, effective 9 February 1943, and Bureau of Narcotics Regulation No. 7, approved 10 February 1943*. Under these laws and regulations the opium poppy may not be cultivated or derivatives manufactured therefrom without first procuring the appropriate grower's or manufacturer's licence from the Commissioner of Narcotics. These licences are not transferable, must be renewed annually, and are issued only to persons (1) of good moral character, (2) having a suitable farm or factory, and equipment, (3) proper financial standing and farming or manufacturing experience, (4) who afford suitable safeguards, and (5) comply with such further requirements as may be prescribed. The Commissioner may revoke or refuse to renew a licence in case of a violation of the law or where he deems it in the public interest. The areas to be planted and the quantities to be produced or manufactured may be limited by the licence and any excess is subject to confiscation. Returns must be rendered annually by producers and quarterly by manufacturers.

The regulations prohibit the issuance of licences for the production of opium poppies unless and until their production becomes essential in order to provide narcotic drugs for medical and scientific needs which cannot be supplied from crude opium obtained by importation. Accordingly, no licences to produce opium poppies or to manufacture therefrom have been issued by the Commissioner under this law and none are contemplated under existing conditions.

The agency responsible for administration of the Opium Poppy Control Act is the Federal Bureau of Narcotics, whose organization and functions

* "These laws and regulations as well as the two charts showing respectively the organization of the Bureau of Narcotics and the control of the legitimate manufacture and distribution of drugs in the United States are filed in the archives of the United Nations Secretariat."

have been described in numerous annual reports on the Traffic in Opium and other Dangerous Drugs, submitted on behalf of the United States Government. See attached organization chart, marked E. The control of narcotics manufactured from opium and coca leaves is accomplished through a system of registrations, licences, monthly returns and periodic inspections. See attached chart, marked F for further details. These same controls will be applied to opium poppies and derivatives manufactured therefrom, if and when their cultivation and manufacture are permitted. They will meet all requirements of the Opium Conventions as well as those of American narcotics laws and no particular difficulties in their application are anticipated. The constant surveillance of the traffic maintained by our officers would promptly disclose any diversion to unauthorized channels.

Copies of the Opium Poppy Control Act of 1942 and Bureau of Narcotics Regulation No. 7 are attached, marked "C".

PART IV

INDUSTRY - CROP SUBSTITUTION

There is at present no industry in poppy straw or manufacture therefrom to be described. Since there is no present cultivation of the opium poppy there is likewise no question of crop substitution. There is also no preparation or export of standardized raw opium. Statistical Tables B and C have been completed, however, and are attached.

REPUBLIC OF THE PHILIPPINES - 2 JUNE 1947

(Delegation of the Philippines to the United Nations)

"The Opium Poppy (*Papaver somniferum*) has never been cultivated in the Philippines. In 1939 a certain party applied for a permit to cultivate the same in the island of Mindanao. This application was, however, disapproved due to the strong recommendation of the State and Treasury Departments of the United States Government and the policy of the Opium Advisory Committee of the League of Nations to limit the poppy cultivation to medical and scientific requirements of the world. Since then, the Philippine Government has made it a policy not to allow the cultivation of the Opium Poppy."
