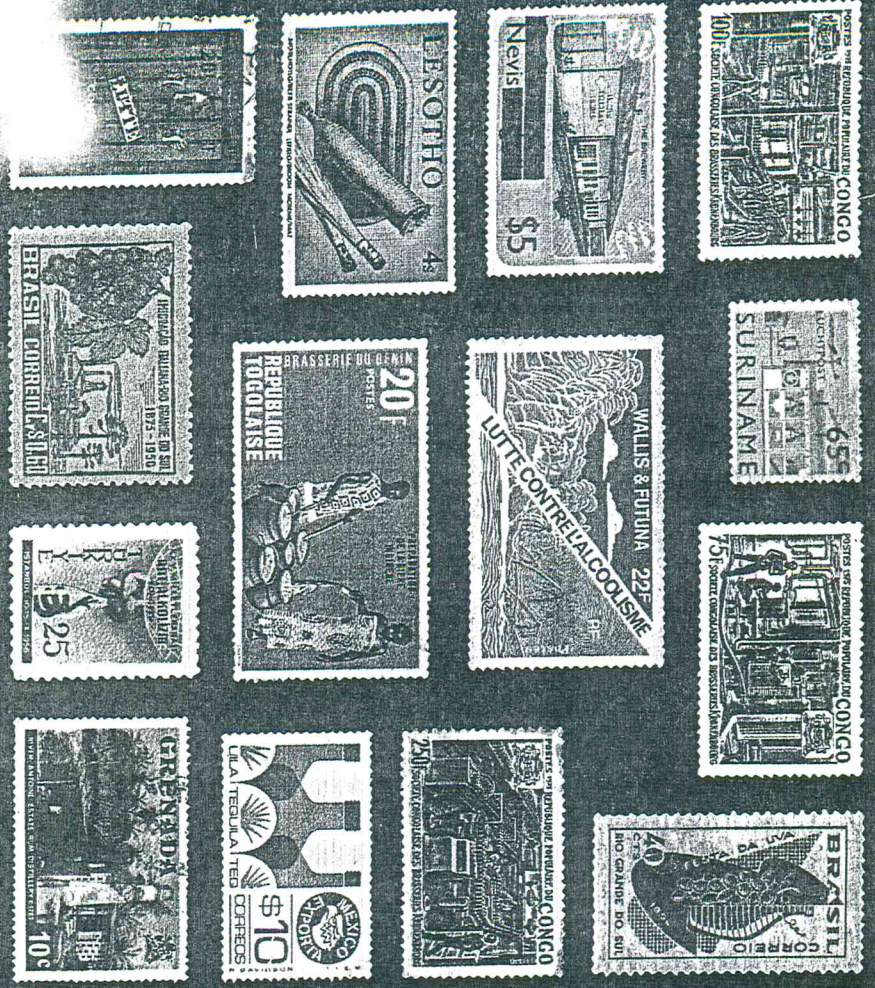
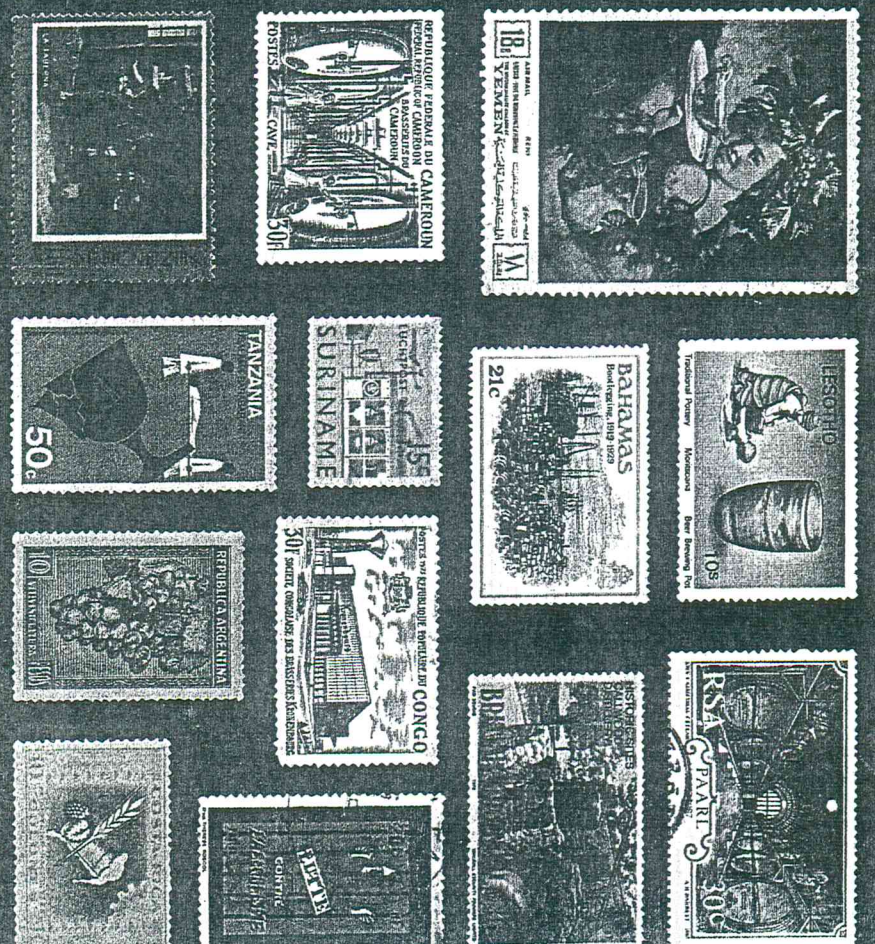


ALCOHOL IN DEVELOPING SOCIETIES: A PUBLIC HEALTH APPROACH



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Alcoholic beverages are global commodities and drinking is a widespread social custom. But alcohol is also a major source of health and social problems in developing societies as elsewhere. Through controls and other prevention measures, the burden of disease and disability can be reduced. Under the auspices of the World Health Organization, an international group of scholars analyzes the many sides of the picture, with a focus on Africa, Latin America, Asia, Oceania and indigenous societies within developed countries.

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in collaboration with THE WORLD HEALTH ORGANIZATION



**ALCOHOL AND THE DEVELOPING WORLD:
A PUBLIC HEALTH PERSPECTIVE**

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in collaboration with WORLD HEALTH ORGANIZATION



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This volume expresses the views of the authors
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PREFACE

In 1994, under the auspices of the European office of WHO, an independent group of scholars (Edwards et al., 1994) published a volume, *Alcohol Policy and the Public Good*, which drew wide attention, and has by now been translated into eight languages. The volume reviewed the epidemiological evidence on alcohol's role in a variety of health and other problems, and the evidence on the effectiveness of different policy measures and prevention strategies in preventing alcohol-related problems.

The present book's inception was an initiative of the staff of the Programme on Substance Abuse (PSA) of the World Health Organization, Geneva — specifically, of Helge Kolstad, Mario Argandoña and Hans Embiad. The initiative reflected the fact that the Geneva office of WHO has responsibility for public health on a global basis, which implies a special responsibility for developing societies. The question which the WHO staff found themselves facing was, what could be said in the context of developing societies about rates, patterns and trends in drinking and in alcohol-related problems, and about evidence on the effects of different alcohol policies and prevention programs? Reflecting the available literature, the analyses and arguments in *Alcohol Policy and the Public Good* had been based almost entirely on material from developed societies. The original idea of this book, then, was to prepare a volume in the tradition of *Alcohol Policy and the Public Good*, but drawing on material from developing societies, and directed at audiences in those societies.

In 1995, Robin Room was asked to coordinate a project to produce such a volume, and in the following months each of the team of scholars agreed to join the project research group. Alan Lopez, by then the acting director of PSA, agreed that the team would function as an independent group of scholars, under the general auspices of WHO-Geneva. The first full project meeting was held in June 1996 in Edinburgh, and further project meetings were held in Mexico City in 1997, New Delhi in 1998 and Bangkok in 1999.

Over the course of intense discussions and multiple drafts, the project took on its own life and directions. It will be seen that, although the present volume shares a general public health orientation with *Alcohol Policy and the Public Good*, the combination of the particular circumstances of developing societies and the holes in the available research literature required analysis in a considerably different style and with different content. As a research group, we faced first of all the task of assembling and making sense of very diverse and scattered literatures, often not easily accessible. An early product of the project, indeed, was a bibliography with annotations of relevant studies (Talomicanu, 1998), which it is hoped will be useful to future scholars in the field.

The primary audience for which this book is written is those involved in dealing with alcohol problems in developing societies. This includes not only public health workers, and those involved in work in health, social work, law enforcement and public administration, but also policymakers and concerned citizens. We had in mind also an audience of students and scholars in developing societies. Besides these primary audiences, we hope that scholars, public health workers, policymakers and others from developed societies will also find that a sustained look at alcohol issues in the context of developing societies sheds new light and opens interesting perspectives on major issues in the field.

The project generated considerable research, which is reflected not only in the current volume, but also in several other publications associated with the project. In the first phases of the project, participants from a developing country or with particular knowledge of such a country prepared case summaries concerning all aspects of alcohol for that country. These case studies of Brazil, India, Malaysia, Mexico, Nigeria, Papua New Guinea, South Africa and Zimbabwe have been published by WHO (Riley and Marshall, 1999). In reviewing the epidemiological literature on drinking patterns and problems in developing societies, it became clear that there were opportunities to fill out the literature by stimulating reanalysis of existing data-sets, often collected for other purposes but including alcohol questions. A set of these reanalyses, for Mexico, Costa Rica, Namibia, Nigeria, the Seychelles, India and China, have also been published by WHO (Demers et al., 2001). The project was also able to draw on the *Global Status Report on Alcohol* (WHO, 1999), for which one of the project participants, David Jernigan, was primarily responsible.

A number of journal articles related to the study have also appeared. Among them are a discussion of some perspectives arising from the project (Room et al., 2000), which appeared in a thematic issue of the *Journal of Substance Use* on "alcohol policies and developing countries", along with other contributions from several project participants (Cooper and Monteiro, 2000). Other overview discussions informed by the project (e.g., Parry, 2000) have also been published. A discussion of WHO and alcohol policy in a global perspective appeared in the *Bulletin of the WHO* (Jernigan et al., 2000).

The original plan for financing the project did not come to pass, and the project was carried out with only limited earmarked funds from WHO and other institutions. Funds for project meetings and expenses came from WHO, the Addiction Research Foundation of Ontario (now part of the Centre for Addiction and Mental Health), and the International Alcohol Policy Foundation, Stockholm. The All-India Institute of Medical Sciences and the National Institute on Psychiatry of Mexico provided substantial assistance by hosting project meetings.

The major part of the implicit financial support for the project came, of course, from the regular salary support to project team members from the institutions with which they were affiliated. In particular, work on this project was the main task for Robin Room's six months at the National Institute for Alcohol and Drug Research, Oslo. We extend our thanks for their support to all institutions employing project team members during the life of the project.

The project team also owes thanks to a number of associates who helped the project in various ways. These include Susan Bondy, Andrée Demers, Anca Talomiteanu, Mohan Isaac, Mary Jansen, Alan Lopez, Andrea Mitchell, Heli Mustonen, Usaney Permparn and Jürgen Rehm. Tom Babor, Griffith Edwards,

Tom Greenfield and Isidore Obot provided helpful comments on late drafts of the book, and Kari Poikolainen facilitated the work's publication.

The work of the project team was collegial, and this book as a whole is jointly authored. The listing of authors is alphabetical, except for the first two names, reflecting their roles as project coordinator and in the final round of editing, respectively.

Any project that extends over six years witnesses a number of changes for the participants. Among the authors of this study, these have included a number of changes of institutional affiliation (and indeed of country of residence and of life circumstances). In the course of the project, as our lives ramified and the work unfolded, we have come to know each other well and to respect each other greatly.

Chapter One

INTRODUCTION

We live in a rapidly changing world. The pace of change is perhaps most visible in parts of the world known as "developing," where societies and cultures are clashing and transforming, and processes of change which took centuries elsewhere are collapsed into decades. Alcohol has been present in many of these cultures for thousands of years. Yet both the product alcohol and its social role are being swept along in the tides of global change. This book aims to explore what this means in terms of drinking practices and problems in these societies, and what research can tell us about how to control and prevent alcohol-related problems in the current era.

Our focus on alcoholic beverages in contemporary developing societies sets for us a very broad frame — not a wholly global perspective, but one that includes the overwhelming majority of the world's population and the world's cultures. For our purposes, we have defined "developing societies" broadly. Included are all countries in the Americas south of the United States, all countries in Asia except Japan and the Russian Federation, all countries in Africa, and all the island states of Oceania except for New Zealand. We have also included within our frame what has sometimes been called the "fourth world":¹ the partially autonomous societies of indigenous peoples that are located within developed countries.

There is enormous diversity in these societies, not least in terms of economic development and position. Included, for instance, are the countries of the Arabian Gulf that, because of mineral resources, have considerable wealth on a per capita basis. Also included are all of the societies that are at the very bottom internationally in terms of societal wealth. Some societies constitute unitary nation-states; other nations are federal; many are multicultural; and for a few societies there is no functioning national state.

In most of these societies, there is a tradition of alcoholic beverage production and consumption that extends back in time before the modern era. In many places, as we shall discuss, there is still some production by traditional methods, but industrial production has long provided most of the supply; elsewhere, it is gradually replacing production by traditional methods. This process of displacement was initiated in most places during the European colonial era, and usually involved the introduction of new kinds of alcoholic beverages. In many places, the process continues today, driven by mass marketing and other promotions, particularly for European-style lager beer. Alcoholic beverages, as one more consumer

¹ Note that our usage of "fourth world" here differs from the somewhat broader meaning used by Castells (1998).

commodity, have become part of the process of globalization of production and promotion. The images with which they are promoted reflect this, often appealing to the cosmopolitan aspirations of the drinker. However, a brand may be positioned and promoted with the opposite orientation where this offers more leverage, by identifying it with local or national symbols in distinction from the foreign.

There is considerable variation among developing societies in whether and how much the level of consumption of alcoholic beverages is increasing. There are substantial variations also between societies in patterns and contexts of drinking. Accordingly, there are variations, too, in the levels of different types of alcohol-related problems. In this book, we shall discuss the available evidence on all of these levels and patterns. Our aim is to set out what is known about the epidemiology of alcohol-related problems in developing societies, in the context of knowledge about the alcohol market and drinking patterns and levels in such societies. We then consider the various strategies available to governments for limiting and reducing the harm from drinking, and the evidence on the effectiveness of these strategies in a developing-society context.

So far as is possible, the material in this book is drawn from developing societies. To the extent they are available, we have drawn on available epidemiological and policy-impact studies concerning alcohol carried out in these societies. In conjunction with these, we have also used case studies and descriptions of developing-society experience. And, when necessary, we have also drawn on experience from developed societies, considering its relevance and potential value in a developing-society context.

The diverse uses of alcohol

Alcoholic beverages have a number of use-values, reflecting both their physical properties and their cultural definitions. Ethanol's properties, apart from its functions as a solvent and as a fuel, suit its use for human consumption as a food, as a thirst quencher, as a medicine, as a mood-changer, or as an intoxicant (Mäkelä, 1983). At the level of cultural definition, many other use-values are added to this list. Alcoholic beverages are a medium of sociability (Partanen, 1991), and often of celebration. Access to use may be a marker of social standing. Particular alcoholic beverages or brands may become identified with a particular cultural or national identity. In many religions, notably including Christianity, an alcoholic beverage has a sacramental function. In other religions, notably including Islam, the believer is forbidden to use alcohol, and abstaining from drinking becomes a marker of religious identity.

Different use-values for alcohol usually coexist in the same culture. While Indian warriors consumed *surra* (a fermented beverage made from rice and sugarcane) to enhance valour and courage, alcohol was also an ingredient in many medicinal preparations in the traditional Ayurvedic medical system of that country. The use-values may indeed coexist even in the same drinking occasion. In Nigeria, palm wine has been used for generations as a vehicle for social exchange, as ambrosia for the gods, and as a commemorative drink for various rites of passage; these functions may all be served by the same drinking occasion.

Alcohol consumption and health

Along with the pleasures and benefits many drinkers derive from it, drinking brings many problems. The diversity in the forms of alcohol and the reasons for their use has also meant widely differing patterns of drinking, and widely ranging consequences. While much of the traditional drinking in developing societies was sporadic and communal, as we shall see, drinking today in these countries cannot be understood simply in terms of these traditional patterns. Grafted onto these patterns, or replacing them, are new forms of drinking resulting from changing social circumstances and from diverse colonial and international influences.

Drinking may never have been problem-free for traditional societies, but in the modern world problems from drinking have taken on new dimensions. Incorporation in the global economy has brought new risks from motor vehicles and machinery and new demands for sober attention. Often societal responses to these new risks have lagged behind. The result can be an escalation of alcohol-related physical and social problems.

Alcohol problems may occur in many realms of human life. Practically no organ in the body is immune from alcohol-related harm (Bower, 1992). Drinking can bring in its wake emotional and mental disorders. Alcohol is causally implicated in many casualties, both to the drinker and to others. Social as well as health problems are often due to drinking: a pattern of drinking can adversely affect family life, work functioning, and performance of other social roles.

Alcohol and the Global Burden of Disease

Recently efforts have been made to estimate on a global basis the adverse effects of alcohol on the health of the drinker. These estimates of course do not include adverse effects of drinking on the health or interests of others, nor do they cover social problems from drinking. However, they provide global insight into alcohol's negative impact on the lives of its users, and they represent an important and ongoing exercise in situating alcohol problems in the larger landscape of international health.

The first such estimates were made as part of the effort to calculate the Global Burden of Disease for the year 1990 (Murray and Lopez, 1996). These estimates focus on a broad-reaching indicator of impaired health, the Disability-Adjusted Life-Year (DALY). Included in the DALY calculation are not only the years of life lost from a full lifespan by early mortality, but also years spent with some level of disability, with the proportion of disablement assigned according to the particular disability.

The calculation of alcohol's contribution to the burden of death and disability in the Global Burden of Disease estimates for 1990 rests on a series of meta-analyses of the epidemiological literature estimating the proportion attributable to alcohol (the attributable fraction) for specific diseases and disorders (English et al, 1995). In order to make their task more practical, Murray and Lopez used only the categories of illness or injury that brought the greatest number of deaths, either through sheer mortality impact or through high alcohol attributable fractions.

While the methodology used by English et al. to estimate alcohol's causal role has been generally well-regarded in the scientific literature, it is limited by the reach of the available literature, and, within that literature, by the exclusion of all non-English publications and of all studies based on populations of non-European

origin. The proportion of a chronic disease condition attributed to alcohol may well vary from one society to another. Such variation is even more likely for alcohol's role in casualties, given the very different social and environmental conditions in which casualties occur in different societies. To adjust for these limitations, Murray and Lopez applied correction factors to the attributable fractions. In the case of injuries, the factors were derived from estimates of per capita consumption in each world region in ratio to consumption in the developed countries. In the case of diseases, the factors were based as well on a combination of the non-hepatitis-B cirrhosis rate and the number of deaths coded to alcohol dependence; these were taken as a proxy for drinking patterns entailing the kind of long-term heavy consumption required for onset of most alcohol-related disease.

To adjust for alcohol's protective role, Murray and Lopez took as a credit against alcohol's burden a percentage of deaths from ischaemic heart disease, scaling from an assumption that drinking in the developed countries prevented 18 percent of male and 14 percent of female ischaemic disease mortality. This is generally regarded as a generous assumption. Adjusting for the unreliability and paucity of data is more difficult. Lopez and Murray based their per capita consumption estimates largely on 1980 data (Smart, 1991; Adrian, 1984), even though they were estimating mortality for 1990. A preliminary re-assessment of their per capita consumption estimates using more recent data (Productschap voor Gestilleerde Dranken, 1997; FAO, 1998) suggests that these may also have been too generous for regions outside the developed world, with the exception of the nations of the former Soviet Union, for which the estimates may have been too low. It is possible that the two sets of generous assumptions, one on the plus and one on the minus side, cancel each other out.

With these caveats in mind, the results of this first exercise in estimation of alcohol's global burden were as follows: in 1990 alcohol was responsible for 3.5% of the total disability-adjusted life years lost, more than the tobacco's share (2.6%) and far more than the share for illegal drugs (0.6%; Murray & Lopez, 1996). In general, alcohol's share in the burden in terms of life-years lost was greater than its share in terms of lives lost, reflecting that drinking-related deaths tend to occur at relatively younger ages. Alcohol's share in the burden in terms of years of life disabled was even greater than its share in the years lost because of death.

Table 1.1 shows the Global Burden of Disease study's estimates for different world-regions, as defined by the World Bank. It will be seen that the highest estimated burden for a developing region is for Latin America, with alcohol estimated to account for almost 10% of the burden of disability and death. This figure is similar to the 9% calculated for Mexico, using the same methodology, by Frenk et al. (1994). The estimated burden is relatively low for the Middle East and for India, reflecting the small proportions of populations that drink at all in these areas. The estimated burdens for other regions fall in between.

This first Global Burden of Disease study was a pathbreaking effort to estimate the proportions of premature death and disability attributable to different conditions and risk factors. Its findings underline that, however the calculation may be done, alcohol has a substantial negative effect on world health. But its estimates must be regarded as a first approximation that will be refined in future studies. Replications of the Global Burden of Disease methodology in developed (Cipriani et al., 1998) and developing country contexts are now under way, and a

new set of estimates will be published in the *World Health Report for 2002*.

Table 1.1
Global burden of disease from alcohol, 1990

(Source: Murray and Lopez, 1996)

Region (World Bank)	Deaths (1000)	As % of total deaths	Years of life lost (YLLs) (1000s)	As % of total YLLs	Years of life disabled (YLDs) (1000s)	As % of total YLDs	Disability- adjusted life years (DALYs) (1000s)	As % of total DALYs
EME Established Market Economies	83.8	1.2	2 537	5.1	7 667	15.6	10 204	10.3
FSE Former Socialist Economies	53.0	1.4	2 063	5.7	3 130	11.9	5 193	8.3
IND India	112.9	1.2	2 723	1.4	1 974	2.3	4 697	1.6
CHN China	114.1	1.3	2 118	1.8	2 737	3.0	4 856	2.3
OAI Other Asia and Islands	97.4	1.8	1 862	1.6	3 191	5.1	5 053	2.8
SSA Sub- Saharan Africa	170.7	2.1	4 435	2.0	3 169	4.6	7 603	2.6
LAC Latin America and the Caribbean	136.1	4.5	3 319	5.9	6 201	14.7	9 520	9.7
MEC Middle East crescent	5.6	0.1	229	0.2	437	1.0	666	0.4
World	773.6	1.5	19 287	2.1	28 400	6.0	47 687	3.5

Key:

EME: includes Europe from Finland, Germany, Austria and Italy westward, Greece, Canada, United States, Australia, New Zealand, Japan.

FSE: includes other countries of Europe and Russia

OAI: includes Asian countries other than China, India, Russia, and countries in MEC; includes Mongolia, Bangladesh, Sri Lanka, the two Koreas, Myanmar, Thailand and countries of Indochina and the Malaysian and Indonesian archipelagos, Philippines, Papua New Guinea, and Pacific island countries

SSA: includes all of Africa south of the Sahara, and Madagascar and island states near Africa.

