Abstract:

Opium, as a tradable commodity, has a long history in the Indian sub-continent. This article offers a history of the production and distribution of both licit and illicit opium from 1773 to the present day in order to explore the lessons that Indian and Pakistani experiences can offer to contemporary drug policy. Four insights for contemporary drug control policy are developed from the historical analysis: (1) Post-independence Pakistan and India illustrate the difficulties of controlling a regulated, licit, opium industry; (2) The relationship between Chinese and Indian opium production and exports may suggest that competition can be an effective impetus to production suppression; (3) Developmental approaches to reducing production can limit the damages caused by opium suppression; (4) Effective suppression requires alterations to institutional and structural conditions which facilitate production (i.e. reducing violent conflict, improving civil and criminal justice institutions efficiency or extending transport infrastructures).
The significance of opium in the history of India is well documented. It has been demonised as the epitome of colonial capitalism; the trade facilitated widespread opium addiction in China and India and was a major factor in two Sino-British wars and several famines in opium farming communities throughout India. However, the trade has also been celebrated as supportive of the economic development of Indian farming communities. This article offers a history of the opium trade from colonial India to the present day in order to explore the lessons that Indian and Pakistani experiences can offer to contemporary drug policy. As a caveat, this article is concerned only with the production and export of opium, and its derivatives, as a commodity.

While there are inherent difficulties in transferring experiences across time and space, the colonial opium trade offers four main insights for contemporary drug policy: (1) Post-independence Pakistan and India illustrate the difficulties of controlling a regulated, licit, opium industry; (2) The relationship between Chinese and Indian opium production and exports may suggest that competition can be an effective impetus to production suppression; (3) Developmental approaches to reducing production can limit the damages caused by opium suppression; (4) Effective suppression requires alterations to institutional and structural conditions which facilitate production such as reducing violent conflict, improving civil and criminal justice institutions efficiency and extending transport infrastructures.

Before progressing, the difference between illicit production and diversion must be made apparent. Diversion (the theft of opium at any point along regulated production and distribution lines) and illicit production (the clandestine extraction of the juice of the opium poppy) produce the same outcome yet operate in distinct environments and require different approaches. Licensed farmers are strongly linked to the state machine and divert opium from under its scrutiny, while illicit production tends to occur in remote areas distant from state authority.

**The development of the monopoly**

The existence of opium as a tradable commodity was apparent as early as the mid-16th Century when Indian merchants began exporting small amounts of northern Indian opium to China (Watt, 1908; McCoy, 2003). By the early-17th Century, Portuguese, then Dutch and finally British traders entered the market (Asthana, 1954; Watt, 1908).

Until 1773, a syndicate of Indian opium traders based in Patna exerted a large amount of control over the supply of opium to European merchants for export (Richards, 1981). In
1773, the British East India Trading Company (henceforth the Company) - who had already secured authority over much of northern India – abolished the Patna syndicate and declared a monopoly over supply and export. The collection, processing and export of opium were subcontracted to merchants at auction, and financial penalties were promulgated by the Company against farmers who adulterated or diverted their produce (Watt, 1908).

The system became repressive with contracted merchants coercing farmers to grow opium (often at the expense of food crops) and to accept low prices (Eisenlohr, 1934; Watt, 1908). As these unfair procurement practices had reduced output, the Company introduced a set-price to be paid to all farmers. The price was high enough to motivate an increase in production by 1793 (Wright, 1959).

In 1797, the practice of sub-contracting was stopped and replaced in 1799 by Regulation Six. The Regulation established a state opium agency that administered the licensing of opium farmers in the eastern Gangetic plains. The licenses specified the area of land to be cultivated, the minimum amount of raw opium to be produced, and set-prices to be paid. All licensed farmers had to deliver their produce to the agency. Private farming of opium was prohibited and any farmer not producing the agreed amount after entering into license was required to pay back three times that which had been advanced. The licensing system continued with minimal changes until 1947 (Richards, 2002a) and established the foundation for the present day licit system.

Also in 1799, an Imperial edict was issued in China prohibiting the importation of opium (Yongming, 1999). Prior to 1912, there were no international legal restrictions on opium production, consumption or trade; nations possessed complete sovereignty over the commodities legality. Hence, while India was legally entitled to produce and export, China was equally entitled to prohibit its importation. As such, the exportation of opium to China became an illegal act in 1799. In response, the Company cosmetically dissolved responsibility for the trade by forbidding its employees from exporting opium (Newman, 1989) whilst continuing to produce and package opium specifically for the Chinese market. Monopoly opium was sold at auction to private merchants who shipped to China, where corrupt officials or professional smuggling networks facilitated illicit importation (Dixon, 1922; Yongming, 1999).¹

¹ The collection of essays in Brook and Wakabayashi (2000) offer a comprehensive history of the Chinese opium trade throughout the 19th and 20th centuries.
In 1833, the Company had its license to trade removed by the British Government who took control of the monopoly (Farley, 1977). As Iranian, Malwa\(^2\) and Turkish opium had begun to compete with Indian opium in China, the monopoly increased the area under cultivation (Pietschmann et al., 2009), prohibited non-British merchants from trading Indian opium, and removed the 4,000 chest cap on exports to China (the cap had been set just high enough to balance the procurement of Chinese tea) (Farley, 1977; McCoy, 2003). These changes significantly increased exports of Indian opium to China and consequently inflated Chinese consumption\(^3\) and the outflow of silver. In turn, this deflated the Chinese economy and increased domestic opposition to the trade (Brook and Wakabayashi, 2000; Farley, 1977). As the Chinese market was economically important to Britain and India (Richards, 2002a) the enforcement of the import ban resulted in a three year conflict. While a defeated China was forced to cede Hong Kong and compensate for damages done to British opium merchants, the illicit trade continued as before; albeit at an increased level (Farley, 1977).

