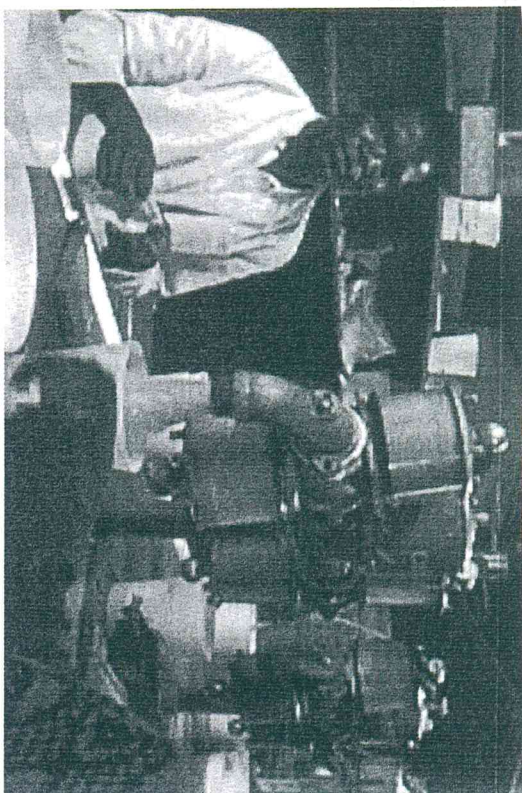




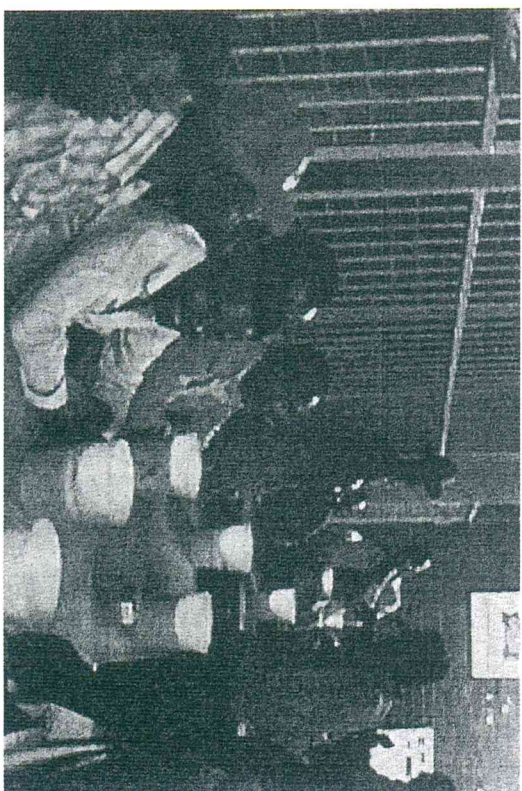
Photographer: Neeraj Berry.

Plate 12

Government alcohol monopoly: off-sale
A "government wine shop", selling spirits and beer, for off-premises consumption in Delhi, India. DSIDC stands for Delhi State Industrial Development Corporation, a government owned corporation.



Photographer: David Jernigan.



Photographer: David Jernigan.

Plate 13

Government alcohol monopoly: on-sale
Two views of a government beerhall in Zimbabwe, serving industrially-produced sorghum beer. *Top*: The beer apparatus, with a server. *Bottom*: a group of drinkers in the beerhall. The beer is about 3% alcohol, and is served in one-litre plastic containers. Since these photos were taken, the beerhalls have been privatized.

to specific categories of the population or circumstances. The most familiar form of prohibition for a specific population category in the modern world is forbidding the sale of alcohol to children, considered separately below. Familiar circumstances in which it is forbidden to drink include when piloting a plane or driving a train or bus. Prohibitions are also commonly applied in specific circumstances, e.g., to all attending a sporting event or a ceremony or performance (see box). Such situational prohibitions may become so culturally embedded and taken for granted that they are rarely even noticed by those brought up with them.

The sale, use and distribution of alcohol, fireworks, glasses and cans during soccer games are interdicted in stadiums and their surroundings (200 metres around them) in São Paulo State, Brazil (state law 9,470). A similar law also exists in Rio de Janeiro.

The law proposal was made in 1995, right after a series of violent disputes among soccer fans in São Paulo stadiums, which resulted in the death of a 16-year-old boy. It was felt at the time that alcohol was among the factors contributing to violent episodes, and alcohol sales and use in sports stadiums were therefore prohibited.

According to the state police, the law helped in controlling the violence in the stadiums, although its approval was coincident with a decreasing trend in the number of people going to stadiums.

In early 1999, a national magazine published an article stating that the repeal of alcohol prohibition in the stadiums had been proposed by a state representative and was being considered by the São Paulo Federation of Soccer teams, one of the main forces in supporting the interdiction in 1995 (*Veja*, Jan 27, 1999). The reason for that shift was, according to the magazine, pressure from a beer company. However, the prohibition has not been repealed, and a representative of the São Paulo Federation of Soccer teams stated later in 1999 that they firmly support alcohol interdiction during soccer games.

The most widespread prohibitions in the world on alcohol consumption are religious in nature. Except for Christianity, most major global religions – with hundreds of millions of adherents – regard the drinking of alcoholic beverages as incompatible with leading a holy life. In one of these religions, Islam, abstaining from alcohol is an obligation of all adherents. In the last two centuries, many strands of Christianity have also required abstinence of their adherents.

A general prohibition on alcohol sales or drinking as a government policy exists in many places in the modern world. In some cases, the prohibition is based on religious law; this is often the case in Islamic societies. Other prohibitions include more secular elements in their origin. For instance, secular considerations play a role in the history of the commitment to eventual prohibition that is written into the Indian federal constitution (see Plate 2).

General prohibitions at a more local level are quite widespread in the world. There is a rich history of prohibitions at the state level in the United States in the last 150 years and in India in the last 50 or so. Between 1999 and mid-2001, twelve states in northern Nigeria had moved to adopt Muslim *sharia* law (AFP, 2001; Farah, 2000), which involves alcohol prohibition. Prohibitions of sales at an even

more local level are quite common: for instance, on Indian tribal reservations in the United States, on islands in the Pacific (Marshall and Marshall, 1990), and in local districts or neighbourhoods in many societies (sometimes as a protective zoning for affluent neighbourhoods).

General prohibitions on alcohol are often effective in terms of some specific aims. Typically, the population's net consumption of alcohol does fall, even after accounting for illicit alcohol, and there are declines also in the rates of the direct consequences of drinking such as cirrhosis or alcohol-related mental disorders. A prohibition policy may succeed in reducing the rate of social disruption related to drinking by pushing the drinking behaviour into more covert forms, for example off in the bush (Marshall and Marshall, 1990).

But a general prohibition also brings with it characteristic negative consequences. In most societies, it has proved impossible to suppress completely the desire for drinking. To a greater or lesser extent, an illicit trade emerges to satisfy these desires. Governments have much less control over an illicit than over a legal trade; by the same token, those in the trade have to substitute violence for legal measures in enforcing their market claims and disputes. Often, after a period of prohibition, it is decided that the gains in public health it brings are not worth the added violence and criminal activity it entails.

Prohibition as a policy also carries a burden of historical associations in much of the developing world. As discussed in Chapter Two, it was often imposed on a racist basis in the 19th and early 20th centuries in the colonies of European empires, particularly in the British empire. Colonial prohibitions on drinking or on specific alcoholic beverages for "natives" reflected a mixture of motives, including a fear that drinking might engender disorder and uprisings, desires for labour discipline, racist beliefs about alcohol's effects, and pressures for colonial "uplift" by missionaries and home-front temperance societies. In the high point of European attempts to impose prohibition on colonized peoples, international agreements among European powers just prior to the First World War attempted to prohibit the importation of spirits into Africa (Bruun et al., 1975; see Plate 2).

In the last stages of the colonial era, access to alcohol thus became defined in many places as a mark of emancipation for native elites. In countries such as Australia, the United States, Canada and Papua New Guinea, centrally-imposed prohibitions for native peoples lasted as late as the 1960s. In many parts of the world, this history means that the dynamic of drinking to some extent still reflects a symbolic association of drinking with personal freedom and full citizenship.

In the modern world, with unlimited quantities of industrially-produced alcoholic beverages available, and with dense and widespread means of transportation and trade, general prohibition policies have proved difficult to sustain. Exceptions to this generalization tend to be relatively isolated places, such as islands, places protected from encroachment by desert or distance, or relatively closed societies.

In such places, prohibition policies are often sustained with considerable popular support. Usually there is some level of "bootlegging" or other illegal distribution of alcohol, although depending on local circumstances this level may be kept fairly low. Where there is a sustained local prohibition in non-Islamic societies, the major benefit is often seen to be the separation of any drinking which goes on from core community activities and from family life.

The evidence from historical alcohol prohibitions in the US, and elsewhere is that prohibition of alcohol sales can be effective in reducing levels of alcohol

consumption and of such alcohol-related problems as liver cirrhosis (Peasley, 1992; Moore and Gerstein, 1981). However, except in circumstances where there is strong normative sentiment against drinking (e.g., many Islamic societies), a substantial illicit market eventually gets organized. In the absence of overriding popular sentiment against drinking, the greatest effectiveness of prohibitions thus is short-term, before the illicit market is organized. Often, the social opinion against prohibition. A number of states in India have instituted alcohol prohibition in the course of the last half century, in accordance with the preference of the Indian federal constitution, but almost all such prohibitions have been repealed, often after a relatively short period (see box for example).

All sales, possession and consumption of alcoholic beverages, and most production of them, were outlawed in Haryana state, India, as of July 1, 1996 (Saxena et al., 1998). No compensation was given for lost business or investment in alcohol production or sales. Prohibition was implemented in fulfillment of an election promise with which the party previously in opposition had won the election, and was part of a wave of prohibitions in Indian states in the 1990s, under the impetus particularly of women's interest groups (see box at end of chapter on the anti-arrack movement in Andhra Pradesh).

Haryana is a small and relatively prosperous state with 16 million population, surrounding Delhi, the national capital, on three sides. Its agriculture is well developed, it has a flourishing industrial sector, and it has successfully promoted tourism, including pioneering a net of facilities for adventure and nature tourism.