LAC: includes all countries of the Americas except Canada and the United States

MEC: includes all countries on southern shore of the Mediterranean, and all countries from Turkey east to Pakistan and from Kazakhstan south to Yemen.

Natural experiments in alcohol control

There is nothing immutable about alcohol's influence on health and social well-being. Many societies, both ancient and modern, have attempted to limit or eliminate these adverse effects, using a variety of strategies. Among these have been punishing the individual excessive drinker, restricting and controlling alcohol availability, and prohibiting the use of alcohol altogether.

The potential impact of changes in alcohol availability on rates of problems is demonstrated by the natural experiments that occur in a society or locality when the supply of alcohol changes substantially. For instance:

- In Greenland, assault cases fell by 17% and attempted and completed homicides by 18% during the period 1979-1981, when alcohol rationing reduced alcohol consumption levels by 23%. Assaults and homicides rose to higher than the pre-rationing level in the year after rationing was repealed (recalculated from Schechter, 1986).
- In September 1989 the islands of Yap and Palau (in Micronesia) became unintentionally "dry" for more than one week after supply ships were delayed and existing supplies of beer, the predominant form of alcohol consumed, were exhausted. During this time the incidence of injuries and accidents in Palau declined to the point that the hospital wards were nearly empty (Nero, 1990).
- Until 1972, Aborigines in Western Australia were banned from purchasing alcohol, which substantially limited their drinking. In the 15 years before then, non-infant deaths from accidents and violence had been steady in the range of 4-7% of male deaths and 2-5% of female deaths. After drinking by Aborigines was legalized, the proportions attributable to accidents and violence rose to 23% of male and 15% of female deaths in the period between 1982 and 1986 (Hunter, 1993:83).
- In April 1985, a far-reaching campaign to reduce levels of alcohol consumption in the former Soviet Union began. The campaign had slackened by 1988. Despite a sharp increase in illicit alcohol supplies, it is estimated that there was a net drop in per-capita alcohol consumption in Russia of about 25% during the campaign (Shkolnikov and Nemtsov, 1997:243). While life expectancy had been slowly declining in Russia in the preceding years, between 1984 and 1987 life expectancy for males increased by 3.2 years for men and 1.3 years for women (Leon et al., 1997). Specific causes of death which declined during the period of the alcohol campaign included accidents and violence (by 36% for males, by 24% for females), cirrhosis and other alcohol-related diseases (56% for males, 52% for females), pneumonia (40% for males, 32% for females), infectious and parasitic diseases (25% for males, 23% for females), and circulatory diseases (9% for males, 6% for females) (see Table 1.2). In the post-Soviet period, the gains in mortality were more than reversed. Alcoholic beverages became freely available and sales considerably increased, but other factors are also probably involved in the "mortality crisis" of this period.

It should be noted that our emphasis in giving these examples is not on the particular means by which alcohol consumption became restricted. The prohibition on drinking specifically for Australian Aborigines undoubtedly reflected the racism of another time, and the Soviet anti-alcohol campaign, imposed from above, became very unpopular. Our emphasis instead is on what happened to rates of

Table 1.2
Age-standardized mortality rates per million for Russia by gender, comparing 1987 to 1984 and 1994 to 1987 (standardized to European population)
(Source: recalculated from Leon et al., 1997)

Cause of death	1984 (rate/million)		ratio, 1987/1984 rates		ratio, 1994/1987 rates	
	male	female	male	female	male	female
All causes	21 293	11 606	0.88	0.93	1.37	1.2
Accidents and violence	2 519	597	0.64	0.76	2.26	1.91
Alcohol-specific causes	455	123	0.44	0.48	4.29	3.9
Pneumonia	279	118	0.6	0.68	2.29	1.26
Other respiratory diseases	1 531	523	0.8	0.78	1.16	0.94
Infectious and parasitic diseases	308	88	0.75	0.77	1.6	1.15
Circulatory diseases	11 798	8 037	0.91	0.94	1.29	1.17
All neoplasms	5 252	1 488	1.04	1.03	1.04	1.05

health problems when there was a sudden change in the level of alcohol consumption in the population. And, in all these cases, the effect was quite dramatic — not only in terms of the effects on the drinker him- or herself, but also in terms of the injuries and other effects on others.

In the light of the evidence of alcohol's importance as a source of health and social problems in developing societies, and of the demonstrated potential for reducing alcohol-related problems, this book aims to set out what is known about the epidemiology of alcohol-related problems in developing societies, and to consider the strategies governments can adopt to reduce alcohol-related harm, along with the evidence on their effectiveness. We begin in Chapter Two by setting drinking in its context, considering historical as well as economic, social and cultural factors shaping drinking in developing societies. Through a review of the available data on alcohol consumption in both developed and developing countries, Chapter Three establishes that drinking and drinking levels are indeed changing, in ways that may not bode well for the health and safety of populations in the developing world. In Chapter Four, we review the changes occurring in alcohol itself, from communal product to industrial product to global commodity articulated with a global economy and global trade agreements.

Chapter Five then moves to a deeper examination of the wide range of patterns of drinking in developing societies that underlie aggregate figures on per capita consumption. The close relationship between drinking patterns and drinking problems leads us to Chapter Six, which documents the extent and levels of alcohol problems in developing country contexts.

That alcohol problems are by no means inevitable or unpreventable has been demonstrated. There is a rich history and growing literature of experiences in preventing and controlling alcohol problems in these societies. Chapter Seven describes interventions that target individual behaviour and considers the literature on their effectiveness. Evidence of effectiveness is more promising for the strategies described in Chapter Eight, which seek to intervene in the environments surrounding and conditioning drinkers' behaviour.

The final chapter summarizes what we have found, and then addresses the question of action. Taking into account a complex array of cultures, of local, regional, national and international governmental levels, and of drinking contexts, patterns and problems, we seek as researchers to suggest and inform meaningful actions to prevent and control the harmful effects of alcohol in a rapidly changing world.

Chapter Two

DRINKING IN DEVELOPING SOCIETIES: THE ECONOMIC, SOCIAL AND CULTURAL CONTEXT

In developing societies, the historical and contemporary economic, social, and cultural context differs in many ways from the context in the industrialized countries, and the uses of alcohol, its motivations, the consequences of drinking, and the means to deal with them differ accordingly. In this chapter we shall present a broad overview of alcohol in human history and then describe some of the particular effects of the colonial past of the developing world on alcohol availability and problems. The chapter concludes by considering the emerging structures of the global order, the consequences of these for the lives of peoples in the developing world, and in particular their relationship to drinking practices.

Alcohol in human history

The drinking of alcoholic beverages extends back in human history several thousand years, at least to the early days of agricultural settlement in the Middle East and in China. In most parts of the world, alcoholic beverages were known and used before contact with the European imperial expansion of the last 500 years. The exceptions to this were Australia, Oceania, and North America roughly north of present-day Mexico; and even in these areas alcoholic beverages may not have been completely unknown (Marshall, 1976; Brady, 1991).

For most of their history of several thousand years, alcoholic beverages have been produced mainly locally at the level of household or small community, using local raw materials and methods that have been handed down from generation to generation. These beverages, produced from grain, fruit or other organic materials, were nearly always fermented, and contained at most a few percent of ethanol. They included wine, beer, cider, mead, and a variety of other beverages brewed in particular regions, some of which were regarded as an important part of nutrition. Beers, ciders and meads did not keep for very long, and means of transport were limited. So what was produced was usually consumed soon and locally. For the most part, the beverages were not sold on the market. They were consumed within the household, given away as a sign of generosity and hospitality, or shared at communal festivals and within local circles of exchange, to celebrate the completion of harvest or a joint work project. The production of alcohol presupposes the existence of an agricultural surplus above the minimum necessary for survival.

For this reason, as well as because of their intoxicating power, alcoholic beverages were in many societies regarded as special commodities. Their consumption was often restricted to particular population groups, to specific occasions, or to religious ceremonies (Mandelbaum, 1979). Often they were traded as items of luxury.

Except in special circumstances, fermented beverages have a maximum content of ethanol (pure alcohol) of about 13%. Distillation, as a process to refine and increase the ethanol content of the liquid, was invented in China, and had diffused to Europe through Arabia by about 1100. For several centuries distilled beverages were regarded in Europe primarily as a medicine (Wasson, 1984). However, beginning in the 16th century, the advent of distillation on a commercial scale transformed the availability of alcoholic beverages. Distilled beverages — and wine fortified with distilled spirits — keep indefinitely, and thus make alcoholic beverages potentially available year-round, whatever the climate. Distillation provided a means to transform part of the harvest into a commodity that could be easily stored and transported without spoiling.

Distilled beverages became a major item in colonial trade (Pan, 1975). Rum flowed from the Caribbean area to North America, and cheaper varieties of industrial alcohol, so-called "trade spirits", were exported from Europe to its African and Asian colonies. Thus in the early stages of European industrialization and imperial expansion, distilled beverages became a banalized part of everyday life, both as beverages in their own right and as a "fortifier" and preservative for wines. In most places in the present-day world, distilled as well as fermented beverages are among the various different alcoholic beverages in regular use.

In addition to the variety of use-values described in Chapter One, from the beginning drinking alcoholic beverages also brought strife, tragedy and sorrow. Writing in 440 B.C.E., Herodotus recorded that the Persians attributed the cruel madness of Cambyses, the tyrant son of Cyrus, to his drinking too much wine (Herodotus, 2000; see O'Brien, 1980). The Jewish Bible associates alcohol use with a variety of negative outcomes, including incest (Genesis 19:31-34), seizures (I Samuel 25:36-38), addiction (Isaiah 28:7); hallucinations, blackouts, injury, misery, anxiety and remorse (Proverbs 23:29-33; see O'Brien and Sellar, 1982). Classic Chinese poets were also well aware of adverse effects of drinking: "In the city when I am drunk I disturb the peace of the streets", wrote Tu Fu in the 8th century of the Common Era (Underwood and Chu, 1929:7); in the 1600s, a poem by Ch'ien Ch'ien-Ti notes that "Love of wine makes people wild... Even when his insides rot, a drinker won't quit drinking" (Lin and Lo, 1975:470; see Lee, 1986). And a 2,000-year-old Indian treatise on medicine, Charak Samhita (Anonymous, 1949), includes a warning that "a person who drinks whatever kind comes in hand to him, and whenever he gets an opportunity, this very wine acts as a poison."

Historically, most societies have recognized the double quality of alcoholic beverages, their "prized and dangerous effects" (Steele & Josephs, 1990), and have tried to limit or eliminate the harm. Often there were edicts punishing excessive drinking. Ancient Jewish law, for instance, prescribed stoning to death for a son whose parents denounced him as a disobedient glutton and drunkard (Deuteronomy 21:18-22). But measures to restrict and control availability of alcohol have also been common. In tribal and village societies, access to drinking alcoholic beverages has often been limited to particular festivals or occasions, and/or to particular social statuses. Formal rules regulating those selling alcohol can be

found in the earliest surviving legal documents. Thus the Code of Hammurabi, from about 1780 B.C.E., included three articles governing the behaviour of tavern-keepers and in taverns (Hammurabi, 2000: §§108-110).

Some societies and cultures have forbidden the use of alcoholic beverages altogether or forbidden its use on the society's territory. All the major world religions have included elements or segments in which drinking was forbidden or discouraged — e.g., by Brahmins in the Hindu religion, by adherents of some Protestant denominations in Christianity, and by all faithful Muslims. At the time of first European contact, leaders of a number of indigenous peoples asked that sales to their people be prohibited: "we are afraid of the wicked water brought to us by our white friends", a Kickapoo tribal spokesman told a United States Commissioner in Kansas in 1832 (Urrau, 1996:24). As recently as the 1970s, the elders of a group in Papua New Guinea experiencing its first extended contacts with Australian patrol officers and the market economy strictly forbade all contact with alcohol for the group's members (Poole, 1982; see box in Chapter 5). Within societies with predominantly European populations, also, there have been periods when there has been a prohibition on sales of alcoholic beverages. Thus, in the course of the 20th century, alcohol was prohibited altogether for a longer or shorter period in the United States, Canada, Iceland, Norway, Finland and Russia. Government prohibition of alcohol exists today in a number of Islamic countries, in twelve Nigerian states, in many U.S. counties, and in the state of Gujarat in India, as well as in many land reservations for indigenous groups, e.g., in North America.

The burden of the colonial past

In looking at alcohol in developing societies in particular, special attention must be given to the larger historical context created by the expansion of European and other colonial powers into the rest of the world, beginning in the late 15th century. This chapter of human history continued for close to 500 years, with serious decolonization only a recent phenomenon, in the second half of the 20th century. The Age of Discovery, with subsequent exploration and colonization, greatly accelerated the sharing of products, habits and ideas from one part of the world to another, and these included the spread of alcoholic beverages and patterns of their consumption. Lest too Eurocentric a cast be placed on these processes of diffusion and contact, however, it is important to be aware of earlier widespread maritime exploration and trade by China throughout Mainland and Island Southeast Asia, to coastal South Asia and the Middle East, and as far as the east coast of Africa in the 15th century (LeVathes, 1994). Among the numerous supplies and trade goods carried aboard the Chinese fleets were beer and wine.

In the earliest years of the European expansion Spain and Portugal were dominant. In the 16th century they established large empires in the New World, especially in Mexico, Central America and South America, but their influence was also prominent in parts of Africa, in the Philippines and Malacca, and in other Asian outposts such as Goa and Macao. The indigenous peoples of Brazil, to which the Portuguese first came in 1500, had various fermented alcoholic beverages, but the Portuguese introduced both wine and distilled beverages (Carlini-Cotrim, 1999); indeed, soon after the conquest production of a local distilled beverage called *cachaça* began, and remains important in Brazil to the present. The Indian peoples who inhabited what is now Mexico also made fermented beverages, such as

publique, although their consumption was quite strictly regulated (Medina-Mora, 1999). The Spaniards imported wine and distilled beverages like brandy in the early 1500s following the conquest (Taylor, 1979); as in Brazil, locally-produced distilled beverages have remained a significant part of Mexican life.

By the 17th and 18th centuries the Dutch, English and French joined the European colonial expansion, and they began to compete (and fight) with the Spanish and the Portuguese for territory, trade and influence. Dutch holdings were particularly important in Island Southeast Asia, Africa and parts of the Caribbean, while the English established colonies in North America, Africa, South Asia, Australia, New Zealand, and the Caribbean. The French presence was pronounced in parts of Africa and North America, and in the Caribbean. As with the Portuguese and Spanish before them, these colonial powers introduced new alcoholic beverages both to places that already had a drinking tradition (e.g., Africa), and to others (e.g., North America and Australia) that lacked such a tradition.

In the 19th century Germany, Russia and the United States joined the colonial powers, and late in the colonial period Australia and New Zealand took control over some former British colonies in the Pacific Islands. Germany's influence was mainly in Africa and Oceania, while Russia expanded across northern Asia to Alaska and what is now the West Coast of the United States as far south as Fort Ross, California. The United States was a relative latecomer to colonialism, overthrowing the Hawaiian monarchy in 1893, and grabbing former Spanish territories in the Caribbean and the Pacific during the Spanish-American War at the end of the 19th century.

In the early period of imperial expansion and colonization, the European colonies' primary interest in alcohol lay in commercializing and taxing the local production both of the traditional local beverages and of new distilled beverages. Alcoholic beverages were also commonly used as a colonizing force to attract, pay, entertain and control indigenous labourers (Van Onselen, 1982; Crush & Ambler, 1992). Two other impulses towards alcohol were evident by the 19th century. One was an effort to turn colonies into markets for alcoholic beverages produced in the metropolitan country or elsewhere in the empire. A substantial trade grew in spirits and fortified wines, which could be shipped long distances. The second impulse, particularly from Britain, the United States and northern Europe, was to restrict or cut off the availability of alcohol to indigenous peoples, culminating at the international level in a series of agreements between the colonial powers on limiting the alcohol trade in Africa (Bruun et al., 1975; see plate 2). This impulse drew strength from the temperance movement in the metropolitan countries, but also reflected imperial worries about drinking's associations with idleness or insurrection (Room, 1990). Colonial prohibition laws often sought to limit the consumption of some or all alcoholic beverages to the colonizers and other resident or itinerant foreigners.

This colonial expansion by European and European-derived powers encountered a variety of different drinking cultures in Africa, Asia, and Latin America. In a few localities — specifically in most of North America and in Oceania and Australia — there were no indigenous alcoholic beverages, and so the drinks were introduced to populations with little or no previous experience of alcohol (e.g., Marshall, 1999). Present-day drinking patterns and beverage preferences throughout the developing world derive historically from a combination of the beverage preferences and drinking practices of the particular colonial power

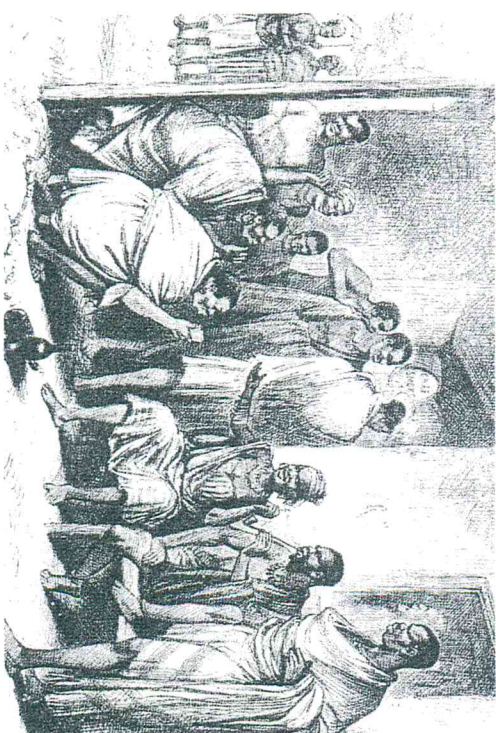
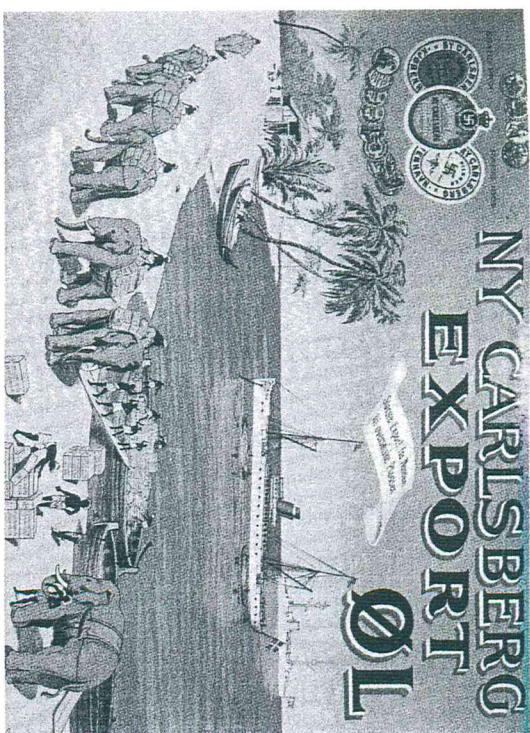


Plate 1

Alcohol and the colonial era: building and supplying demand

Top: A Carlsberg beer poster from about 1910 notes with pride (on the scroll): "Biggest export from Nordic countries to overseas places". *Bottom:* A liquor can-teen in the Eastern Cape district of South Africa in the 19th century. "Cape smoke", the label on the barrel at the top centre of the picture, was a raw brandy produced for the local market (Mills, 1985; La Hausse, 1988).

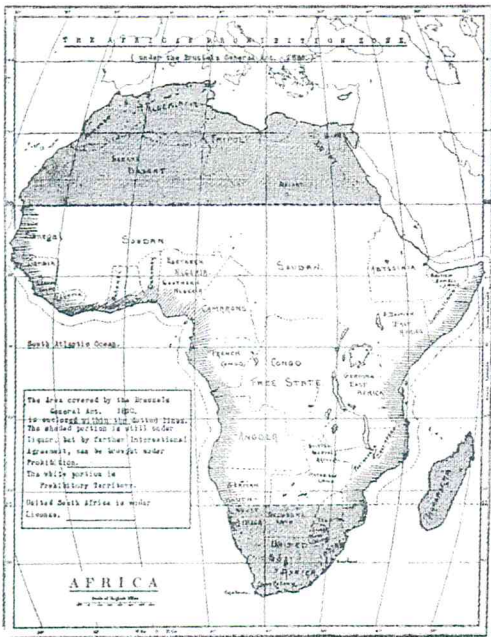


Plate 2

Alcohol and the colonial era: anti-alcohol campaigns

Left: The British and American temperance movements initially had high hopes from the Brussels General Act of 1890, effective in 1901, an agreement between the colonial powers which provided for prohibition of distilled spirits for the "native population", or otherwise a minimum tariff. The map of the "African Prohibition Zone" is from a temperance study (Hayler, 1913:202). *Right:* "Mahatma Gandhi driving liquor from India", poster, c. 1921. Gandhi's "Non-cooperation movement" for national independence "placed the demand for the prohibition of liquor at the cornerstone of his political structure" (Sinha, 1922:200-201).

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involved, mixed with whatever pre-colonial beverages and drinking practices may have existed.

One exception to this is that it was not until well into the 19th century that techniques were developed for making a palatable European-style beer in hot climates. It was thus in the 19th century that breweries for European-style beer were first established in many colonies, using equipment, techniques and often supplies from the colonizing country. For example, the first breweries were set up in Brazil in 1853 (Carlini-Cotrin, 1999), in Zimbabwe in 1898 (Jernigan, 1999), and in China in 1900 (Xu and Bao, 2000). Elsewhere, the first breweries are a more recent phenomenon; in the 1930s in Malaysia (Jernigan and Indran, 1999), in 1949 in Nigeria (Gureje, 1999), and in 1952 in Papua New Guinea (Marshall, 1999). In the latter half of the 20th century, European-style beer became more popular worldwide, and large transnational corporations have established new breweries (or bought out old ones) across the globe (Jernigan, 1997).

The colonial past leaves strong marks on the alcohol situation in many parts of the developing world today, as well as in the "fourth world". This is not only a matter of the alcoholic beverages which were introduced and often became indigenized, but also of persisting regulatory structures for alcohol production and sale, and legal provisions to deter or reduce problems from drinking. Particularly where there was prohibition of some or all alcohol to the indigenous population, in the immediate post-colonial era drinking often carried over its cachet of elite status, while taking on a symbolism also of personal and collective emancipation and autonomy (laHousse, 1988). In many places, these symbolic values still influence behaviour today.

Emerging structures of the global order

Presently our world is experiencing a rapid historical transformation. In his consideration of modern world history, Eric Hobsbawm (1995:6) states that the twenty-five or thirty years following the Second World War "probably changed human society more profoundly than any other period of comparable brevity". In the perspective of world history, this period can be seen as a watershed that brought to a close the long era during which the overwhelming majority of humankind gained its livelihood from agriculture. Seen in retrospect, the third quarter of the 20th century appears as a sort of Golden Age, a time of unexpected and uniquely fast economic growth, accompanied by wide-reaching processes of social and cultural change. In contrast, the last quarter of the 20th century was characterized by recurring economic and political crises in various parts of the world, serious environmental problems, and widespread insecurity about the future. In this period, parts of the developing world — notably much of Africa — actually lost ground economically. Easy assumptions that a rising tide would float all boats gave way to a recognition that the gap between rich and poor was often growing, both within societies and in terms of the contrast between the developed world and the poorest countries.