The next major change occurred with the passing of the 1857 Opium Act which made unlicensed opium production a criminal rather than civil offence (Haq, 2000). The administration of the monopoly was strengthened after the Opium Act. Areas where opium cultivation was permitted were divided into administrative divisions. Divisional offices - which licensed an average of 10-15,000 farmers - consisted of Indian civil servants, soldiers and opium patrol officers. A village Lambadar (representative) was used as an intermediary between the farmer and monopoly. At the start of the farming season, the Lambadar would approach the office with a list of farmers wishing to be licensed and, if issued, the farmers would secure an interest free advance. Villages could apply for loans to develop infrastructure. At the end of the season, the Lambadar oversaw the transport of all village opium to the sub-divisional office where it would be weighed and examined for adulterants. The opium was then transported under armed guard to opium factories at either Bankipur or Ghazipur (Richards, 1981).

The 1799 and 1857 Regulations were further strengthened by the Opium Act of 1878. The Act was partly designed to limit diversion and illicit traffic (Deshpande, n.d.) by criminalising unlicensed possession and trade in opium. It gave criminal justice personnel

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\(^2\) ‘Malwa opium’ is a generic term used for any opium produced in the independent princely states of central and western India.

\(^3\) By the 1830s there were an estimated two (Yongming, 1999) to three million (McCoy, 2003) consumers of opium in China.
powers to pay informants and, forcefully enter and search properties. Those suspected of violating provisions of the Act could be arrested and face maximum penalties of one year’s imprisonment and R.s.1,000 fine. Additionally, contraband opium could be seized, land used for unlicensed cultivation confiscated (Richards, 2002b) and households could be banned from receiving future licenses. Registers with the names of all persons convicted of smuggling were opened in the police stations of opium growing districts. To prevent diversion, divisional offices estimated the average yield produced in each village; farmers producing sufficiently below the village average were investigated (Deshpande, n.d.).

There is disagreement as to whether opium production was beneficial to farmers during the 18th Century. For Richards (2002a, 2002b) opium was of great financial value to many Indians; especially the mercantile castes. Watt (1908) posited how the trade supported the development of rural infrastructures, presented a stable market and generated sufficient income to allow farmers to ride through famines. Conversely, Haq (2000) has suggested that the conversion of food crops to opium in 1873/74 triggered famines in Bengal and Bihar, while Owen (1934) argued that opium was an unstable crop open to fluctuating markets. For example, during the 1850s, a drop in the fixed monopoly price forced many to switch to cotton, indigo or sugar cane, while between 1861 and 1881, the monopoly raised the price three times and lowered it twice. Furthermore, the opium crop was open to the will of nature and poor yields were often recorded. The opium trade may have been both unstable and supportive of development. The colonial government undertook rural development programmes to improve the efficiency of agricultural exports such as wheat, indigo, cotton and opium. The transport infrastructure, including railroads and shipping, were also developed to link isolated rural opium farmers to national and foreign markets (Richards, 1981).

_Malwa opium_

As exported Malwa opium was in direct competition with Indian opium, the Company - and later the colonial government - sought to exert control over the profits extracted from production and distribution. After gaining control over the western Indian coastline during the 1818 Anglo-Maratha War, the Company denied export access to the weakened princely states

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4 In 1870, after blight eradicated much of the crop, the monopoly paid farmers their fixed price regardless so that they would not be deterred from opium farming in the future (Owen, 1934).
who conceded to demands and allowed the Company to procure all Malwa produced opium. However, as conflicts between farmers, merchants and Company agents were common the policy was dropped within ten years (Richards, 1981) and replaced in 1831 with a toll system. All princely states signed contracts with the Company permitting them access to the port of Bombay. Company administered toll stations, operating along trade routes, issued certificates permitting entry into Bombay; uncertified merchants faced criminal prosecution and the confiscation of their opium (Newman, 1989; Owen, 1934). Both the transportation of Malwa opium to Bombay and the regulation and enforcement of the toll system became easier with the development of the railway infrastructure (Newman, 1989) and by the end of the 19th Century, Malwa tolls\(^5\) accounted for approximately one-third of total opium derived revenue (Owen, 1934).

The black market

Full authority over the trade was limited by the existence of a black market. Diversion from the opium monopoly was common, for example, in 1866 the Bengal Board of Revenue implied large-scale diversion to illicit channels when they reported that most opium farmers were able to produce significantly more than they had been licensed to (Carnac, 1866). Furthermore, the Inspector General of Police of the Lower Provinces complained that merchants procured surplus opium secreted by farmers (Pughes, 1866).

There was a long history of smuggling Malwa opium into British India (Alexander, 1930; Beadon, 1867) and towards China - mostly on Portuguese ships (Markovits, 2009). However, the largest black market trader between 1799 and 1858 was the colonial state facilitated smuggling of opium between India and China. Such a trade today would be equivalent to the Government of Afghanistan legalising opium production and allowing, and facilitating, private merchants to smuggle non-medical opiates into any sovereign nation which prohibited its importation.