The government made serious efforts to organize and implement the prohibition. A committee to set strategies, chaired by the Chief Minister, brought together governmental and voluntary agencies. A Department of Prohibition organized and supervised the enforcement efforts, which included vigilance at the state borders, checks of trains, buses and trucks, traffic checkpoints in the state, dog squads to detect smugglers, breathalyzers, a network of twelve laboratories to test seized samples, and appointment of nine special judicial magistrates. A large publicity campaign included posters and other materials, speaking tours by government officials, and a television appeal from the Chief Minister. Provision was also made for free medical assistance for liquor addicts at the "de-addiction centres".

The bold new bid to fulfill the vision of an alcohol-free society was initially widely acclaimed by the intelligentsia, opinion leaders, social workers, and religious and cultural organizations. Early reports on the implementation were very positive. A study by the Chandigarh-based Implementation Development and Communication found 82% approval for the policy, with 89% of the men and 96% of the women feeling that there had been a substantial decrease in the harassment of women, and 72% of the men and 89% (1998). Men who continued to drink behaved better, knowing they would be in trouble for any nuisance created under the influence of alcohol. Fear of sexual harassment by strangers vanished, and women felt safe on the street

alone even late at night. Women formed intervillage groups and held periodic meetings in support of prohibition and to discuss the situation in their village. Comparing the first eighteen months of prohibition with the preceding eighteen months, police statistics showed a decline in homicides of 10%, in injury assaults of 11%, in "affray" (disturbing the peace) of 34%, in robbery of 34%, and in burglary of 6% (Saxena et al., 1998).

On the other hand, the market for illegal alcohol organized fairly quickly. Haryana is surrounded by "wet" states, which did not cooperate with requests to create a "buffer zone" without sales points near the border; in fact, some stores moved closer to the border and a few provided night-stay facilities. There was also considerable illicit production within the state. In the first eighteen months, more than 2,000,000 litres of beverages and 1866 stills were seized, 105,955 samples were seized for testing, and 63,773 people were arrested for violations of the prohibition. Great ingenuity was displayed in the diverse ways by which alcohol was brought across the border and transported within the state, both by agents of organized crime and by petty smugglers, and stories of police corruption abounded.

Alcohol taxes had provided a large part of state revenue, and the government moved to replace the revenue with a variety of new and increased taxes, including increased bus fares, college and school fees, general sales taxes, new business registration fees and a "profession tax" on employed persons. Rises in state charges for electric power brought violent protests by farmers. Increased sales taxes on building materials slowed down construction in the state and depressed real estate prices. There was also a slump in the tourist industry, with reports of a 30%-50% decline in hotel occupancy and restaurant receipts. Several hotel and resort projects were closed down or put on hold. Since it had become fashionable to serve alcohol at weddings, middle-class families shifted wedding venues out of the state.

In interviews with 54 key informants, after prohibition had been in effect for about a year (Saxena et al., 1998), most felt there had been a substantial decrease in drinking, although there was a range of opinion on how big the decrease was. The informants generally saw positive effects on family life, on health, and particularly on law and order. On the other hand, most saw negative effects on the economy and on corruption and criminality; a minority also saw negative effects on social life. At the time of interview, a majority of the informants favoured a continuation of the prohibition, but a majority also felt that it would not last beyond two more years.

Prohibition was repealed in Haryana effective April 1, 1998. A commissioner, appointed at the end of 1999 to probe the prohibition experience, "found evidence that liquor smugglers in the state [have] among their patrons politicians and bureaucrats". As evidence of organized crime and corruption, he noted that "the sale of autos increased during prohibition and the crime graph went up" (*Times of India*, 2000). A sociologist who had studied the prohibition experience felt that during it women had come to feel "that they were more able to deal with the 'traditional' crimes of wife-beating and eve-teasing than the mafia's crimes of violence" (*Business Line*, 1998). To the surprise of many, prices of alcoholic beverages actually went up with repeal, reflecting the high prices paid in the auction for the liquor wholesale monopoly (Rao, 1998).

A local prohibition that is instituted with popular support may have a number of salutary effects in controlling problems from drinking, even if there is something of an illicit market. Alcohol will usually be more difficult to obtain and more expensive on the black market than if legally sold, and drinking is likely to be pushed out of public places. This may result in less public drunkenness and reduced hospital admissions for alcohol-related maladies and injuries (Marshall and Marshall, 1990). Prohibition often produces long-term changes in drinking places and patterns as well, sometimes in a beneficial direction and sometimes not. Prohibition may be a symbolic gesture that members of a community make to themselves about who they are and what they stand for, and in small communities prohibition laws may help support and mobilize community controls. Finally, prohibition may provide a breather – a time to take stock – in relatively isolated and self-contained communities that suffer from a high incidence of alcohol-related problems. In sum, prohibition laws can be seen as one option in a wider arsenal of measures that can be taken to contain and control alcohol-related problems in developing societies. But it should be kept in mind that the state has more diverse and cost-effective tools for controlling the market when there is a legal market for alcoholic beverages than when there is none.

Barrow, Alaska is an isolated community in the North Slope region of Alaska, accessible primarily by air. It has about 4000 residents, approximately 61% of which are Inupiat (an Inuit group), and 24% "Anglo" (white American). A high rate of alcohol-related problems had previously been documented in the community (Klausner and Foulks, 1982). In the 12 months starting November 1993, 90 of the approximately 2000 outpatient visits per month to the local hospital were documented in the patient encounter records as alcohol-related. After alcohol intoxication/detoxification, the most common diagnoses in this category were trauma, medical/gastrointestinal problems, withdrawal, suicide attempts, and family violence.

A series of local votes led to a ban on importation and possession of alcoholic beverages in November 1994, repeal of the ban after October, 1995, and reimposition of the ban in March, 1996. The alcohol-related outpatient visits to the hospital fell from 90 per month before the first ban to 15 during the first ban, rose to 60 per month when the ban was repealed, and fell again to 17 per month after the ban was reimposed (Chiu et al., 1997). Admissions to the local detoxification facility also fell dramatically during the two bans. While the number of women seeking help for family violence at a women's shelter did not appear to change during the bans, the severity of domestic violence apparently decreased.

A typology of alcohol controls

Regulations of alcohol availability can be classified in terms of their orientation to a limited number of dimensions of who or what is being regulated or restricted. The object of control may be the *product* itself, the *provider or seller*; the *conditions of sale or provision*; and the *buyer or consumer*. In the limiting case of a full prohibitory regime, of course, the distinctions between these dimen-

sions lose their point. But even most regimes that are labeled prohibitory usually have some exceptions where these dimensions come into play. National prohibition of alcohol in the United States between 1919 and 1933, for instance, involved few restrictions on the buyer or consumer, and provided for production and sale for religious and medical purposes.

Regulation of the product. Modern industrial societies typically regulate a large proportion of all marketed products, in terms of such factors as purity, safety, strength or size, and labelling and claims made for the product. Alcoholic beverages tend to be subject to particularly stringent product controls. Frequently, there are also controls on labelling, advertising and other promotional activities with respect to the product. Another aspect of alcoholic beverages regulation is controls on price, through taxes and other means. As a means of limiting harm from use, price and other regulations may be used to favour more diluted or less harmful forms of alcoholic beverages.

Typically, regulations of the product are enforced primarily through the manufacturer or importer of the alcoholic beverage in final form. Manufacturing or importing often requires a license, and the primary enforcement mechanism is usually the threat of losing this license – an efficient and relatively inexpensive means of enforcement. Other parts of the chain of production and distribution to the retail level may also be licensed.

Regulation of the provider or seller. A primary form of restriction of the market in alcoholic beverages is by limiting who can provide or sell the product, or authorize its provision or sale. As noted above, the government can reserve to itself the right to sell the product. An alternative and more common mode of regulation of the sale of alcoholic beverages is by specific licenses to private persons or entities entitling them to sell alcoholic beverages. The number of such licenses may be limited on a per-capita basis or otherwise. Again, the threat of losing this license serves as an effective and inexpensive enforcement mechanism. Elsewhere, providers or sellers of alcoholic beverages may be regulated more loosely as part of the general regulation of commerce.

Regulation of the conditions of sale. Part of the alcoholic beverage control structures in many jurisdictions is a set of controls on the hours and days of sale. In many countries, there is a restriction which forbids selling to customers under a minimum age. Other regulations of the conditions of sale of alcoholic beverages, particularly for on-premises consumption, often include specifications concerning physical design, requirements on the availability of food, prohibitions of particular activities (e.g., dancing, gambling, smoking, cardplaying, sexual behaviour) and a prohibition on serving someone already intoxicated. Historically, alcohol sales on credit were also often forbidden, so that drinking would not so easily become a source of indebtedness.

Again, the primary means of enforcement of alcohol regulations has been the threat of cancellation of the license of the provider or seller. In the U.S. and a few other countries, potential legal liability of the seller for harm resulting from prohibited sales has also become an important support for regulation of the conditions of sale.

Regulation of the buyer or consumer. The primary regulation of the alcohol buyer or consumer in most places is in terms of behaviour while or after drinking – particularly the offences of driving under the influence and public drunkenness. In addition to these alcohol-specific offences, of course, the intoxicated consumer

is also in principle held responsible to standards of behaviour with respect to the general criminal law, often the same standards as for the sober.

As we have noted above, other restrictions on the buyer or consumer have been fairly common. Alcohol rationing systems have been used in various times and places (e.g., Schechter, 1986). In Nordic countries in the years before the 1950s, these came with "buyer surveillance" systems that could limit availability on the basis of the drinker's behaviour and community standing (Järvinen, 1991; Sulkuinen et al., 2000). In some places, taverns have been required to post and respect public listings of drunkards who could not be served alcohol. These laws are still on the books in some states in the United States and elsewhere, and there have been moves by the Home Office in Britain to revive such provisions (Home Office, 2000). In many societies, such provisions were abandoned in accordance with developing notions of privacy rights and of equality in treatment under the law. The British example suggests that they may make a comeback as a counterweight to a further weakening of general alcohol controls.