In this same period, the outlines of a new global economic and political system, a world of increasingly integrated production systems based on a new global division of labour, have begun to emerge (Dicken, 1998). The simultaneous emergence of the Internet, which within a generation has grown, in interaction with the global economy and world politics, into a world-encompassing system,

further underscores the division of world into two. Providing instant communication for financial transactions and other kinds of information, the Internet integrates global capitalism, bridging differences in time and place. On the one hand, the constant flow of decisions that are made and transmitted through the Internet essentially governs the world economy and politics and deeply affects the lives of the people within their ambit. On the other hand, there are the people, in the developing as well as the developed world, who have become irrelevant from the viewpoint of the dominant economic interests of our time. These people are, in Castells' words, "bypassed by flows of wealth and information, and ultimately deprived of their basic technological infrastructure that allows us to communicate, innovate, produce, and even live, in today's world" (Castells, 1996:74). They have no escape from their condition as long as the rules of the system remain unchanged.

At the same time, economic and political developments have modified the relationships between various regions and financial centres and blurred older oppositions between centre and periphery or "North" and "South". The notion of the Third World, in particular, has lost its analytical value. This is true, firstly, in the sense that the collapse of the Soviet Union brought down the global frontier line between capitalism and socialism, which formed the main axis of politics in the post-World War II era. This is also true because of the highly divergent economic development in the countries that were considered as part of the Third World a generation ago. Singapore's GNP per capita is one of the highest in the world, South Korea is now a member of the OECD group of wealthy nations, and all the larger South American countries belong to the upper middle income group of the World Bank classification.

Economic trends

In the present context, however, we take a wide view of developing societies, irrespective of their economic progress or their position in this global division of labour and information flow. It turns out to be quite important to consider what happens to alcohol and drinking during the rapid industrialization, as in the case of the "Asian tigers" and other newly industrialized countries. This means that one has to deal with a highly heterogeneous assemblage of societies, geographically as well as economically and culturally. For an overview, in order to gain some understanding of this geographical and economic diversity, it seems advisable to look at three regions – Asia (excluding Japan), Central and South America, and Sub-Saharan Africa – separately, without forgetting their inter-country and intra-country differences.

Much of Southeast Asia has been characterized since the 1960s by consistently high rates of economic growth and rapid social transformations. Financial crises in the late 1990s somewhat blurred the picture, raising doubts about whether the "Asian miracle" can be sustained. Most experts seem to think, though, that these difficulties are temporary and that Southeast Asia, together with China, is on its way to becoming a major powerhouse in the global economy.

Several South American countries have tried to match the Asian success story, but the record is mixed. After rapid economic growth until the middle 1970s, based at first on exports of primary commodities and then on import-substitution industrialization, came the "lost decade" of the 1980s, with debt crises that forced

the countries to adopt austere economic policies imposed by international financial institutions. In Mexico, for instance, the Gross National Product (GNP) per inhabitant had been 32% of that of the United States in 1980, but had fallen to 14% by 1990; the ratio was still roughly the same at the end of the 1990s. Inequality between the poor and the rich in Mexico, which had been falling before 1982, has increased since then (Bolvinnik and Hernández Laos, 1999). In 1998, 48% of the Mexican population lived below the poverty line, little changed from the figure in 1989; 19% lived in extreme poverty (Comisión Económica, 2000:40, 42). So far the stake of their technology and infrastructure does not usually allow South American countries to compete successfully on the world market of high value-added manufactured goods. Brazil and Mexico, with their natural resources and large domestic markets, have made substantial progress in manufacturing, and Venezuela can rely on its oil, but on the whole widespread poverty shrinks potential domestic markets, and economic survival in the global competition requires cutting costs on labour, social welfare, and environmental protection. In parts of Latin America, as in parts of Asia, the illicit drug trade provides a significant source of income, derived from developed societies. Recent financial problems have added to the uncertainty concerning future prospects in Latin America.

Sub-Saharan Africa presents the saddest stories of development. After a rapid growth in the 1960s and a moderate increase in the 1970s, industry collapsed in the 1980s, and even agricultural production has lagged behind the 3% annual population growth rate, leaving survival in most African countries dependent on international aid and foreign borrowing. The structural adjustment policies imposed by international financial organizations have mostly failed, according to various evaluations. Some countries, especially Nigeria and Zaire/Congo, possess valuable resources, but the use of earnings has served neither the well being of the people nor the development of the country. Africa has also been especially hard hit by the AIDS epidemic. According to UNAIDS (2001), 70% of those living with HIV/AIDS reside in Sub-Saharan Africa. This is expected to have a dramatic adverse economic effect in the coming decade. In Botswana, for example, per capita income will fall by 8-10% in the next 10 years because of HIV/AIDS, and the income of the poorest households by 13%, according to recent projections (Greener, 2000). Famines, epidemics, violence, civil wars, massacres, mass exodus, and social and political chaos were the visible signs of Africa's plight at the close of the 20th century.

Social trends

Economic globalization has brought about dramatic and widespread social transformations, especially in the developing world. It is always difficult to find out what is happening in society, whether at its grassroots or in its corridors of power, even in the best-documented societies. In developing societies these difficulties are compounded by a lack of adequate statistical services and of academic as well as market and public opinion research. The ethnographic record on the contemporary reality of the developing world also remains spotty. However, we single out here what seem to be some of its most salient structural aspects, and consider how they may relate to the arena of drinking and alcohol problems.

Increasing inequalities

For many people in developing societies, undoubtedly, the conditions of life have improved. Development indicators show that, on average, and despite the pressures created by rapid population growth, infant mortality has diminished and life expectancy has gone up. Educational levels have risen more or less worldwide, and income statistics suggest that living standards have improved in many parts of the world.

At the same time, there is more inequality in the world than a generation ago. The gap between the rich and poor countries has widened substantially, and the differences between those developing countries that are accomplishing a transition into an industrial economy and those that are not have become more accentuated. As regards inequality within countries, the picture is less clear-cut. Industrialization usually signifies the emergence of a middle class and a shift from subsistence agriculture to better paying urban jobs. In fact, available data suggest there is decreasing economic inequality in countries like India, Malaysia, Hong Kong, Singapore, Taiwan and South Korea, but increases in Brazil, Argentina, Venezuela, Bolivia, Peru, and Thailand (Castells, 1998:81).

Yet overall, the number of people in the world who subsist on less than the USD \$1 per day international poverty line, as defined by the World Bank, has been increasing. According to the Human Development Report, of these 1.3 billion people, 550 million live in South Asia, 215 million in Sub-Saharan Africa, and 150 million in Latin America (Castells, 1998:82). For these populations, poverty, even misery, appears ineradicable.

Despite all the geographic, economic and sociocultural differences among the developing societies, there is thus a structural aspect common to nearly all of them: the social reality of the developing world is deeply divided, far more so than in affluent industrial societies. In nearly every developing country, unless it is in total disarray, there is the elite that governs the country and is connected to the global economy. And, depending on the extent of industrialization, there is also the middle class. But the majority of the population are poor people either working in cities and living in slums and shantytowns, with their congestion, squalor and lack of basic amenities, or trying to eke out their livelihood in the countryside.

Socioeconomic divisions play out in complex ways in drinking patterns and problems. In most developing societies, economic realities constrain alcohol consumption by much of the populace, limiting both the frequency of drinking and the choice of beverage. On the one hand there are the Western-type alcoholic beverages that are imported for the elite, and produced locally, in cheaper versions, for the middle-class. On the other hand are the traditional fermented or brewed products (Haard et al., 1999) and their distillates, often illegally manufactured: East African *ponbe* and *chang'aa* and West African palm wine; *pulque* and *chicha* in Latin America; toddy, *samsu* and arrack in South and Southeast Asia. Whether because of the colonial heritage or as a reflection of tenuous distribution networks (Schatzberg, 1980), in developing-society contexts, access to alcoholic beverages, and in particular to Western-style beverages, is often defined as a status marker. In many cultural situations, an improvement in the economic situation of the poor is thus likely to bring increased drinking, often involving more consumption of higher-prestige European-style beverages. This phenomenon, which historically also accompanied economic development in many industrial societies, can be seen in the recent history of drinking in Japan, South Korea and China, where increased prosperity even among poor people has been accompanied by dramatic increases in

alcohol consumption.

Urbanization

One of the truly dramatic changes in the latter part of the 20th century was the shrinkage of peasantry and rural labour. This resulted from increasing agricultural productivity, which created a push away from rural areas. The other side of the coin has been rapid urbanization, which has created megacities and urban agglomerations in every major developing society — places like Mexico City, São Paulo, New Delhi and Shanghai, with their concentrated poverty and uncontrolled sprawl, congestion and pollution.

For migrants this is a new world, where traditional networks of mutual obligation and custom come under heavy strain. Unemployment is endemic, especially in the poorest countries, and migrants are forced to live by their wits, trying to earn a livelihood as petty traders or to find some other means to fit into the networks of the informal economy.

The effects of migration to the city on drinking patterns and problems depend considerably on the traditional culture of drinking in the countryside. Studies of developed societies suggest that where there has been an established pattern of heavy drinking in association with agricultural labour, as in the wine cultures of southern Europe, the drinking at least of adult men may be reduced in the wake of the move (Sulkunen, 1989; Room, 1982). More commonly, however, poverty, weak distribution networks or cultural proscriptions have held down drinking in the countryside, so that movement into the urban cash economy and into the greater anonymity and autonomy of urban life often is accompanied by a rapid increase in heavy drinking occasions. For instance, within five years of the move, Mexican male immigrants to the US, had greatly increased their alcohol consumption (Gaetano and Medina Mora, 1988; see also Vega et al., 1999).

The spreading of slums and shantytowns around the cities of the developing world should not, however, make one forget that large parts of the developing world are still predominantly rural. In China the proportion of the population which is rural is 70%, in India 73%, and in Sub-Saharan Africa 69%, whereas Latin America with its 26% is far more urbanized (World Bank, 1997:114-116). Yet urbanization continues relentlessly, and also brings changes in the countryside, which becomes dependent on the city and its industries, and on the earnings of the migrants. When the migrants return for a visit or for longer, they bring their urban ways with them.

Changing gender roles

Accompanying the increase in urbanization, involvement in wage labour, and revolutions in transportation and communication, relationships between men and women have begun to alter nearly everywhere. Yet traditional male attitudes, be they Confucian or macho, are still very much in evidence in much of the developing world. While these attitudes conflict with ideas from Western feminism, it seems that the waves of Western feminism have at most reached educated urban middle-class women in developing societies. It is primarily structural changes which are changing women's position in society and which have made visible their vital role in social development. For instance, in newly industrializing countries, employers in export industries often prefer female to male labour, regarding it as cheaper and more docile. Elsewhere, especially in Sub-Saharan Africa, the exodus

of men to cities in search of work has in practice made rural women heads of families, leaving them to take care of family and subsistence farming. The changes thus often collide with traditional male attitudes and expectations, and they create tensions, strains on family life, and emotional insecurities for women and men alike, although in the long run the strengthening of women's economic and social position will undoubtedly increase humankind's capacity to cope with its problems.

These changes and tensions are often manifested in the arena of drinking and alcohol-related problems. In many traditional societies, notably in Africa, women were (and in some places still are) the producers of homemade alcoholic beverages, even though men were and are the primary consumers (Colson and Scudder, 1988; Maula, 1997). But as women have entered the wage economy, those who are younger, better educated and more successful are increasingly to be found drinking in public settings, and this has meant "that gender and age are now differently constructed in acts of drinking" (Suggs, 1996:606). As such "reconstruction" of the meanings of drinking occurs, women's age-old role as guardians of men's drinking has also begun to shift, particularly in the light of their own drinking.

Gender conflicts concerning drinking, however, remain strong in many developing societies, and are often exacerbated by changing circumstances. Many of the strains between men and women that play out in drinking contexts are graphically illustrated in Christine Eber's poignant accounts of alcohol use in Highland Chiapas, Mexico (Eber, 1995; 2001). And they are echoed as well through many other parts of the developing world. For example, Nero (1990) describes the relationship between drunkenness and domestic violence, in the changing circumstances of Palau, Micronesia. Another manifestation of the shifts and strains in gender relations around drinking are the women's prohibition movements to curtail problems from men's drinking in India (Saxena, 1994; and see Chapter 8 below) and Chuuk, Federated States of Micronesia (Marshall and Marshall, 1990).

Children and young people

One major demographic difference between the developing and the developed world is the age distribution of the population. For a visitor in a developing country, the sheer number of children and young people around is striking. The emergence of youth as a distinct social category is a global trend. This has mainly resulted from the expansion and lengthening of formal education, creating an enormous gap between generations. Political radicalism, always anti-authoritarian and usually leftist, has been one of its visible signs. It has flared up not just in Paris, Seattle and on American campuses, but also in such places as Mexico City, South Korea, Tien An Men Square in China, Nairobi and Djakarta. As Hobsbawm (1995:298) remarks, in dictatorial countries the students are "the only bodies of citizens capable of collective political action."

Another highly visible aspect of the emergence of youth as a social category is that it has created a global market for the entertainment industry and popular music, propagating Western ideals and values and suggesting new role models and consumption patterns. Its inspirations and performers may nowadays come from anywhere in the world, but more often than not they are recycled by U.S.-based multinational corporations, providing the stuff from which youth cultures around the world are built up. These reflect the needs and aspirations of all those



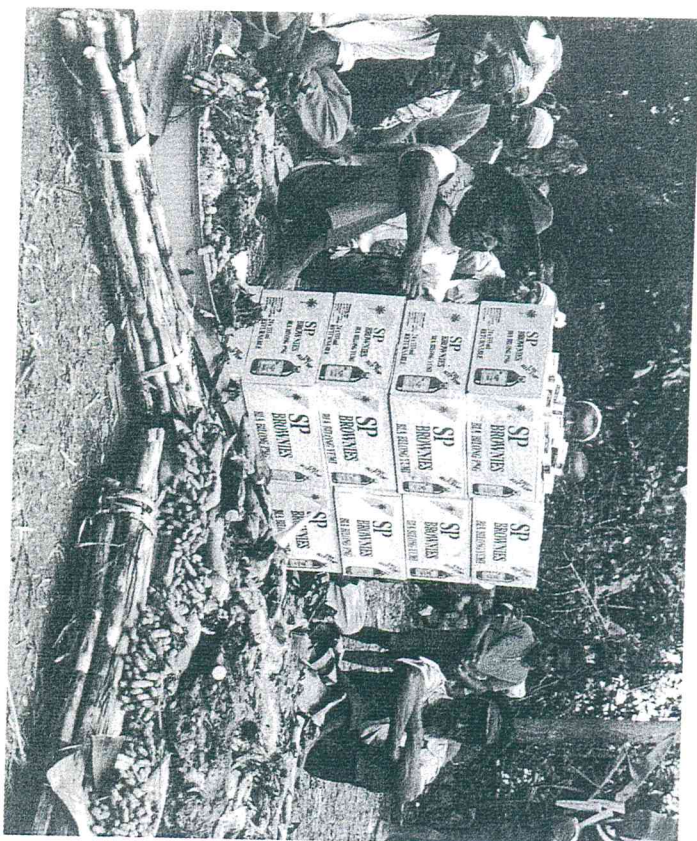
Photographer: Alison Wright, Corbis.



Plate 3

Alcohol and street children

Top: Street children on the Kalamati Bridge, Kathmandu, Nepal, drinking alcohol found while rag-picking. *Bottom:* Children selling beer at an open roadside market, Ibadan, Nigeria. Underage selling is illegal, but the law is not enforced.



Photographer: Michael O'Hanlon.

Plate 4

"Alcohol beverages easily take their place in the *bricolage*"

Cartons of beer are incorporated into a local interclass exchange of presents, Papua New Guinea highlands, 1980. The person seated to the left of the cartons is receiving a return gift of beer and food from his *Omingar* "source people" (O'Hanlon, 1993). The beer has often replaced pork in these exchanges.

young people who have no established place in the social order and who face an uncertain future. Traditional rites of passage have often become mere relics, and youth cultures have replaced them as a means to distance oneself from one's family and establish one's identity.

In many places, traditional societies were often heavily age-graded, with access to alcohol reserved for mature males. As youth become emancipated from these older systems, the age of initiating drinking tends to fall. Among middle-class youth, experimenting with drinking and drunkenness is well under way by the mid-teens, in developed societies (Jernigan, 2001). Mass media programs associate drinking with cosmopolitan young adult lifestyles. Drinking and heavy drinking are often taken for granted in the frequently gritty lyrics and ambience of popular music.

Education and the consumer society do not, however, reach all children. The economic circumstances of the family may make it impossible to keep their children in school. Children may have to work for their own living, or to support the adult members of their family. Child labour in factories and sweatshops or in the streets is a regular aspect of the workforce in many countries. Street children providing various services, or resorting to begging and petty crime, seem to be part of the urban milieu in most big cities of the developing world. According to Noto et al (1998), 77% of Brazilian street children between the ages of 15 and 18 drink heavily. The extent to which drinking is part of the life of such children probably varies with the cultural circumstances. At a minimum, they are likely to be exposed to the adverse effects of others' drinking.

Changing identities

Singling out just the above four aspects of social transformation should not allow one to forget that other processes of change are taking place as well. Industrialization is likely to create industrial working classes demanding workers' rights and labour unions, as well as educated professionals, eager to consume and longing for a more liberal political atmosphere. And inequalities feed resentments, which often fuel ethno-religious nationalisms. We live in a highly unstable and inflammable world.

In conditions of rapid social change, establishing and maintaining one's identity, that is, making sense of one's life, becomes problematic (Castells, 1997). Traditional communities have dissolved; old norms and values are no longer valid in neighbourhoods where different ethnic groups often live side by side. Contemporary life in developing societies could perhaps be characterized in terms of *bricolage* a mixture, in variable proportions and ways, of Western consumption patterns and traditional customs and ways of life. The elite and the middle class adopt new consumption items as status symbols, while poor segments of the population use anything that is available to provide their basic means of existence.

Alcohol and other drugs easily serve as symbolic arenas in which to conduct and express the search for identity. The emergence of new contexts for alcohol use does not in itself tell anything about the quantitative trends in alcohol consumption. There are too many other factors at play, especially economic circumstances. But it does tell something about the changes in styles of drinking and in the meanings attached to it, and, accordingly, about changes in the consequences of drinking. Despite all the economic and cultural diversity in the world, there appear to be some aspects that are common among highly differentiated contexts of alcohol

use. There has been a definite shift from communal to more individualistic patterns of alcohol use. Tradition and established customs tell people less than in times past where, when, and how to drink; today, the choices are left more to the individual drinker.

In city life, drinking places like African *shebeens*, Mexican *pulquerias* and *cantinas* or Brazilian *botecos* provide a "home away from home", a place to get together with others from one's village or region. They may serve as islands of stability and sociability, amidst both the individualistic conspicuous consumption of the middle classes, and the new and often urgent and violent struggle for survival of the underclasses in the new megalopolises. Thus the traditions of communal drinking assume new forms and functions, and as we shall see in the next two chapters, cottage industry or industrialized production provides urbanized and commodified versions of traditional drinks.

Conclusion

In our times, it is extremely rare to discover a drinking culture unbrushed by the winds of change. Whereas production and consumption of alcoholic beverages were once peculiar to specific locations, particularly since the colonial era certain beverages at least have diffused around the world. As incomes and access to a cash economy and industrially produced alcohol have increased, drinking has tended to increase as well.

Trade winds have brought not only beverages but also cultures and cultural change. Urbanization, revolutions in transportation and communications, increasing articulation of local and global economies and resulting involvement in wage labour and a new global division of labour, changing gender roles, and growing youth cultures and distance between the cultural experience of the young and their elders all influence the patterns of drinking in developing societies. Alcoholic beverages easily take their place in the *bricolage*, whether as carriers of cosmopolitan images or as a part of traditions. The choice to drink, of how much to drink, and of which beverage, and the choice of whom to drink with, in what situation, all become means for claiming and living out an identity.

The next three chapters explore these changes in greater depth. We move from the general to the specific, marshalling the available data to fill in the picture of alcohol in a changing world. We first examine changes in the levels of alcohol production and consumption in developing countries. We then move on to the changes that have taken place in the nature and societal treatment of alcohol itself, as it has moved beyond the boundaries of the local and the communal to the realm of the global and industrial. In Chapter Five, we review the substantial survey and other evidence that documents in more detail the changes in drinking patterns to which we have called attention thus far. We will then be ready to assess the implications of all these changes for alcohol's role in the health and safety of the peoples of the developing world.

Chapter Three GLOBAL PATTERNS AND TRENDS IN ALCOHOL PRODUCTION AND CONSUMPTION

Within the *bricolage* of life at the end of the 20th Century and beginning of the 21st, how have patterns of production and per capita consumption of alcohol changed? As indicated in Chapter Two, nearly every trend affecting society at large has had an impact on alcohol cultures. Industrialization, urbanization, changing age structures of populations, globalization of cultures and commodities, the rise of new middle classes and elites are all reflected in the ways in which countries and cultures produce and use alcohol. This chapter will describe what is known and discuss what we do not know about how production and per capita consumption of alcohol are changing.

Industrialization brought in its wake changes that have profoundly altered human life, and industrialization has affected the social position of alcohol as well. In the early 19th century the level of alcohol consumption was high in most countries of Europe and North America. It began to decline towards the end of that century, and this decline continued throughout the period between the two world wars. This trend was reversed after the Second World War, and increasing consumption was recorded from the late 1940s to the middle 1970s. This was the period of Hobsbawm's "Golden Age" of unexpected and uniquely fast economic growth accompanied by wide-reaching processes of social and cultural change (Hobsbawm, 1995), in nearly all countries that can provide reasonably accurate statistics. In contrast, the last quarter of the 20th century was characterized by recurring economic and political crises in various parts of the world and insecurity about the future. Accompanying this, alcohol consumption levelled off, or even declined, in a number of countries after the late 1970s or early 1980s.

These "long waves of alcohol consumption", as they have been called, have been most pronounced in Northern and Central Europe and in North America (Mäkelä et al., 1981b; Sulkinen, 1976). In the countries where wine has traditionally been used as a daily nutrient, they have taken place on a different timetable. In France, for example, consumption remained at a relatively high level until steady decline started in the middle 1950s, mainly because of the diminishing popularity of wine. In other parts of the world, there have been historical changes in alcohol intake as well, but available statistical sources do not tell us much about trends or magnitudes of change.

Three general remarks can be made about these historical macro-level changes in alcohol consumption (Mäkelä et al., 1981b). First, they are clearly historical,

anchored in particular historical times and conditions, but nonetheless attesting to the fact that alcohol consumption patterns do change over time. Second, it is significant that similar trends and reversals of trends have been recorded roughly within the same period in countries at different stages of economic development and representing a wide variety of alcohol cultures. Third, it is worth observing that these long-term changes in alcohol consumption are affected by changes in affluence, amount of leisure time, social misery, industrialization, and urbanization. But they bear no simple or uniform relationship to them. The effects of these factors vary, depending on the historical and societal context of alcohol use. Poverty appears to be the most consistent limiting factor on alcohol use, but greater affluence does not invariably lead to more drinking. Religion is another important influence, in view of the different stances toward drinking of the major world religions.

