

know, but will let their knowledge of the human genome accumulate until they can patent an indubitably artefactual material, a drug perhaps.

The developing countries raise other problems. This week's survey of Science in India draws the attention in another direction. There is no way in which a peasant farmer can be told that he cannot save his seed from one crop to the next, or forbidden by regulations sanctified in a far-off city called Geneva not to sell surplus seed to somebody else. Worse still, there is no way in which a traditional use of the product of an indigenous plant, say the contraceptive ingredient of neem-tree oil, should become taxable when some company overseas discovers the active principle. There would be riots if there were attempts to enforce a doctrine such as that. There would be more modest trouble if improvements of the millet crop engineered in California were charged for. But what incentive will there be for people with the skill to tackle these problems if there is no reward?

That is why the research community needs to take this issue in its grasp. Science is about understanding the world, but it also has the property of creating wealth in which, in equity, it (and its people) should have a share. Everybody agrees. The difficulty is that the now-conventional rules for the protection of intellectual property from which wealth may spring no longer correspond with professional people's estimates of the efforts expended in acquiring it, nor on the needs of the real world (and of the needs of the developing world in particular). Patent lawyers are fond of referring to the antiquity of the system they help administer, which should be a giveaway; it has also outlived its applicability. Ideally, it would be for UNESCO to take up this question, but that organization is not yet sufficiently restored to health to meet the need. The world's academies, which held a successful if unremarkable conference on population growth in New Delhi in October, are better placed to take up the challenge. If they will not, who will? □

## Decriminalizing drugs?

**The US Surgeon-General has revived a long-simmering debate about existing legal restraints on drug abuse.**

JOYCELYN Elders, the Surgeon-General of the United States, last week gave new life to a long-standing argument about the criminal sanctions applied to drug abuse when she said, in off-the-cuff remarks, that "I do feel that we would markedly reduce our crime rate if drugs were legalized." The reaction has been swift and hostile. Conservative Republicans in Congress went wild, many of them calling for her dismissal and saying that this remark was the last straw. (The outspoken Surgeon-General talks frequently and bluntly against teenage pregnancy, especially among poor minorities, and advocates condoms and any other measures that will keep children from having children.) Within hours, the White House also repudiated Elders' comments, saying that President Bill Clinton is opposed to legalizing drugs. "End of story. There is no more to discuss", the

White House press secretary said.

But not so fast. Although Elders forthrightly admitted that she is not a scholar in the field of drug decriminalization, she is quite right to suggest that the idea should be given serious study. In the United States and elsewhere, the use of illicit drugs (ranging in potency from marijuana to crack cocaine and heroin) is creating a generation of hopelessly addicted and crime-driven young men (and women) in the worlds' inner cities. In a vicious cycle of addiction and crime, a frightening increase in robbery and murder are tied together by a craving for drugs, a need to steal to buy them and the violent defence of trading pitches by the pushers.

But the connections may not be as simple as they seem. One possibility, tested somewhat in the Netherlands, is that if drugs were legal, crime would be reduced simply because the cost of buying them would decrease. There are also data from the Netherlands, where the use of marijuana is not illegal, to suggest that decriminalization does not bring increased use. To be sure, the data by themselves do not make a compelling case for legalization. But they are better than mere straws in the wind.

The arguments against the legalization of drugs, or some of them, are often different in kind, asserting that legalization would be seen as "giving in" to drug cartels and dealers, and would signal to people that it is safe to get high on crack cocaine. But would it be such a blow to the collective pride if the cartels and dealers were put out of business? And is it necessarily the case that licit use would become excessive and addictive use? Alcohol, legal and socially acceptable in all but *shi'ite* Moslem states, is not an irrelevant example; a little may be good; too much is not only bad for heart and liver, but turns otherwise law-abiding people into public dangers behind the wheel of a car. What evidence is there that marijuana in small amounts is more dangerous?

The more serious argument is that use of drugs inexorably leads to addiction and that the use of relatively harmless marijuana leads to the use of more potent drugs, cocaine, crack and heroin. The argument would be more powerful if there were compelling data to support it, but it is also possible to turn the supposition on its head and to conclude that if marijuana were legalized, but other drugs were not, those with a hankering after artificial psychosensation would satisfy their needs with the cheap and licit substance on the market, to the neglect of the harder stuff (and the chagrin of those who deal in it).

All that, of course, is handwaving. The truth is that there is insufficient understanding of how people and the societies of which they are a part would respond to the legalization of drugs of any potency. What Joycelyn Elders has done is to draw attention to the need to learn more about the role of drugs in modern society. Especially when "prevention" is all the rage, as now in the United States, there is the strongest case for a fresh government supported attempt to understand the social connotations of the use of now illicit drugs. What harm would be done by that? After all, if building prisons, locking people up and interdicting drugs at national borders were the solution, the problem would have been eradicated by now. □