Specific types of regulation of availability and their effectiveness

The last quarter century has seen the development of a burgeoning literature on the effects of alcohol control measures. There are by now well-developed literatures on the effectiveness of many types of regulation of availability. Specific are discussed below.

Minimum age limits. A minimum age limit is a partial prohibition, applied to one segment of the population. There is a strong evaluation literature showing the effectiveness of establishing and enforcing minimum-age limits in reducing alcohol-related problems (Edwards et al., 1994). However, this literature is North America-based, focuses mostly on youthful driving casualties, and mainly evaluates reduction from and increases to age 21 as the limit, a higher minimum-age limit than in most societies. The applicability of the literature's findings to other societies and where youth cultures are less automobile-focused has been little tested. At least 67 countries have age limits on drinking (WHO, 1999), with 18 as the most common minimum age limit; however, some countries have higher age limits (up to 21), some have lower (down to 16), and some set different age limits for different beverages. The legislation in some countries concentrates on the seller (bans on sales), while in others the focus is on the buyer (bans on purchases). Experience with minimum age limits suggests that controls on the seller are more likely to be effective, but only to the extent that enforcement of the law has more substantial priority with police or licensing officers. In many countries, setting a high age limit on drinking means that early drinking experiences for most drinkers will be in the context of an illegal activity.

Taxes and other price increases. Generally, consumers show some response to the price of alcoholic beverages, as with all other commodities, and young drinkers seem to be especially responsive to the price (Grossman et al., 1995). If the price goes up, the drinker will drink less; data from developed societies suggest this is at least as true of the heavy drinker as of the occasional drinker (Edwards et al., 1994). Other things being equal, poorer people drink less than the more affluent (though poorer drinkers usually spend a greater proportion of their income on drinking), and consumption tends to go up with increasing income and to decline with falling income. Special circumstances may intervene in one direction or

another, particularly in the short term. A newly unemployed worker may increase his or her drinking to fill the increased available leisure time, despite the reduction in income, particularly if there is some unemployment compensation. On the other hand, much of a sudden increase or windfall in income may be especially likely to be "drunk up", whether because of social expectations or for lack of readily available alternative consumer goods.

As noted in Chapter 4, alcoholic beverages are often an important source of government revenue. In many countries the government levies a sales tax, an excise tax, and a corporate tax on the alcohol trade, and some countries add other special levies as well. High taxes on alcohol may be justified on three bases: public health, economic efficiency and revenue raising (Grossman et al., 1993). From a public health point of view, high taxes may be accepted as an instrument to curtail alcohol consumption, since heavy or abusive alcohol drinking has harmful effects on health. From an economic efficiency point of view, the government may wish to impose high taxes to correct for negative externalities, that is, costs associated with alcohol consumption that the drinker does not take into account in a decision to purchase or consume. Such costs may not be borne by the drinker; and include excess death, violence, crime, accidents on the road and expenditure on health care costs. The government may design the structure of taxes to internalize these externalities and to ensure that the full social costs are reflected in the price charged for alcohol. Finally, from a revenue raising point of view, high tax rates may be supported if alcohol consumption is relatively inelastic with respect to price, and if the government exercises a reasonably high level of control over the alcohol supply.

Governments may also collect taxes on alcohol for other reasons. A "sumptuary tax" may attempt to alter who consumes a product, and a "luxury tax" may have an aim of economic equalization. An import excise tax may be a protectionist measure on behalf of "home" producers. At the extreme, a very high tax may seek to drive a commodity from the market. All these motivations have influenced governments in setting alcohol taxes in one or another place and time.

Enhancing public health and public order as a motivation for taxing alcohol became important only in the 19th century, but is common today and indeed taken for granted in a variety of countries. In Scandinavian countries, it is assumed by public health authorities that taxes on alcoholic beverages are part of an overall "alcohol policy" (Holder et al., 1998).

The main threat to taxes on alcoholic beverages is the competition from untaxed alcoholic beverages. It has thus long been in governments' interest, from a revenue point of view as well as in public health terms, to gain control over all aspects of the alcohol market, and to ensure that the taxes are paid. Alcoholic beverage producers who are taxed usually have an interest in helping governments in this task. As noted in Chapter Four, the struggle to gain control over the alcoholic beverage market was often lengthy. In the last few years, with the dissolution of centrally planned economies, many governments in Eastern Europe at least temporarily lost control of the alcohol market.

In general, governments find it easier to control the market in industrially produced beverages than to control home production. The number of producers is fewer, and the manufacturing facilities less portable and less easily hidden. On the other hand, large-scale producers may find it easier to influence government policies and can more effectively promote and mass-market their products.

Nevertheless, the practicalities of imposing public-health-oriented tax policies are nearly easier for industrially produced than for home-produced beverages.

In many developing societies, however, as we have discussed, home production both of traditional beverages and of distilled drinks accounts for much of the alcohol consumed. As villagers with traditional brewing and distilling skills have moved into the market economy, they often engage in small-scale production of alcoholic beverages for sale. Such beverages often offer effective price competition for taxed beverages. In this situation, an attempt to raise taxes on an industrially produced product can actually result in a fall in state tax revenue. Thus in 1995 Zimbabwe had to rescind beer taxes it had raised when tax receipts fell because consumers shifted to cheaper alternatives (Jernigan, 1999).

Large-scale smuggling of alcoholic beverages across national borders can also undercut a high-tax policy. Particularly in the developed world, customs unions and free trade agreements have increasingly restricted the ability of governments to use this highly effective policy instrument (Ferris et al., 1993; Holder et al., 1998).

Despite all these difficulties, there are long-term trends in favour of greater governmental control of alcohol markets. In Africa, Asia and Latin America, Western-style manufactured beverages enjoy a prestige advantage over indigenous and home-brewed products. This has two implications. The share of the market accounted for by commercially-produced and manufactured alcoholic beverages is rising almost everywhere. And consumers are generally willing to pay considerably more for these products than for the same amount of alcohol in traditional beverages. Although the Zimbabwe case illustrates that there are clear limits, governments have some room to tax commercially-produced products to a higher price before substantial substitution of beverages sets in.

As noted above, alcoholic beverage demand is typically fairly inelastic, particularly for the dominant type of alcoholic beverage in a society, but consumers do respond to price. The relative inelasticity usually means that fiscal receipts rise from raising the tax level. Studies have found that alcohol tax increases reduce the rates of traffic casualties, of cirrhosis mortality, and of incidents of violence (Cook, 1981; Cook and Moore, 1993).

Mauritius, an island nation in the Indian Ocean, has a population of about one million, of Indian, African, European and Chinese origin. By religious affiliation, 53% are Hindu, 29% Christian and 17% Moslem. Tourism is the third-ranked industry, in terms of hard currency earnings. In June 1994, customs duties on imported alcoholic beverages were drastically lowered to 80%, from rates that had ranged from 200% for wine to 600% for whisky and other spirits (Abdool, 1998). The change was made under pressure from the hotel industry, which claimed that tourists were not purchasing enough alcohol because of high prices. Other reasons given for the change were to reduce unofficial imports from elsewhere, and to make "better, more refined" alcoholic beverages available to the local population. It was believed that better quality alcohol would result in fewer health problems.

Imports of beverages, primarily spirits, were 70% higher in 1996 than in 1993, in gross litre terms. In the meantime, local production of alcoholic beverages also rose by 4% in gross litres. But the tourists did not account for the increase in consumption of imported beverages, since the hotels did

not reduce drink prices for them. With imported beverages a status symbol for local customers, the extra consumption of imported beverages was primarily by Mauritians.

Arrests for driving over the legal blood alcohol limit, primarily made in connection with traffic crashes, increased by 23% between 1993 and 1997 (annualizing from the first eight months of 1997). Admissions of alcoholism cases to the island's psychiatric hospital shot up in 1994; the rate in 1995 was over twice the rate in 1993, and rose slightly again in 1996 and 1997. Medical specialists in Mauritius agree that patients afflicted with alcohol problems are an increasing portion of admissions in general medical wards, and now represent between 40% and 50% of bed occupancy in medical wards (Abdool, 1998). According to WHO statistics (WHO, 1999 and 2000b), the age-adjusted death rate for chronic liver disease and cirrhosis rose from 32.8 for males and 4.0 for females in 1993 to 42.7 for males and 5.3 for females in 1996.

There were some increases in alcohol taxes in the 1999-2000 budget (US Department of State, 1999). Meanwhile, an analysis by World Bank staff called for further reductions in maximum tariff rates, identifying Mauritius as having an "anti-trade bias" on the basis of the structure of its alcohol and tobacco taxes (Hinkle and Herron-Aragon, 2001).

Limiting sales outlets and hours and conditions of sale: A substantial literature shows that levels and patterns of alcohol consumption, and rates of alcohol-related injuries and other problems, are influenced by restrictions on the location and conditions of sale, which typically make the purchase of alcoholic beverages slightly inconvenient, or influence the setting for and after drinking (Edwards et al., 1994, pp. 125-142). As discussed above, enforced "house policies" in drinking places on not serving intoxicated customers, etc., have also been shown to have some effect (Saltz, 1997; Graham, 2000).

Tennant Creek is a small town (population 3400) in the dry heart of northern Australia, on the lands of the Warumpungu, an Aboriginal people. Tennant Creek was founded by white gold miners, located (according to the local story) where the beer truck broke down. Many of the Aborigines live in camps around the edge of town. The Aborigines are a large part of the customer base for the white-owned businesses in town, but race relations are often tense.

Since alcohol prohibition ended for Aborigines when they gained citizenship rights in 1967, casually, health and social problems related to drinking have become a prominent problem in many Aboriginal communities, and not least in Tennant Creek (Brady, 1988). Thursday, which is the day weekly pension and other pay checks are distributed, was a particularly high-risk drinking day, with the money often spent on drinking before food for the family could be bought.

In 1986 the local Aboriginal Council held a large "Beat the Grog" meeting

("grog" refers to all alcoholic drinks) to discuss what could be done about the problems. A volunteer Night Patrol was set up as an Aboriginal mediation service, working in cooperation with the police, to "resolve problems/dissipates when they begin not after they have exploded ... to short-circuit the destructive cycle of alcohol-induced payback, anger, guilt, misunderstanding and frustration" (Wright, 1997:51). By 1989 the Aboriginal Council had begun to focus on the alcohol supply, opposing a new alcohol license in town, and adopting the position that "we need to work towards a society where alcohol use is discouraged rather than promoted" (Wright, 1997:59-60).