Estimating alcohol consumption

Our statistical base for estimating alcohol consumption in recent years is certainly greater than what is available for earlier eras. Nonetheless, the measurement of alcohol consumption remains an inexact science at best. Most estimates of alcohol consumption rely on data on recorded alcohol production or sales. While there may be fairly reliable data in some developed countries, data sources for developing countries are often scarce, or come from estimates made by international public or private organizations. One of the most comprehensive sources is the data bank of the United Nations Food and Agriculture Organization (FAO). It consists of annual figures on the production, trade, and consumption of foodstuffs, including alcoholic beverages, beginning with 1961. These figures are largely based on data supplied by individual countries, the quality of which varies. In most Islamic countries, for example, alcohol does not officially exist, and the statistics tend to show zero consumption when undoubtedly there is some.

In both developed and developing countries, what is recorded as sold is not quite the same as what is consumed. Exports and imports need to be taken into account, as does alcohol that is not produced for human consumption. An even larger issue than these in many developing countries is estimating the amount of alcohol produced and/or sold informally. This is covered partially if at all in the FAO data. Before reviewing current consumption levels and recent trends, then, we need to give brief consideration to these problems of measurement.

Relationship of production and recorded sales to consumption

Approximately 8% of the recorded production of alcoholic beverages enters international trade (calculated from FAO, 2001). Except in a few island countries, then, most alcoholic beverages are domestically produced. Conversely, in most countries, the largest part of alcoholic beverage production is sold on the home market. Accordingly, any increase in production is likely to find much of its market domestically. Among commercially produced beverages, this is most likely in the case of beer, since only about 5% of beer production is traded internationally, whereas approximately 11% of spirits production and 22% of wine products find their way into global trade.

Apart from production for alcoholic beverages, ethanol is also produced for fuel and for a variety of industrial purposes (e.g., Demetrius, 1990). But fortunately for our purposes here, the product flows of alcoholic beverages and of other ethanol products are almost entirely separated. This separation is usually

enforced by both custom and regulation, reflecting safety, purity and aesthetic concerns about the potability of non-beverage alcohol, as well as concerns of authorities about revenue collection.

Beer is usually consumed within six months of its production; even commercially produced beer in cans or bottles goes stale. In contrast, distilled and fortified alcoholic beverages may be stored for long periods, and table wine may also be aged before sale. Wine and spirits produced in one year are therefore often not consumed in that year. However, stocks carried over from year to year do not substantially attenuate the connection between level of production and level of consumption.

Alcoholic beverages that are sold are usually consumed rather soon thereafter. For the most part, then, the level of alcoholic beverage consumption is closely linked to the amounts produced, although when production or sales statistics are used as a surrogate for consumption in a society, corrections for imports and exports are usual and desirable (WHO, 2000a).

Particularly in developing societies, much alcoholic beverage production may not be recorded in the official statistics. Much of it is produced at home or as a cottage industry in the informal economy. This mode of production is used primarily for fermented beverages in Africa and for both fermented and distilled spirits products in Latin America and Asia (Haard et al., 1999). Illicit industrial production and smuggling also contribute to the unrecorded production. The size of unrecorded production may be estimated from agricultural inputs or from data from local customs, public health or police authorities (e.g., Partanen, 1991:46-50; WHO, 1999), but the estimates tend to be very approximate. When there is an increase in industrial production of alcoholic beverages, recorded in the official statistics, this often to some extent replaces this unrecorded production. But this should not be assumed; consumption of the new production may, to a greater or lesser extent, be added onto existing consumption (Mäkelä et al., 1981b:8-16).

Estimating unrecorded production and consumption: some examples

The magnitude of aggregate annual alcohol consumption is usually obtained from statistics on alcohol sales, compiled in connection with taxation. Or it can be equated with the total supply or availability of alcohol, which is calculated by adding imports and stocks to and subtracting exports from production figures, as has been done to derive many of the graphs in this chapter, where data were available.

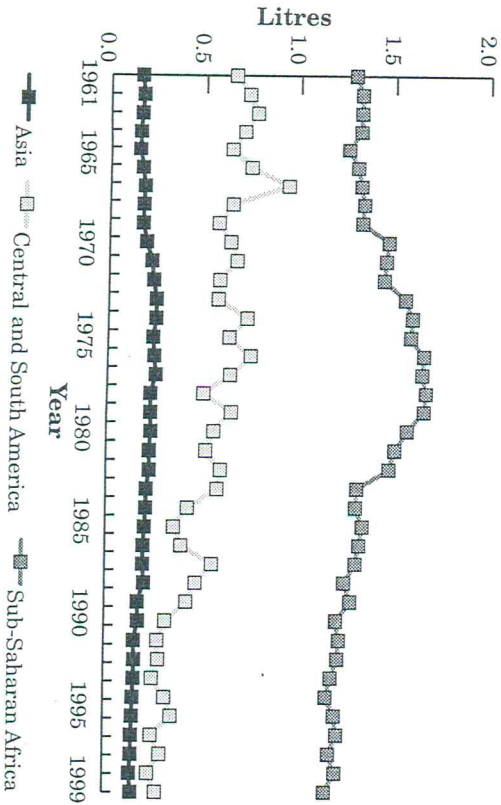
The problem with these statistics, however, is that they almost never achieve full coverage. Unregistered items include household production, illegal brewing and distilling, smuggling, and tourist alcohol, all of which must be estimated separately. In spite of many technical difficulties, it seems that for many industrialized countries estimates of total annual alcohol consumption can be made that are not very far off the mark. In developing countries the difficulties in doing so are of a different order of magnitude, mainly due to the extent of home and cottage industry production of alcoholic beverages, whether legal or illegal.

Registered consumption most frequently falls into one of the three most common international categories of alcoholic beverages: beer (from barley), distilled spirits, and wine (from grapes). In addition to these categories, the FAO estimates production of beers from maize, sorghum or millet; ciders and fruit wines; and alcoholic beverages fermented from wheat or rice. Although such estimates are subject

to all of the caveats given above, Figure 3.1 below (data from FAO, 2001) gives some sense of the differential importance of these latter beverage categories for the three developing macro-regions (East and Southeast Asia, Central and South America, and Sub-Saharan Africa). Beverages falling outside the most common global categories of barley beer, distilled spirits or grape wine are important in Sub-Saharan Africa, but are declining into relative insignificance in the other two macro-regions.

Rough estimates of the magnitude of unregistered consumption have been made for some African countries. On the basis of a survey carried out in 1986 in coastal and Dar es Salaam regions, it was estimated that the proportion of the unregistered consumption in Tanzania was about 90% (Kilonzo 1989:598). Even with much detailed work by Nout (1981; see box), the estimates obtained of the magnitude of unregistered consumption are subject to considerable uncertainty. If the real magnitude of unregistered consumption in Kenya were only one half of Nout's estimate, unregistered consumption would be 71% of the total consumption in Kenya. If the real magnitude were twice Nout's estimate, its share would be 91%. Another estimate based on a "commercial survey" in 1994 gives a result of 85% of the absolute alcohol consumed being from unregistered consumption (Willis, 2000). It seems clear, in any case, that most of the alcohol in Kenya comes from unregistered sources, that is, from the informal sector of production

Figure 3.1
Adult (15+) Per Capita Alcohol Consumption of Alcoholic Beverages
other than Barley Beer, Spirits or Grape Wine, by Macro-Region



In Kenya, Nout (1981) made a major effort to get estimates of the consumption of traditional African beverages and illegally distilled *chang'aa* for the year 1978. This was based on the system of about 10,000 licensed traditional beer halls in Kenya. Visits were made to scores of randomly chosen beer halls around the country, and their operators were interviewed. This exercise yielded data on the beverage types that were sold and the average daily sales. In addition, the operators were asked to give their estimates about the rate of illegal trade and home consumption taking place in the vicinity of the beer hall, expressed as a percentage of the legal trade. On the basis of this information, estimates of the total sales of various beverages were obtained. These were converted into absolute alcohol using existing or separately obtained information on the alcohol contents of the beverage types.

For *chang'aa*, which is illegally distilled liquor, a different method of estimation had to be employed. According to Nout (1981:15), *chang'aa* is manufactured by adding crude brown sugar ("Black Jaggery"), white refined sugar, or molasses to *bunaa* (maize-based beer) or its residues. The fermented mixture is distilled, and the resulting product contains alcohol from 25% up to 60% by volume. Field studies on the production process indicated that practically all *chang'aa* manufacturers utilize Black Jaggery as an ingredient for fermentation, and it is very little used for any other purposes. A detailed analysis of 25 individual cases of *chang'aa* production found that the average yield was 0.38 litres of absolute alcohol per kilogram of Black Jaggery used. The Black Jaggery industry is a scattered small-scale industry, and no official figures on the number of factories or their output are available. Rough estimates of the magnitude of Black Jaggery production have been made, however. The most recent is 50.6 million kilograms, indicating that an estimated 19.2 million litres of 100% alcohol had been produced in the form of *chang'aa*.

Estimating current consumption levels in different world regions

As part of WHO's effort to estimate alcohol's contribution to the Global Burden of Disease for 2000, a sustained attempt has been made to estimate alcohol consumption levels and proportions of abstainers for each of the 191 member countries of the World Health Organization (Rehm et al., forthcoming). The data are then aggregated to the level of 15 subregions, which subdivide the six WHO regions into groups of countries on the basis of adult and infant mortalities, with a further subdivision of one of these subregions on the basis of alcohol culture. Given the paucity of data in some world regions, estimates at the subregional level are more stable than estimates at a country level. The estimates make use of official statistics, the FAO (2001) database, the *Global Status Report on Alcohol* (WHO, 1999), and data from population surveys and expert informants.

The first column of figures in Table 3.1 shows levels of alcohol consumption as recorded in internationally available statistics. It will be seen that recorded per capita consumption varies over 30-fold between world subregions. Recorded per capita consumption is much higher in developed subregions than in the developing world. Within the developing world, recorded per capita consumption is particularly low in subregions dominated by Islamic populations and in Sear B

Table 3.1
Estimated alcohol consumption per person aged 15+ in different regions of the world, for 2000 (litres of 100% ethanol per year, population weighted averages)

Source: Jitgen Rehm (April 2002), based on estimates for the WHO Comparative Risk Analysis within the Global Burden of Disease 2000 Study. See next page for explanations; and Rehm et al., forthcoming.

WHO Region (Defined on next page)	Beverage type mostly consumed	Recorded consumption	Unrecorded consumption	Total consumption	% drinkers	Consumption per drinker
Afr D (e.g. Nigeria, Algeria)	Mainly other fermented beverages	2.3	2.6	4.9	37	13.3
Afr E (e.g. Ethiopia, South Africa)	Mainly other fermented beverages and beer	3.8	3.3	7.1	43	16.6
Amr A (Canada, Cuba, US)	> 50% of consumption is beer, about 25% spirits	8.3	1.0	9.3	65	14.3
Amr B (e.g. Brazil, Mexico)	Beer, followed by spirits	6.3	2.7	9.0	64	14.1
Amr D (e.g. Bolivia, Peru)	Spirits, followed by beer	3.3	1.8	5.1	67	7.6
Emr B (e.g. Iran, Saudi Arabia)	Spirits and beer, but scarce data	0.9	0.4	1.3	12	11.0
Emr D (e.g. Afghanistan, Pakistan)	Spirits and beer, but scarce data	0.3	0.3	0.6	10	6.0
Eur A (e.g. Germany, France, UK)	Wine and beer	11.6	1.3	12.9	85	15.1
Eur B 1 (e.g. Bulgaria, Poland, Turkey)	Spirits	5.6	3.7	9.3	67	14.3
Eur B 2 (e.g. Armenia, Azerbaijan, Tajikistan)	Spirits and wine	2.1	2.2	4.3	43	9.9
Eur C (e.g. Russian Federation, Ukraine)	Spirits	8.6	5.3	13.9	84	16.5
Sear B (e.g. Indonesia, Thailand)	Spirits	2.3	0.8	3.1	23	13.7
Sear D (e.g. Bangladesh, India)	Spirits	0.4	1.6	2.0	16	12.9
Wpr A (e.g. Australia, Japan)	Beer and spirits	6.8	1.7	8.5	82	10.4
Wpr B (e.g. China, Philippines, Viet Nam)	Spirits	3.7	1.3	5.0	57	8.8

Table 3.1 (cont'd)

All consumption levels are in litres of absolute alcohol per resident of the region aged 15 and over. Recorded consumption is derived from official or industry figures; unrecorded consumption is estimated from a variety of sources. The percentage of drinkers (drinking at all in the last 12 months) in this table averages the estimated percentages for males and females; these are derived from population surveys, where possible. Where figures for a country were otherwise unavailable, they were extrapolated from nearby countries on the basis of similarity of alcohol culture.

The regional subgroupings below have been defined by WHO on the basis of high, medium or low levels of adult and of infant mortality. WHO's EUR B has been subdivided to separate out the relatively low-consumption southern republics of the former Soviet Union (**15 Regions**: 191 WHO Member States (defined by geographical location and mortality pattern):

Afr D Algeria, Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Comoros, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Togo

Afr E Botswana, Burundi, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, Mozambique, Namibia, Rwanda, South Africa, Zimbabwe

Amr A Canada, Cuba, United States of America

Amr B Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guyana, Honduras, Jamaica, Mexico, Panama, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

Amr D Bolivia, Ecuador, Guatemala, Haiti, Nicaragua, Peru

Emr B Bahrain, Cyprus, Iran (Islamic Republic of), Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates

Emr D Afghanistan, Djibouti, Egypt, Iraq, Morocco, Pakistan, Somalia, Sudan, Yemen

Eur A Andorra, Austria, Belgium, Belgium, Croatia, Czech Republic, Denmark, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden,

Switzerland, United Kingdom

Eur B 1 Albania, Bosnia and Herzegovina, Bulgaria, Georgia, Poland, Romania, Slovakia, The Former Yugoslav Republic of Macedonia, Turkey, Yugoslavia

Eur B 2 Armenia, Azerbaijan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

Eur C Belarus, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Sri Lanka, Thailand

Sear B Indonesia, Sri Lanka

Sear D Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Maldives, Myanmar, Nepal

Wpr A Australia, Brunei Darussalam, Japan, New Zealand, Singapore

Wpr B Cambodia, China, Cook Islands, Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Nauru, Niue, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Viet Nam

and D (including India and Indonesia). In the remaining subregions (Afr E, Amr B, Amr D, Wpr B), alcohol consumption levels vary less than twofold, from 3.7 to 6.3 litres.

As noted above, estimated unrecorded consumption (second column of figures) is particularly high in the African subregions, but also consequential elsewhere. In particular, unrecorded consumption accounts for much of the total estimated consumption in the subregion including India.

The net result of adding in unrecorded consumption (third column of figures) is that total consumption in some developing country regions (Afr E and Amr B) approaches the ranges of the developed-society regions. Four other subregions — Amr D, Wpr B, Afr D and Sear B — fall in the range between 3 and 5 litres per capita. Three regions, dominated by Islamic countries or India, have estimated consumption levels of 2 litres or less.

Thus far, the statistics we have presented have eliminated children from the base, as contributing little to alcohol consumption. But, as we shall discuss in greater detail in Chapter Five, many adults also abstain from alcohol. The fourth column of figures in Table 3.1 shows that there is great variation between subregions and areas of the world in proportions that have had a drink of an alcoholic beverage in the last 12 months — that is, drinkers. The clear influence of the Islamic prohibition on drinking appears in the two Emr subregions. The proportion of drinkers is also exceptionally low in the subregion including India, and quite low in the subregion including Indonesia and Thailand. It is also estimated that less than half the African adult population drink alcohol. Only Latin America and eastern Asia and Oceania (Wpr B) show proportions of drinkers that approach the proportions in the developed-society subregions.

The last column of figures in Table 3.1 shows the impact of abstinence on consumption levels. That is, the column shows the annual consumption per drinker aged 15 and above. On this basis, the variation between subregions in consumption levels is substantially reduced: there is less than a threefold variation between the highest estimated consumption per drinker (Eur C, 16.5) and the lowest (Emr D, 6.0). Developing-country subregions that rank especially high on this measure are Afr E (16.6) and Sear B (13.7), which have consumption levels equivalent to those in developed subregions. Levels in Sear B (including Indonesia) and Amr B are not far behind.

These last figures emphasize the importance of the rate of abstainers in a country or region in how much alcohol is consumed. It seems that those who do drink in social environments where they are in a minority drink, on the average, about as much as drinkers in much "wetter" social environments.

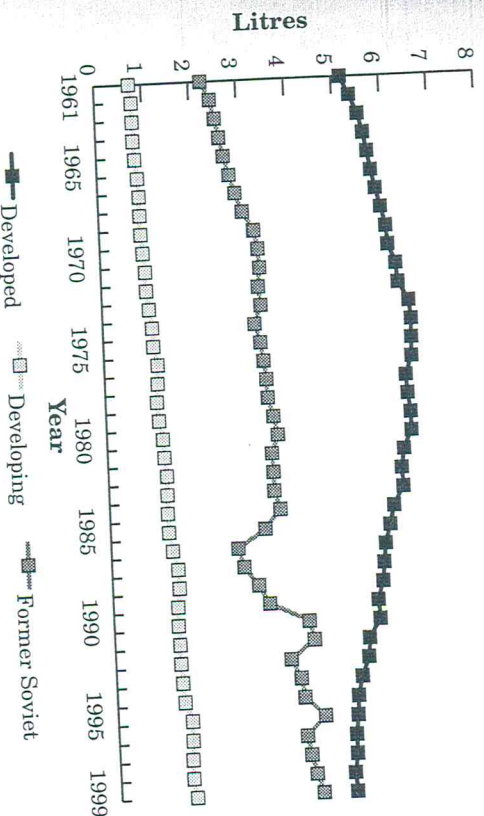
Recent world trends in recorded alcohol production and consumption

Since about 1980, the developed world, mainly consisting of Western Europe and North America, has shown stable or decreasing alcohol consumption levels. A major exception is Japan, where per capita alcohol intake continued to increase into the 1990s. The European Comparative Alcohol Study (ECAS) estimated that average annual adult (age 15 and above) per capita alcohol consumption in European countries between 1996 and 1998 varied from roughly 7.1 litres of 100% alcohol in Norway to 14.7 litres in Portugal (Leifman, 2001b). These estimates

include both registered and unregistered consumption. In the post-war period, the differences in average consumption levels among developed countries have narrowed (mostly due to a precipitous drop in wine consumption in southern Europe), with some convergence in drink preferences (Sulkunen, 1976; Mäkelä et al., 1981b; Stimpura, 1998; WHO, 1999; Leifman, 2001a). Cultural differences in drinking preferences and patterns persist, but the increased internationalization of lifestyles has smoothed them by adding new patterns of drinking to the more traditional ways of using alcohol.

The available data for tracking trends in alcohol and drinking in the developing world are even more limited than the cross-sectional data used for the estimates in Table 3.1. In accordance with WHO's *Global Status Report on Alcohol* (WHO, 1999), the data used here rely on the FAO (2001) database, and also take advantage of sources that are superior to FAO where they are available (e.g., sources within each country, or data from *World Drink Trends* [Productschap voor Gestilleerde Dranken, 2000]). As is usual in alcohol studies, consumption per capita is shown here on a base of the "drinking-age" population, that is, those 15 years old and older. To a considerable extent, this controls for the very different age distributions in different societies, and in particular for the high proportion of children in the population of most developing societies.

Figure 3.2
Adult (15+) Per Capita Alcohol Consumption by Development Status



Using these data first to look at global trends, Figure 3.2 shows the decline in consumption in the developed nations (reflected above in the discussion of Western Europe), the steady rise in consumption in the developing world, and the rise in consumption in the former Soviet countries following a dip during the anti-alcohol

campaign of the mid-1980s. Consumption in registered litres per capita remains quite low in most developing countries, and certainly considerably less than in most industrialized countries. In some countries, this is partly due to much of the consumption remaining unrecorded. Per capita figures are also kept down by the fact that, even though the figures are computed on the base of those aged 15 or older, in many cultures women drink very little in comparison to women in Europe or North America (see Chapter Five).

However, perhaps the main reason for the low consumption, where religious prohibition is not a factor, is widespread poverty. According to the World Development Indicators (World Bank, 1997, p. 31), 29% of the population in the developing world live on less than US\$1 a day, and their numbers have been increasing. Lack of buying power sets strict limits on consumption, and drinking simply becomes unaffordable. According to Mexican household budget survey data, the 70% of the population with the lowest income in that country accounts for only 47% of the alcohol consumption (Consultores Internacionales, 1998). Low averages, even if they are not spurious because of deficiencies in the data, may nevertheless conceal heavy drinking in some localities and in some groups of population. They should not be taken as an indication of an absence of heavy and problematic use of alcohol.

We will break down trends in the developing world in two steps: first, using the three macro-regions referred to in Chapter Two above; then, looking at examples of variation within these macro-regions at the country level, since each macro-region includes hundreds of millions of inhabitants, and examining trends at this level tends to obscure substantial inter-country and intra-country differences.

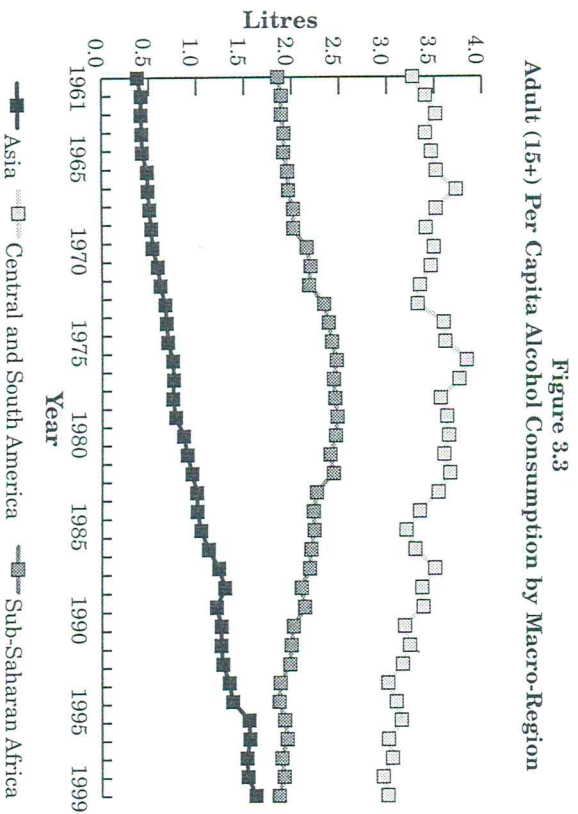


Figure 3.4
Adult (15+) Per Capita Alcohol Consumption in Selected Asian Countries

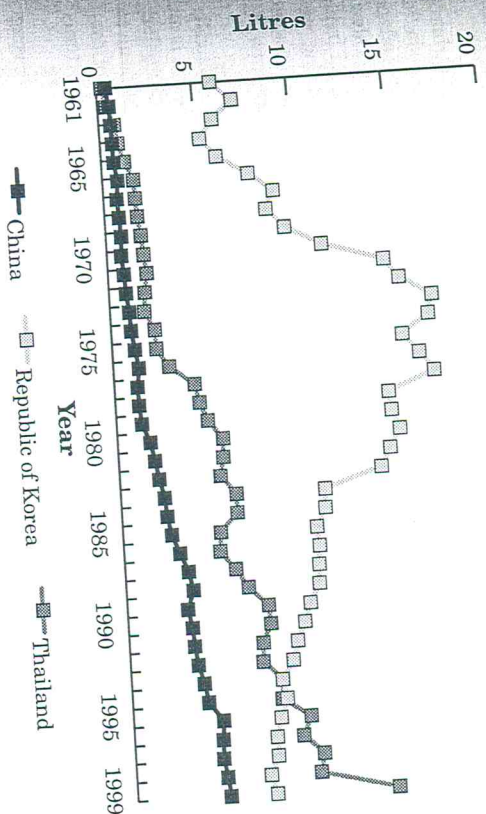
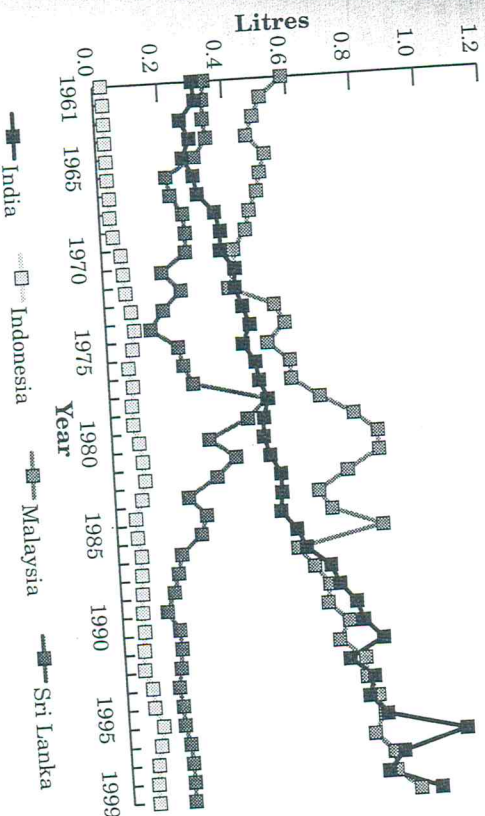


Figure 3.5
Adult (15+) Per Capita Alcohol Consumption in Selected Asian Countries



The data suggest that, broadly speaking, changes in alcohol consumption in the three macro-regions correspond to trends in their economic development (Figure 3.3). In Asia, alcohol consumption has increased very rapidly, and the rate of increase has remained nearly constant throughout the period 1961-1999. In Latin America, consumption reached a high point in 1976, while in Africa there was a considerable decline after a peak period from 1974-1982.