A changing market: the second ‘Opium War’ to independence

In terms of revenue and exports, the Indian opium trade peaked around 1880, after which it gradually declined until 1897, when it unevenly increased before sharply declining after 1911 (Fig. 1). The area under cultivation continually increased until the 1905 peak, which was

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\(^5\) Toll prices were based upon the market price of Indian opium at Calcutta (M’Laren, 1907).
followed by a sharp decrease. Three factors appear to account for this market shift: changes to the Chinese market; internal economic conditions and; international and domestic pressure.

Fig 1 Indian opium exports expressed in Rupees and kilograms (1839-1947)

![Opium exports graph]

Sources: adapted from Bulletin of Narcotics (1949); Dixon (1922); Eisenlohr (1934); Richards (2002a); PCOB (various years); INCB (various years). Note: missing values indicates missing data.

Fig 2 Area cultivated with opium poppies in India (1808-1970)

![Area cultivated graph]

Sources: adapted from Department of Commercial Intelligence and Statistics (various years); Bulletin of Narcotics (1949); INCB (various years); M’Laren (1907); Pietschmann, et al. (2009); Richards (1981); NNICC (1971). Note: missing values indicates missing data. Pre-1808 data unavailable, although production was already established at substantial levels.
In 1858, the Chinese Government - after fighting a Second ‘Opium War’ with the British – legalised the importation of opium by including it on a list of goods subject to import tariff (Dixon, 1922; Yongming, 1999). Indian exports to China gradually increased; for a time (Newman, 1995; Reins, 1991).

Legalisation provided a stimulus for domestic Chinese opium production. While there had been limited opium production in the southern provinces of China during the mid-19th century, total production had never exceeded 300 tons (Pietschmann et al., 2009). After import legalisation, the Emperor approved the taxation of opium production in Yunnan to fund the suppression of the Muslim Uprising. Several other provinces followed this example and de facto legalisation preceded the official repeal of prohibition in the mid-1880s (Yongming, 1999); after which many provinces encouraged the production of opium (Brown, 1973) and, importantly, improved the quality of opium being produced. The result was that by 1905 China produced eight times more than was imported (Fig. 3); Szechwan Province alone produced four times that of India (Reins, 1991) with 14,400 tons (Pietschmann, et al., 2009) while South-West Hupei produced 13,550 tons (Dixon, 1922). Additionally, the opening of the borders increased competition from Turkey and Persia (Newman, 1989).

Fig 3 Comparison of Indian and Chinese opium production (1896-1911)

Sources: adapted from Department of Commercial Intelligence and Statistics (various years); Pietschmann et al. (2009); Reins (1991); Richards (1981). Note: the Indian production estimates for 1896 are unknown. Therefore, to illustrate the significance of Chinese production, an estimated
production value was calculated by using the lowest yield recorded in India since 1950 (14kg/he) and the recorded area under cultivation.

By the turn of the 20th century, China again began to perceive opium as a threat to the productivity and health of the nation (Baumler, 2000) and in September 1906 issued an Imperial Decree declaring the gradual suppression of opium production, trade and consumption. The Decree and the measures taken to enforce it signalled to the British Government that China would suppress its internal trade if India reduced exports (Reins, 1991). As a result, under the 1908 Anglo-Chinese Ten-Year Suppression Agreement, it was agreed that if Chinese opium production was reduced by 10 percent annually, Indian opium exports would decline by an equal amount and exports would cease completely by 1917 (Yongming, 1999). In 1917, all provinces were declared ‘clear of opium’ by a joint British-Chinese inspection team and exports of Indian opium were officially discontinued (International Anti-Opium Association, 1924b).

Internal factors

During the late-19th century, the opium trade had lost much significance to Indian farmers and the state. As early as 1870, farmers working the most fertile land had shifted their attention to other crops and by the beginning of the 20th Century many farmed opium primarily to receive government advances. Innovations in the transport infrastructure had linked rural communities to national markets and thus permitted farmers to produce and market bulkier or more perishable goods. In many areas the crops cultivated in place of opium poppies (including wheat; barley; sugar cane; tobacco; and potatoes) provided more favourable returns and represented more stable markets. However, opium remained an integral crop in the less developed independent princely states (see, Owen, 1934; Newman, 1989).

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6 In 1890, an estimated 10 percent of the Chinese population smoked opium; this may have been as high as 60-80 percent in some areas (Spence, 1975). In 1906, the Chinese Government officially estimated that 30-40 percent of the population smoked opium (FO, 1907). To place this in perspective, in 2008 the country with the largest prevalence rate in the world was Iran; where 2.3 percent of the population had consumed an illicit opiate (UNODC, 2009). While in India in 1909 an estimated 0.4 percent of the population had consumed opium (Pietschmann, et al., 2009).

7 Several members of the joint teams reported suppression being conducted primarily for their benefit. After 1917, there was a large-scale resurgence in opium production throughout China. This was primarily due to a lack of central control and the existence of conflicting warlord factions who relied upon opium revenue (FO, 1917a, 1917b).
The Government of India had also begun to diversify its exports (Richards, 2002a). Figure 4 illustrates a comparison of the export earnings from opium and the percentage of gross national exports earned from opium. While revenue from the trade peaked in the late-1870s, as a percentage of exports the trade peaked in the mid-1840s. From this point on the diversification of exports reduced India’s reliance on opium.