After a series of small measures at local and territorial levels had failed to have an impact on the problems in the town, local agreement was reached on a "grog-free day" on a Thursday in 1994 (Wright, 1997:121). The police reported two minor incidents on that day, whereas on a typical Thursday there were usually around thirty. Suggestions for further initiatives included a grog-free day for the whole community every week; a ban in the whole region on casks (cheap bulk wine); pub opening hours limited to between noon and 8 pm; a six-can limit on takeaway sales; a prohibition of grog sales to "the taxi service" (for phone-requested home deliveries); and no "happy hours" (times with reduced-price drinks) (Wright, 1997:125). Though white residents of the town grumbled at the grog-free day, Aboriginal leaders were determined that solutions for the town should not single Aborigines out.

The territory's liquor licensing commission agreed to consider a further fully evaluated trial for several months of "grog-free" Thursdays and other new alcohol controls. Opposition by local alcohol sellers resulted in a series of hearings, so that the trial was not implemented until 17 months after the grog-free day.

Three months into the trial, the police reported that police calls had been halved on Thursdays. "The streets are quieter and a pleasing trend is the absence of intoxicated people" (Wright, 1997:237). A community survey toward the end of the six-month trial found that 69% thought the trial had positive effects on the community, with major benefits being less drinking, improvements in personal welfare, less disruptive and violent behaviour and quieter, cleaner streets (Wright, 1997:243). The evaluators of the trial found that police calls were 55% lower on Thursdays in the trial's first period, with full closing on Thursdays, and 13% lower in the second period, with opening only after 3 p.m. Compared with 1994, there were 36% fewer cases presenting to the hospital in the first period, and 21% fewer in the second. Admissions to the women's refuge were 39% lower in the first period, and 10% lower in the second (Wright, 1997:243-244; d'Abbs et al., 1996). On this basis, the commission decided to implement permanently most of the restrictions from the first period.

A second evaluation in 1998 (Gray et al., 1998) found that the gains from the controls had continued. Mean annual per capita alcohol consumption had dropped from 25 litres to 22 litres since the restrictions, with a reduction in the sale of cask wine.

There had been a consistent reduction in criminal behaviour, and a reduction in admissions to the women's refuge. Although licensees had

suggested that tourists would stay away if they were not able to purchase alcohol on Thursdays, tourist complaints had not been about inability to purchase alcohol but about drunken behaviour. There was, in fact, some evidence of an increase in tourism since the restrictions. A slight displacement effect was found, with increases in sales in clubs and from outlets beyond town.

Apart from its success in terms of alcohol controls, the Aboriginal Council's campaign raised its profile; in future it had to be acknowledged in the power structure of the town (Wright, 1997:243). And Aboriginal groups in other places have begun to work along similar lines. (Summarized from Wright, 1997, and personal communication from Maggie Brady)



JULALIKARI COUNCIL ABORIGINAL CORPORATION

Grog is one of the biggest problems confronting Aboriginal people. It is wrecking our culture, destroying our families and killing our people.

Aboriginal people all over Australia are distressed about the effect that alcohol abuse is having on our communities. We recognise that we are the ones who must take control of the problem and find the solutions.

The Tennant Creek Aboriginal community has been working on these solutions and have been the leaders in developing ways to beat the effects of grog. Our Night Patrol has been a big success and has been adopted by many other communities. But Night Patrol can only deal with one part of the problem, after people have had too much grog.

Our next step is to try and reduce the amount that people drink. But we don't think total prohibition is the answer. So we want to try ways of controlling alcohol abuse by controlling its availability. Our trial 'Grog Free Day' in April produced great results ... people's pension cheques were spent on food and clothes and not on grog. Grog related problems stopped for that day and the next. Now we want to try this over a longer period.

We need this to give our people a break from the destructive cycle of alcohol abuse. To give us time to think about other ways; to help our people see that the problem is not hopeless and then we can get on top of our problems. The Julalikari Aboriginal Council, on behalf of the Warramungu people, appeals to the Tennant Creek community, Aboriginal and non-Aboriginal, to support the 3 month trial, and get behind us to help us help our people.

Plate 14

Alcohol control for public health and order in the "Fourth World": an appeal from the Aboriginal community in Tennant Creek, placed as an advertisement in the Northern Territory News, 29 June 1994 (Wright, 1997).

Rationing sales. Rationing the amount of alcohol sold to an individual potentially directly impacts on heavy drinkers while imposing little burden on moderate drinkers. Studies both in developing and developed societies show that rationing reduces levels both of intoxication-related problems such as violence, and of drinking-history-related problems such as cirrhosis mortality (Schechter, 1986; Norström, 1987). But while a form of rationing — the medical prescription system — is well accepted in most societies for psychoactive medications, it has proved politically unacceptable nowadays for alcoholic beverages in developed societies.

Greenland is a self-governing dependency of Denmark, with a harsh Arctic climate. In the early 1980s, it had a population of about 50,000 people, about 80% indigenous Greenlanders speaking an Inuit (Eskimo) language. Danish law forbade distribution of alcohol to Greenland natives from 1782 until 1929. Then a rationing system was in effect until 1954.

In 1978, following a public referendum, a new rationing system was announced, to take effect in August 1979. Adults were entitled to 72 rationing coupons per month, with each coupon valid for roughly the equivalent of one beer in alcohol content, except that a bottle of table wine took 3 rather than 6 coupons, "to encourage a more Mediterranean drinking pattern" (Schechter, 1986). Though the coupons were not legally transferable, they quickly became a kind of alternative currency, with a month's supply worth USD \$150-200. Students who chose not to drink found their coupons a considerable help in financing their education.

The institution of the rationing system had dramatic effects, particularly in the first few months. Even after that, there was substantial improvement in some measures. Compared to 1978, consumption in terms of litres of pure alcohol had fallen in 1980 by 33%, while homicides and attempted homicides fell by 28%, and assaults fell by 18%.

A study in Nuuk, the capital, showed the number of calls to police concerning domestic quarrels fell by 58%, comparing equivalent periods in 1980 and 1978. However, some categories in the Greenland crime reports showed little change (thefts, vandalism, drinking-driving), and others rose (sex crimes up 28%, and hashish smuggling crimes up 253%). An evaluation reported that there was less drinking done at home, and children and youth were better cared for; children's shelters emptied out, and requests for emergency cash advances almost ceased. Venereal disease cases in 1980 were down 26% from 1978. Businesses selling such goods as clothes, radios and photography equipment reported sales gains of 25-50%.

Drawbacks of the rationing system mostly centred on the technically illegal but more-or-less open market in coupons. Heavy users committed crimes to get money to buy points, and some poor heavy drinkers were seen as ending up in social need because of the coupon system alone. Smuggling and home brewing and distilling increased, as did hashish smuggling. The rationing system was also criticized as expensive to administer. Further, some viewed rationing as an unnatural external control, infantilizing adults who should instead learn self-control.

In March 1982, Greenland's new home-rule Parliament abolished rationing, effective four days later, substituting a public information campaign and a relatively small increase in spirits and strong beer taxes. A commission set up by the government had concluded that "in the population, in the municipalities, in the rest of the public administration, in some unions and organizations, there seems to be a widespread desire that the point system be repealed". However, no popular vote was taken. A 1984 survey of a representative population sample found that 47% favoured rationing, 10% favoured prohibition, and 35% preferred no restrictions. Those favouring restrictions were concentrated among the old, the young, the less educated, and those living in smaller settlements — "groups who are weak in the political decision-making process", as the report of the survey noted (quoted in Schechter, 1986:615). The legislature may thus have been reacting to the political discourse in their own circles rather than the true state of public opinion.

The results were even more dramatic than at the inception of rationing. Consumption in 1982 was up 96% compared with 1980. The 1982 consumption translates to a consumption of more than 20 litres of pure alcohol per adult. Homicide and attempted homicide were up 55%, assaults up 25%, sex crimes up 10%, theft and vandalism up 11%, and drinking-driving offences up 6%. Undercutting a substitution argument, hashish smuggling offences continued their rise, by 57%. Public children's shelters were soon overflowing, and police calls to domestic quarrels in Nuuk were estimated to have doubled. Visits to a hospital emergency room in a town of 3,900 tripled, and in another town the number of persons injured per month rose by 58%. Venereal disease cases in Greenland in 1982 were up 58% from 1980. Sales of items like clothing, radios, and photography equipment were down 25%, and retail businesses threatened to lay off workers. (Summarized and recalculated from Schechter, 1986)

Production restrictions. Failures of production or distribution of alcoholic beverages to meet demand have been fairly common in developing societies (e.g., Schatzberg, 1979), and in developed societies during wartime. Deliberate reductions in or restrictions of production have been less common, e.g., in Algeria after independence, and most notably in the Soviet Union during the Gorbachev-era sobriety campaign of 1985-1988 (White, 1996). Though a substantial part of the reduction in official production in this period was made up by increased illicit production, rates of alcohol-related problems fell substantially, and the average age of male deaths rose (See Table 1.2; Leon et al., 1997; Shkolnikov and Nemsov, 1997). However, in the medium term, the restrictions proved as unpopular as a full prohibition, and were relaxed in the last months of the Soviet Union.

Advertising and promotion restrictions. Regulations on advertising and other promotion of sales of alcoholic beverages are widespread in developed societies (Hurst et al., 1997), and common also in developing countries. At least 29 countries have implemented bans on advertising in at least one medium (WHO, 1999). Bans on billboard advertising are found in India, Egypt and most states in Malaysia

(WHO, 1999), and billboards in Mexico are required to carry warning messages. While it is well accepted that advertising can strongly affect consumer choices among products on the market, it has proved difficult to measure the effects of advertising on demand for alcoholic beverages as a whole, in part because the effects are likely to be cumulative and long-term, making them difficult to measure. In terms of a public health or other social policy justification, it is the overall demand rather than demand for a particular brand that matters. However, the evidence on the effects of advertising and promotion on overall demand has become stronger in the recent literature (Casswell, 1995), and a recent study of the relationship between alcohol advertising and motor vehicle fatalities in U.S. metropolitan areas found a significant relationship (Saffer, 1997).

