South-East Asia Region

Bangladesh

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	88 221 000	108 118 000	120 433 000
Adult (15+)	46 615 000	62 878 000	72 874 000
% Urban	11.3	15.7	18.3
% Rural	88.7	84.3	81.7

Health status

Life expectancy at birth, 1990-1995 : 55.6 (males), 55.6 (females) Infant mortality rate in 1990-1995 : 108 per 1000 live births

Socioeconomic situation

GNP per capita (US\$), 1995: 240, PPP estimate of GNP per capita (current int'1\$): 1380

Average distribution of labour force by sector, 1990-1992 : agriculture 59%; industry 13%; services

2070

Adult literacy rate (per cent), 1995: total 38; male 49; female 26

Alcohol production, trade and industry

As a primarily Muslim country, Bangladesh has no formal alcohol industry and very little alcohol trade. Home production of alcohol takes place, but figures are not available.

Alcohol consumption and prevalence

Lower socioeconomic classes are known to consume a local alcoholic beverage called "cholai", while labourers drink another distilled beverage known as "Bangla Mad." A section of the formally educated citizenry consumes imported alcohol including whisky and beer.

Mortality, morbidity, health and social problems from alcohol use

Alcohol dependence and related disorders

Experts estimate the number of alcohol-dependent people in the country to be roughly 300 000, less than one half of one per cent of the adult population.

Alcohol policies

Control of alcohol products

Production, sale and consumption of alcoholic beverages is prohibited by law. Importation of alcoholic beverages is allowed for consumption by foreign nationals and tourists.

Control of alcohol problems

The government's primary strategy for dealing with alcohol is prohibition. Some NGOs active in health education include alcohol problems as a component of their work.

Alcohol data collection, research and treatment

The government has established one central treatment centre for alcohol and other drug dependence at Dhaka and three regional centres at Rajshahi, Khulna and Chittagong.

Bhutan

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	1 237 000	1 544 000	1 638 000
Adult (15+)	740 000	916 000	966 000
% Urban	3.9	5.3	6.4
% Rural	96.1	94.7	93.6

Health status

Life expectancy at birth, 1990-1995 : 49.1 (males), 52.4 (females) Infant mortality rate in 1990-1995 : 124 per 1000 live births

Socioeconomic situation

GNP per capita (US\$), 1995 : 420, PPP estimate of GNP per capita (current int'1 \$) : 1260 Average distribution of labour force by sector, 1990-1992 : agriculture 92%; industry 3%; services 5% Adult literacy rate (per cent), 1995 : total 45; male 56; female 28

Alcohol production, trade and industry

Alcoholic beverages are widely available in Bhutan, and include the locally brewed beverage *ara* as well as commercially distilled country liquor, wine and beer. There are three large distilleries and a few beer and wine factories. The total value of alcohol imports in 1994 was US\$ 287 720, roughly one quarter of one per cent of the country's total imports.

Alcohol consumption and prevalence

Consumption

Alcohol is an integral part of cultural and religious ceremonies, and is routinely offered to guests. There are no data available on how much alcohol is consumed in Bhutan.

Alcohol policies

Control of alcohol products

The government has fixed limits on brewing in order to prevent food scarcities as a result of diversion of food grains into home production of alcoholic beverages.

Control of alcohol problems

Selling alcohol to persons under the age of 18 and driving while intoxicated are punishable offences.

Democratic People's Republic of Korea

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	18 260 000	21 774 000	23 917 000
Adult (15+)	10 863 000	15 550 000	16 959 000
% Urban	56.9	59.8	61.3
% Rural	43.1	40.2	38.8

Health status

Life expectancy at birth, 1990-1995 : 67.7 (males), 74 (females) Infant mortality rate in 1990-1995 : 24 per 1000 live births

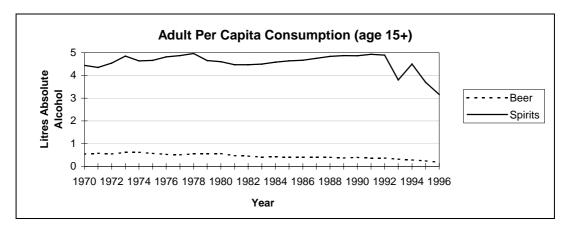
Socioeconomic situation

Average distribution of labour force by sector, 1990-1992 : agriculture 43%; industry 30%; services 27%

Alcohol production, trade and industry

The Democratic People's Republic of Korea produces beer and distilled spirits, and imports beer.

Alcohol consumption and prevalence



Consumption

Recorded alcohol consumption comes primarily from distilled spirits. There are no data available regarding consumption of smuggled or informally- or home-produced alcohol.