The gradual reduction in Indian exports created a windfall. As Indian opium (which was considered of the highest quality by Chinese opium connoisseurs) became scarce in China, the price increased and Malwa opium merchants rushed to sell their produce. This resulted in a spike of opium revenues between 1911 and 1913 (Owen, 1934).

**Fig 4** Exports expressed in thousand Rupees and as a percentage of total national export earnings

![Diagram showing export earnings and percentage of total export earnings from 1839 to 1929.](image)

Sources: adapted from Richards (2002).

**Domestic and international pressure**

In 1911, some administrative changes were implemented to account for reductions in Chinese trade. The Patna opium factory and Bihar Opium Agency were closed, the national headquarters was moved to Ghazipur in Uttar Pradesh and, the less efficient farmers and administrators were purged (Haq, 2000).

A supportive factor was the pressure exerted on the British Government by American, British, Chinese and Indian anti-opium lobbyists. Significantly, prior to the signing of the 1908 Agreement, the Liberal Party was elected to power in Britain; many of its most...
influential members were opposed to the opium trade. On the international level, the convening of the first Opium Conference in 1909 signified the beginning of international condemnation and eventual regulation of the opiates trade. Britain and the colonial Government in India conceded that dwindling opium revenues did not warrant increasingly vocal international and domestic censure (see, Musto, 1987; Newman, 1989).

The 1909 conference produced nine non-binding recommendations centred upon respecting the sovereignty of Chinese opium controls; most importantly that nations ban the exportation of opium to nations that prohibit its importation (reprinted in Pietschmann et al., 2009). The recommendations were codified in the 1912 International Opium Convention, which obliged Parties to enact ‘effective laws or regulations’ to control the production and distribution of raw opium. The domestic manufacture, consumption and distribution of prepared opium were to be gradually suppressed and its import/export prohibited. The licensing of importers/exporters was recommended. Ratification was limited until the end of World War One when the treaty achieved almost universal ratification as a condition of peace treaties (Musto, 1987; Pietschmann et al., 2009).

World War One inflated the demand for opiate-based painkillers. However, many of the opium farming districts that had been de-licensed after the cessation of the Chinese trade had already substituted opium with crops offering healthier returns. Districts were re-licensed and, to encourage farmers back to opium, the state increased the set price from Rs.5 to Rs.9 per seer\(^8\) between 1914 and 1917. Additionally, a new research institute was created to improve yields and quality, and new machinery was procured to convert raw opium to manufactured pharmaceutical drugs. After the War, production was again restricted. De-licensed farmers were offered agricultural advice and improved wheat and sugar cane seeds to develop yields of crops for which markets already existed. Crop substitution was so effective that by the late-1920s the price demanded by opium farmers was such that the monopoly sought cheaper Malwa opium for internal consumption (Eisenlohr, 1934).

The 1925 International Opium Convention established a system requiring documents proving merchants had gained authorisation from the importing/exporting government to transit opiates (League of Nations, 1925). Hence, in 1926 India passed a resolution guaranteeing a gradual reduction of opium exports intended for anything other than medical/scientific purposes by ten percent annually. Furthermore, a prohibition on exports to

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\(^8\) A seer is a unit of measurement equivalent to 0.933kg.
nations believed to be illegally transhipping - regardless of receipt of a signed Import Certificate - was enforced (Eisenlohr, 1934). Consequently, Persia replaced India as the world’s major source of recreational and quasi-medical opium (Prideaux, 1927).

Trade was further restricted with the passing of the 1931 Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, which obliged Parties to prohibit distribution or manufacture of any opiate ‘not in use….for medical or scientific purposes’ (League of Nations, 1931:Art.11). Thus, in 1936 India discontinued all foreign exports except for the British pharmaceutical industry and raw opium to: Aden; Burma; Nepal; Zanzibar; and, French and Portuguese settlements in India (Croft, 1939; FO, 1939). From 1926 the area under cultivation was reduced by 90 percent (League of Nations, 1938) and between 1934 and 1937 India produced 6.7 percent of the world supply of raw opium; 65.4 percent was produced in China (Atzenwiler, 1944).

The black market

The constricting of the Malwa trade after 1907 left many opium farmers with significant surplus stock that was stored for a number of years until decreasing Colonial Indian production had increased the value of opium. Malwa farmers then sold their stock to merchants who smuggled the opium into Colonial India and to states such as Australia and South Africa (Alexander, 1930).

During the 1920s and 1930s, there was evidence of large-scale trafficking of Indian opium to Ceylon, Burma and the Far East (CO, 1934; Eisenlohr, 1934). Between 1946 and 1952, Indian opium was seized in: Australia; Burma; Ceylon; Hong Kong; Pakistan; Singapore; and the Bahrain Islands. The US delegate to the United Nations in 1950 cited India as one of the world’s primary sources of illicit opium; the majority was diverted from licit sources (Bulletin of Narcotics, 1953).

Context: changing international legislation

The 1961 Single Convention succeeded all previous treaties. While its primary objective is the security of medicinal drug supplies, Parties are obliged to take legislative and administrative measures to ‘limit exclusively to medical and scientific purposes’ the
production, manufacture, export/import, distribution and consumption of drugs under its jurisdiction. Official production must be managed by a government agency with exclusive trading rights who designate production areas and license farmers (who are obliged to deliver all produce to the agency). Parties are obliged to criminalise unauthorised production, manufacture and distribution, and continue the established import/export certificate system (UN, 1961).