Examples of individual countries give an indication of the extent of variation hidden beneath the apparent smooth curves for the macro-regions. In Asia, for example, while Figure 3.4 shows that a steady pattern of growth holds for Thailand and China, and South Korea showed a very steep rise until 1977, and then a slower decline, Figure 3.5 illustrates that consumption has grown more slowly in India and (majority Islamic) Malaysia, and fluctuated at low levels in Sri Lanka and predominantly Islamic Indonesia. Thus the overall curve for the Asian macro-region is heavily influenced by China, where beer and spirits have marched steadily upward since the fall of the "Gang of Four" in 1978.

In Central and South America, Brazil, Mexico, and Venezuela, the economically most successful countries, show fairly consistent growth (Figure 3.6). Mexico is an exemplar of this trend: the principal motor of growth has been beer consumption, which rose steadily until the recession years of the 1980s, and has come back up to its former levels in the 1990s. In contrast, in Argentina and Chile alcohol consumption has fallen, as rising beer consumption has cut into longstanding patterns of wine consumption, without replacing all of its alcohol content (Figure 3.7).

In Sub-Saharan Africa, the pattern of consumption first rising, then decreasing during difficult economic times is most dramatic in Tanzania, Uganda, Zambia and Zimbabwe (Figure 3.8), but the economic difficulties for sub-Saharan Africa generally are reflected as well in the more gradual downward trends in Ghana, Kenya, Nigeria and South Africa that are visible in Figure 3.9. Gureje (1999) describes the tremendous expansion in the Nigeria's brewing capacity during the period of enforced import substitution beginning in 1978. He also estimates, however, that the country is currently using only 50% of the installed brewing capacity. A new factor in the period since the fall of Nigeria's military dictatorship, potentially depressing future recorded consumption, is the adoption of *sharia*, the system of Islamic law which forbids alcohol sales and consumption, in twelve northern Nigeria states by mid-2001 (Abubakar, 2001). Nonetheless, Nigeria's unused beer production capacity suggests that, like much of sub-Saharan Africa, if economic growth resumes, the rise in alcohol consumption may be expected to continue as well.

Conclusion

In the absence of accurate and uniform data sources for measuring alcohol consumption in developing countries, it is difficult to make definitive comments regarding trends in per capita consumption outside of the industrialized nations. The general rule seems to be that the higher the level of industrial development, the less important the informal sector becomes and the more accurate per capita consumption estimates are likely to be.

Nonetheless, the evidence available suggests that among the many factors influencing national levels of alcohol use, a country's economic fortunes and level of income are quite important. This implies that as economic development occurs, in the absence of major mitigating influences such as religious prohibitions, alcohol consumption and resulting problems are likely to climb with rising

Figure 3.6
Adult (15+) Per Capita Alcohol Consumption
in Selected Latin American Countries

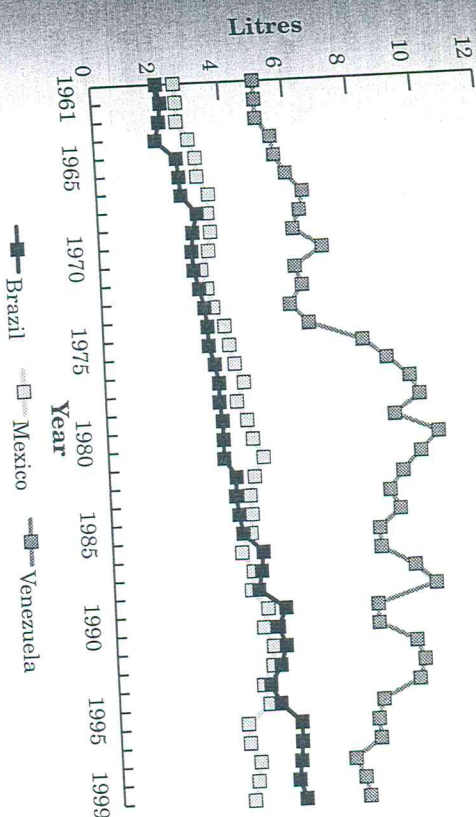


Figure 3.7
Adult (15+) Per Capita Alcohol Consumption
in Selected Latin American Countries

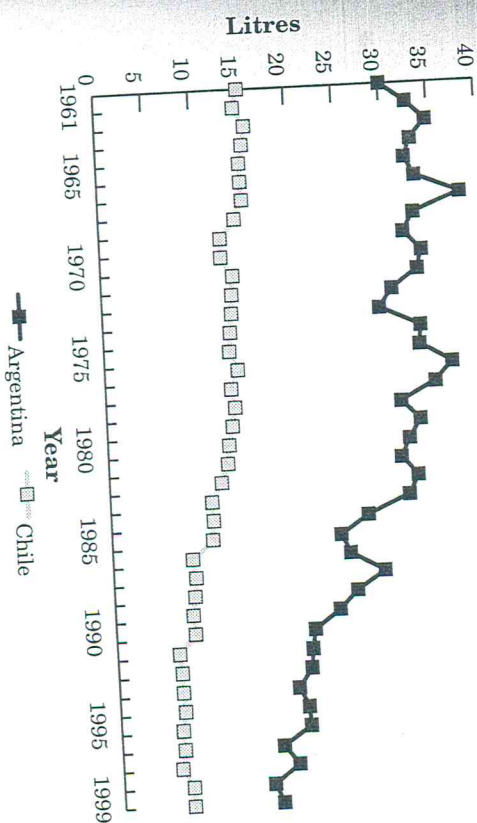


Figure 3.8
Adult (15+) Per Capita Alcohol Consumption
in Selected African Countries

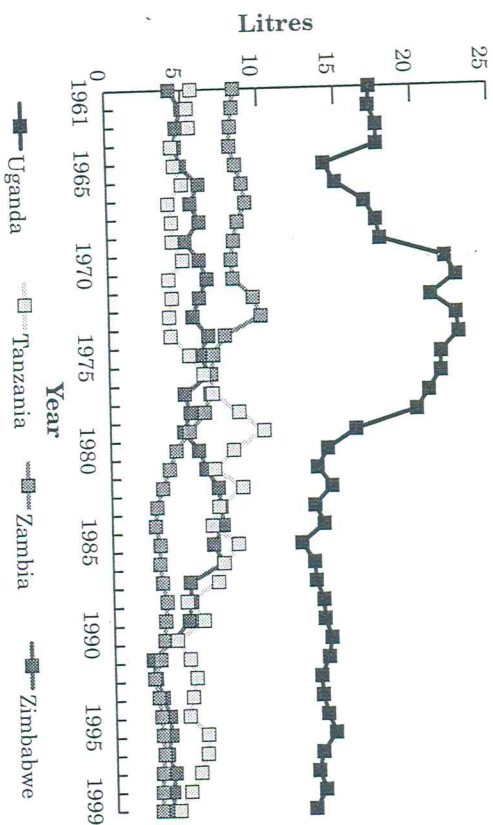
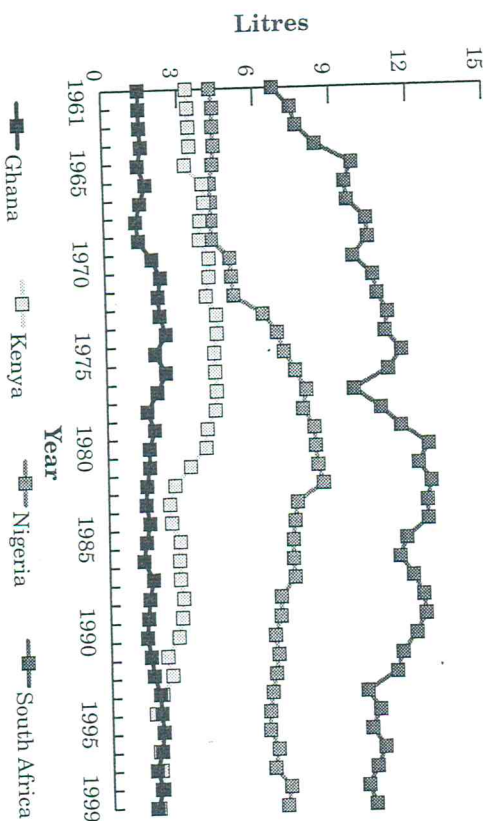


Figure 3.9
Adult (15+) Per Capita Alcohol Consumption
in Selected African Countries



As we shall see in Chapter Six, this is likely to present developing nations with new or greater levels of alcohol-related problems, and new challenges to develop effective alcohol policies to reduce or prevent them. We have now established that alcohol consumption is changing, and have made some preliminary suggestions about the direction of those changes. However, our understanding is as yet at a fairly crude level. The estimated trends in per capita consumption rest in turn on changes in beverage preferences, and in patterns of drinking. The next two chapters will explore each of these in turn, beginning with the transformations occurring in the product alcohol and its role in developing societies.

Chapter 4 ALCOHOL AS A COMMODITY IN DEVELOPING ECONOMIES

Introduction

Alcohol has an important economic role in the developing world. At the macro-level, it plays a role in the world economy, as well as in local, regional and national economies. As a commodity, it is often regulated by and a source of revenue for governments at all levels, and trade in it is subject to intergovernmental bodies and agreements. At the micro-level, it affects the family, the community and work organizations. Alcohol's economic role is complex and changing, with both positive and negative aspects.

This chapter begins by describing the diversity of processes by which alcoholic beverages are made in developing societies, and how the structures of alcohol industries and production are changing globally. These in turn affect the structure of international trade in alcohol, which in part shapes the impact of alcohol on national economies. Alcohol's role in developing economies will be explored in terms of revenues to the state, contributions to the national economy, impact on employment, and share in household budgets. Finally, in order to help us understand the impact of all these changes, the chapter attempts to assess who are the winners and the losers in the process of industrialization of alcoholic beverage production and sale that is occurring in many countries.

Alcoholic beverages as commodities

Like other consumer commodities, alcoholic beverages may be thought of in terms of a commodity chain, that is, a "network of labor and production processes whose end result is a finished commodity" (Hopkins and Wallerstein, 1986; Jernigan, 2000). The chain may be tight and simple, as with traditional beer production in an African village, in which a village woman uses grain grown in the village's fields to make beer for consumption by the men in her family. Or it may be complex and extended, as with a bottle of wine which may be made from different varieties of grapes grown in different places, and which may be the end stage of a process where the fermentation, the blending, the aging and the bottling have each been carried out in different places or even countries, using bottles, corks and labels coming from yet other places.

We can identify four commodity chains for alcohol, which arose in different

Table 4.1
Alcohol commodity chains in developing nations

	Design (recipe)	Raw materials	Manufacturing	Imports	Distribution	Marketing	Advertising
Traditional	Communally-derived	Locally-grown	Local	None	At point of production, by producer/producing community	Barter-based or ceremonial; to local communities	Word of mouth or attached to festival days, by producers and their communities
Traditional industrial	Imitation of communally-derived product, now in local private or public hands	Locally-grown	Local	None	Local or national, by private or governmental producers	Cash-based	Price and quality-oriented
Peripheral "cosmopolitan" (neo-colonial)	Originally from colonial power or trading partners, now in local private hands	Mostly grown local to point of production	Local, in core nations or in or near colonial metropolises	Mainly distilled spirits and wines	By colonial political or economic authorities, or their private assignees	Scrip or cash-based, tied to labour centers; to workers in colonial enterprises	Price and quality-oriented, by employers and/or colonial authorities
Globalized ("marketing-driven")	From global or regional transnational producers	Local, supplemented by globally-sourced inputs	Local under control of global transnationals	Mainly distilled spirits and fine wines	Regional or global, by transnational producers, their subsidiaries and licensees	Cash-based, targeting entire population via on-premise promotions, sponsorships, endorsements, holiday promotions	Culturally-embedded, "lifestyle" oriented, by global advertising agencies or their affiliates

Source: Jernigan, 2000

historical eras but which as forms of production still exist today. At opposite ends of the spectrum of commodity chains are traditional beverages and globalized commodities. Between these are two hybrids: industrially-produced traditional beverages, and locally-produced beverages that imitate the cosmopolitan character of the global commodities. Table 4.1 lays out the characteristics of these four chains for the following stages of production and distribution (drawn from Korzeniewicz, 1994): design, raw materials, manufacturing, import, distribution, marketing and advertising.

Many of the postage stamps on the cover of this book were issued to show or commemorate one or another of the forms of alcohol production. Two implements involved in the home production of traditional beer, a brewing pot and a strainer, are shown in the Lesotho stamps, along with the process of production. The République Togolaise stamp also shows a stage in traditional beer production, although the stamp was one of three actually issued to commemorate the opening of a lager brewery. Depiction of industrial production of traditional beverages is a rarity on stamps, although tequila, shown on a Mexican stamp, might be considered traditional despite its colonial origin. The Mexican stamp is also commemorating tequila's unusual success as an export product.

Stamps from Argentina, Brazil, and the Republic of South Africa commemorate a European beverage, grape wine, which was implanted in some parts of the developing world early in the colonial period. The historic distilleries shown in the stamps from Grenada and the British Virgin Islands represent a preindustrial stage in colonial production of cosmopolitan beverages. The most common alcohol subject on stamps from developing countries is a brewery, specifically an industrial brewery for lager or other European-style beer. Stamps from the République Populaire du Congo and from Cameroon offer realistic depictions of a modern continuous-process industrial brewery, while Suriname's and Costa Rica's representation of the industrial nature of the production is more abstract, and Nevis shows a more modest establishment, reflecting the relatively small population of this Caribbean island.

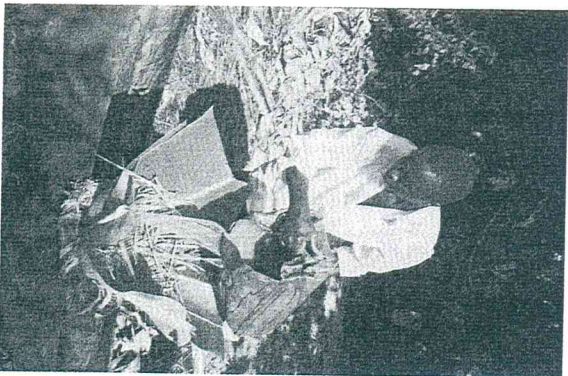
Home or craft production of traditional beverages

In most traditional societies, the "design" of or recipe for alcoholic beverages tended to be the property of the community, whether that be a family, a village or a society. The means of producing alcohol would be passed from generation to generation among those in the society designated as alcohol producers. In sub-Saharan Africa, the producers were usually women; in some other societies, the priestly caste. Raw materials for alcohol production were obtained locally, and the availability of particular raw materials determined the nature of the product. The technological level was low, so that producing in bulk or in excess of immediate needs was often impossible.

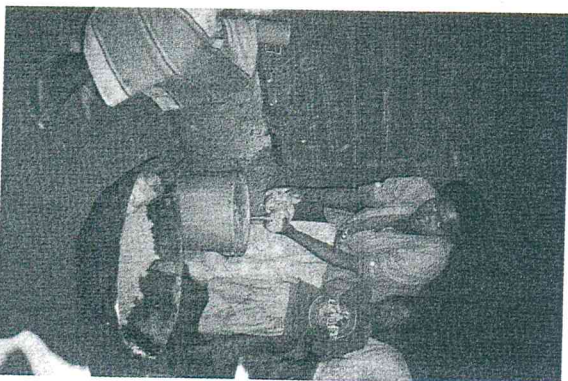
Distribution of alcohol was usually carried out by the producer or the producing family or community. Limited means of storage and transport generally meant



Photographer: Phil Schermmeister, Carbis



Photographer: Justin Willis



Photographer: Justin Willis

Plate 5

Home or craft production of traditional alcoholic beverages

Top: A Tarahumara Indian woman stirs a large pot of *tesguino*, a corn beer, Chihuahua State, Mexico. *Bottom left:* Filtering banana wine, Uganda. Large clumps of pulp are separated from the juice before the juice is put into a trough to ferment. *Bottom right:* Producing maize beer in Tanzania.



Plate 6

Industrial production of indigenous and of versions of cosmopolitan beverages: bottle labels.

Top: an Indian "masterbrew pilsner lager beer", using imported hops, for sale in Delhi. Note the mandatory warning: "Consumption of liquor is injurious to health". *Bottom left:* "Preserved natural palm wine", Nigeria; "Shake well for full nutritional value". *Bottom right:* an adaptation of a cosmopolitan beverage: Thai whisky, "distilled from the finest rice grains".

that little alcohol traveled very far from its point of production. To the extent that a market existed for alcohol, it was tied to the exchange of labor, as when drinks were brewed to celebrate the completion of the harvest or a joint work project. People knew where and when alcohol would be available by word of mouth or by the customary association of drinking with particular festivals or community events.

Industrial production of traditional beverages

In many parts of the world, there is by now a tradition of industrial production of alcoholic beverages attuned to traditional local tastes. Examples of this include *pulque* in Mexico, *pinga* in Brazil, *chibuku* or sorghum beer in southern Africa, and *makkoli* and *soju* in South Korea. As administrative units grew larger, ensuring a steady supply of alcohol available at an accessible price was a basic task of government, which tended to take control of production itself or assign it to private producers under its sway. In the case of colonial governments, taking control of the alcohol supply was often an important ingredient in establishing sovereignty over the native workforce (Van Onselen, 1982; Crush and Ambler, 1992). Still, the end product was usually low in alcoholic content in comparison to the beverages coming from Europe, and required little marketing or advertising, since it filled a demand already present in the local traditional culture.

Indigenized production of cosmopolitan beverages

As described above, Westernized beverages spread outside of Europe with the growth of colonial empires. The importance of alcohol as a force in colonizing non-Western peoples is well documented in historical sources (e.g., Unrau, 1996; Mills, 1985). As distilled spirits began to be produced for regular consumption in Europe, these and fortified wines (wines with added distilled spirits) became mainstays of the European export trade. In the course of the colonial period, local production of versions of European beverages started in many colonies, often alongside production of industrialized versions of indigenous beverages.

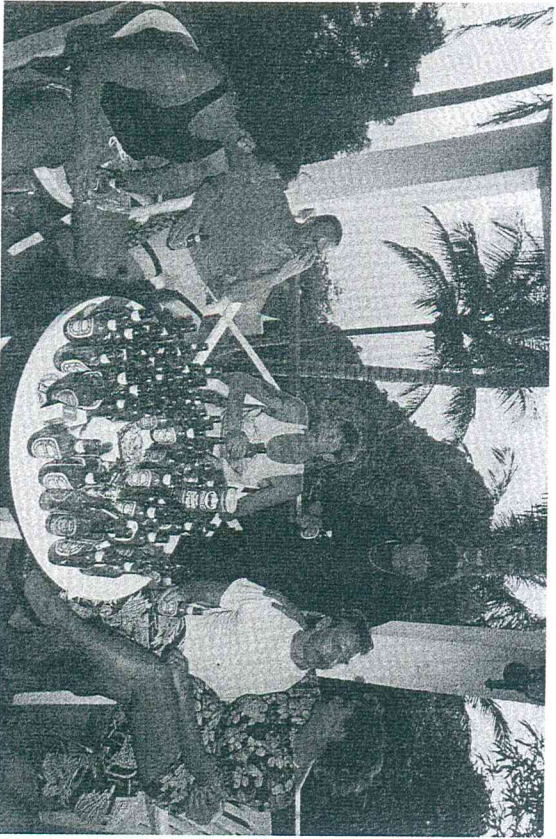
These Westernized alcoholic beverages provided a ready source of revenue for colonial governments (Crush and Ambler, 1992). Manipulation of their availability also gave colonial authorities an additional means of control over indigenous populations. Even today, alcoholic beverages are used as a form of payment to indigenous workers in mines and on agricultural estates (Jernigan, 1997; London, 1999). There is great variation in quality, mostly due to unstandardized methods of production, but also sometimes reflecting unregulated additives used to give a beverage more "kick". Consequently, advertising has tended to be oriented to quality and strength on the one hand and price on the other — not surprisingly, given the low income of the target consumers.

Locally-produced industrial forms of traditional beverages, or adaptations of beverages which were European in origin, are still important in the global alcohol supply today, constituting a substantial proportion of recorded production of alcoholic beverages. In the spirits trade, such products comprised an estimated 54% of global spirits production in 1994 (Impact Databank, 1995). Generally manufactured with low levels of technology, these products differ from the traditional commodity chain in that production is industrialized and oriented towards the cash-based market.