India

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	688 856 000	850 638 000	935 744 000
Adult (15+)	423 305 000	542 391 000	606 250 000
% Urban	23.1	25.5	26.8
% Rural	76.9	74.5	73.2

Health status

Life expectancy at birth, 1990-1995 : 60.4 (males), 60.4 (females) Infant mortality rate in 1990-1995 : 82 per 1000 live births

Socioeconomic situation

GNP per capita (US\$), 1995: 340, PPP estimates of GNP per capita (current int'1 \$), 1995: 1400. Average distribution of labour force by sector, 1990-1992: agriculture 62%; industry 11%; services 27%

Adult literacy rate (per cent), 1995: total 52; male 65; female 38

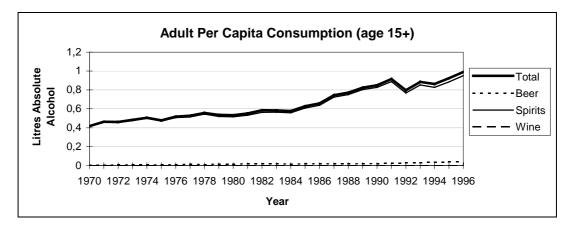
Alcohol production, trade and industry

In the formal sector, alcohol distribution is administered in a three-tier system, with approximately 50 alcohol manufacturers selling through nearly 1500 wholesalers to 28 000 liquor outlets. These 28 000 retailers comprise of only three per cent of all retailers in the country. The market is highly concentrated in the major metropolitan areas, with the top six cities representing 80 per cent of potential case sales.

The Indian beer industry currently produces 4.32 million hectolitres of beer per year, and is growing at a rate of 17 per cent annually. India's wine industry is extremely small. The spirits industry is divided into two segments: "India-made foreign liquor" (whisky, gin, rum, brand, liqueurs, vodka) and "India-made country liquor" (licensed distilled spirits, made locally). Common varieties of "country liquor" are *arracte*, *desi sharab* and *tari*. Illicit liquor is also produced clandestinely in small production units. Home production for self consumption is also common in some parts of India. An estimated 1.5 million people are employed in the production and sale of alcoholic beverages.

A number of foreign companies have taken notice of India's increasing economic liberalization, and are entering into joint ventures with Indian companies. Stroh Brewery Company signed a licensing agreement with Rajasthan Breweries in 1994 to allow Rajasthan to produce, distribute and market Stroh's products throughout India. In early 1995, Anheuser-Busch announced that it would enter the Indian market through a joint venture with Bombay-based Shaw Wallace and Co Ltd., India's third-largest brewer. Other companies to negotiate access to the Indian market include Allied-Domecq and Brown-Forman, both of whom have signed equal profit sharing ventures with Jajatjit Industries of New Delhi; Guinness, who entered into a joint venture with United Breweries India; and Seagram, whose wholly owned subsidiary (Seagram India) will produce a range of distilled spirits and fruit juices, as well as providing technological assistance to the wine industry.

Alcohol consumption and prevalence



Consumption

Both beer and spirits consumption have been rising recently, possibly due to the liberalization of the Indian market. Very little wine is consumed in India. Unrecorded or illicit consumption is estimated at 50 per cent of recorded consumption, suggesting that total adult consumption of alcohol in 1996

was approximately two litres of pure alcohol (assuming very little wine consumption). Among certain tribal groups and tea plantation workers, there are substantial numbers of women drinking, although generally speaking, over 95% of the female population are abstinent.

Prevalence

No national prevalence study is available. Regional general population surveys have found that women drink very little throughout the country. Use among men varies from 16.7 per cent to as high as 58.3 per cent, varying by the degree of urbanization as well as by region. Using an average of 60 per cent male abstinence and almost total female abstinence, per capita consumption of adult drinkers is approximately nine litres of absolute alcohol.

Age patterns

Studies from the late 1970s and early 1980s found that 12.7 per cent of high school students, 32.6 per cent of university students, and 31.6 per cent of non-student young people were using alcohol. Medical students in the same period reported much higher prevalence of between 40 and 60 per cent. Studies in the 1990s suggest abstinence rates of 83-97% in 15-19 year olds.

Economic impact of alcohol

The total revenues from alcoholic beverages excise and sales taxes for 1995-1996 were approximately 180 000 million Indian rupees (US\$ 5 billion). Duties on alcohol make up as much as 23 per cent of some Indian states' revenues.

Household expenditure studies in the 1960s found families spending anywhere from 3 to 45 per cent of their income on alcohol. There are no more recent data available. Approximately 15 to 20 per cent of absenteeism and 40 per cent of accidents at work are attributed to alcohol by industry sources.