Studies of advertising have generally measured the impact of "above the line" expenditures, that is, funds spent on traditional advertising in measured media. However, as noted in Chapter Four, global beer and spirits are increasingly moving in the direction of becoming marketing-driven commodities. Such commodities rely heavily on brand image, and on embedding the brand into local cultures and daily practices. The marketing activities and expenditures that support brand image and embeddedness tend to be "below the line" strategies, that is, sporting events, rock concerts and cultural activities; sweepstakes; frequent-drinker loyalty programs and special offers; stealth promotion with paid word-of-mouth endorsements ("buzz marketing", Khermouch and Green, 2001), and such brand extensions as clothing and music marketing with the product's brand name. From the point of view of developing countries, these emerging techniques of globalization of alcohol as a mass consumer product may be as important to regulate as the traditional media.

As our review of alcohol control strategies suggests, popular support is important to the success of alcohol controls, if only in terms of the political will to continue them. The final strategy we will discuss involves the mobilization of large numbers of people, which has often accompanied moves towards greater control of alcohol.

Working with social and religious movements and other nongovernmental groups

Substantial reductions in alcohol-related problems, both in developed and developing societies, have often been the result of social and religious movements that put a major emphasis on quitting intoxication or drinking. Such movements may be seen as vehicles or catalysts for prevention, rather than a strategy in themselves; they may use or support any of the strategies we have been considering. Historically, alcohol-oriented movements usually arose spontaneously as the reaction of community members to what were perceived as substantial social or spiritual problems.

While some of the largest historical reductions in alcohol problem rates have resulted from such spontaneous and autonomous movements, there is considerable question about the extent to which such movements can or should become an instrument of government prevention policies. The power of such movements is often related to the perception of their autonomy from influences outside their constituency, and support from or collaboration with a government can easily be perceived as official cooptation or manipulation (Room, 1997). One source of the

strength of the most widespread international mutual-help movement for recovery from alcoholism, Alcoholics Anonymous, has been that it accepts no linkage with or financial support from governments (Mäkelä et al., 1996). Except in cases where a cultural or religious revival includes taking control of the state (e.g., Iran in 1979), there is little record of success with state sponsorship of social or religious movements concerning alcohol. As the disastrous history of the official temperance movement set up in the Soviet Union during the sobriety campaign of 1985-1988 suggests (White, 1996), top-down "popular" campaigns that are out of tune with community sympathies may even have perverse results.

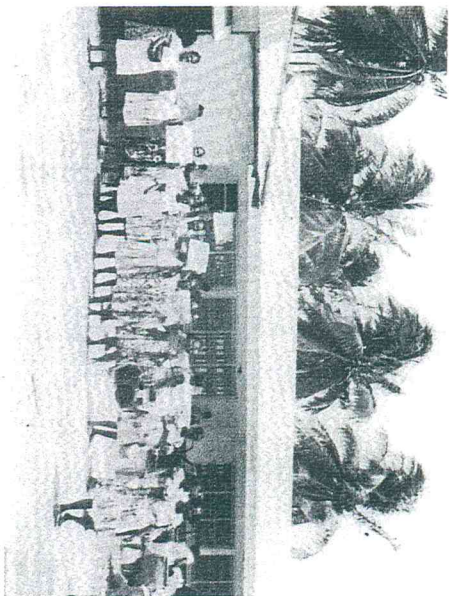
In recent decades, there have also been efforts to form partnerships between state organizations and nongovernmental groups to work on alcohol problems, often at the level of the local community. There has been a lively tradition of community action projects on alcohol problems, often using a range of prevention strategies (Giesbrecht et al., 1990; Greenfield and Zimmerman, 1993; Holmila, 1997; Holder, 1998). School-based prevention efforts have also moved increasingly to try to involve the community, in line with general perceptions that such multifaceted strategies will be more effective (Paglia and Room, 1999).

From the introduction of alcohol in Moen, Chuuk (formerly Truk) in Micronesia in the late nineteenth century, its use has been restricted almost exclusively to males (Marshall, 1979: 82-97). In a survey, only 2% of the women had ever consumed alcohol, whereas 86% of the men were current or former drinkers. Intoxication is common, and male drunken comportment typically is threatening and violent.

Traditionally, Chuukese women were expected to stay at home and to be "humble, obedient, generous, and submissive". On the other hand, women have been regarded as morally superior to men, and women are expected to have a special responsibility in matters of common welfare. Traditional role expectations thus defined family disruption caused by drinking as a legitimate concern for women. Lately, formal education has increased women's options in Chuuk, and female wage labour has become increasingly acceptable. Concomitant to changes in the social position of women has been the rise of a monied elite in a formerly egalitarian society.

In 1978, the voters of Moen voted for a prohibition on alcoholic beverages. A women's movement played the leading role in establishing and ensuring the continuation of prohibition. Middle-class women provided the leadership and energy to launch and sustain prohibition. Drinking-related casualties, traffic crashes, homicide or injuries did not decline significantly but prohibition did make a visible effect on the street scene. Drunks no longer accosted bystanders and no longer attracted an appreciative audience as they once did. Chuukese women also unanimously reported that family violence was reduced. Despite the black market and speakasies, the prohibition continued to enjoy strong community support. More than two-thirds of current drinkers in 1985 indicated that it was a good law.

The most important factor in reducing public acts of alcohol-related violence may have been the closure of the public bars. Bar fights involved combatants from different communities who often did not know each other, and frequently ended in tragedy. After the prohibition, drinking was driven



Photographer: Mac Marshall.

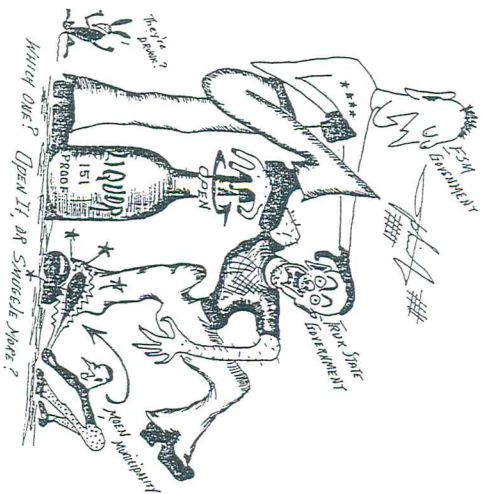


Plate 15

A successful women's movement for local prohibition

Top: the women's demonstration in 1983 outside the Municipal Council Chambers, Moen Island, Truk (now Chuuk), Federated States of Micronesia. Signs included "Love Mother; don't permit drinking on Moeen" and "Don't kill/injure my children". The council, which had been moving to repeal prohibition, backed off. **Bottom:** The cartoon from the local paper commented on the competition over liquor revenues from three levels of government; local prohibition disrupted the revenue streams. (Marshall and Marshall, 1990)

underground. Most disturbances now occurred in settings where kin and friends were likely to intervene before someone was seriously hurt. (Marshall & Marshall, 1990)

Remarkably, even though a substantial black market had grown up in the 17 years since the prohibition law passed, disruptive public drunkenness remained a rarity in Chuuk in 1995. Drinking occurred, but it took place in relatively private settings, and drunks took some pains to avoid making a public spectacle of themselves. In this case, then, political action born of altered community attitudes toward the acceptability of certain kinds of drunken comportment seems to have changed the behaviour of those who had become a community problem.

There are parallels between the Chuukese campaign and the Woman's Crusade in the US, in the late 19th century (Marshall & Marshall, 1990). In both cases, structural changes provided the background for a women's social movement of unforeseen self-reliance and militancy. The American temperance movement's struggle was against saloons and for the family. It also was about female power against male power but the struggle was kept within the confines of traditional definitions of male and female spheres of life. The women temperance activists in the US did, however, play an important role in later more general campaigns for social equality.

Evidence on effectiveness

In the short term, movements of religious or cultural revival can be highly effective in reducing levels of drinking and of alcohol-related problems. Alcohol consumption in the US fell by about one-half in the first flush of temperance enthusiasm in 1830-1845 (Moore and Gerstein, 1981). Rates of serious crime are reported to have fallen for a while to a fraction of their previous level in Ireland in the wake of Father Mathew's temperance crusade (Room, 1983). Similar levels of change, at least in the short term, can be found in the course of cultural or religious revivals in tribal and village societies (Hill, 1985; Guillory et al., 1988). The enthusiasm that sustains such movements tends to decay over time, though they often leave behind new customs and institutions with much longer duration. For instance, though the days when the historic temperance movement in English-speaking societies was strong are long gone, the movement had the enduring effect of largely removing drinking from the workplace in these societies.

Arrack, a clear liquor distilled from molasses, is the main drink of poor rural village men in Andhra Pradesh, a state in the southeast of India with a population of 63 million. In the early 1990s, the state had the highest consumption of arrack in India; the volume of sales, and the number of arrack shops, had doubled since the early 1970s. Arrack sales were an important source of state government revenue, collected by a system where they bore the brunt of their men's auctioned to contractors. Village women felt they bore the brunt of their men's drinking; according to one, the family's money "is squandered away in the evening in drinking arrack. Not only that, our lives have become a living hell

as the men start beating up family members after drinking" (Romano, 1995).

A women's movement against arrack started as an outgrowth of a literacy campaign initiated in 1991 by the state government. One reading primer included the story of a rural village where women united to end the violence against them by drunken men, picketing the liquor stores and forcing them to close. The beginning of the movement is attributed to the reaction of village women who had read this story when three drunken labourers lost their way and drowned in a village tank. The women marched to the village liquor store with sticks, bricks and chili powder and forced its closure. Within three months the movement had spread to 50 villages in the district, and by two months later there were protests in 600 villages. At first the agitation forced the closure of over 300 arrack shops. During the elections in 1993, arrack was banned in the state. In 1995, a candidate campaigning for a statewide ban of all alcohol won the state election, and the movement spread to six neighbouring states.