Since 1909, a succession of multilateral treaties have been concluded which have shifted the emphasis from obligations to enact regulatory controls of a licit trade to the criminalisation of all non-authorised production and distribution. Each treaty has drawn on the previous to become stricter (Bassiouni, 1997) whilst gradually narrowing what constitutes legitimate consumption, production and distribution in opiates to a point whereby it is bounded by the parameters of medical/scientific purpose. Indian and Pakistani reforms are a response to these shifts in international law and represent attempts to conform to the international prohibitionist framework.

**Independence**

**India**

In 1947, the peoples of India realised their right to independence. Bounded by the increasingly stringent body of international law and founded upon colonial administrative and legal mechanisms, the state almost immediately began rejuvenating and strengthening the trade in opium.

In 1949, the All-India Opium Conference was convened in Delhi. During the conference it was announced that opium would not be exported for non-medical/scientific purposes, unless prior agreements were in force (Dev, 1957), and that India would produce opium for the global pharmaceutical market (Haq, 2000). To support the recommendations, the Opium and Revenue Laws Extension Act of 1950 was passed to extend the existing colonial drug control legislation to all Indian states. The monopoly continued to be administered almost exactly as it was during the 19th Century (Asthana, 1954).

During the Second All-India Narcotics Conference of 1956, two innovations were recommended to limit diversion. Firstly, that Minimum Qualifying Yields (MQY) should increase in a bid to eliminate corrupt and inefficient farmers. (Experimental farms were later created to investigate the correct MQY.) Secondly, licensed cultivation areas should be
restricted to those near or touching each other (Dev, 1957). Following these recommendations, six states were de-licensed between 1948 and 1960. The largest state to be de-licensed, Himachal Pradesh, was due to the difficulty of controlling production in remote areas. This concentrated licensed opium production in three touching and accessible states’ (Uttar Pradesh, Madhya Pradesh and Rajasthan) (Deshaprabhu, 1966). The area under cultivation in the three remaining areas was gradually increased. The MQY became more stringent and cash incentives were introduced for those producing excess opium to the monopoly (Kohli, 1966). As illustrated in Figure Five, the yield per hectare improved and continues to do so.10

**Fig 5** Indian yield per hectare (1951-2006)

![Graph showing Indian yield per hectare from 1951 to 2006.](image)

Source: adapted from NNICC (1971); INCB (various years). Note: missing values indicates missing data.

During the 1960s, India, supported by the UN, was able to establish a near monopoly on the international trade in licit opium for medical/scientific purposes (Haq, 2000). While the 1970s were the ‘golden years’ of the Indian licit opium trade, by the early-1980s India’s position as the world’s leading producer was unstable. The Economist (1981:83) reported that changing technology had ‘left India stranded with an illusory monopoly and an opium glut’. Competition, from Turkey, Australia, France and others, had forced India to cut its export price from US$60 to US$45 per-kilo and de-license 73,000 farmers.

10 Some dips in yield may have been accountable to adverse weather conditions.
As the number of licenses began to contract, concern was expressed that formerly licit opium was being diverted into the illicit market (Burger, 1995). The Government expressed their apprehension for the loss of rural jobs and approached the UN which resulted, in 1981, with a UN resolution urging all major licit opium importing countries to purchase Indian opium (Haq, 1998). However, as illustrated by Figure Six, India’s share of the global licit market has fluctuated on a gradual declining gradient from between 40-60 percent in the 1980s to around ten percent since 2003. Consequently, the number of licensed farmers unevenly declined between 1994 and 2009 from 104,215 to 44,821 (CBN, 2010).

**Fig 6 Opium production in morphine equivalent: share of global market (1980-2008)**

![Opium production in morphine equivalent: share of global market (1980-2008)](image)

Source: adapted from INCB (various years, b).

The second major change of the 1980s was India’s rising importance as a transit route for illicit heroin from Pakistan and Afghanistan (INCB, 1985; Kumar, 1989) and the emergence of small-scale domestic heroin/morphine manufacturing for Indian consumers (Kumar, 1989). By the mid-1980s, the international spotlight was shining on India’s licit and illicit opiates trade.

In response, between 1985 and 1988 three pieces of legislation were passed to strengthen criminal justice mechanisms. The legislation provided: mandatory minimum imprisonment of 10 years with Rs.1lakh\(^{11}\) fine for trafficking in illicit narcotics; obligations

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\(^{11}\) In November 2010 Rs.1Lakh (100,000 Rupees) was equivalent to US$2,201.
on landowners and government officials to report illicit cultivation or diversions; and the introduction of forfeiture laws (see, Kumar, 1989; Pinto, 1989).

Pakistan

In 1947, colonial India was partitioned and Pakistan became an independent sovereign state. India inherited all former opium producing regions12 and agreed to export opium to Pakistan (Magnusson et al., 1980). However, in 1955 India, obliged by international law, ceased all exports to countries where opium was to be consumed for non-medical/scientific use; including Pakistan (Hardestly, 1992).

As Pakistan inherited the laws and regulations of colonial India, an administrative and legal structure to control licit opium production already existed. After 1955, the Lahore Opium Factory was constructed and, under the Opium Act of 1857, farmers were licensed in the Punjab Province to produce opium. This turned out to be ineffective and in 1956 the districts of Peshawar, Mardan and Abbottabad in the North West Frontier Province (NWFP)13 were licensed (Asad and Harris, 2003; Khan, 1982). The state utilised former employees of the Indian opium monopoly who had chosen to reside in Pakistan to administer the new Pakistan Opium Agency (Haq, 2000).