Mortality, morbidity, health and social problems from alcohol use

Alcohol dependence and related disorders

A general population survey in 1984 in Western India estimated probable incidence of alcohol dependence at 3 per cent overall, 5.6 per cent among males and 0.5 per cent among females. Given regional variations, overall prevalence is more likely to be between one and two per cent.

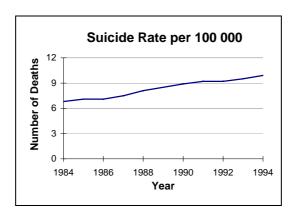
Mortality

Follow-up of young and middle-aged patients examined in hospital and diagnosed with alcohol dependence found mortality rates of 5.5 per cent after 18 months, and 11.3 per cent after four to five years. Approximately 300 people die every year because of methanol poisoning from alcohol beverages. An additional 3000 individuals are affected with long-term disabilities such as blindness.

Morbidity

Most liver cirrhosis in India is not alcohol-related. A review of Indian studies of biopsy-proven cases of liver cirrhosis from 1933 to 1975 found a cumulative mean of 16 per cent from patients with alcohol dependence. However, among alcohol dependent patients, three studies have found that less than 14 per cent had normal livers. The majority had hepatitis, with significant numbers showing fatty changes and cirrhosis or pre-cirrhosis.

Although incidence of cancers in India, at the rate of 75 per 100 000 population is lower than in many developed countries, both oesophageal and oral cancer are particularly common. Even after controlling for tobacco use, numerous studies have found an association between oral cancers and alcohol use. Among them, a 1989 study of 187 cases of gingival cancers and 895 controls showed a positive association with alcohol use, and in 1994 a study of 713 oral cancer patients from Bombay reported a relative risk of 1.42 with alcohol use. Case control studies have found that alcohol use increases the relative risk of oesophageal cancer, one study finding an adjusted odds ratio of between 1.5 and 2.7 for those less than 60 years old. A synergistic effect was observed for alcohol and tobacco use. An estimated 25 per cent of motor vehicle crashes are alcohol-related. According to one study, between 5 and 10 per cent of men who have attempted suicide have been found to be under the influence of alcohol. The overall recorded suicide rate in India has been increasing since 1984.



Alcohol policies

Control of alcohol products

The constitution of India declares that "the State shall endeavour to bring about prohibition of the consumption of intoxicating drinks." However, since independence in 1947 successive governments have followed different policies on alcohol. Currently, the central government is encouraging deregulation of alcohol production and liberal imports of alcoholic beverages. In addition, foreign companies were recently granted permission to produce alcohol locally and market it under foreign brand names.

Production, distribution and sale of alcoholic beverages, however, are all licensed under excise rules promulgated by each of the state governments, not the central government. As a result, there are significant variations from one state to another. Overall, there is increasing liberalization in alcohol production and availability, except for a few states which have promulgated prohibition. Prohibition was promulgated in only one state (Gujarat) until the early nineties, although in the last five years other states (Andhra Pradesh, Tamilnadu, Kerala and Haryana) have experimented with partial or complete prohibition. In 1997, Andhra Pradesh repealed its prohibition, with loss of state revenue as a key reason. Haryana, which passed complete prohibition in July 1996, removed it in April 1998.

Most states enforce a few days in the year as "dry" (no alcohol sales) and on other days restrict the time for sale. Shops that sell alcohol may not be within 100 meters of a school/college or a place of worship. Alcoholic beverages are not allowed to be sold to minors (less than 18 years of age) by law, but this is poorly enforced. Alcoholic beverages may have up to 42.8 per cent alcohol, and the package is required to carry a warning regarding the injurious effect of alcohol on health. With no legal quality control checks, the alcohol content of illicit liquor varies, but may exceed 50 per cent alcohol. Price and taxation policies are based on explicit and stated objectives of maximising the government revenues with minimal consideration for public health.

Alcohol beverage advertising is prohibited in print and electronic media and on street hoardings. However, this law is routinely and regularly circumvented by alcohol companies with surrogate advertising. Brand names of alcoholic beverages are often used to market other products (mineral water, soda, playing cards) of sister companies. In addition, satellite television channels from neighbouring countries which have a high viewership advertise Indian alcoholic beverages. Alcohol companies also sponsor sporting events and are permitted to put up large hoardings on site, which are covered by television, providing a convenient and effective advertising medium.

Control of alcohol problems

The maximum BAC permitted when driving is 0.10 g%. Drunk driving is an offence, but few regular checks are carried out, except on holidays or special occasions. Penalties are in the form of fines, but driving licences are not suspended except when a serious crash has been caused. Creating a public nuisance under the influence of alcohol is also a crime and this is more often enforced. Governmental as well as non-governmental organizations periodically take out advertisements describing the harmful effects of alcohol.