In its initial stages, the movement's main feature was collective action by women at the local level. A peasant skirt hung across a tree or at the entrance to a liquor store became a signal that a man caught drunk or carrying liquor risked being dressed in the skirt and paraded through the streets. Drunk men's heads were shaved and they were paraded through the village on donkeys. Arrack from liquor stores that refused to stop selling was poured into the street. State liquor license auctions had to be postponed when the women blocked entrances to the auction house. Later the movement became more politicized, appealing to patriotism and Gandhi's memory, and calling for politicians to support state-wide prohibition.

The state government initially dismissed and then tried to suppress and silence the protests, even deleting the catalyzing story from the literacy primer.

As the movement grew, it developed a broader constituency, with other interest groups interpreting its goals in terms relevant to their own concerns. While national TV and radio ignored the movement, a local newspaper was instrumental in covering it in sympathetic terms and legitimizing its goals. With the adoption of the cause by the main opposition party in 1993, the issue became part of mainstream politics.

There is only anecdotal evidence of the effects of the movement on drinking (Romano, 1995). Women reported that in many villages the men stopped drinking arrack. "There are no drunken brawls, no law and order problems. Our village has become a peaceful area", said a woman about the village where the protests started. The movement had obvious success in mobilizing women to express their common interests politically.

However, prohibition was partially repealed in Andhra Pradesh in 1997, after remaining in effect for two years (Reuters, 1997). It was estimated that the ban cost the state government 30 billion rupees (\$836 million US dollars) in taxes. Under the repeal legislation, the state retained its prohibition on arrack. Liquor still cannot be sold at bars and is available only at a limited number of liquor depots with tightly restricted working hours.

"The total prohibition policy has totally failed," the Chief Minister told the state assembly during the debate in 1997. He said the state government had been unable to check smuggling and illicit manufacture. "The liquor smugglers have formed mafia gangs. Corruption and lawlessness have reached disturbing proportions," he said. "The enforcement efforts of the excise and prohibition and the police departments did not make much headway."

During the 26-month ban, the government arrested 310,000 people, seized 9,300 vehicles and destroyed over a million litres of liquor, worth about 450 million rupees (\$12.6 million US dollars), officials said.

Conclusion

As we have documented in earlier chapters, alcohol is a special commodity, in terms of the social and health problems it causes or exacerbates. In any society where alcohol is a regular item of consumption, there is thus a strong justification for adopting a comprehensive policy concerning alcohol, taking into account production, marketing and consumption, and the prevention and treatment of alcohol-related problems. Such a policy needs to reach well beyond the two most common and popular strategies, education of schoolchildren and provision of treatment for alcohol problems – particularly since evidence of the effectiveness of such strategies in reducing societal rates of problems is limited at best.

In terms of all the strategies we have reviewed in the last two chapters, there is clear evidence for effectiveness and cost-effectiveness of measures regulating the availability of alcohol and the conditions of its use, and for some measures that insulate that use from harm. With respect to some aspects of alcohol problems, notably drinking-driving, there is also strong evidence of the effectiveness of deterrent strategies.

Often the different strategies for preventing alcohol problems appear to be synergistic in their effects (DeJong and Hingson, 1998). Controls of availability, for instance, are more likely to be adopted, continued and respected when the public has been successfully persuaded of their effects and effectiveness. But strategies can also work at cross-purposes: a prohibition policy, for instance, makes it difficult to pursue measures that insulate drinking from harm.

This review of the evidence points up what can work in reducing and preventing alcohol-related problems. However, an effective alcohol policy needs to be not simply a scattershot collection of specific measures, but rather an integrated response to the complex social system that produces alcohol problems. Constructing such a response is the topic of our final chapter.

Chapter Nine

BUILDING AN EFFECTIVE RESPONSE TO ALCOHOL PROBLEMS

Alcohol problems take an enormous toll on lives, families, communities, economies and nations in the developing world. There have been myriad attempts to alleviate these problems, and the substantial body of research and experience arising from those attempts provides clear direction for future action. Such action must be based in a clear-eyed assessment of the current situation, building neither on doctrinaire opposition to alcohol use nor on the self-interest of those who profit from its use. A public health approach to alcohol problems in developing societies needs to take into account the current situation, and to employ effective policy levers to shape that situation in ways that will minimize the risks of alcohol use.

This book thus far has summarized the global changes occurring both generally and in alcohol use and production that contribute to the current situation in developing societies. We have looked at how these changes are influencing both how much and how people drink alcohol. We have documented the magnitude of alcohol's impact on health and on society, and we have explored the effectiveness of a variety of policies for lessening the negative consequences of alcohol use. In this final chapter, after a review of our findings, we will focus on the important question of how to put these findings to work on behalf of public health, that is, how to implement a successful programme of public health policies to prevent and reduce alcohol-related harm. Such a programme may be initiated at any level of government. However, in an increasingly globalized world, the influence of actions at the international level is growing, permeating ever more widely and deeply into human life. As our scope has been near-global, so we will conclude by emphasizing the need for global awareness of and action against alcohol problems.

The current situation

There are two essential elements to the current situation regarding alcohol problems in developing societies. First, to the best of our knowledge, in the absence of mitigating factors such as religion, and unless public health countermeasures are taken, these problems tend to increase with development. Second, awareness of and a policy focus on alcohol problems as well as resources to alleviate them remain scarce in the developing world. Together, these create the conditions for an epidemic rise in alcohol problems in the course of economic and social development.

Drinking patterns and problems in developing societies

We can summarize our findings in this book as follows:

- Consumption of alcoholic beverages is a long-standing and widespread human custom, with enormous variety in how different cultures and social groups use alcohol.
- Apart from its use as a source of calories or as a thirst-quencher, the culturally-mediated association of drinking with sociability and its effects on mood and state of mind are probably the aspects of drinking most valued by drinkers in most developing societies.
- In a given culture or social group, the cultural framing and meaning of drinking may be quite resistant to change. However, at the same time, the frequency of drinking occasions – and of heavy drinking occasions – can change, and there are numerous examples in developing societies where new drinking patterns are being added onto the old.
- In general, adults in developing countries are more likely to abstain from drinking than adults in developed countries. In much of the world, drinking by adult women has been relatively uncommon, although in some places this is changing.
- In many parts of the developing world, the traditional drinking pattern dominated by sporadic episodes of intoxication continues, but involvement in the cash economy and the industrialization of alcohol production and distribution have permitted the episodes to become more frequent, often in the form of weekend binge drinking.
- Given this pattern of drinking in many developing societies, problems associated with intoxication episodes typically predominate. These problems include injuries and interpersonal violence, causing harm to the drinker and to others, as well as adverse impacts on family and community life and functioning.
- The process of development also makes regular heavy drinking more feasible, so that alcohol also makes an increasing contribution to chronic health problems, often in conjunction with endemic infections, poor and inadequate nutrition, and unsanitary conditions.
- In terms of total years of life lost to premature mortality and disability, alcohol's net effect in developing societies is everywhere negative. The burden of social problems from drinking is mostly unmeasured, but qualitative evidence suggests it is large in many parts of the developing world.
- Although alcohol's potential protective effect against cardiovascular disease (CVD) has drawn much attention, alcohol's net effect on heart disease at the population level is likely to be negative in most of the developing world, because of both patterns of drinking and patterns of nutrition and lifestyle.
- Drinking is everywhere a gender issue, in that men everywhere do more (in some places most or all) of the drinking, but women disproportionately suffer the consequences.
- The type of alcoholic beverage consumed has relatively little effect on the level of health consequences of drinking. With respect to social and casualty problems, differences by type of beverage mostly reflect who is drinking what in which circumstances in the society. The predominant beverage of younger adult males in a society usually has the strongest relation to these problems.
- The levels of alcohol-related problems in a given society tend to rise and fall,

all else being equal, with rises and falls in the level of per-capita alcohol consumption in the society. Prevention measures which affect the level of alcohol consumption are thus among the most effective ways of preventing alcohol-related problems.

Alcohol production and economic and social development

The shape and structure of alcohol production systems have changed significantly in most developing societies. These changes in the alcohol supply in turn contribute to the changing profile of drinking patterns and problems described above. We can summarize the key features of these changes as follows:

- In most developing societies, home and cottage production of indigenous or indigenized beverages exists alongside industrial production of European-style and indigenous beverages.
- Industrially produced beverages, particularly lager beer, are gradually gaining ground against indigenous beverages, on the basis of prestige, promotion and other advantages, although they are typically more costly.
- There may be health benefits from replacing cottage-produced by industrially-produced alcohol in terms of the purity of the product. However, these benefits should also be empirically verified, since they can easily be overstated.
- Particularly in Africa, home and cottage production is a major source of employment for women, particularly single heads of household, and industrialization of production results in employment losses particularly for women.
- Industrialized beer or spirits production is not labour-intensive and not a major source of employment in itself, thus industrializing alcohol production diminishes employment in it.
- Industrialization makes some contribution to building transferable skills and technical expertise in a developing society, but this contribution will be limited in the case of the typical joint-venture larger brewery with a multinational corporation, using turnkey technology, expatriate technical staff, and imported agricultural inputs.
- Industrialization of alcoholic beverages may help to foster transport and distribution networks in a developing country, particularly to the extent the product is semi-perishable (e.g. commercial opaque beer in Southern Africa).
- Most employment related to alcoholic beverages is in retail sales (including restaurants and bars), and is likely to be relatively little affected by the industrialization of alcohol production. The primary way in which industrialization might affect retail employment would be if it causes alcoholic beverage consumption to rise. In this case, levels of problems from drinking are also likely to rise.
- Most alcoholic beverages are drunk relatively close to the point of production. Significant exports of alcoholic beverages are not a realistic prospect for most developing societies.
- From a government's point of view, the main benefit of industrialization of production is that it makes it much easier to control the market, and in particular to collect taxes on alcoholic beverages.
- The main adverse consequences of industrialization and centralization of production stem from the increased promotion and sales that may accompany this, resulting in increased rates of adverse health and social consequences of drinking.

From the perspective of public health, changes in the way alcohol is produced and distributed thus potentially have both positive and negative effects. The shift towards more industrial production is an intrinsic part of the long process of development. But how the shift occurs, and what its public health consequences are, can be greatly affected by public policies. Governments need to recognize that with a more centralized production process and ownership comes a much greater power to promote the product and influence potential consumers, and need to put in place tax regimes and controls on promotion which will hold down the potential harm from this.

