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Licensing Afghan Opium for Medicinal Use Why It Work

Summary

- With large increases in Afghan opium cultivation and production in 2013 and 2014, there is a risk that resulting frustration may give rise to a search for extreme but unproductive solutions.
- There are no easy solutions to the illegal narcotics problem. The proposal that Afghanistan could shift to licensed production of opium for pain medications will not work.
- Due to severe problems with governance, rule of law and security, opium licensing in Afghanistan would be subject to extremely high leakages. Afghanistan's comparative advantage in supplying the illicit market means that it would likely expand cultivation to meet demand in both markets.
- Afghanistan is a high-cost producer of opium, and prices for licensed opium are much lower than on the illegal market, so profits might well be marginal or even negative.
- Existing producers of licensed opiates—Australia, Turkey, India, France and others—would strongly oppose any move to let Afghanistan become a competitor on the licensed market.
- Even if a more liberalized market for opiates is envisioned, technological advances and modern techniques in other countries mean that Afghanistan could not be a competitive producer.

Afghanistan's comparative advantage is based largely on the illegality of opium and associated high prices. The country would not be competitive in a more liberalized and regulated global regime for opiates.

The Problem and the Proposal

Afghan opium cultivation and production has increased sharply since 2012, with further increases expected in coming years. By far Afghanistan's largest illicit economic activity, opium production and its processing into heroin brings many problems for the country, including adverse effects on governance and the rule of law, as well as a growing drug use problem among Afghans. These problems more than offset the short-term financial benefits for rural households cultivating opium poppy and the stimulus opium provides to demand in a weak economy.¹

There is a risk that frustrated reactions in the international community to repeated increases in opium cultivation will give rise to a search for extreme solutions. But there are no silver bullets—simplistic, one-dimensional remedies—for Afghanistan's opium problem. Radical measures, such as massive eradication of opium poppy fields, either ground-based or through aerial chemical spraying,



at one extreme or legalization of opium at the other, will not work, are likely to be counterproductive in the country's fragile economic and political environment and could lead to worse outcomes than the problem they are meant to address.

This paper explores a common proposal: to license Afghan opium for medicinal use. It is widely recognized that there may be considerable unmet demand for opioids—synthetics and opiates—for pain medication. Only 10 percent of the world's population is estimated to consume as much as 90 percent of pain relief medication, and many in the developing world do not have access to analgesics at all. Global demand for opioids more than tripled between 1993 and 2012 and is expected to continue to increase, even though the share of opiates in opioids is likely to decline due to faster expansion in the use of synthetics. Thus, it has been suggested that Afghanistan should shift from the illicit market to licensed opium production for pain medications, eliminating the serious problems associated with opium's criminalization and responding to demand for pain medications.²

International Regulatory System for Medicinal Opiates

The International Narcotics Control Board (INCB) is charged to ensure a balance between global demand and supply of narcotics for legitimate medical needs. The Single Convention on Narcotic Drugs of 1961 requires that cultivation, production and trade in licit opiates occur under INCB supervision and guidance.³ Each producing country must establish a government agency responsible for a licensing system for licit opium poppy cultivation. This agency acts as the sole purchaser of the crop and maintains the exclusive rights for exporting, wholesale trading, and maintaining stocks of opium and its derivatives.

Australia (mainly on the island of Tasmania), France, India, Spain and Turkey are the five major exporters of licensed opiates, but India is the sole exporter of raw opium, which it produces using labor-intensive techniques similar to those in Afghanistan. The other countries all produce concentrate of poppy straw (CPS), which the Single Convention defines as "all parts (except the seeds) of the opium poppy, after mowing." CPS comprises the bulk of the global supply of licensed opiates, 95 percent of opiate raw material rich in morphine and 97 percent of opiate raw material rich in thebaine in 2013.⁴ Producing CPS is preferred because it is mechanized and offers considerable economies of scale, with much lower labor requirements than extracting raw opium. There are also much more limited opportunities for diversion into the illicit market, and the product has a higher value-to-weight ratio, reducing transport costs. Finally, CPS processing involves less residual waste than raw opium, facilitating safe disposal with fewer environmental hazards.