Alcohol data collection, research and treatment

No single agency is responsible for collecting alcohol-related data on a national level. The following agencies collect some data, usually incomplete, regarding alcohol: Ministry of Chemicals, Government of India; Ministry of Welfare, Government of India; Department of Excise, Ministry of Finance, Government of India; Indian Distillery Association, NewDelhi; and the All-India Prohibition Council, New Delhi. In addition, the corresponding Ministries at the state level also collect information for their state.

The primary responsibility for preventing and treating alcohol problems at the central government level is with the Ministry of Welfare. Prevention, counselling and some treatment activities are undertaken by non-governmental organizations supported by the Ministry of Welfare. In addition, the Ministry of Health has established De-addiction Centres for medical treatment. The NGOs and the government treatment centres cater to alcohol as well as drug problems, the focus often being on illicit drugs.

In spite of rapid growth of prevention and treatment agencies, they are still very deficient in covering the entire country. Treatment facilities are available to only a small fraction of the individuals needing help. Private treatment facilities are available in bigger cities, but these are too expensive for all but a small minority of people.

In India, residential alcohol treatment is generally provided in psychiatric hospitals, or, less frequently, in general hospitals. More affluent clients may be treated in private general hospitals or "nursing homes". Most non-residential services are run by NGOs. Alcohol treatment is very rarely provided in primary health care settings, though efforts are currently being made to increase involvement from this sector.

A forthcoming publication of WHO (Riley and Marshall [ed.] Alcohol and public health in eight developing countries, 1999) includes an in-depth case study from India.

Indonesia

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	150 958 000	182 812 000	197 588 000
Adult (15+)	89 045 000	117 578 000	132 398 000
% Urban	22.2	30.6	35.4
% Rural	77.8	69.4	64.6

Health status

Life expectancy at birth, 1990-1995 : 61 (males), 64.5 (females) Infant mortality rate in 1990-1995 : 58 per 1000 live births

Socioeconomic situation

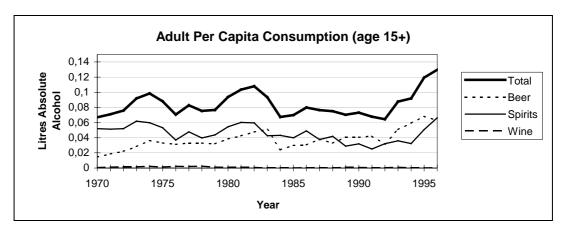
GNP per capita (US\$), 1995: 980, PPP estimates of GNP per capita (current int'1\$), 1995: 3800. Average distribution of labour force by sector, 1990-1992: agriculture 56%; industry 14%; services 30%

Adult literacy rate (per cent), 1995: total 84; male 90; female 78

Alcohol production, trade and industry

Heineken Brewery owns 77.2 per cent of the Multi Bintang Brewery in East Java, which produces and markets Bintang, Tiger and Guinness beer.

Alcohol consumption and prevalence



Consumption

As a predominantly Muslim country, Indonesia reports very low per capita consumption of alcoholic beverages. Non-Muslim groups such as the Balinese drink local products such as palm wine, but this consumption is not recorded. Beer and distilled spirits are the most common beverages in recorded consumption.

Prevalence

Population screening for coronary heart disease risk factors in urban Jakarta in 1990 found that only 2.7 per cent of the population drank alcohol regularly.

Alcohol use among population subgroups

A community survey of drinking patterns in a Balinese village in 1990 showed a relatively high prevalence (approximately 40 per cent) of excessive consumption of locally produced palm wine.

Alcohol policies

Control of alcohol products

The Food and Drug Directorate General in the Ministry of Health controls the production and distribution of alcoholic beverages in the country.

Maldives

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	158 000	216 000	254 000
Adult (15+)	90 000	115 000	138 000
% Urban	22.3	25.9	26.8
% Rural	77.7	74.1	73.2

Health status

Life expectancy at birth, 1990-1995 : 63.4 (males), 60.8 (females) Infant mortality rate in 1990-1995 : 60 per 1000 live births

Socioeconomic situation

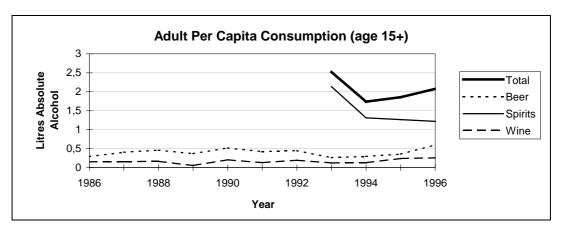
GNP per capita (US\$), 1995: 990, PPP estimates of GNP per capita (current int'1\$), 1995: 3080 Average distribution of labour force by sector, 1990-1992 : agriculture 25%; industry 32%; services 43%

Adult literacy rate (per cent), 1995: total 93; male 93; female 93

Alcohol production, trade and industry

Under the country's Islamic laws, production of alcohol is prohibited.