While all opium was supposed to be surrendered to the state and sold by the monopoly to registered opium addicts (Hasnain, 1982), inefficient monitoring of licensed opium sales resulted in many merchants bypassing the state and buying opium illicitly produced in NWFP and Federally Administered Tribal Areas (FATA) (Khan, 1982; Murphy, 1983). The controls on licensed vends were further relaxed in 1971 (Haq, 2000) to a point whereby there was ‘no organisation and no control’ (Train, 1974:3) of either production or consumption (Qayyum, 1993). Consequently, NWFP production increased alongside inflated demand (Haq, 2000).

However, it was external factors which launched Pakistan as a major global producer and transit point for heroin. In the early-1970s Europe and North America’s primary source of illicit heroin had been removed through the suppression of opium production in Turkey and heroin manufacturing in France (Murphy, 1983). European traffickers looked to Pakistan as an alternative source (Hardetly, 1992) and in 1975 the first heroin laboratories appeared in

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12 During the late-19th Century the British had suppressed attempts at opium production in Pakistan for fear that revenues would facilitate dissent to their rule (Haq, 1996).

13 As of 2010 renamed Khyber-Pakhtunkhwa.
NWFP and Baluchistan Province of Pakistan (INCB, 1975; PNCB, 1975; Qureshi, 1982). Then, in 1979, opium production and heroin manufacturing increased in neighbouring Afghanistan as a consequence of the Soviet invasion. This was coupled with the closing of Iran’s borders - due to the Islamic Revolution and later the Iran-Iraq War – blocking the primary trafficking corridor from South Asia to Europe. These events increased Pakistan, and later India’s importance as a major exporter of illicit Pakistani and Afghan opiates to the markets of Europe, North America and by the late-1980s Iran itself (see, Murphy, 1983; Haq, 1998).

Domestically, in 1979, the Enforcement of Hadd Ordinance prohibited the non-medical/scientific production, trade and consumption of intoxicating drugs; thus ending the sale of monopoly opium to registered consumers. The ban on production was enforced by near constant monitoring of opium producing areas, forced eradication (Magnusson et al., 1980) and arrests. Many NWFP opium farmers were prosecuted (over one million rupees was collected in fines) and production decreased significantly (Khan, 1982). The sudden removal of an important cash crop without the support of alternative incomes economically harmed many farmers (Murphy, 1983; see, Qureshi, 1982). The ban was supported by a one-year spike in production in 1979. The spike created a surplus which deflated the farm-gate price of opium; the risk to farmers had increased at a time when the reward had decreased (Magnusson, et al., 1980; Murphy, 1983). Nevertheless, the surplus did increase illicit heroin manufacturing in FATA and Baluchistan (Qureshi, 1993).

Illicit opium production resurged around 1986. Relatively high production levels were maintained until 1996 after which a sharp decrease is witnessed (see Figure Seven). The resulting decreasing trend was partly a result of development and eradication programmes, supported by the UN and international development agencies. These programmes took time to produce results. Whilst projects differed in substance, and effectiveness, overall they had development as a foundation, and for the purposes of this paper some generalisations can be made. Illicit opium producing areas would receive assistance in constructing transport and social welfare infrastructures as well as irrigation and land levelling to increase the productivity of licit crops, such as wheat. Agricultural extension workers were used to introduce high-yielding varieties of existing crops or establish new crops such as tobacco or

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14 Assad and Harris (2003) offer a more critical analysis which casts development and law enforcement interventions in a more repressive and corrupt light.
fruit trees, whilst instructing farmers in modern agricultural techniques. All this was often completed through continual discussion with tribal leaders\(^{15}\) (see, Der Meer, 1989; Gillett, 2001; Murphy, 1983; Williams and Rudel, 1988).

Once the development projects began to produce tangible results, the state implemented phased eradication programmes.\(^{16}\) Each September, the Government targeted areas for suppression. State representatives would then meet with tribal leaders and farmers in the targeted areas and inform them of the enforcement schedule. The risks involved in opium farming (i.e. eradication and/or prosecution) were communicated to the communities during the initial meeting and again in November and January. Agricultural extension workers were on hand during this time to give advice on substitute crops and modern agricultural techniques (Boner, 1991; Qureshi, 1987; Zahid, 1987). Any opium poppies discovered following the initial warnings were manually eradicated by state employees supported by military guards (Qureshi, 1987); aerial spraying of crops with pesticides was also conducted (Asad and Harris, 2003; Economist, 1989). Any farmer who re-cultivated after the initial eradication was prosecuted (Qureshi, 1987). Individually, the projects have been responsible for suppressing opium production and, to varying degrees, improving livelihoods throughout FATA, NWFP and Gilgit in the Northern Areas. The cumulative effect being that Pakistan was declared ‘poppy free’ by the UN Office of Drugs and Crime (UNODC, 2008) in 2001.