Australia, France and Spain have demonstrated their comparative advantage in the licit opiate industry, using improved seeds and well-resourced agricultural extension. The development of new genetic varieties has provided increased alkaloid content, particularly in thebaine-rich varieties, for which demand has been increasing, especially in the United States. Cultivation occurs on sizable farms; Australian fields reportedly averaged thirty-six hectares in 2012–13. The economic potential of the opiate industry in Australia and its competitive advantage in the international market has prompted the country to approve extension of licensing into the state of Victoria and possibly the northern territories.

India and Turkey continue to cultivate opiates on smaller farms. While Turkey produces CPS, India's raw opium extraction is considered to have a significant problem with leakages into the illicit market, making it quite possibly the fourth-largest global producer of illegal opiates. The United Nations recognizes both countries as traditional supplier countries, and they have preferential access to the large U.S. market under the so-called 80/20 rule.⁷

Information on production costs is considered commercially sensitive, but 1999 figures indicate that Australia produced morphine equivalent for US\$56 per kg, around one-third the cost in India (\$160) and less than one-fourth the cost in Turkey (\$250) at that time. Production figures for 2013 suggest that Australia has far higher yields, producing 16 kg of morphine equivalent per hectare compared to 5.7 kg in India.⁸

In 2013 INCB estimated global demand for opiate raw materials at 480 tons of morphine-rich opiates and 287 tons of thebaine-rich opiates. In the same year, INCB anticipated that 593 tons of the former and 348 tons of the latter would be produced, exceeding supply in both categories. Thus, worldwide opium stocks for licit medicinal use are growing.⁹

Why Opium Licensing Won't Work for Afghanistan

Opium licensing in Afghanistan is a proposal that unfortunately does not survive several reality checks. Of most immediate relevance, the institutional setup, good governance and security are not in place in Afghanistan to prevent and minimize leakages from licit production into the illegal market. Because of weak security, lack of rule of law, significant corruption and existing trafficking networks, Afghanistan has a strong comparative advantage in supplying the illicit heroin market, and incentives to continue to produce for this market remain very strong. Afghanistan uses a very small proportion of its agricultural land to produce opium. So if licit licensing were introduced, there is no reason why total cultivation would not increase sharply to cater to both licensed and illicit markets. Prices for licensed opium are much lower than those on the illegal market, skewing incentives in favor of the latter.

If the problem of leakages and the risk of continuing large-scale illicit opium poppy cultivation somehow could be mitigated, the next problem is that there would be no international demand on the licit market for the raw opium that Afghanistan produces. Supply from India already exceeds global demand. Pharmaceutical companies prefer CPS. Moreover, it seems doubtful that Afghanistan would be able to obtain status as a traditional producer of opium, even though it is certainly true from a historical perspective; existing licit producers would strongly oppose it.

Even if Afghanistan could gain access to the licit market, the country's tiny farm sizes, highly labor-intensive technology and poor infrastructure mean that costs would be very high. On well-irrigated land in the central canal command area of Helmand Province, an estimated 4.7 kg of morphine equivalent per hectare was produced in 2013 (based on a yield of 33 kg per hectare of opium and a conversion ratio of 7 kg of opium to 1 kg of morphine equivalent). The estimated production cost was US\$3,100 per hectare, or \$660 per kg of morphine equivalent—much higher than costs in licit opium-producing countries, probably ten times higher than in Australia. The relatively low prices of licensed opiates would mean at most limited benefits for Afghanistan.

Finally, if the global market for opiates were decriminalized and subject to a regulated system, it seems extremely doubtful that Afghanistan could remain a significant producer of opium in a competitive international market. Australia, the low-cost producer, would defend and expand its market share. Other producers, such as Turkey, France and Spain, would do the same. Still other countries with modern mechanized agricultural sectors might well enter the market. These competitors would have ample capacity to take over the market for heroin and morphine-based medicines by producing morphine-rich CPS. If Afghanistan were to try to compete in CPS production, it would generate very little employment. In Australia only around 0.04 persons are employed per hectare cultivated, compared to an estimated 1.8 persons in Afghanistan—a difference of some forty-five times.