Alcohol consumption and prevalence



Consumption

Alcohol consumption in Maldives comes entirely from imports, brought into the country for tourist consumption.

Alcohol policies

Control of alcohol products

Consumption of alcohol by citizens is completely prohibited, and strict action is taken if these laws are broken. As a concession to the tourism industry, consumption of imported alcoholic beverages by tourists in specified resorts is permitted.

Myanmar

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	33 821 000	41 813 000	46 527 000
Adult (15+)	20 419 000	25 962 000	29 117 000
% Urban	24	24.8	26.2
% Rural	76	75.3	73.8

Health status

Life expectancy at birth, 1990-1995 : 57.6 (males), 59.3 (females) Infant mortality rate in 1990-1995 : 84 per 1000 live births

Socioeconomic situation

Average distribution of labour force by sector, 1990-1992 : agriculture 70%; industry 9%; services 21%

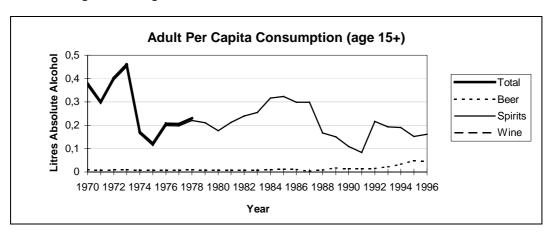
Adult literacy rate (per cent), 1995: total 83; male 89; female 78

Alcohol production, trade and industry

In 1996, the government of Myanmar banned all imports from the Heineken and Carlsberg and announced it would confiscate any products from those companies found on sale in the country. This action was taken after the two companies withdrew from planned investments in the country,

including cancellation of a new US\$ 30 million Heineken brewery, in response to pressure and a threatened boycott from international human rights groups. At that time Heineken held between 35 and 40 per cent of Myanmar's beer market.

Alcohol consumption and prevalence



Consumption

Recorded adult per capita consumption of alcohol in Myanmar is very low. Distilled spirits are the alcoholic beverage of choice. Beer consumption has risen slightly in recent years. There are no data available on consumption of smuggled or home- or informally-produced alcohol, or on wine consumption after 1978.

Prevalence

A general population survey in 1982 found that eight per cent of the suburban population used alcohol. A repeat of the survey in 1994 revealed an increase in suburban prevalence to 10 per cent.

Mortality, morbidity, health and social problems from alcohol use

Alcohol dependence and related disorders

Hospital statistics from Yangon Psychiatric Hospital show that between 10 and 11 per cent of all inpatients admitted between 1994 and 1996 received a primary diagnosis of alcohol dependence syndrome.

Nepal

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	14 874 000	19 253 000	21 918 000
Adult (15+)	8 392 000	10 983 000	12 625 000
% Urban	6.6	10.9	13.7
% Rural	93.4	89.1	86.3

Health status

Life expectancy at birth, 1990-1995 : 54 (males), 53 (females) Infant mortality rate in 1990-1995 : 99 per 1000 live births

Socioeconomic situation

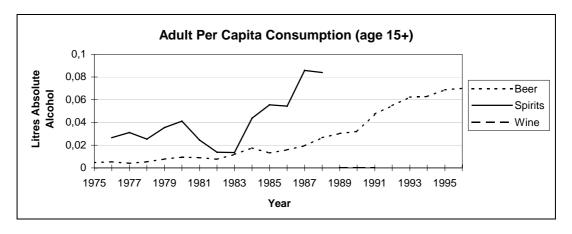
GNP per capita (US\$), 1995: 200, PPP estimates of GNP per capita (current int'1 \$), 1995: 1170 Average distribution of labour force by sector, 1990-1992 : agriculture 93%; industry 1%; services 6%

Adult literacy rate (per cent), 1995: total 28, male 41, female 14

Alcohol production, trade and industry

There are 36 large distilleries and five large breweries in Nepal.

Alcohol consumption and prevalence



Consumption

There are no data available on consumption of smuggled or home or informally-produced alcohol. Beer and spirits production have been rising. Adult per capita consumption of licensed beer and spirits (excluding home and illegal production) in 1996 was nearly 2.5 litres of pure alcohol. There is a substantial amount of home production of alcohol, and drinking is more common than the per capita figures would indicate. Local distilled spirits include *Raksi*, *Tadi*, *Chyang* and *Tomb*.