The illicit manufacture of heroin also began to climb during the 1980s. By 1994, Pak-Afghan heroin supplied 75 percent of the European, Arabian and African markets and 25 percent of the US market (INCB, 1994). Two major factors are given for the high-levels of heroin production. First, Pakistan and the US were supporting the Afghan insurgency in Soviet controlled Afghanistan and neither state was willing to suppress a trade which their allies in the conflict relied upon for revenue purposes. Second, there was endemic corruption within the Pakistan state machine and high-level traffickers were politically protected (see, Haq, 1996, 2000; McCoy, 2003). However, by 1988 Pakistan - due to domestic concerns over rising heroin consumption and the removal of the Soviet Union from Afghanistan - began to strengthen their drug control legislation and interdict refineries. Accordingly, by 1997, all

\(^{15}\) Community involvement became more pronounced in later projects.

\(^{16}\) USAID administered several crop substitution projects which usually demanded a more prompt cessation of production (GOA, 1988; Williams and Rudel, 1988; Qureshi, 1982)
heroin refineries had been pushed (or possibly pulled) from Pakistan to Afghanistan (INCB, 1998; Laurent et al., 1996).

**Contemporary India and Pakistan**

**Pakistan**

In 2003, a resurgence in illicit production was witnessed in Pakistan. The state had been able to limit the damage of this resurgence by eradicating as much as 77 percent of all opium poppies cultivated (UNODC, 2008). However, in 2008 virtually none of the 1,729 hectares cultivated in FATA were eradicated due to the redeployment of troops and tribal militia to anti-militant operations (US State Department, 2010). Furthermore, traditional resistance by tribal leaders to law enforcement increased in parallel to military operations in Pakistan and Afghanistan. For example, it was reported that:

> it has become almost impossible for the administration of tribal areas to engage in punitive action against illegal growers. There seems an anarchical situation in our tribal territories. The local tribal population has cleverly exploited this situation and thus an increase in poppy growing (Fasihuddin, 2010:119).

The current conflict for authority in NWFP and FATA between Islamist militants and the Pakistan state, coupled with high-levels of corruption and, low-levels of development and state authority in NWFP and FATA may result in a return to large-scale opium production and heroin manufacture (Windle, 2009). This represents a situation with the potential to destabilise an already tentative political situation (Ahrari, 2009; Felbab-Brown, 2009).

Pakistan remains a primary transhipment point for Afghan opiates destined for: Europe; North America; India; Iran; East/Southeast Asia; and the Pakistan domestic market - where 0.70 percent of the population consumed an illicit opiate in 2006 (UNODC, 2010; Windle, 2011). Whilst high-seizure rates illustrate Pakistan’s political commitment, the inhospitable

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17 Whilst several groups facilitate the smuggling of Afghan opiates (Ahrari, 2009; Shelley and Hussai, 2009) there is little evidence to suggest systematic involvement in illicit production. However, militant groups could begin supporting production as a means of increasing their rural support base (Felbab-Brown, 2009).
terrain, tribal politics of border areas and general resource constraints on the criminal justice system limit its overall effectiveness (Fasihuddin, 2010; US State Department, 2010).18

India

Currently, control of licit production is founded upon the system initiated in 1799. The Central Bureau of Narcotics (CBN) oversees Divisional Opium Officers who, supported by the village Lambadar, inspect and monitor licensed opium farmers (Smith and Kethineni, 2007). The CBN annually calculates the amount of opium to be produced, the set price to be paid, and the MQY in each of the three licensed states (CBN, 2010; Mansfield, 2001). A major innovation has been the issuing of ‘smart card’ licenses which contain: the licensee’s personal information; the area they are permitted to cultivate; the results of previous monitoring; and the amount of opium previously surrendered to the CBN. From the 2002/03 crop year, another major advance was the use of satellite imagery to support the ground monitoring of the area under licit cultivation (US State Department, 2010). Nonetheless, the Lambadar continues to be the primary source of monitoring (Paoli et al., 2009).

As established above, Pakistan has been a major source of illicit opium and heroin since the late 1970s, however, India’s illicit output is likely to have been significantly higher from at least the 1980s due to diversion from licit production. Precise national-level estimates of the diversion rate are largely conspicuous by their absence (Mansfield, 2001). However, many academic and government researchers have produced educated estimates which have ranged from 10 percent in the mid-1980s (NNICC, 1981, 1988) to 6-7 percent (INCB, 1993), 25 percent (Laurent et al., 1996), and upwards of 50 percent (Haq, 2000) in the 1990s. Estimates in the first decade of the 21st Century range 10 percent (US State Department, 2010) and 30 percent (Mansfield, 2001).

Diversion rate estimates were derived by Karan Sharma, a former Mandsaur Deputy Narcotics Commissioner, who conducted an experiment in 1994 to highlight how high the MQY should be set. The MQY is annually set by the CBN and specifies the minimum kilogram of opium per hectare which each licensee must deliver. If the MQY is not met, the implication is that the remainder was sold illegally and the farmer loses the right to secure

18 Pakistan’s primary drug control agency, the Anti-Narcotics Task Force, currently consists of 1,560 soldiers with aerial and ground enforcement capabilities (Pakistan Army, 2010).
future licenses. While the MQY at the time was 40kg per hectare, Sharma cultivated (on a model farm) 62kg of opium from one hectare and suggested that careful and experienced farmers could produce as much as 100kg per hectare (cited in Haq, 2000).

In 2001, after interviewing Indian nationals involved in the licit opium trade, David Mansfield (2001) reached a similar conclusion, specifically, that average yields of 60-65kg could be obtained from one hectare while 80-100kg was possible. Assuming that little over the MQY is surrendered to the state, the yield estimates provided by Sharma and Mansfield suggest diversion rates of between 35 and 60 percent. A separate indicator of the extent of diversion from licit channels is that since the mid-1980s, significant numbers of heroin manufacturing laboratories have been detected within licensed opium producing areas (Mansfield, 2001; Paoli et al., 2009).