Indigenized spirits products, because they occupy the low end of the price scale, cannot compete with the advertising budgets of the international brands. But where international images may be cheaply appropriated, such as on the labels of

Table 4.2
Global alcohol commodity chains by alcohol type

	Design (recipe)	Raw materials	Manufacturing	Imports	Distribution	Marketing	Advertising
Global Wine (non-globalized)	Many recipes, held by wide range of producers both local and global	Grown only in suitable climates	Done in suitable climates (mostly core)	By many producers	At point of production and regionally or globally, by transnational producers, their subsidiaries or licensees	Cash-based, via discounting, targeting elites	Low-end via price, high-end via limited advertising
Global Distilled Spirits (moving towards "marketing-driven")	From global or regional transnational producers	From core countries	Mostly done in core countries	Bottles and in bulk for bottling in the periphery	Regional or global, by transnational producers, their subsidiaries and licensees	Cash-based, via discounting and on-premise promotions, targeting elites with sponsorships, endorsements, holiday promotions	Low end with price, high end with culturally-based, "lifestyle" oriented, by global advertising agencies or their affiliates
Global Beer ("marketing-driven")	From global or regional transnational producers	Local supplemented by globally-sourced inputs	Done locally under control of global transnationals	Bottles, at high end	Decentralized into networks loyal to transnational producers, their subsidiaries and licensees	Cash-based, targeting entire population via on-premise promotions, sponsorships, endorsements, holiday promotions	Culturally-based, "lifestyle" oriented, by global advertising agencies or their affiliates



Photographer: Amos Nachoum, Corbis

Plate 7

Advertising and tantalizing: European-style beer and the desirable. *Top left:* Ecuadorean beer poster, "This one is mine". The beer is brewed by Cerveceria Nacionales, which dominates the Ecuadorean beer market and is owned by Bavaria, the largest private corporation in Colombia. *Top right:* the "long cool Dane" of Carlsberg's campaign in Malaysia. *Bottom:* Tourists drinking Heineken at a resort on Saba Island, Netherlands Antilles.

the bottles, the local spirits producers use them to add cachet to an otherwise nondescript and utilitarian product. Thus for example in Malaysia, labels on the local *samsu* spirits products invoke such international icons as 007, the R.J. Reynolds Camel, and Ralph Lauren's Polo brand. Such appropriations of international trademarks generally go unsanctioned.

Cosmopolitan industrial beverages
(marketing-driven global commodity chains)

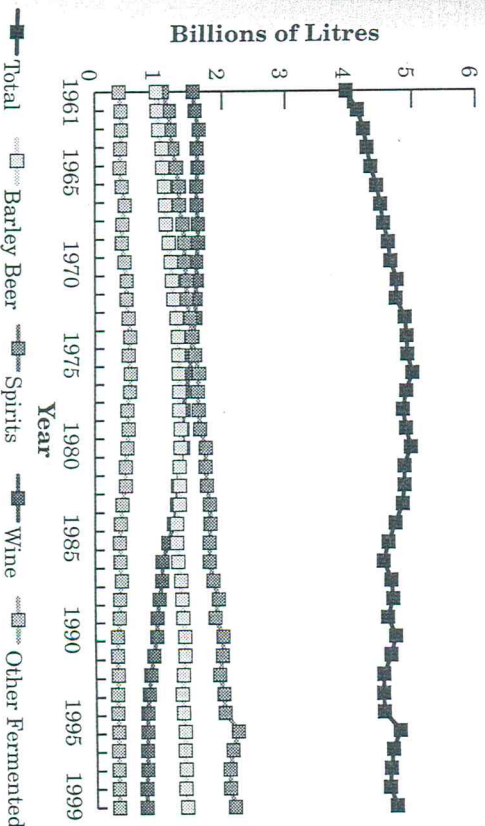
The most profitable forms of alcohol today are cosmopolitan beverages, mostly produced by giant global corporations and marketed with a certain uniformity the world over. Table 4.2 describes the contemporary commodity chains for globally available wine, distilled spirits and beer. In the present-day world, the dominant type of commodity chain is different for the three different classes of European-style beverages.

Wine production is still tied to a limited (albeit slowly growing) number of regions, mostly located in developed nations. The wine trade is still largely non-globalized, although the proportion which is exported has been growing. The biggest factor in changes in the wine supply has been the fall in production and consumption of cheap table wine in southern Europe. As Figure 4.1 shows, the supply of wine worldwide has fallen by more than 50% since 1970, with the fall largely due to these changes in southern Europe.

European-style beer, production of which has increased by 8% per capita over the same period, is the beverage most closely conforming to what Jernigan (2000)

Figure 4.1
Global Supply of Pure Beverage Alcohol, 1961-1999

Source: WHO Global Alcohol Database



has dubbed the marketing-driven commodity chain model. Technical improvements in the manufacture, transport and storage of beer have contributed to lager beer's emergence as an exemplar of the contemporary marketing-driven commodity chain.

The actual production of the beer primarily occurs relatively close to the point of consumption. Imports exist only in the high end of the market — the so-called super-premium beers. The local manufacture of the beer is controlled by the global brewers, according to their own recipes, but is carried out by local subsidiaries, joint ventures or licensees. The hops are mostly imported from three growing areas: Germany, the United States and Australia. Other raw materials may be bought locally, but are often also imported.

The most important difference between the marketing-driven commodity chain and other alcohol commodity chains lies in the last two links: marketing and advertising. In the traditional and indigenized chains, the product tends to speak for itself. It is marketed based on availability, quality and price. In the marketing-driven commodity chain, the product becomes a symbolic object to which the marketers attach a broad range of significations and connotations. It is presented to the consumer as an entrée into various worlds — of the cosmopolitan and urbane, of the brave and patriotic, of the sexy and powerful, of riches and luxury. The status of some alcoholic beverages as luxury items is not a new phenomenon. What is new in the marketing-driven commodity chain is the ubiquity of images of the product. The transnational brand owner controls the entire chain, even though this owner may not be involved in the actual production of the beverage. Global advertising agencies or their affiliates generally design the advertising. Some campaigns carry global themes, while others draw on global principles of advertising to develop custom messages for local consumers. The product is marketed through sponsorships of high-profile sporting events (mainly of Western origin) and music festivals (rock, jazz, and classic, for instance, in Brazil), through sweepstakes and endorsements by famous sporting figures, among other promotions, as well as by advertising. The product has become a set of marketed images.

Distilled spirits is the beverage type with the largest increase in production globally, in terms of alcohol content, over the last 25 years. Spirit production, up 24% per capita since 1970, is increasingly moving in the direction of a marketing-driven commodity chain, particularly in the case of the major international spirits brands. The 46% of spirits that are cosmopolitan — i.e., that are not produced by local firms — come from some of the world's largest and most sophisticated purveyors of consumer goods. This part of the spirits trade displays many aspects of the marketing-driven global commodity chain.

The leading international spirits brands are often promoted in terms of a particular place of origin, and tend to be more dependent than the brewers on particular ingredients and proprietary production technologies. Producing large quantities of high quality spirits requires substantial technology. For some forms of distilled spirits, such as high-end whiskies and cognacs, there is also the need to make the investment over time inherent in the aging process. Because of these factors, production of high-end spirits is less diffused around the world than, for example, production of Heineken beer, which is sold as a super-premium product everywhere but in its native Netherlands, and produced in close to fifty countries. On the other hand, international spirits firms make heavy use of the marketing

and advertising ends of the commodity chain, defining and building on images of success and sophistication. For instance, although cognacs tend to be gulped rather than sipped in East and Southeast Asia, they are marketed as if drinkers rather than sipped with a connoisseur's sensitivity of palate. An image from one culture is thus grafted onto a completely different drinking culture. It is the image of the product, much more than what it is or how it is drunk, that is key in the commodity chain. The international spirits brands use international advertising campaigns so that they can maintain their international allure. The branch system of the international advertising industry is a perfect fit for this marketing style.

Developing countries and the globalization of alcohol industries

Concentration of ownership and the marketing-driven commodity chain

The model of the marketing-driven commodity chain reflects the changes in the global organization of alcohol production that have occurred in the past fifty years. The impact of these changes in developing societies has been to move control of the production of alcoholic beverages further away from developing country influence.

Wine is produced in a fairly small number of (mostly developed) countries, and continues to be the most commonly imported and exported alcoholic beverage. As noted above, approximately 22% of global wine production enters international trade, compared to only 11% of spirits and 5% of beer. Ownership of the wine industry is also dispersed around the world, and is the least concentrated of the three segments.

In contrast, the principal producers and marketers of beer and distilled spirits are a shrinking group of companies, headquartered for the most part in developed countries. Measured by volume produced in 1998, the ten largest global spirits companies produced 58% of the world's globalized spirits beverages (Fleming, 1999), that is, of the roughly 46% of world spirits production which is of cosmopolitan rather than indigenized spirits products (Impact Databank, 1995). In 1998, nearly 42% of the world's European-style beer was produced by the top ten brewers, while the top twenty produced close to 58% of the global supply (Barry, 1999). In contrast, in the same year the top ten wine companies accounted for only 11.4% of the wine sold throughout the world (Impact Databank, 1999).

This high level of globalization in beer and distilled spirits has important implications for their markets. In most developing countries, the degree of foreign control over production and marketing is high. Recipes are owned by the transnationals and licensed to local subsidiaries or (particularly in the case of brewing) those of global competitors. Foreign nationals supervise production, while most product development is done abroad. Much of the product advertising is also purchased globally. Even when the advertising is produced locally, it is likely to be produced by a local affiliate of the major global advertising agencies. Part of the reason for this is the importance of the product's image. Control over image becomes as important as control over the recipe and technology. The size of the largest transnational alcohol producers helps them to maintain their market dominance, as the heavy reliance on advertising and marketing gives the largest firms a substantial cost per unit advantage (Jain, 1994).

Of the top ten global spirits companies, all but one (India's UB Group) are

headquartered in developed countries. In contrast to the pattern followed by transnational beer producers, spirits producers tend to rely on direct export or local bottling of bulk exports rather than on building new distilleries in developing nations. The spirits producers have grown and spread internationally both through expanding distribution of their major brands, and through expanding their brand families via acquisition of other spirits companies. This highlights the importance of international brands in the spirits trade. Looking at the leading international (as opposed to indigenized) brands in 1994, 115 of the top 200 and 20 of the top 25 brands were products of the top ten companies. *Impact*, a periodical and database covering the alcohol industry, assigns brands a "global distribution index" measuring how widely available each brand is internationally. Brands ranked 81-100 are considered "a truly international brand selling significant amounts in multiple markets and regions." Sixty percent of these brands (and 75% of those ranking above 90) come from the top ten spirits producers (*Impact Databank*, 1995).

Twenty companies produce or market more than half of the world's European-style beer. Control of the global beer market has become concentrated in fewer hands since 1980, when the top thirty brewers produced less than half the beer (Cavanagh and Clairmonte, 1985). The top ten brewers also have alliances with or part-ownership of several of the other leading producers. For instance, world leader Anheuser-Busch owns 50.2% of the 8th-ranking brewer, Grupo Modelo of Mexico, and has an equity interest in the 17th-ranking brewer, Companhia Antarctica Paulista of Brazil. In 2000, a merger between Antarctica and Companhia Cervejaria Brahma was announced, in Brazil's largest corporate deal ever, to form a company controlling over 60% of Brazil's largest beer market (Fritsch, 2000). Anheuser-Busch's arch-rival in the U.S. market, Philip Morris's Miller Beer, also owns a piece of Antarctica, as well as part of the Mexican brewer FEMSA, ranked 16th. Belgium-based Interbrew, ranked 6th internationally, also owns part of FEMSA. The second largest global brewer, Heineken, works in partnership with Guinness (ranked 11th) in some markets. Guinness is also the world's largest spirits producer, due to its merger a few years ago with Grand Metropolitan to create Diageo.

Licensing agreements permit companies that dominate their home markets to control the distribution of imported brands produced by other majors. For instance, Kirin Brewery, producer of half the beer consumed in Japan, also controls distribution of all Seagram's and Anheuser-Busch products in Japan. Molson produces Kirin beer in Canada for the Canadian and U.S. markets. Foster's, which dominates the Australian beer market, holds the Australian licenses for Miller, Coors, Carlsberg, and Kronenbourg (produced by Group Danone, ranked 14th). South African Breweries holds the local licenses in South Africa for Guinness and Heineken brands, and brews Heineken's Amstel brand under contract. Cross-licensing of this type is an important feature of the marketing-driven commodity chain for beer.

The major transnational brewers continue to follow a pattern of establishing dominance (oligopoly or near monopoly) of their home market, and then using this as a springboard for international expansion. Of the top ten, only the U.S. companies Miller and Coors do not hold the dominant positions in their home market (they do, however, have the advantage of occupying the number two and three

spots in the world's largest beer market). Globally, one or two major players dominate each market, with the exception of China and Eastern Europe. The majors have regional "spheres of influence". Carlsberg and Heineken are the major players in Southeast Asia, with Guinness allied with Heineken. Guinness plays a strong role in Africa, but the dominant player there is the South African giant, South African Breweries. The North American brewers are moving to cement alliances with the South American and China, markets that have opened up more recently, are battlegrounds populated by larger numbers of companies.

The combination of "spheres of influence" and licensing and joint-ownership agreements means that there is much less competition than appears in this supposedly highly competitive industry. Contract brewing is fairly common, that is, a global brewer will contract with a local brewer, sometimes operated by a competing global brewer, to produce and market one or more of its brands. Thus Heineken's joint venture in Singapore brews Guinness, and its part owner of a brewery in Malaysia that has the Guinness name on it. Together with the importance and expense of marketing to establish and maintain brands, these arrangements pose formidable barriers to any new entry to the market, whether by a local or a global brewer.

Carlsberg in Malaysia: A Case Study

The importance of the marketing end of the commodity chain in selling image in order to sell beer in developing countries can be illustrated with the case of Carlsberg in Malaysia. Carlsberg had less than 5% of Malaysia's beer market in the early 1970s. Today it sells more than 60% of the country's beer. The account executive for Carlsberg's local advertising credited the brand's success to a single advertising campaign (Jernigan 2000). Begun in the early 1970s, and targeting primarily drinkers in the rural areas, the "long cool Dane" campaign has consisted of a series of print, cinema and Chinese-language video advertisements starring a lithe and leggy blonde woman, dressed in a white bathing suit. Over time, the blonde has become more and more a part of the beer she advertises, her hair blending into the golden bubbles of the brew (see Plate 7). In the cinema and video ads, she plays opposite the "Carlsberg man", who, in the ads, never actually gets the woman, but can have the beer.

Carlsberg supplements its advertising with point-of-sale promotions, spending 20% of the company's marketing dollars on "women in green" who dress in green dresses or t-shirts and whose sole function is to greet customers at the door of bars and restaurants and offer them a Carlsberg. Beer company-sponsored tours of "beauty queens" through the bars are also a common Malaysian marketing tool. Rock stars also personify the brand's modern and Western image. In a combination of the traditional with the global, Carlsberg funds a local rock and roll band competition that culminates in a tour by the winning bands to the largely privately-financed and privately-run Chinese language schools. Run as a benefit programme for these schools, by 1996 it had raised in excess of RM 100 million (about USD \$40 million at 1995 exchange rates).

The point of all this activity is to provide an attractive image to a beverage with few characteristics to distinguish it from its competitors. This image is culturally-based, but the culture is self-consciously Western and globalized. Marketers inscribe the imagery onto beer with the ease of writing on a blank slate (Jernigan 2000).

The multinationals' role in shaping images of drinking

We have noted that what distinguishes marketing-driven commodities such as beer is their tremendous reliance on the downstream activities of marketing and brand establishment. Implications of this pattern for development are twofold. First, the marketing-driven commodity chain minimizes the opportunities for developing nations to exercise control or enhance their position in the global division of labour. Transnational corporations control both ends of the commodity chain, guarding recipes and keeping production opportunities within the small club of global companies, at the same time that they control marketing campaigns, frequently working through a small group of global or globally-affiliated advertising agencies.

Second, the marketing seeks to import images and perhaps patterns of drinking new to many developing nations. Images of drinking as a badge of Western success, and as an activity appropriate at all times, turn the outer limits of the national drinking culture into a norm for substantial sub-populations. As well, the marketing may seek to replicate existing local customs at new times or places. Whereas Brazil's traditional Carnival occurs in February or March, beer companies in Brazil are successfully promoting new "carnavals" on other dates. For instance, CarNatal, successfully promoted in the 1990s, takes place in the city of Natal in December. Dwight Heath's point that "the attitudinal context, rather than the beverage, shapes expectations and actions with respect to alcohol" is well-taken (Heath 1995). But in the marketing-driven commodity chain, the attitudinal context is being shaped not only by indigenous cultural forces, but also by transnational corporations and advertising agencies.

Developing countries and international trade in alcohol

Alcohol trade, like alcohol production, lies primarily in the control of the developed countries. International trade in alcohol primarily occurs between the developed countries. Mexico is the only developing country among the top ten spirits exporting countries and the top ten beer exporting countries. Chile and Argentina are the only developing countries among the top ten wine exporters.

It is thus only in exceptional cases (as in Mexico and Chile) that developing societies have been able to develop substantial export markets in alcoholic beverages. Conversely, imports of alcoholic beverages have a relatively small market share in most developing societies. The primary impact of globalization in the alcohol market of developing societies has thus been through the increasing role of multinational companies in the ownership, cross-licensing, and promotion of locally-produced alcoholic beverages, and particularly of marketing-driven European-style beverages. Given favorable economic conditions, the marketing-driven commodity chain is a dynamic driver of change in customs and amounts of drinking

Alcoholic beverages in developing economies

Whatever its mode of production and distribution, alcohol plays a role in the economy of a developing society. Alcoholic beverages are in the first place commodities and consumer goods. Associated with their sale, also, are many services, including the work of the shopkeeper, bartender or waiter. In this section we consider alcohol's impact on national economies and state revenues, on household budgets, and on employment.

Contribution to the national economy

Four interests of the state in alcohol can be identified (Mäkelä & Viikari, 1977). From the point of view of national interest and public accounts, two of these are on the positive side: a government's economic interests (alcohol's contribution to the economy) and its fiscal (taxation) interests. On the other side, governments also have an interest in minimizing losses, and often spend resources to do so, in two areas which alcohol adversely impacts: production of goods and services (adverse effect on productivity) and public health and order (reproduction). In this section, we focus on the first two of these areas, considering the adverse consequences in Chapter Six.

As with any other commodity or service, commerce in alcoholic beverages makes a contribution to the national economy. The contribution takes different forms and is differentially likely to be counted for the four types of commodity chains. Household production of traditional beverages may absorb substantial labor and other resources, but most of this will not be recorded or appear in the national accounts. Industrial production of indigenous or indigenized beverages will usually be recorded, and makes a contribution to the economy also by using local agricultural products.

Local industrial production of cosmopolitan products will also make a contribution to the national economy. To the extent ingredients are imported (which most are, for instance, for lager beer production in many African countries), however, the cosmopolitan products may make less use of local agricultural products. Even locally-produced cosmopolitan products may have an adverse impact on the national trade balance, because of payments of royalties, fees and profits for joint ventures. And substitution of locally-sourced ingredients may still require imports. Thus in Nigeria, under the "Indigenization Decree" promulgated in the early 1970s, breweries were compelled to turn to sorghum as a replacement for imported barley. However, in order for sorghum to produce European-style beer of acceptable taste, it has to be treated with some industrial enzymes. As it happened, these enzymes were not produced locally and the breweries had to rely on the two available sources overseas. The two producers promptly increased the prices of their enzymes. In the end, the expected gain from import substitution was lost. By the time the decree was abrogated in 1999, this time because of the imperatives of globalization and of an open market, the breweries were already clamouring for a return to imported barley.

Cosmopolitan products are typically priced higher than local industrial products, which in turn are priced higher than traditionally-produced products. To some extent, but not completely, the different types of beverages substitute for each other in the market, with a long-term trend in most places for cosmopolitan products, and particularly lager-style beer, to grow at the expense of other products. As the size of the GNP grows, the amount spent on alcoholic beverages thus

Taxation becomes progressively easier to impose as production becomes more industrialized and more concentrated. A government can successfully drive a large corporation out of business if it fails to pay taxes, whereas it is difficult to enforce taxation of home production without a quite authoritarian social system. From the perspective of government revenue, then, there is a highly positive effect of a shift of consumer preferences and of the alcohol market towards increasingly concentrated industrial production: more of the output is from producers who can be effectively taxed, and less is from untaxed production which can compete on price with the taxed goods.

Home and craft production of alcohol requires some skill. Untaxed production may be more of a problem in societies where such skills are widely diffused, such as in southern Africa, where women have traditionally brewed beer for generations, than in societies such as Papua New Guinea, which had no tradition of home production, or of alcohol production at all, prior to the advent of Western influence.

As an outcome of all these factors, the role of alcohol revenues in state finances varies greatly in the developing world. As a point of comparison, one industry trade group has estimated that alcohol taxes provided 2.4% of revenues in the 12 countries of the EU in 1991 (Naert, 1993). Nigeria recorded roughly the same level of tax income from alcohol, 2% taxes in 1996 and 1997, and the figure is 2.3% for South Africa, while Sri Lanka earned 4% of its revenues from alcohol taxes in 1996 (WHO, 1999). Elsewhere, however, the percentages are much higher: In Cameroon, taxes on locally-produced beer and soft drinks supplied 42% of the government's revenue in 1990 (Nlahne, 1994), while 10% of Kenya's government revenues in 1985 came from alcohol taxes (Partanen, 1989).

National governments are not the only ones benefiting from alcohol taxes: in India, alcohol makes up as much as 23% of some of the states' revenues (Bloomberg News, 1997). Harare, Zimbabwe earned 2% of its municipal revenues from sales in the city-owned beerhalls in 1992 (City of Harare, 1992).

Share of household budgets

Societies vary widely in the proportion of consumer spending accounted for by alcoholic beverages. In developed countries, the percentage of household incomes spent on alcohol ranges from just more than 1% in Italy and Spain to as high as 6.2% in Finland (Osservatorio Permanente sui Giovani e l'Alcool, 1996; Moser, 1992). It ranges higher in Eastern Europe: Romanians spent an estimated 11% of family income on alcohol in 1991 (Ferrer et al., 1995).

Household budget surveys have been carried out in many developing societies since the 1950s, following standards for sampling and measurement laid out by the UN Statistical Office and other international organizations. Except for most Islamic countries, expenditures on alcoholic beverages are singled out as a standard item. The ILO and FAO statistical services have compiled the data internationally, although often the original national publications contain more detailed data.

The comprehensiveness and quality of the household budget data, however, has serious limitations. The interviews that form the basis for the data are usually with a single member of the household, often an adult woman, and she may well be unaware of some of the household expenditures on alcoholic beverages. Reports often take note of the systematic underreporting of alcohol expenses. Nevertheless, the household budget studies do offer another window into the eco-

nomic role of alcohol consumption in developing societies, as well as limited information on the distribution of consumption in the population.

A survey of household consumption expenditure in Uganda in 1989-90, for instance, found that alcohol accounted for 4.5% of expenditures in urban households, and 4.4% in rural households. As is commonly found, the Uganda study found a higher proportion of expenditure on alcohol in low-income families (6.0%) than in higher-income families (4.5%) in the major cities (Statistics Department, 1989-90).

In interpreting the household budget survey results, the distribution and patterning of drinking in the society need to be kept in mind. If heavy drinking is concentrated in a small portion of the population (as it often is), then the impact of alcohol expenditures on household budgets in drinking families is likely to be much higher. In 98 families in a slum in Delhi, India, where the husband drank at least three times a week, an average of 24% of the total family income was being spent on alcohol (Saxena, 1999). According to Mexico's national survey on incomes and expenses, on a nationwide basis, households spend an average of one percent of household income on alcoholic beverages. This figure is doubled in rural areas, and households earning incomes in the two lowest deciles spend far greater percentages of their income on alcoholic beverages than those in the two highest income deciles (Zurita and Medina-Mora, 1994).