Responding to alcohol problems: Lessons from the research literature

The process of development tends to bring an increased supply of alcohol and new methods of promoting its sale, on the one hand, and on the other hand increased demands for attention and sobriety, e.g. in motorized traffic or on the production line. As part of their social and health policies, most developed societies have built systems of regulation of the alcohol market to bridge this gap. These regulations tend to be more stringent in those developed societies where intoxication is part of customary drinking patterns. As this is also the case in much of the developing world, development of a comprehensive system for regulating the alcohol market to reduce rates of alcohol-related problems is an essential task for developing states. Yet many developing societies have little in the way of such structures, leaving a large gap as industrialization processes bypass old systems of social control at a personal, communal or local level.

Measures with the best-established effect in reducing alcohol problems are those affecting the level, pattern or circumstances of consumption of regular social drinkers. These include controls of alcohol availability, drinking-driving counter-measures, and measures aimed at the drinking environment to insulate use from harm. Regular social drinkers usually include among their number many influential and powerful people in a society, who would often be personally inconvenienced by such measures. On the other hand, in many societies, those most supportive of such measures are those with little power and status: women, those living in rural areas, and poor people. Compensating for these power differentials may be part of what is required in alcohol policy development. Except in local situations where prohibition is an option, the aim is "living with drinking", with a set of societal rules and understandings which minimize the adverse consequences.

There is a substantial literature from developed societies evaluating different strategies for managing and reducing rates of alcohol-related problems, and a growing number of case studies in the use of the strategies in developing societies. On the basis of this knowledge, it is clear that, given the political will, a government can act effectively to reduce to a minimum the rates of alcohol problems in its society. The principal lessons from that literature may be summarized as follows:

- The politically easy strategies are often among the least effective.
- Well-designed alcohol education is an appropriate part of the school curriculum, but is unlikely by itself to do much to reduce rates of alcohol problems in a society.
- Likewise, a low-intensity public information and persuasion campaign may have the symbolic value of appearing to do something about alcohol problems,

but will usually have little practical effect on them.

- Provision of treatment is a worthy and humane initiative in a modern society, but its primary justification is in terms of the help given to drinkers and their families. In and of itself, it is unlikely to lead to a reduction in a society's rates of alcohol problems.
- Evaluation studies have demonstrated that measures that restrict and channel sales and consumption of alcohol can be effective in holding down or reducing rates of alcohol-related problems, including harm to those around the drinker.
- Effective measures include taxation to limit consumption levels, specific licensing of alcohol outlets, limits on the number of outlets and on the times and conditions of alcoholic beverage sales or service, minimum-age limits, and drinking-driving countermeasures.
- Government monopolies of all or part of the retail or wholesale market have often been effective mechanisms for implementing alcohol control measures, while ensuring equitable availability.
- Limits on advertising and promotion, and requirements for warning labels or signs, are also of symbolic importance, though it is often difficult to demonstrate their short-term effectiveness in changing drinking behaviour.

Building an integrated societal alcohol policy

The distance between knowing what works and implementing successful policies can be vast. Building an integrated societal alcohol policy requires both horizontal integration, of the various departments within a level of government, and vertical integration, of the functions of the various geographic levels of government. In this section we will discuss the challenges posed first by horizontal and then by vertical integration, concluding with a discussion of the particular roles the various levels of government can play.

The research evidence clearly indicates that governments possess the powers and policy levers to create comprehensive and successful alcohol policies. However, alcohol use continues to pose a major threat to public health and safety in developing societies. Both for governments and for groups in civil society, an important part of countering alcohol problems is to build recognition of their existence and extent, and to mobilize the political and popular will to adopt effective policies. Assuming that this can be achieved at least to some extent, governments must still create a set of alcohol policies that are consistent in message and coordinated in function.

Building coordinated policies of any kind is a complex and continuing task. The workings of different levels of government – local, regional or provincial, national, and international – must be integrated. For alcohol, the task of coordination is further complicated by the four separate interests that governments have in alcohol, as we noted in Chapter Four (Mäkelä and Viikari, 1977): an interest in the contribution of the alcohol trade to building the economy; a fiscal interest in taxes on alcohol and the alcohol trade; an interest in the productivity of labour, which drinking can undermine in various ways; and an interest in public health and order, also negatively affected by alcohol. These interests often pull in different directions: prototypically, an increasing alcohol trade will contribute to the economy and yield more taxes, but at the expense of lessened labour produc-

tivity and increased problems in public order and health.

Responsibility for alcohol issues is typically split among a number of departments and social institutions in any modern government (Room, 1999). The treasury or fiscal department will have responsibility for taxes on alcohol. An agriculture or commerce department will have responsibility for promoting locally produced farm and manufactured products, including alcoholic beverages. The education department and schools will have responsibility for alcohol education in schools. The health department and hospitals and clinics will have responsibility for treating mental and physical health problems from drinking, and usually for any treatment of alcohol problems. The social welfare department and services will have responsibility for dealing with family and work problems, including those due to drinking. The criminal justice system and police will have responsibility for controlling drinking-driving and violence due to drinking. This list is by no means comprehensive; the point is that each of the diverse and potentially conflicting interests of the state in alcohol tends to end up in the custody of a different department or assortment of departments.

The consistent and over-riding aim of a national alcohol policy should be to reduce the incidence and severity of alcohol-related problems. Yet, at a national level, the dispersion of responsibility for alcohol can lead to diverse departments, left to their own devices, often taking actions that imply very different and conflicting policies on alcohol. Governments have made use of various formal measures to bring coordination and direction to national alcohol policies. These have included setting up an overall office to coordinate alcohol policies between departments, or naming a lead department with cross-departmental responsibility for strategy. Such a mechanism needs to include some power to ensure that departments will indeed adhere to the national policy once adopted, even where this would go against the department's usual inclination and core constituency.

Further complicating the challenge to consistency of purpose and coordination of function is the fact that dealing with alcohol issues is not solely the responsibility of central governments. Typically, local governments have the responsibility for handling many of the day-to-day emergency problems – injuries, crimes, family disputes, etc. – that may result from drinking. Provincial or regional governments may provide mechanisms of law enforcement, or may be delegated control over taxation or physical availability. Thus, in a single nation state, there are four different levels of government that may have responsibility for one or more aspects of alcohol policy. The interests of these different levels of government may be in conflict. For instance, a central government may collect the taxes, while a local government may be responsible for picking up the casualties. In such circumstances, it is particularly important that policies of the central government not impede the ability of local governments to adopt effective policies to reduce problems from drinking. For instance, national rules on alcohol licenses, opening hours and so on should not pre-empt the ability of communities to put further local restrictions on licenses or on opening hours as needed.

In formulating a policy, there are a number of essential steps. These include the identification and definition of the problem, consultation with significant groups with interest in the problem or in its solution, the identification of local factors that would make the policy relevant and acceptable to the people for whom it is meant, and selecting the appropriate level of government to create and implement the policy. If policies are not to become mere pious declarations, govern-

ments must also ensure that there is appropriate and practical monitoring and enforcement.

Broadly, understanding the social and political climate of the setting at which a policy is to be formulated and implemented may be crucial in determining the policy's impact. We discuss below some typical responsibilities and opportunities for reducing alcohol problems at each level of government. However, it must be recognized that national policies differ greatly in the assignment of different tasks to different levels of government. What is important is that performance of the tasks be seen as part of an overall strategy for reducing rates of alcohol-related problems that reaches across departments and levels of government.

The local/provincial level

In many countries, ethnic and religious diversity leads to significant local differences in attitudes towards alcohol. Since policies aimed at addressing alcohol-related issues have to take cognizance of such differences, many such policies would be better formulated and implemented at local or provincial levels, where there is often greater ethnic and linguistic homogeneity. This is not only to address the factor of relevance to local needs, but also to prevent the development of local resistance and resentment to policies that might be perceived as imposed from outside or above.

For example, while prohibition is not often now seen as an effective policy for alcohol control in nation states, especially large and multicultural ones, it may still be a viable policy in specific localities, especially where there is strong religious impetus for such a policy. Controlling distribution by restricting the times of sale and controlling the outlets for alcohol sale may also be more successfully implemented at the local level. If such a policy has community involvement in its design, community policing may be an effective way of ensuring compliance. Such a policy may have a chance of success not only because of a strong religious or cultural driving force, but also because monitoring may be more effective at the local level.

In particular, policies aimed at influencing attitudes, values and norms relating to the use of alcohol may be better formulated at local levels. Such policies will of course include educational programs with specific factual information on the dangers of drinking. However, couching them in local language and mores and relating them to norms of behaviour and of moderation in the local culture may increase their acceptability and effectiveness. Such policies may also include restrictions on the sale and/or promotion of alcohol at community events and in public spaces, in keeping with the community's norms and values. Policies aimed at encouraging non-governmental organizations (NGOs), religious institutions such as churches, and sporting and cultural organizations to be actively involved in controlling alcohol use are also better coordinated at local/provincial levels. Community activism may, however, be directed at higher levels of government, as well as at the local community. Such pressures from communities are often a strong impetus for government at higher levels to act on alcohol issues.

Policies designed to achieve early detection goals are best implemented at the local/provincial level. In particular, the incorporation into the primary health care system of measures for early detection and treatment of alcohol-related problems is more likely to succeed if it is designed and implemented at the local/provincial level. Such programs often require strong community support for success. Alcohol

control policies relating to the community environment may also have better impact if local and provincial governments take a particular interest in them. Provision of housing, promotion of leisure activities, and conservation of public parks and recreation centres may be part of a comprehensive local strategy to keep youths away from misuse of alcohol.

Effective and efficient record keeping at the local level may be an important component of policies aimed at monitoring alcohol-related morbidity and mortality. Records on injuries, deaths, causes of deaths, and domestic and public violence are important in tracking the influence of drinking on the pattern of social and health problems in the population. Keeping proper records of licenses for alcohol use. Central governments also have a role in this area, in terms of setting standards, encouraging uniformity, and collecting and collating locally collected statistics.