Prevalence

Alcohol is considered an integral part of most social occasions among many ethnic groups. Drunkenness among men is frequent and tolerated, but female drunkenness is not.

A *Matwali* is a person allowed to drink alcoholic beverages by virtue of his birth. A high percentage of the population belong to this category, and drink on social occasions or on a regular basis. People not in this category are not supposed to consume alcohol. However, there is reportedly a steady rise in the number of people in the category.

Age patterns

Surveys of school and college students have found that between 3.5 per cent and 25 per cent have consumed alcohol.

Mortality, morbidity, health and social problems from alcohol use

Morbidity

It was reported in 1997 that eight per cent of hospital emergency room cases were alcohol-related, while between two and ten per cent of psychiatric admissions and outpatients had alcohol problems.

Economic impact of alcohol

The government derives between 3.2 and 3.5 per cent of its total revenue from the alcohol industry. In 1996-1997 this totalled 1480 million Nepalese rupees (US\$ 26 million).

Alcohol policies

Control of alcohol products

The Hotel Business and Liquor Sale and Distribution Act (1966) prohibits the sale of liquor to anyone under 16 years of age. The government has no policy designed to curb the production or sale of alcohol. The Liquor Act (1971) requires that anyone producing, selling, importing and exporting liquor obtain a licence to do so, although Clause 7 of this act allows anyone to produce a small amount

of liquor without a licence. There is a 40 per cent sales tax and a 25 per cent income tax on the factory price of total production..

Control of alcohol problems

The Local Administration Act gives power to the local administrator to punish anyone who is publicly intoxicated, but enforcement is poor.

Sri Lanka

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	14 819 000	17 225 000	18 354 000
Adult (15+)	9 591 000	11 556 000	12 723 000
% Urban	21. 6	21.4	22. 4
% Rural	78. 4	78. 6	77. 6

Health status

Life expectancy at birth, 1990-1995 : 69. 7 (males), 74. 2 (females)

Infant mortality rate in 1990-1995: 18 per 1000 live births

Socioeconomic situation

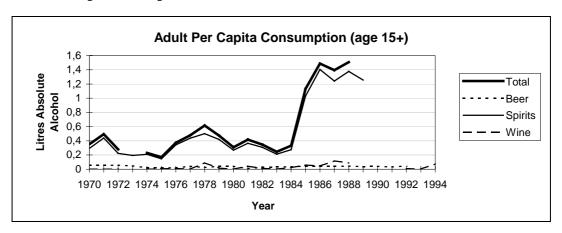
GNP per capita (US\$), 1995: 700, PPP estimates of GNP per capita (current int'1 \$), 1995: 3250 Average distribution of labour force by sector, 1990-1992: agriculture 49%; industry 21%; services 30%

Adult literacy rate (per cent), 1995: total 90; male 93; female 87

Alcohol production, trade and industry

The largest producer of distilled alcoholic beverages is the State Distilleries Corporation, which was privatized in the early 1990s. This ownership transfer has brought about significant changes in the policy environment. Increasing freedom regarding advertising, production and imports has resulted in a rapidly expanding and increasingly visible alcohol industry.

Alcohol consumption and prevalence



Consumption

The available data on alcohol consumption indicates a steady movement away from fermented beverages such as *toddy*, and towards distilled beverages, in particular *arrack*. High taxes and excise duties have encouraged illicit production. In the above graph, the years 1985 to 1988 are based on figures from the Sri Lankan Excise Commissioner, and represent the most accurate estimate of per

capita consumption for that period: in the range of 1.5 litres of absolute alcohol per capita. Estimated adult per capita of absolute alcohol in 1995, based on production and import figures, rose to 3.2 litres.

Prevalence

A community survey of 8257 adults in seven districts of Sri Lanka found that between 25 and 34 per cent of the respondents had ever used alcohol, and between 20 and 32 per cent were current users. Most drinkers were men, and less than four per cent of women fell into these two categories. Use is higher among poor families; a recent survey found that 42.2 per cent of these families had at least one member who used alcohol.

In the rural areas, those who do drink do so heavily. In 1990 a random sample of alcohol-drinking households in eight villages showed 71 per cent of the 162 respondents to be drinking daily. Ninety-three per cent of the respondents used informally or locally produced alcohol, while only six per cent bought from the formal sector. More than 43 per cent of the respondents had begun drinking between the ages of 16 and 20, and almost 10 per cent began before age 15. Thirty-five per cent had experienced an inability to control drinking, and about 92 per cent reported disapproval from other family members regarding drinking habits.