A stratified sample of 1000 adults in a subsistence economy in Micronesia in 1985 found that 12% of drinkers had spent all of their ready money on drink (Marshall, 1987). Questionnaire surveys of urban poor in Sri Lanka found that the 30% of families that used alcohol at all spent more than 30% of their income on it (Alcohol and Drug Information Centre, 1994). In Zimbabwe, households spend an average of 7% of their income on alcohol (Central Statistical Office, 1994). However, since only approximately 40% of Zimbabwean adults drink alcohol (Chinyadza et al., 1993), the percentage spent by households including drinkers is considerably higher.

Contribution to employment

Countries in which traditional, labour-intensive means of producing alcohol remain prevalent will typically enjoy higher levels of alcohol-related employment. For instance, in Botswana a conservative estimate suggests that at least 20% to 30% of rural households are regularly engaged in brewing traditional beers. At least 90% of these beers are produced for sale (Kortteinen, 1989a). Similarly, in the Gambia, where about 90% of alcohol consumed in the country is palm wine, the impact of its manufacture and marketing on the regional economy is significant, as these activities constitute a major source of cash income and employment. Limited evidence implies that indigenous production and distribution of traditional beers may provide, where it is prevalent, some degree of employment for 7% to 20% of the labour force (Haggbladh, 1987).

In many developing societies, women are over-represented among those deriving income from the production of alcoholic beverages. In these countries, production and sale of traditional alcoholic beverages, often on-premises in a modified domestic environment, is a niche that offers economic self-sufficiency to female heads of household and their dependents. An ILO study concluded that "the brewing of traditional brews on a domestic scale may well be the greatest single source of employment particularly for single women in some African countries"

(quoted in Maula, 1997: 218). From small-scale surveys, Maula found that about 1% of the males and 2% of the females in a village in Benin supported themselves at least partly through the production of *sodabi* (distilled palm wine), while 4% of the males and 7% of the females in a survey of three communities in Dar es Salaam, Tanzania had at least from time to time supported themselves mainly by brewing traditional alcoholic beverages (Maula, 1997: 101, 103).

As in Europe in previous centuries, a shift to industrially-produced beverages greatly diminishes employment in alcohol production, leaving retail service jobs as the primary type of alcohol-related employment. With industrialized production, the numbers employed in the production of alcohol beverages and their packaging become quite small, and the main contribution to employment in connection with alcoholic beverages is widely diffused in retail and service industries: shopkeepers, shop clerks, waiters, bartenders (e.g., this is 85% of alcohol's contribution to employment in the Finnish estimates (Osterberg, 1998)). For many in these jobs, alcoholic beverage sales may only be a small part of the job, albeit often the most profitable part. The Finnish estimates suggest that half of all employment in the restaurant industry there is attributable to sales of alcoholic beverages. Since many retail owners and employees have at least a small interest in increasing or sustaining alcoholic beverage sales, they often have a larger influence in the political arena than alcohol's share of all consumer sales would suggest.

The influence of tourism

Tourism from the developed world has become a significant contributor to the economy in many favourably located developing societies. Many such tourists drink more often than those in the host society, even when they are at home; when on holiday, they may drink more still. Thus Swedes report drinking more than 3 times their normal daily levels when they are on holiday outside Sweden (Kühlhorn et al., 1999:55). The tourists' lifestyles, including their holiday drinking, offer an attractive model to many in the host society, including young people and those involved in the tourist trade (see Plate 7).

Tourists have become an important part of the economy on the island of Lamu, off the coast of Kenya. But, as an elder on the island noted, "tourism is a double-edged sword.... People come here to see the way we live. We are very traditional, even conservative. We do not drink alcohol; we prefer that people dress modestly. The tourists bring money, which we need, but they also bring influences which are difficult for our young people to resist.... This puts us in danger: The tourists help us survive, but their money and ways may kill the thing they come here to see. We elders must walk a fine line between accommodating them and maintaining our traditions." (Caputo, 2001:110)

Perhaps more important than any demonstration effects, however, is the influence on local alcohol policy of the many interests – global and local – involved in the tourist industry. Pressure from the hotel or other tourist industries to lower alcohol taxes (see box on Mauritius in Chapter 8) or to increase the times and places where alcohol is available has often become a powerful engine of change.

The arguments often carry political weight, even though there is little evidence on whether changes in alcohol availability actually affect the flow of tourists (Lee, 2001). Even where there is an effort to limit the effects of changes in availability to tourists, the effects may reach wider. Thus in Tunisia, where alcohol is served only in the tourist hotels, "during the evenings, the bars in many tourist hotels are largely full of Tunisian men, often making it difficult for the tourists themselves to get served" (Bleasdale and Tapscell, 1999:192).

Benefits and losses from the industrialization of alcohol production

As the commodity chain descriptions above demonstrate, global alcohol production is changing, as is global alcohol trade. The net results of industrialization of alcohol production are mixed in terms of economic development (Room and Jernigan, 2000). Industrialization of the alcohol supply can improve the overall quality of alcoholic beverages. The variation in quality in informally or home-produced alcohol can on occasion have serious health consequences. The use both of good-quality ingredients and of technologies to ensure product freshness (especially in the case of beer) can benefit consumers. But this is not always the case; industrial producers have also sometimes added questionable substances to their products, e.g., cobalt to beer to give a more stable head (Morin and Daniel, 1967). Where there are no requirements for ingredient labelling on alcoholic beverage containers (as is the case in many countries), there are no formal barriers to questionable additives.

Historically, industrialization of alcohol production in Europe occurred early on in the modernization process. In developing societies today, industrial production of alcoholic beverages is also often seen as an early step in industrialization. With a relatively low level of technology, for example, beer production may use some local inputs to replace what has often been an imported beverage. The technology of production may be transferred to the new production site, raising the general technological levels in the society. Since beer has a relatively brief shelf life, it can provide an incentive for investments in improved storage facilities at the wholesale and retail level, as well as more sophisticated transportation networks. These are the kinds of apparent advantages that have led governments and development agencies such as the World Bank and the Danish Industrialization Fund for Developing Countries to advocate and support industrialization and modernizing of alcohol production facilities, both as a means of generating employment and as a way to improve the balance of payments.

This rosy picture, however, turns out to be considerably less positive in practice. Although alcohol is an exportable commodity, low-value alcohol is not generally suitable for long-distance trade, due to high transportation costs in comparison to the potential sale price. Most international trade of other alcoholic drinks, especially from developing to industrialized countries, is also limited by various trade barriers imposed on goods from developing countries by the developed world. Moreover, in general, only high quality alcohol is traded, which may not apply to drinks produced in developing countries. For the above reasons, success stories of export-led economic growth in alcoholic beverage exports, as in the case of Argentina and Chile, are rare among developing countries. Mexico, with a large developed-country market next door, is the main example of a successful develop-

ing-country exporter of beer and spirits.

Furthermore, some of the apparent benefits to the balance of payments of increasing domestic production of alcohol may not be realized. Korttinen's (1986:689-690) research indicates that, despite shifts to local production in developing countries of European-style beer, imports of barley and malt from developed to developing countries increased significantly from the 1960s to the 1980s. Korttinen's findings undercut claims that establishment of local breweries necessarily assists with countries' balance of payments problems.

Industrialization is also likely to lead to a decline in the numbers of people employed in alcohol production. The first and in some cases heaviest losers in terms of employment are the women who had been involved in home-brewing of traditional products. Traditionally, in the Gwembe district of Zambia, as in much of Africa, beer was made only by women and drunk only by men. Colson and Scudder (1988) show that the beginnings of improved transport and a cash economy meant that women found they could earn substantial amounts by brewing beer for sale. Then, when the transport improved, industrially-produced beer of the same type (*chibuku*) could be trucked in from Lusaka. Now that the seller did not actually have to make it, the men took over the industry. This meant that women lost doubly. Not only could they no longer have some control over their men's drinking at the supply end, but they also lost an important source of employment.

The technology of alcohol production continues to evolve, and in the developed countries and increasingly in the developing world alcohol production is becoming an integrated and automated industry. New technology has made beer production in particular highly capital intensive. As capital intensity increases, labour needs decline. For instance, when the ABC Brewery in Ghana was privatized, the number of jobs at the brewery fell from 718 to 350 (White and Bahata, 1998). When Asian Pacific Breweries replaced two older breweries with a new production plant in Singapore in 1990, the total number of workers at the plant fell from more than 600 to 250 (Jernigan 2000). Most of the jobs that remained were on the administrative and service side, while the entire computer-operated bottling line now functions under the supervision of four workers.

It can be argued that this is simply a set of trade-offs, that the loss in employment is offset by a gain via technology transfer. However, as the technical requirements have increased, so has the proprietary control of these technologies by a very small number of global alcohol producers. These producers tend to employ "turn-key" technologies, in which equipment, materials and technical experience are imported ready-made from industrialized countries. The greatest disadvantage is that indigenous personnel are prevented from participating in various stages of industrial development, and therefore from acquiring the relevant skills. For instance, in Nigeria, despite a considerable history in industrial brewing, for technological control, engineering and technical matters there has been a heavy reliance on foreign experts. Similarly, when Singapore's Asian Pacific Breweries modernized its joint venture brewery in Malaysia, the improvements in brewing technology were imported from the parent company in Europe, while the important position of brewmaster remained in the hands of a Dutch national (Jernigan and Indran, 1999).

Recently, the World Bank Group has, for the first time, undertaken a general reconsideration of the approach that international investment and development

agencies should take to projects relating to alcoholic beverages. In 2000, the Bank published a Note setting a new set of standards for alcohol investments. The Note recognizes such investments as "highly sensitive", and mandates that its staff be "highly selective" in approving them, supporting only those projects "with strong developmental impacts which are consistent with public health issues and social policy concerns" (World Bank Group, 2000). Following adoption of this note, the World Bank Group had as of mid-2001 declined further alcohol investments.

Alcohol in global trade agreements

Under the impetus of European temperance movements, the colonial powers in Africa signed a series of agreements in the early 20th century aimed at controlling alcohol trade in colonial Africa, particularly the market in "trade spirits" (Pan, 1975; see Plate 2). The effectiveness of these agreements varied considerably with the colonial alcohol policy of the particular European power. By the end of the Second World War, these agreements were essentially in dead-letter status.

Except for the international conventions on colonial Africa, the trade in alcoholic beverages has never been subjected to any specific controls at the multinational level (Brunn et al., 1975). There have been occasional regional agreements to share information on alcohol smuggling, and national prohibitions in the 1920s led to some bilateral treaties in support of national control policies. A far more common effect of trade agreements, however, particularly in the present era, has been to undercut rather than to support national alcohol control efforts.

The pattern was set in Europe in the era of national prohibitions. Spain and other wine-producing countries of southern Europe successfully pressed Iceland and Norway to abandon national prohibition, under the threat of banning the import of Nordic fish to their markets (Tyrrell, 1994, pp. 432-433).

Both under regional trade agreements and under the General Agreement on Tariffs and Trade (GATT) and its successor the World Trade Organization (WTO), trade agreements for commodities in general have become an instrument to attack regulatory controls on alcohol, including controls of significance to public health. Thus Canada and the United States have used the GATT process to attack each other's alcohol control systems (Ferris et al., 1993). The United States, Canada and the European Union have used the WTO's leverage to eliminate Japan's high taxes on imported spirits. While these taxes were a clear example of the use of tariffs to protect domestic production (of *shochu*) in violation of neo-classical trade principles, the net effect is likely to drive spirits prices down in Japan. Elsewhere, moves to "harmonize" alcohol taxes within the European Union threaten the high-tax policies of Britain, Ireland and the Nordic countries (Tigerstedt, 1990; McGuinness, 1991; Lubkin, 1996); and the alcohol control structures in Norway, Sweden and Finland have been weakened by decisions of the European Union under regional trade agreements (Tigerstedt and Rosenqvist, 1995; Holder et al., 1998).

Following their success in lowering Japan's spirits tariffs, developed countries have recently moved to file complaints at the WTO alleging that alcohol taxes in South Korea and Chile discriminate in favour of indigenous versus imported spirits (Buckley, 1997; Impact International, 1997). Under pressure from trade complaints from the European Union and the United States, in 2000 South Korea moved to equalize taxes at 72% ad valorem on *soju* (an indigenous 25%-ethanol

spirits drink) and imported whiskey (usually 40-43% ethanol) (Kim, 2000). The impact of the WTO is indirect as well as direct: in 1996 Taiwan announced that in order to strengthen its bid for membership in the WTO, it was voluntarily eliminating its alcohol monopoly and establishing a new tax system (Tyson, 1996; Anonymous, 1997).

A further threat to alcohol policies is posed by the General Agreement on Trade in Services, or GATS (Grieshaber-Otto and Schacter, 2001), under renegotiation beginning in February 2001. The distribution, service, and promotion of alcohol are regarded in GATS as in the same status as any other kinds of services; without recognition of the public health issues involved. In future years, GATS may effectively undermine alcohol policies by ruling out national or local distribution and advertising restrictions.

International financial and development agencies, with little exception until recently, have also tended to act towards alcohol as they would have in relation to any other commodity, disregarding that alcohol has health and safety risks and costs. (The Multilateral Investment Guarantee Agency, an arm of the World Bank and a guarantor of private investments, is a partial exception, in that it has historically declined to make guarantees on investments in distilled spirits, but not in beer or wine.) The influence of these institutions, along with the neo-classical economic assumptions they espouse, has increased over the past decade, as each new wave of economic crises has forced national governments to look to international bodies such as the World Bank and the International Monetary Fund for assistance. These bodies have generally advocated and supported the elimination of direct government interventions in the alcohol market, such as retail and production monopolies, with no allowance for any current or potential public health role such monopolies might play. In Zimbabwe, in the year following privatization of the capital city Harare's beer halls, the new private company responsible for the beer halls constructed three new ones, all in the "high-density" lower income areas already hardest hit by the effects of heavy alcohol use (Jernigan, 1997). There are no evaluations planned or in process regarding the public health effects of such a major change in alcohol availability, and in the data vacuum, the global financial agencies continue to advocate privatization.

In global trade agreements, then, no formal recognition is given to the special status of alcoholic beverages as commodities causing health and social harm. In accordance with general ideologies of free trade and free markets, international institutions and advisers have pushed to dismantle measures to control the alcohol market, such as state monopolies on alcohol sales. Although high tax regimes are routinely threatened by smuggling from lower-tax bordering jurisdictions, no standard of comity exists internationally by which countries would have a duty to assist each other in enforcing taxes on alcohol.

These circumstances apply at present for another commodity, tobacco, which is also intricately involved with economic development and international trade, and which also carries severe health consequences. In collaboration with many partners internationally, the World Health Organization has recently moved to address these issues through an international Framework Convention on Tobacco Control (Joossens, 2000). Thinking and experience in this effort might well be drawn on in future for a parallel convention on alcohol control (Jernigan et al., 2000).

Conclusion

Throughout much of the developing world, the product alcohol is changing. The evolution from home, cottage or communally-produced beverages to globally marketed commodities brings several apparent benefits to developing countries, most notably tax revenues from an increasingly formalized market. On closer inspection, however, the glow of these benefits fades in comparison with the costs incurred as sophisticated product development and marketing embed globalized alcoholic beverages in cultures and daily life. The shift in control over alcohol production from women in the village to multinationals located abroad creates social changes in village and family life and economies. Although in situations with large informal production sectors this shift may help to ensure more consistent quality in the alcohol supply, at the same time it brings little to countries in terms of technological advancement. The recent recognition by the World Bank of the special nature of alcohol as a commodity models for other international agencies the need to create exceptions for alcohol in giving free market-oriented development advice and writing international trade agreements.

However, the World Bank is as yet an exception. The global trend in alcohol production and trade is towards adoption of Western-style beverages, production and marketing techniques, accompanied by free market ideologies of privatization of production and few controls over availability. As the intent of modern alcohol marketing is to shift beverage preferences and to embed new drinking styles and practices, it is fair to assume that the diffusion of globalized products and marketing is leading to changes in drinking patterns and practices. We turn now to review the available evidence of these patterns and practices. With this last piece in place, we will have enough of a picture of alcohol use to be able to move to an examination of the demonstrated and likely adverse consequences of that use, and thence to a discussion of how these may be prevented.

The two classical traditions

Two main traditions have aimed at analyzing drinking patterns at the cultural level (Room and Mäkelä, 2000). The "holocultural" tradition drew on the ethnographic descriptions of traditional village and tribal societies, as summarized in the Human Relations Area Files (Whiting, 1964), using each society as the unit of analysis in quantitative correlational analyses. Studies in this tradition typically sought to explain why there was more drunkenness in one society than in another in terms of generalized functions of intoxication for the individual - e.g., that intoxication reduces anxiety (Horton, 1943), that it alleviates dependency conflicts within the family (Bacon et al., 1965), or that men drink to attain a feeling of personal power (McClelland et al., 1972). The relationship between the theoretical generalizations of these schools of thought was anything but clear. Each seemed to regard the rival explanations as being included in its own theory as special cases. Moreover, the rival theories were all attempts to explain American alcoholism. Accordingly, McClelland aimed at developing methods of alcoholism treatment (McClelland et al., 1972), and Blacker wanted to find similar traits in heavily drinking preliterate societies and in the family of American alcoholics, such as "inadequate specification of the male role" or "erratic satisfaction of dependency needs" (Blacker, 1966).

Many of the studies argued that the complexity of the political and social organization of society correlated negatively with drunkenness. In Horton's study, subsistence insecurity was measured by the nature of the economy (hunting, herding, agriculture) of each society. Field (1962) pointed out that Horton's measure represented a continuum of social organization as well as one of subsistence insecurity. This raised the possibility that a higher degree of social stratification translated into greater social control on drinking: the higher the degree of social stratification, the higher the probability that disruptive drinking among the lower strata was under tight social control.

The holocultural tradition has been criticized from a number of angles (Room and Mäkelä, 2000). The studies are nevertheless useful in two ways when explaining fluctuations in the level of alcohol consumption. For one thing, they showed that even in preliterate societies, social control and social and political power relationships are important factors to consider in the study of drinking customs and the level of alcohol consumption (see especially, Field, 1962, and Bacon, 1976b). Secondly, they made it clear that the drinking customs in every society are bound up with its overall cultural dynamics. Cultural norms and the ongoing interaction of daily life possess their own dynamics. Cultural norms and turns of culture and interaction probably have an autonomous impact on drinking patterns that cannot be explained by the material structure of the society.

The second main tradition of classifying cultural drinking patterns became known as the "socio-cultural approach". A landmark study in this line was Ullman's distinction (1958) between "integrated" and "unintegrated" drinking customs, with the latter seen as producing high rates of pathological drinking in a culture. Along the same lines, Mizruchi and PERRUCCI (1970) distinguished between "proscriptive", "prescriptive", and "permissive" cultural norms on drinking. Mizruchi and PERRUCCI used Mormons and Methodists in the United States as examples of "proscriptive" cultural groups, and Jews and Italians as examples of cultures with "prescriptive" norms, that is, cultures where drinking was expected but drunkenness prohibited. The

third type, "permissive" norms, was described as "characteristic of periods of normative transformation", an anomie period in which norms were not specified. Although evidence on the third type was said to be "scanty", Mizruchi and PERRUCCI gave examples from the general North American and Finnish cultures.

PITTMAN'S (1967) elaboration on Mizruchi and PERRUCCI'S typology split the third category into two types: "ambivalent cultures", where "the cultural attitude toward beverage alcohol usage is one of conflict between co-existing value structures", and "over-permissive cultures", where "the cultural attitude is permissive toward drinking, to behaviours which occur when intoxicated, and to drunken pathologies". The main discussion under "ambivalent cultures" was of US and Irish drinking, with mention also of some village and tribal societies and of the Netherlands. Under "over-permissive cultures", PITTMAN mentioned the Bolivian Gamba, France and Japan. PITTMAN commented that "in one sense, this type ... does not occur completely in societies, but only approximations in certain nonliterate societies, in those cultures undergoing considerable social change, and those in which there are strong economic vested interests in the production and distribution of alcoholic beverages".

The socio-cultural approach has been critiqued from a number of different directions (Mäkelä, 1975; Room, 1976a; Frankel and Whitehead, 1981; Orcutt, 1991). The analyses relied on a very narrow empirical base, and critics raised questions about the mode of analysis in some studies. Also, as with the holocultural tradition, the studies were primarily organized around presumed features of American drinking culture (Room and Mäkelä, 2000). On the other hand, like the holocultural approach, the socio-cultural studies continued to point attention to the importance of the relation between drinking and daily life, and of the normative structure concerning drinking, in understanding cultural differences in drinking practices and in rates of problems related to drinking.

Other typologies

The substantial anthropological literature on drinking has for the most part not attempted explicitly comparative studies. One exception was LEMERT'S (1964) comparison of "forms and pathology of drinking in three Polynesian societies". In Tahiti, LEMERT found a pattern of "festive drinking" on periodic festivals and on weekends, where singing and dancing was accompanied by a "long slow drunk" without peaks of intoxication. On Aitiu, he found a pattern of "ritual-disciplined drinking" in "bush beer schools", presided over by a sober master of ceremonies, featuring hymns, conversation and recitations. In Samoa, LEMERT characterized the typical pattern of drinking away from the public scene in small circles of drinkers as "secular drinking". Drinking in Tahiti seemed to LEMERT "relatively integrated", while men on Aitiu were definitely more hostile and aggressive when intoxicated. But it was in Samoa that drinking was most commonly associated with disorder, free-floating aggression, rape and spousal abuse. LEMERT noted that alcoholism in a North American sense was unknown in any of the three cultures.

The most influential discussion of the cultural position of drinking based on the ethnographic literature has been MACANDREW and EDGERTON'S interpretation of cultural differences in drunken comportment (1969). The authors argued that cultures differ greatly in the extent to which drunkenness results in "drunken changes-for-the-worse", i.e. violent and other deviant behaviour. Implicit in MACANDREW and EDGERTON'S discussion was a continuum, with societies in which

drunken behaviour did not differ at all from sober behaviour at one end, and societies in which serious violence was expected at the other end (Room, 2001). As a constraint on this end of the continuum, MacAndrew and Edgerton postulated a "within limits" clause: that drunken comportment is still governed by norms in such societies, but that they are different norms from the norms for sobriety.

In his study *Sociability and Intoxication*, focusing on drinking in Africa, Partanen (1991) proposed two contrasting ideal types: "heroic drinking" and "modern drinking". Heroic drinking, in Partanen's formulation, "is the kind of drinking from which all instrumentality and critical self-reflection are absent, and it is a phenomenon that is essentially constituted by the stories and myths spun around it. In the rituals of heroic drinking these stories and myths are re-enacted and brought to life." (1991: 238) In contrast to both pre-modern Europe and North American drinking and traditional African beer cultures, Partanen argued that "alcohol and drinking in modern societies are in a far more marginal position...[While] alcohol is quite freely available and its use is extensive, . . . we are not highly engaged with it. . . . The functional uses of alcohol have gained at the cost of 'drinking for drinking's sake.'" (1991:248-249)

Makekela (1983) approached the issue of the cultural position and regulation of drinking in terms of the use-values of alcohol. Alcohol is unique among psychoactive substances, he pointed out, in the variety of its objective properties for which humans have found uses. Setting aside its use as a fuel and as a solvent, alcoholic beverages are consumed as a medicine, as a nutrient and as an intoxicant. Cultures attach meanings and beliefs to each of these material properties of alcohol. But while the cultural meaning of a particular act of consumption may be defined in terms of one property, each of the other material properties is always simultaneously present.