The regional level

In large countries, the effective implementation of policies relating to drinking-driving may be better achieved at the regional level. Policing the roads and conducting random breath checks as part of control of alcohol consumption are effective policies in reducing alcohol-related morbidity. However, the success of such policies depends on coverage and strict enforcement. Implementation on a regional basis may better guarantee that coverage will be wide and that monitoring enforcement will be more achievable.

Routine collection of data relating to the production, distribution, and sale of alcohol as part of alcohol control policy is often coordinated at the regional level. Control of distribution through regulation of licensing of outlets may also be more effectively done at the regional level. The particularly difficult problem of monitoring production of traditional beverages is a task that regional governments could devise approaches to tackling. Also probably better implemented at the regional level is a policy on routine collection of data relating to different forms of morbidity and mortality.

The national level

The level of research into alcohol-related issues in many developing countries is very low. Policy options designed without a good knowledge of the scope and extent of alcohol use and problems are likely to be inappropriate and ineffective. National governments are often best placed to promote and sponsor research within their borders. Not only are national governments more financially able, but also they are more likely to implement a coordinated research policy that would reduce duplication and be more goal-directed.

Tax policies aimed at controlling alcohol use are frequently formulated and executed by regional and national governments. Taxation policies should at a minimum ensure that the price of alcohol keeps pace with the overall consumer price index in the country. While regional and local governments may also be involved in taxing alcohol or the alcohol trade, it is important that tax policies are centrally coordinated, to minimize the possibility that differences in tax policies between regions in the same country are exploited to defeat the objective of controlling the market and limiting consumption.

Because of the wide reach of broadcast and print media, control of advertising is also probably best achieved at the national level. Policies along this line will aim at restricting advertising in print and electronic media. National govern-

ments are also better placed to insist on mandatory health warnings on alcohol and to make laws relating to the minimum drinking age. Governments at this level may also be able to restrict sponsorship of high-profile national events such as sporting contests by alcohol companies, to outlaw paid placement of alcohol products in film, television and video programming, and in other ways to combat the consistent efforts by the multinational alcohol companies to embed their products and promotional materials in everyday life.

The international level

In today's world, it is increasingly foolhardy to view alcohol policy solely as a matter to be discussed and settled within national borders. Matters that formerly could be settled by a regional or a national government can now be overruled by a trade disputes panel, under an international trade agreement (Room and West, 1998; Grieshaber-Otto et al., 2000), or by a supranational commission applying common market rules (Holder et al., 1998). International governmental bodies are proliferating, often in the name of free trade. These international bodies often wield far greater influence in developing than in developed societies. As with other levels of government, these bodies should also seek to make their actions regarding alcohol consistent with an overall goal of reducing alcohol-related harm.

However, at the moment, the public health interest is given short shrift in international trade dispute decisions about alcohol, and the situation may well worsen in the future if further powers are given to private interests under international trade agreements to challenge government actions in new fields, for instance services and investments (Grieshaber-Otto et al., 2000). The problem of the challenge of trade agreements and disputes to public health interests is of course not limited to alcohol (Betcher et al., 2000). Grieshaber-Otto and colleagues (2000:SS503) have suggested that one remedy may be to "obtain broad exemptions from commercial treaties, similar to the ubiquitous exemption for national security, for all critical health protection sectors". Along with this a shift would be needed from the present practice in trade dispute panels of interpreting exceptions to trade treaties as narrowly as possible. The World Bank's steps towards taking into account public health interests in considering alcohol investments, noted in Chapter Four, offer an important precedent, in the specific case of alcohol, for the change in orientation that is needed.

The need for global leadership

We have established that alcohol problems are of sufficient scale to be of global importance; that a significant body of work exists from a diverse array of both developed and developing countries that demonstrates that there are effective policy tools that may be used to reduce alcohol-related problems in developing societies; and that, amidst the rapid pace of globalization and societal change, drinking patterns and their attendant problems are worsening in their public health impact, often in the very settings where the fewest resources exist to combat them.

In this context, there is a great need for global leadership and action. Despite increasing global integration occurring in the alcohol supply, there is no equivalent integration of global public health efforts to counter the harmful effects of alcohol. Below we describe several areas in which global leadership and collaboration are needed.

- The Framework Convention on Tobacco Control currently in negotiation

- under WHO auspices (Taylor and Betshah, 2000; Davey, 2001) offers a possible model for future international public health action in the alcohol arena, including establishing the principle with respect to trade agreements and disputes that alcohol is not an ordinary commodity. Whether through a separate Convention for alcohol or some other venue or modality, there is a need to take on the issues for alcohol that have been proposed for inclusion in a separate tobacco Convention. These include:
- harmonization of taxes internationally in a direction which will promote public health (by and large, harmonization up rather than harmonization down);
 - provisions to reduce smuggling, including expectations of comity between nations in enforcing anti-smuggling laws;
 - agreement on abolishing duty-free traveller's allowances for alcohol;
 - restrictions on advertising and sponsorship by alcoholic beverage brands and companies;
 - international standards for testing alcoholic beverages for purity, and for warning labels and controls on alcohol packaging;
 - a shift away from agricultural subsidies for raw materials for alcoholic beverages (Joossens, 2000).
- There is a need to develop and diffuse expertise internationally in designing and implementing effective taxation systems for alcohol. In such places as many countries, but there is presently no clearinghouse or other forum for experience to be exchanged internationally. Such topics would be a natural venue for cooperation between WHO and international financial agencies such as the World Bank.
- Similarly, there is a need to develop and diffuse expertise in constructing and operating effective systems of control of the alcohol market. There are already some limited examples of such cooperation, for instance between retail alcohol monopolies in north America and the Nordic countries (Österberg, 2000), but they have not included developing countries. Again, it should be recognized that effective systems of alcohol controls involve expertise both in commercial regulation and in policing. Again, a cooperative effort between WHO and relevant international agencies would be a logical path forward on this.
- Drinking-driving countermeasures are another area where there has been a substantial development of technical expertise in developed countries over many years. In this case, there is an International Council on Alcohol, Drugs and Traffic Safety (<http://www.raru.adaelaide.edu.au/icadts/>) which holds periodic conferences, primarily involving developed countries, but there is no continuing centre of expertise attuned to developing countries, on which peer-estimated groups and policymakers in such countries can draw. In this case, engineering and policing expertise needs to be drawn together internationally with public health expertise.
- More centred in the usual public health realm, but by no means limited to it, are the arenas of alcohol-specific prevention and treatment programs. In these arenas, WHO already has a track record. But there is a need to move beyond pilot projects and the production of handbooks to organizing an international clearinghouse on alcohol programs, with adequate staff to help inter-

- ested groups and policymakers from developing societies in designing and implementing practical programs.
- As we are only too well aware from writing this book, there is still a serious lack of the basic information that is needed for detailed alcohol policymaking in developing societies. Attention is needed to building up the international alcohol research, monitoring and evaluation community, with specific attention to the needs of developing societies.
 - Along with this, funding is needed for research, demonstration and evaluation projects in developing societies. Besides their immediate contribution locally, such projects would build up the knowledge base for other localities and societies similarly situated, on a global basis. These projects will require substantial support both from international agencies and from developed-country governments. Among the initiatives for which support is needed would be programs
 - (1) to develop indicators of social and health consequences of drinking appropriate to developing societies (WHO, 2000a), and to implement these indicators;
 - (2) to study the relationship of drinking patterns and circumstances to alcohol problems in developing societies;
 - (3) to study the impact of alcohol taxes on alcohol consumption and problems in developing societies;
 - (4) to study in developing society contexts the effectiveness of regulatory and other measures to limit the social and health harm from drinking; and
 - (5) to train appropriate personnel in developing countries in effective monitoring and controlling of alcohol problems.
- With the ongoing globalization of the alcohol trade and of alcohol issues, there is a need for a global intergovernmental focal point concerning alcohol and public health. The World Health Organization is the logical agency to take this on, and indeed WHO already has a long history of action on alcohol and health issues, in recent years most actively in the European Region (Room, 1984; Jernigan et al., 2000). However, the resources that WHO has been able to marshal for this task have been extremely limited – minimal compared to its effort in the anti-tobacco campaign, or the effort of the United Nations Drug Control Programme concerning illicit drugs. Unless WHO's effort can be substantially increased, there will be a need for a new intergovernmental agency to play a leading role globally in coordinating the many sectors involved in the field of alcohol issues.

Conclusion

Alcohol has been entwined with nearly all human societies throughout recorded history. In the current world its use is very broadly spread, though probably only a minority of all humans alive drink alcoholic beverages at all. For many drinkers, alcoholic beverages have positive connotations and pleasant associations. Since regular drinking tends to be more common among the affluent and powerful in many societies, attitudes favouring ready availability of alcohol tend to be over-represented in policymaking circles. But the harmful consequences of alcohol use, both for the users and for others, are extraordinarily diverse and widespread. Often these consequences bear hardest on population segments with

little political power.

The harm from drinking, which includes not only adverse consequences for health but also major social problems, makes alcohol a very special commodity, not just another item of trade or commerce. As we have shown, this is readily apparent in the context of developing societies. A global perspective on alcohol appraisals needs to acknowledge and take into account all these characteristics and contradictions of alcoholic beverages, and yet to focus and act on the public health policy goal: to minimize the harm from drinking.

This goal is often stated but little acted upon by governments across the globe. In the developing world, changing patterns of alcohol production, trade and use have combined with the demands of development and urbanization to produce rates of alcohol problems that are substantial by any measure, yet often unmeasured, unmonitored and underestimated in their impact.

Although the pace of change in developing societies is rapid, the direction of change in levels of alcohol problems is not inexorable. Policies that effectively reduce the level of social and health harms from alcohol require preparation and planning. Developing the knowledge base is an important first step: documenting levels and trends in alcohol-related problems, reaching an understanding of how drinking levels and patterns contribute to these problems, and assessing and disseminating knowledge of strategies that are effective in reducing the rates of alcohol problems. In this volume, we have aimed to provide substantial groundwork in all three of these areas, although much more work remains to be done. The next step, debating and acting on local, national and global alcohol policies, lies in the hands of governments and citizens throughout the world.

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