Age patterns

A 1992 study surveyed 8058 students in six districts between the ages of 12 and 20. Between 19 and 29 per cent had ever used alcohol, and between 3.9 and 17.2 per cent were current users. In four of the districts, more than 70 per cent of males used alcohol at least once a month, usually at parties. More than a quarter of the male users had begun drinking by the age of 11. Most of the users were male.

Economic impact of alcohol

In 1991, according to the Excise Commissioner, 53 per cent of Sri Lankan households reported daily expenditures of 20 rupees (US\$ 0.30) or less on alcohol, almost 18 per cent reported 21 to 30 rupees (US\$ 0.32 to US\$ 0.45), approximately 9 per cent reported 31 to 40 rupees (US\$ 0.47 to US\$ 0.61) and 41 to 50 rupees (US\$ 0.62 to US\$ 0.76) respectively, and more than 10 per cent reported spending 50 rupees (US\$ 0.76) or more.

There is some evidence that poor households tend to spend a greater percentage of their income on alcohol. A 1991 study of the urban poor showed that nearly 30 per cent of the families that used alcohol spent more than 30 per cent of their total expenditure on alcohol. A 1994 survey conducted in six districts found that between 30 and 50 per cent of the income of low-income families was spent on alcohol and tobacco. Yet another study, published in 1997, found that the total expenditure on tobacco and alcohol in a poor community exceeded the amount of government assistance given to the community under the government's poverty alleviation programme.

Alcohol revenue as a proportion of government revenue rose from 3 per cent in 1987 to 3.4 per cent in 1989 and 4 per cent in 1996.

Mortality, morbidity, health and social problems from alcohol use

Alcohol dependence and related disorders

The number of deaths from alcohol dependence rose from 4 to 38 between 1975 and 1984. It continued to rise, reaching a high point of 76 in 1991, then falling to 42 in 1993, and finally rising again to 63 in 1995.

Between 1990 and 1995, the aggregate rate of alcohol dependence syndrome, alcoholic psychosis and alcohol withdrawal rose from 36.2 per 100 000 population to 57.7 per 100 000.

Mortality

The number of deaths from liver cirrhosis rose from 586 to 2050 between 1983 and 1988. Between 1975 and 1995, the rate per 100 000 population of deaths from chronic liver disease and cirrhosis rose from 42.2 to 55.

Morbidity

Between 1983 and 1988 the number of liver cirrhosis patients went from 5483 to 20 472. In a study of 100 patients with oral cancers, 68 per cent were alcohol users.

Social problems

Between 1990 and 1993, cases of driving under the influence of alcohol rose from 8.9 per 100 000 population to 20.7 per 100 000 population.

The rate per 100 000 population of alcohol-related rape remained steady at 2.1 between 1990 and 1993.

Alcohol policies

Control of alcohol products

The stated national policy of containing alcohol consumption in the country, which the State Distilleries Corporation attempted to implement by not actively promoting its products, seems to be having little effect on the post-privatization alcohol industry. Alcohol products are now widely promoted by local producers and importers. Alcohol advertising is not permitted on television or radio, but it is freely allowed in the printed media and on billboards.

As of 1993, state taxes and duties constituted approximately 80 per cent of the price of legally produced alcoholic beverages. There has been no significant increase in the price of alcohol during the late 1990s, when compared to cost of living.

Some examples of the liberalization of recent years include: special licences for alcohol sales are freely granted for sporting events; licences previously restricted to hotels with at least 20 rooms are now available to hotels with only five rooms; one individual is now allowed to transport 10 bottles of *arrack* rather than 2 bottles, as was previously allowed; and the legal minimum drinking age was changed from 20 to 18 in 1993.

Control of alcohol problems

In 1993, an attempt was made to formulate a National Alcohol Policy, but it has not yet been implemented or made public. There is no state-sponsored activity regarding the promotion of social or beverage alternatives to alcohol. Public education on alcohol comes mainly from the various NGOs and private temperance organizations. No national level prevention agency has been established but some NGOs are involved with education. The Federation of Non-Governmental Organizations Against Drug Abuse (FONGOADA) coordinates the activities of NGOs.

Alcohol data collection, research and treatment

No national agency collects information regarding alcohol use or problems. However, nongovernmental organizations are involved in prevention and treatment programmes and collect their own individual data.

Several non-governmental organizations have established their own treatment agencies for limited numbers of users. There are no specialized state-sponsored treatment centres for alcohol-related illnesses. There is evidence pointing to a relapse problem among patients treated for dependency, as shown in a study of alcohol-dependent men admitted to a rehabilitation unit. Out of 234 men admitted, 115 relapsed to drinking while 73 remained either totally abstinent or drank infrequently.