The methodological reasoning of many of the estimations expressed above is not evident; some may be little more than expert opinion. In the absence of a definitive study of Indian diversion and due to the uncertainty over the precise diversion rate, the amount of opium diverted from India’s licit production is here estimated using different diversion rate parameters. A ‘low’ diversion rate estimate of 10 percent, a ‘medium’ estimate of 30 percent and a ‘high’ estimate of 50 percent are used. By employing these parameters, Figure 7 illustrates how Indian diversion to the illicit market has often surpassed illicit production in Pakistan; even at the most conservative estimate.

Viewed in a different context, the low estimate for Indian diversion in 2006 (34,487kg) is higher than the amount seized that year in many western countries: the US seized 1,725kg and Australian seized 65kg of heroin (equivalent to 17,250kg and 650kg of opium respectively). Seizures in Western Europe totalled 8,352kg of heroin (83,520kg of opium equivalent) (UNODC, 2008b) and while this figure is higher than the ‘low’ estimate of Indian diversion, it is significantly less than the higher estimate of Indian diversion (172,433kg). Put another way, current diversion from India probably outweighs a significant part of the global supply reduction effects of western law enforcement.

Clearly, the diversion rate will vary and is not constant - that is merely a simplifying assumption made here for illustrative purposes. For example, the contraction of the number of licensed opium farmers in India in the early-1990s may have resulted in diversion closer to the higher parameters (Burger, 1995). Conversely, technological advances in crop monitoring in the first decade of the 21st Century, coupled with higher MQY’s, may have resulted in
diversion falling closer to the low parameter. However, the inability of the Government to measure diversion with any degree of accuracy may itself illustrate the lack of control the state has over its licit industry.

There is fairly significant illicit (non-diverted) production in the isolated state of Arunachal Pradesh for local consumption. India additionally remains a major manufacturer of illicit heroin (from diverted opium) which supplies India’s 2.1-2.8 million consumers (Paoli, et al., 2009) with a smaller amount exported to South Asia, Africa and Europe. Afghanistan heroin continues to be transhipped through India to Europe (US State Department, 2010).

**Fig 7** Potential diverted Indian opium compared with illicitly produced Pakistan opium

Sources: Adapted from Deshaprabhu (1966); NNICC (various years); PCOB (various years); UNODCCP (various years); INCB (various years); UNODC (various years); US State Department (various years). Note: missing values indicates missing data.

**Conclusions and insights for contemporary drug control**

The experiences of the Indian sub-continent offer some insights for contemporary drug policy issues. That both India and Pakistan demonstrated difficulties in controlling licit (regulated) opium production might have a bearing on the Senlis Council’s (2007) proposition that the

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19 For more in-depth analyses of steps being taken to strengthen controls, and recommendations for improving current mechanisms see Smith and Kethineni (2007), and Mansfield (2001).

20 Now International Council on Security and Development
Government of Afghanistan license farmers to produce opium for the pharmaceutical market. To illustrate this point, Pakistan attempted, and failed, to administer licit opium production between 1950 and 1979. Similarly, India’s inability to prevent large-scale diversion may have made it one of the world’s largest sources of illicit opium. Pakistan and, to an even greater extent, India were in significantly better positions to control licit opium production and trade than Afghanistan. Hence, the experiences of Pakistan and India suggest that the odds of Afghanistan effectively controlling licit production are slim.

The effect of the market shift after the legalisation of Chinese opium illustrates two points. Firstly, as Indian opium production and exports declined partly in response to a loss of market share to China (a lower-cost and more productive competitor), the interaction between China and India may be indicative of the role competition plays in national opium suppression policies. Similarly, throughout the 1990s/2000s national efforts to suppress opium production in Laos and Pakistan may have been supported by reduced demand driven by competition from Afghanistan.

Secondly, the princely states and colonial India were impacted to differing degrees by competition from Chinese production. For example, due to the existence of agricultural technology and market access, colonial India was able to diversify away from opium quicker than the less developed princely states. Consequently, colonial India could reduce production whilst avoiding the humanitarian crises which have been witnessed in some recent Southeast Asian opium production suppression interventions (see, Kramer et al., 2009).

To extend this point further, the case of colonial India may illustrate the necessity of altering ‘the structural and institutional factors that shape... [farmers] decisions’ to produce opium (Youngers and Walsh, 2010:11; see, Mansfield and Pain, 2008) before drug control programmes - including alternative development - can be effectively administered. In India during the late-19th and early-20th Centuries: there were no large-scale violent conflicts; there was a reasonably efficient transport infrastructure; and the state was able to exert relatively efficient administrative and criminal justice control over opium producing areas. Compare this to the primary opium producing areas of Afghanistan where: there is large-scale violent conflict; the transport infrastructure is almost non-existent; the central Government’s authority is weak; and state institutions are ineffective. Such conditions not only make opium a rational crop but also make efficient substitution of opium for other livelihoods appear almost unattainable. Thus, a key insight extrapolated from India is that opium suppression should be sequenced only after a foundation for control has been established.

**Acknowledgements:** The author would like to thank Graham Farrell, Sinead Drew and the anonymous reviewers for their thoughtful and constructive comments on early drafts.

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