In sum, shifting to licensed opium production for medicinal use is not a realistic option for Afghanistan in the short or long run. Afghanistan's comparative advantage is based largely on the illegality of opium and associated high prices. The country would not be competitive in a

ABOUT THIS BRIEF

William A. Byrd, a senior expert at the U.S. Institute of Peace, is a development economist and has published extensively on Afghanistan's economy and other topics. David Mansfield is an independent researcher who has conducted in-depth field research in rural Afghanistan for seventeen consecutive years and has produced numerous publications on the opium economy and related topics. This Peace Brief reflects both authors' concern that a search for simplistic, one-dimensional solutions to Afghanistan's opium problem would backfire. The views expressed do not necessarily reflect those of the U.S. Institute of Peace.



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more liberalized and regulated global regime for opiates and most likely would cease to be a significant producer. Such an outcome would remove the serious adverse effects of illicit opium on Afghanistan, but the idea that the country could engage in licensed production of opiates and reap associated economic benefits is a nonstarter.

Notes

- 1. See the body of fieldwork produced by the Afghan Research and Evaluation Unit on the opium economy between 2005 and 2014, available at www.areu.org.af (accessed September 11, 2014).
- 2. A prominent early example is the detailed proposal by the Senlis Council, subsequently renamed as The International Council on Security and Development, in 2005. See David Spivak, lead editor, *Feasibility Study on Opium Licensing in Afghanistan* (London: Senlis Council, 2006), available at www.icosgroup.net/static/reports/Feasibility_Study.pdf (accessed September 14, 2014).
- 3. Text of the convention available at https://www.unodc.org/pdf/convention_1961_en.pdf (accessed September 11, 2014).
- 4. The former is used to produce morphine and morphine-based medications, such as codeine, whereas the latter is used for other opiate medications such as oxycodone. The former could be processed into heroin but not the latter.
- See Parliament of Victoria State, Australia, "Drugs, Poisons and Controlled Substances (Poppy Cultivation and Processing) Amendment Bill 2013," available at www.parliament.vic.gov.au/publications/research-papers/8902-drugs-poisons-and-controlled-substances-poppy-cultivation-and-processing-amendment-bill-2013#_ftn44 (accessed September 11, 2014).
- For background on the licensed opiate industry in Australia, see Keith Bradsher, "Shake-Up on Opium Island: Tasmania, Big Supplier to Drug Companies, Faces Changes," New York Times, July 19, 2014.
- 7. Dating back to 1981, this rule stipulates that "at least 80 percent of licit opium imported into the United States must have as its original source India and Turkey; not more than 20 percent can have as its original source Australia, Hungary, Poland, France, and the former Yugoslavia." See U.S. General Accounting Office, "Drug Control: U.S. Heroin Control Efforts in Southwest Asia and the Former Soviet Union," Washington, DC, May 1997, GAO/NSIAD-97-148BR, 45, available at www. gao.gov/archive/1997/ns97148b.pdf (accessed September 11, 2014).
- 8. INCB reported that Australia harvested 11,484 hectares of morphine-rich opium poppy in 2013 and produced 184 tons of morphine equivalent. India harvested 5,619 hectares but produced only 32 tons of morphine-equivalent in 2013. See International Narcotics Control Board, Estimated World Requirements for 2014—Statistics for 2012 (New York: United Nations, 2014), Part Three, available at www.incb.org/documents/Narcotic-Drugs/Technical-Publications/2012/NDR_2012_Part3_Supply_E.pdf (accessed September 11, 2014).
- 2011 stocks of morphine-rich opiate raw materials for licit medicinal purposes could cover expected global demand for fourteen months, anticipated to increase to fifteen months in 2014. The inventory of thebaine-rich raw materials in 2012 was enough to meet global demand for eight months, with stocks expected to grow further. See INCB, Estimated World Requirements.