Thailand

Sociodemographic characteristics

POPULATION	1980	1990	1995
Total	46 718 000	55 583 000	58 791 000
Adult (15+)	28 025 000	37 881 000	42 152 000
% Urban	17	18.7	20
% Rural	83	81.3	79.9

Health status

Life expectancy at birth, 1990-1995 : 66.3 (males), 71.8 (females) Infant mortality rate in 1990-1995 : 37 per 1000 live births

Socioeconomic situation

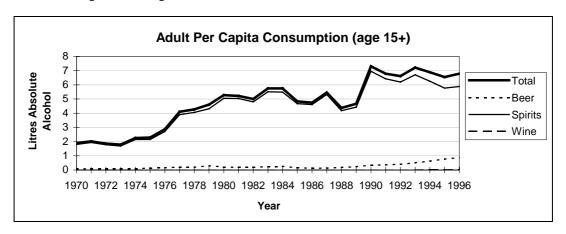
GNP per capita (US\$), 1995: 2740, PPP estimates of GNP per capita (current int'1 \$), 1995: 7540 Average distribution of labour force by sector, 1990-1992: agriculture 67%; industry 11%; services 22%

Adult literacy rate (per cent), 1995: total 94; male 96; female 92

Alcohol production, trade and industry

For 62 years the Boon Rawd Brewery and its Singha label have held 95 per cent of the beer market in Thailand. Boon Rawd's 1995 net worth was estimated at US\$ 1.7 billion. In 1993 Carlsberg Brewery committed more than US\$ 100 million to construct a brewery north of Bangkok, lowering Boon Rawd's market share ten points. Recently, Heineken, Miller and Anheuser-Busch Breweries have entered the market as well. Carlsberg, which entered the market in 1992 and now sells 20 per cent of Thailand's beer, has two breweries that are joint ventures with the Danish Industrialization Fund for Developing Countries and other Thai interests.

Alcohol consumption and prevalence



Consumption

Figures provided by the Ministry of Finance for spirits consumption from 1988 to 1996, shown above, are slightly lower than those provided by the FAO. Both series, however, show that recorded alcohol consumption is rising, fuelled primarily by a rise in spirits consumption. Wine consumption is too low to show on the graph. There is no information available regarding consumption of smuggled or homeor informally-produced alcohol.

Prevalence

A national survey by the National Statistical Office in 1991 found that 31.4 per cent of all adults had consumed alcohol. Daily drinkers made up 2.22 per cent of the population in 1996.

Age patterns

In a sample of 564 juvenile delinquent boys in Metta, Muthita, Karuna and Ubekkha Homes and 123 juvenile delinquent girls in Pranee Home, regular drinking of alcohol by the father was reported by 60 per cent and 26 per cent respectively. One third of the sample reported ever drinking alcohol, and "liquor dependence" was reported by five per cent of boys. The age of the sample ranged from 8 to 24 years.

Economic impact of alcohol

Household expenditure on alcohol in Thailand increased from 1.2 per cent to 2.5 per cent of total expenditure between 1986 and 1992.

Mortality, morbidity, health and social problems from alcohol use

Mortality

According to the Institute of Forensic Medicine, more than 62 per cent of traffic crash victims registered blood alcohol concentrations at higher than safe levels.

Morbidity

A 1989 study established duration of alcohol intake as a significant risk factor in the development of hypertension in urban slum and government apartment dwellers. A 1990 case-control study on risk factors for oesophageal cancer in Southern Thailand revealed the relative risk for alcohol drinking to be 4.7. However, a 1992 case control study of naso-pharyngeal carcinoma in Northeast Thailand found drinking alcohol not to be a significant relative risk.

Social problems

Questionnaires were administered to 2099 accident admissions to the emergency unit at the Police Hospital in Bankok. Of this group, 1255 were drivers and 844 were passengers and pedestrians. The majority (96.6 per cent) of the drivers were male, and 91.2 per cent were 39 years of age or younger. Results showed that 28.8 per cent of the drivers had a positive BAC.

Alcohol policies

Control of alcohol products

Alcohol advertising is prohibited on television. The legal minimum age for buying alcohol is 17.

Control of alcohol problems

There is no national agency responsible for alcohol policy. The national agencies which are concerned with education and prevention regarding alcohol are the Department of Health and the Drug Abuse Prevention and Treatment Division of the Bangkok Metropolitan Administration.

Alcohol data collection, research and treatment

Many prevention and treatment programmes are carried out at Thanyarak Hospital, under the supervision of the Department of Medical Services, Ministry of Public Health. Other hospitals in the Ministry of Public Health provide alcohol prevention and treatment programmes on a smaller scale.