Makekela used this framework to critique Pittman's (1967) classification, noting that "the qualitatively distinct uses of alcohol cannot be arranged on a continuum and that the cultural dynamics of the control of excessive drinking vary according to the historically dominant uses of alcohol". Behind Pittman's continuum, Makekela discerned two basic cultural configurations: cultures like Italy in which "nutritional use of alcohol is historically dominant", and cultures where the definition of alcohol as an intoxicant is dominant. "Among the Jews, the Scandinavians and the Camba alike, alcohol is an intoxicant, but these three cultures have developed alternative normative solutions to the regulation of the use of this intoxicant", with alcohol isolated "into a sacral corner" for orthodox Jews, and confined to "clearly demarcated occasions" by the Camba, while "the Scandinavians vacillate between Dionysian acceptance and ascetic condemnation of drunkenness."

Makekela's category of nutritional use can be further subdivided into alcohol as a source of calories and alcohol as a thirst-quencher. A further subdivision might also be made in the category of alcohol's use as an intoxicant. Someone who drinks "to relax" is seeking a somewhat different use of alcohol than someone who drinks "to forget everything". Also, while each of the properties of alcohol is always present, even when the consumption may be culturally defined in other terms, uses in terms of one property may diminish alcohol's performance with respect to another. For instance, if alcohol is a significant source of caloric intake, the regularity of use this implies potentially diminishes its effectiveness as an intoxicant, through the mechanisms described as "tolerance".

Finally, two analyses have offered two-dimensional typologies of the cultural

position of drinking. A comparison of drinking habits in European cultures (Ahlsström-Laakso, 1976) emphasized differentiations on the integration of drinking with meals, common in southern Europe but not in northern, and on a dimension of intoxication, with stronger traditions in northern Europe of ostensive drunkenness and its control by formal criminal law.

In an empirical reanalysis of data from the Human Relations Area Files, Partanen (1991:211-214) also offered a two-dimensional typology of the cultural position of drinking, which he then related to indicators of general drinking-related problems in the culture, and of the expression of hostility in relation to drinking. One dimension he named Engagement with Alcohol, incorporating such measures as extent and frequency of drinking and approval of drinking; the other he called Seriousness of Drinking, incorporating quantity consumed on an occasion, duration of the drinking episode, and frequency and approval of drunkenness.

In Partanen's analysis, high reported rates of problems with drinking were related to Seriousness of Drinking, whether or not Engagement with Alcohol was present. On the other hand, the intensity and extremity of the hostility expressed while drinking was strongly related to Seriousness of Drinking only in the absence of Engagement with Alcohol. Partanen noted that the ritualization of drinking and its ceremonial uses that often accompany a high level of Engagement with Alcohol "do, in fact, exert a dampening effect on more extreme forms of drunken comportment." (1991:213)

Most of the studies we have discussed deal with preliterate and village societies, and there is an inbuilt tendency to describe cultures as homogeneous totalities that makes analyzing variations within a culture difficult (Stull, 1975). In today's developing world, a large part of the population lives in large conurbations and in multicultural circumstances, about which there is still little ethnographic literature on drinking. Most anthropological studies of the functionality of drinking describe situations where the average annual intake is very low, whereas, as we have seen, increasing consumption is an important feature in a number of today's developing societies.

However, the classical literature does alert us to the diversity of drinking cultures, and to the importance of the interaction between culture and daily life, in which normative structures have a significant effect on the quantity, frequency, and harmfulness of drinking.

The diversity of drinking cultures

In considering the diversity of drinking cultures, the range of potential dimensions is quite large. One obvious dimension is the degree of regularity of drinking. This dimension holds implications for such matters as tolerance, and probably also for how much the drinking occasion is set apart from ordinary life. But regularity by itself is not enough. Along with regularity of drinking, there is a need for a differentiation on how widespread at least occasional intoxication is in the culture.

Several more dimensions should probably be taken into account. One is the degree to which drinking and drunkenness are associated with violence. Parallel to this, and unexplored in the typological literature, is the degree to which drinking and drunkenness are culturally associated with sexuality. Another dimension has to do with the social definition of intoxication. There are cultural differences in "how drunk is drunk", which relate to how intoxication fits with core cultural

values. We may hypothesize that where trances and altered-consciousness experiences are valued, drinking to extreme intoxication, with radical changes from sober behaviour, will often be a goal for the drinker rather than an accidental misjudgement. Where drinking is a more common lubricant of everyday sociability, intoxication may be quite frequent, but it will be less extreme and less marked by a change in behaviour.

A further dimension for consideration is the relationship between heavy drinking groups and contexts and the larger culture. To what extent are drinking and heavy drinking reserved for particular social categories and circumstances, and how do they relate to the culture: as carriers of high prestige or of low? Along with who does the heavy drinking, there is the question of its context and relationship to other cultural elements: is heavy drinking hidden from daily and family life, enclaved within it, or not clearly differentiated from it?

On this basis, we may put forward a list of dimensions to be taken into account in constructing any description of the cultural position of drinking:

- cultural approval or disapproval of drinking, and of intoxication — by the whole society, and by subgroups;
- extent and nature of cultural definition of main problems from drinking;
- importance of alcohol's nutritional value, relation of drinking to meals;
- regularity of drinking, in the society and by social groups;
- degree of intoxication normatively attained in drinking, in the society and by social groups;
- extent and nature of changes in behaviour while drinking — violence and sexuality;
- existence and importance of "fiesta" occasions — periods given over to communal celebratory intoxication;
- social location of heavy drinking groups — gender, age, class, status, etc.;
- social context of heavy drinking occasions — separated from, enclaved within, or integrated in family life, work life, street and public spaces, etc.

The long list of dimensions required for a description of the cultural position of drinking shows how intimately drinking is tied to many aspects of the social and cultural matrix. Any summary description cannot capture the vast number of nuances that are important to members of particular cultures.

These complexities can be serviceably simplified, however. The two key dimensions for classifying the cultural position of drinking in societies are regularity of drinking and extent of intoxication, as identified by Ahlström-Laakso (1976) and Partanen (1991). We will return to these two below when we discuss results of population surveys of individual drinking.

Social differentiations and the cultural position of drinking

In most cultures, norms on drinking are not universally applicable, but apply in specific contexts, and often to specific status groups. Differences in the prerogative to drink alcoholic beverages at all, in the prerogative to drink them regularly, and in the prerogative to get intoxicated are among the most common status differentiations. Table 5.1 shows substantial differences in normative expectations about drinking by age and gender in Mexico, Zambia, Nigeria and China in general population samples interviewed in the course of the last quarter of the 20th century. A strong minority of adult respondents in the Mexican sample thought that drinking by a 16-year-old boy was all right, while few respondents in

Zambia or China found this acceptable. In Nigeria and Mexico, the acceptability of drinking at all was much the same for a drinker of 21 and one of 40, while in Zambia and China there was considerably greater consensus on the acceptability of drinking for a 40-year-old than for a 21-year-old. Within age categories, the acceptability of drinking at all did not differ much by gender in Nigeria and Zambia, while fewer Mexican and Chinese respondents found drinking acceptable for a woman than for a man of the same age. Interestingly, in all samples the gender differentiation on the acceptability of drinking was least for 16-year-olds, although except in Mexico this reflected that it was generally considered unacceptable for both boys and girls.

In terms of the acceptability of drinking enough to feel the effects, both Mexican and Chinese respondents were much more likely to find this acceptable

Table 5.1
Percent finding drinking acceptable, and finding mild intoxication acceptable, according to the age and gender of the drinker: Mexico, Zambia, Nigeria, China

if drinker is:	male and				female and			
	aged 16	aged 21	aged 40	aged 60	aged 16	aged 21	aged 40	aged 60
Mexico: some drinking OK	38	73	85	63	23	47	57	41
OK to feel effects	5	29	45	28	1	5	14	9
Zambia: some drinking OK	7	49	8	77	5	30	78	65
OK to feel effects	2	26	71	60	2	12	55	47
Nigeria: drinking acceptable with friends	18	47	59	NA	15	42	52	NA
China: some drinking OK	7	67	90	87	4	36	70	53
OK to feel effects	2	11	49	24	1	5	25	11

Mexico: N=51, 1978; adults in portions of Mexico City and rural area (Roizen, 1988; Roohman & Moser, 1985)

Zambia: N=939, 1978; adults in portions of Lusaka and rural area (Roizen, 1988; Roohman & Moser, 1985)

Nigeria: N=1562, 1988/89; heads of household (mostly male) in Middlebelt region (Obot, 1993)

China: N=14034, 1993; 15-65 years old in urban and rural areas of 3 provinces (Hao & Young, 2000; Hao et al., 1995)

for a male than for a female at all ages. In all three societies for which we have data — Mexico, Zambia and China — the highest rate of acceptance of drinking enough to feel the effects was for age 40, although the decline in acceptability at age 60 was greater for men in Mexico and China than in Zambia. More than two-thirds of Zambian respondents, and close to half of Mexican and Chinese respondents, felt that drinking enough to feel the effects was acceptable for a 40-year-old man.

These normative data from just four societies suggest how finely differentiated and culturally specific age and gender norms about drinking and intoxication can be.

Ethnoreligious differences in the cultural position of drinking

In many developing societies, different ethnic or religious groups have widely divergent drinking customs. Conflicting views on alcohol and drinking may become a culturally charged marker. In Malaysia, for instance, drinking is uncommon among Islamic Malays. But exact figures are not available: the issue is so sensitive that drinking questions in surveys are omitted for Malay respondents (Jernigan, 1997, p. 28; Kortteinen, 1999a). Drinking is more common among the Chinese and particularly among the Indian population, and government officials look at alcohol as “an Indian problem”. In another example, newspaper reports from Nigeria describe Moslem youths setting trucks containing alcoholic beverages ablaze; “some of the youths explained that they were determined to defend their actions with their lives since they were acting in accordance with the *Sharia*” (Alachenu, 2001). The diffusion of abstentionist Protestantism in rural Indian communities in Mexico provides a third example of ideological conflict related to drinking. Non-drinking Protestants are seen as challenging the cohesion of the community as well as important cosmological beliefs (Eber, 1995; 2001). On the other hand, this means that conversion to Protestant groups provides a safe haven without alcohol in a community where many members are struggling with serious drinking problems.

Beverage preferences may also mark ethnic differences. Thus in Malaysia, the tribal peoples of Sabah and Sarawak continue to drink traditional homemade rice wine. Members of the Indian rural plantation labour force drink mostly *samsu* (liquor distilled at home or by small local producers) and toddy. Middle-class urbanites mainly drink lager beer and distilled spirits, as do ethnic Chinese who drink (Jernigan & Indran, 1999).

Between the culture and individual patterns: drinking customs

Drinking customs present an intermediate level of analysis between cultures and individual patterns of drinking. A culture can be described as being composed of an assortment of customs, some of them centred on drinking, some potentially including it, and others specifically excluding it. Over time, the mixture of customs in a culture may change, and some customs or types of occasions may become more frequent. Customs exist above the individual level and their historical development can be traced, but drinking customs are not necessarily direct emanations of a culture as a whole. For example, Carnival is an important part of Brazilian life, but Brazil is not a “carnival culture”.

Some drinking customs are intangible, part of everyday sociability; for instance, the custom in many cultures of informal “toasting” — making a gesture

or speaking some verbal formula as an invitation to drink together. Others take on or are associated with institutional forms: in many cultures, there are places where people gather to drink, which we will refer to as taverns, with recognizable spatial and architectural arrangements that are typical in the cultural setting.

A full typology of drinking customs remains to be written. We will focus here on three kinds of drinking custom which are very widespread, but which take on diverse typical forms in different cultures: (1) the drinking group, and reciprocity customs within it; (2) communal celebrations; and (3) the tavern or on-premises drinking shop. These by no means exhaust the inventory of drinking customs, but they are exemplary of the range of widely diffused aspects of drinking culture.

The drinking group and reciprocity customs

In all societies, drinking is mainly a social activity. Even most of those who sometimes drink alone usually drink more often in groups. While drinking and intoxication affect the individual's consciousness and body, they are thus intrinsically social activities, carried on in front of those with whom the drinker is drinking, and often also before an audience of those who are not part of the drinking group. In the context of the drinking group, drinking is a medium of solidarity, and in a great many societies drinking together is a sign of mutual trust and status levelling. But the drinking group is also potentially a source of social division where others are excluded, whether explicitly or customarily and by assumption.

The drinking group can function in almost any location — in someone's home, on the street, out in the bush or countryside, or in a restaurant or tavern (see box). Typical locations of social drinking vary with the culture and physical circumstances. Half of the males in a Mexican sample, for instance, reported that their last drinking occasion was in someone's home, while this was true for only 20% of the male respondents in Zambia (Roizen, 1981). Conversely, for 18% of males in Mexico but 33% in Zambia the last drinking occasion was a tavern (Roizen, 1981).

In Khalapur, India, “Rajput alcohol consumption is a group ritual in which the liquor is passed among the participants in a bottle or glass.... The aim of the drinking is purely to get as drunk as possible as quickly as possible without passing out.... The exclusively male alcohol consumers gather out of sight of families, usually even adult children.... One group met nightly in the school building outside the village to build a fire, cook meat and drink liquor. With the absence of women and the consumption of liquor, there was even some laughter, joking and singing.” (Dorschner, 1981:115-117)

Anthropological accounts from many cultures have emphasized the congruence of drinking with cultural values such as hospitality, kinship and reciprocity (e.g., Waddell, 1971; Madsen and Madsen, 1979; Spicer, 1997). Even where alcohol was not present in the traditional culture, it has come to serve as a vehicle for the reciprocal relationships that the culture prescribes (Mathiasson, 1980). An account of the drinking patterns of the group of regular customers at a village beer shop in Togo (see box) typifies drinking group patterns in many societies, although the specifics of the reciprocity expectations and rituals will differ.

"Drinking at Djima's la village beer shop in Togo follows fairly predictable patterns.... The most common pattern, at least among the shop's 'regulars', is to drink bottled beer in groups and to buy 'rounds'. The large size of the beer bottles produced by the national brewery makes group drinking seem natural. The person who is purchasing a round pours drinks for the other members of the group. By making a special point of avoiding foam and filling each glass to the brim, he shows his generosity.

Buying rounds follows certain norms of reciprocity. There is no expectation, within a given group of drinkers, of an immediate, one-for-one exchange of drinks. On a particular occasion, a drinker may stop drinking and leave before everyone has had a chance to buy rounds. But among the 'regulars' there is a presumption that fairness and reciprocity should prevail. In the long run, everyone is expected to carry his appropriate share of the burden of buying drinks.

Besides buying rounds, the customers at Djima's from time to time perform a variety of small drinking rituals. For example, following traditional practices, customers at the beginning of a drinking session sometimes pour a small libation on the floor 'for the ancestors'. Subsequently, the person buying a round, or someone else, occasionally offers a toast.... In general, throughout the drinking session a variety of small rituals of pouring, toasting, and mutual praise are carried on." (O'Donnell, 1984:31)

The solidarity of the drinking group is often to some extent in opposition to and at the expense of others in the society. Where drinking is primarily limited to men, the solidarity is among men, and the women may complain about it (see e.g., Benedict and Benedict, 1982:199). In Fiji, Walter (1982:435) reports, drinking groups are primarily composed of young men, who do not generally have high status in the village. Women who discover homebrew routinely put salt in it to ruin it. Overnight drinking parties are carried on in the bush outside the village. Initially, at least, there is "an exaggerated concern to keep quiet lest the party be exposed". In other societies, those outside the drinking group may have less social power to act, but nevertheless harbour considerable resentment.

The customs of the drinking group often function to encourage or enforce drinking even against the individual's immediate desires. In many societies, games played in the context of the drinking group require further drinking as a reward or penalty. Customs of buying rounds, with their expectations of reciprocity, tend to favour the pattern of the heaviest drinker in a group; other members of the group may fear being considered unsocial and ungenerous if they do not stay in the successions of drinking rounds to the end. An example from fieldwork in a Mongolian community in China (Williams, 1998) describes vividly the pressures to drink within the drinking group (see box).

Williams (1998) describes the strong pressure prevailing in a Mongolian community in China to drink at an even pace and heavily. A refusal to drink signifies a refusal to engage the other on equal and respectful terms. Drinking partners take turns challenging each other to drain the cup, and the cups are inverted immediately afterward to prove the liquor is gone. A competitive playfulness animates each challenge, and verbal sparring becomes more intense as the session goes on, as participants seek to preserve their drinking honour without succumbing to incapacitation. Challengers may be pacified when someone substitutes a folk song for a swallow, and a clever excuse may be rewarded, but it will not offer protection for long. Etiquette does permit an appointed proxy to consume liquor on another man's behalf. The proxy, however, assumes the burden in addition to his own drinking obligations at the table. Even after a guest vomits, he may not be safe from relentless exhortations to drink still more. Williams also offers an array of anecdotal examples of serious problems attached to these drinking customs.

The choice of drinking or not is thus not solely an individual decision. In many contexts, rejecting a drink will be interpreted as indicating disrespect of the other participants or of important and even sacred communal rituals. Some forms of sociability around drinking actually enforce drinking in ways that may be dangerous.

Communal celebrations

From a sociological perspective, it is useful to distinguish between two types of communal celebrations as "time out" from normal activities, and often from normal rules of behaviour. In carnival-type celebrations roles and power relationships blur, vanish, or are even reversed (da Matta, 1978), whereas festa-type celebrations express fraternization and affirmation of roles. In the following, our focus is on festa drinking.

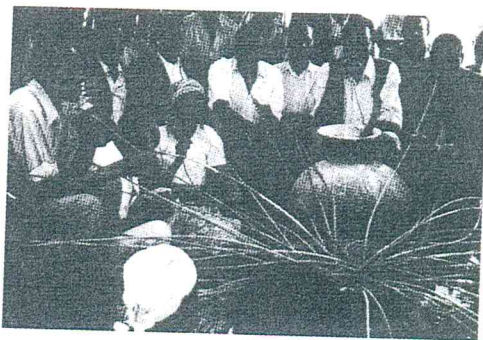
A festa lasts at least a day and more usually several days. Fiestas are normally scheduled in terms of particular seasons or dates (see box): at harvest time, when a local market meets, on a special occasion in a religious calendar, around a national anniversary date. They may mark significant life transitions for individuals in the locality, notably a local marriage.

Zimbabwean women by tradition brewed a cloudy or opaque beer made from sorghum or maize for ceremonies, spirit-medium celebrations, or the culmination of community efforts like planting and harvesting (Moses, 1989). Brewing took more than a week, and when it was ready, it had to be drunk promptly, or it would sour to the point of being undrinkable. During a "beer-drink", other tasks were set aside. Drinking to intoxication, but without complete loss of self-control, was a customary pleasure. The community suffered little harm from it, because it happened during a time regulated by tradition, insulated from work and other responsibilities. Made from sorghum, and averaging 3% alcohol, the beer also had some nutritional value.

Photographer: Jonathan Blair, Corbis



Photographer: M.J.R.Nout



Photographer: Jack Fields, Corbis



Photographer: Conaculta-Frank Sinatra-Fototeca Nacional

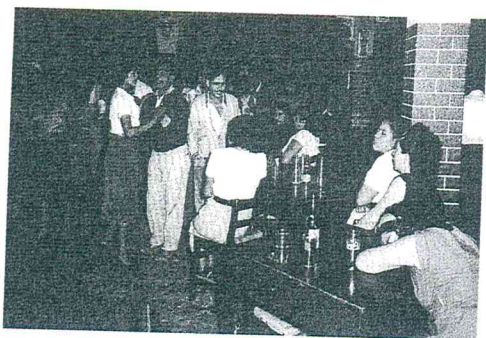


Plate 8

Drinking groups and communal celebrations

Top left: Yapese men drinking beer on United Nations Day; Yap, Federated States of Micronesia. *Top right:* A group of tribesmen drinking indigenous beer, Konso, Ethiopia. *Bottom left:* Drinking and dancing in Mexico. *Bottom right:* A drinking session in Busia, Kenya, near the Uganda border (Beckman, 1988).

In most societies, drinking, often heavy drinking, has been at least an accompaniment of fiesta-type celebrations, and often at the heart of them. The alternation of consciousness of intoxication is both a symbol for and a means of casting aside everyday concerns and rules. Eber's account (1995:81-106) of the fiesta in a town in the Highlands of Chiapas in Mexico underlines the involvement of alcohol not just in the general celebrations but also in the communal ritual of the occasion (see box).

In the town, as in other towns in the Chiapas highland region in Mexico, the remembrance of the town's patron saint "is continued in the minds not only of those that live in the town, but of all that live far and near, by coming, trading, sporting, and dancing, offering unto the saint, and bowing, kneeling, and praying before him.... Rum and chicha stand out ... from other [festal] drinks and food in ... their many-layered symbolic roles."

Days of preparation are required of the families whose honour and turn it is to play main roles at the fiesta. Once the fiesta has begun, "the ritual drinking that fills much of our time in pre-fiesta days moves into the streets, the town hall, and the market-place". Altogether, by the end of the fiesta, the contents of "eighteen fifty-litre barrels of chicha and thirteen twenty-litre jars of rum" had been distributed to fiesta participants.

"Some of the most notorious drinkers at fiestas are musicians, who sustain themselves through all-night jam sessions with rum.... Traditional [local] people say that song is God's favorite sound and that rum heats, and therefore empowers, musician's words." (Eber, 1995: 80, 90, 92, 96).

In village societies with fiesta traditions, it has been quite common for drinking to be primarily associated with the fiestas. Fiesta drunkenness in the past may have been the only occasions of drinking, at least for poorer members of the community. Now the fiesta drunkenness may commonly come on top of other, more regular patterns of drinking.

In many developed societies, part of the process of industrialization was a long fight against popular traditions of the fiesta, which were seen as threatening not only public order but also productivity. The jocular expression among British labourers, "Saint Monday", expressed the pre-industrial reality that Monday was often taken as an unofficial holiday to rest up from the drinking of the weekend. Slowly, in many parts of Europe, the old traditions of markets and fairs as local fiestas were repressed in the interests of a "rationalization of leisure" (Gusfield, 1996). In Chiapas, too, Eber reports (1995:99), the tradition of drinking at fiestas has been challenged, although not the holding of the fiesta itself. The candidate for president of a neighbouring town had "led a vigorous prohibition campaign, arguing that [the people] could move out of poverty if they would stop drinking rum. He won the people over and enacted a 'dry' law when he took office". At the fiesta there, "the town centre was full of people drinking sodas and fruit-flavoured drinks; however, not everyone was sober." Drinking, though probably less than before, still went on at stands on the outskirts of town.

The tavern

Csikszentmihályi (1968) describes in detail three different types of traditional drinking-places in European cultures: the open and airy wine shop in Mediterranean cultures, with drinkers sitting in small groups around tables; the huge, darkened beer halls of Germany and Austria, with long parallel tables flanked by benches; and the stand-up bar of the English pub, with drinkers standing in a line. The range of variation in drinking-places in developing societies is even greater (Single, 1997b). Our primary focus here is on places it is possible to buy and consume alcoholic beverages in a glass, mug, bottle or other open container without having a meal. This excludes places which are primarily for eating, but where drinks can be consumed along with the meal, and places which sell alcoholic beverages only for consumption elsewhere. In practice in developing societies, these categories are often not so clearly differentiated, despite any precision in the regulatory definitions. And places that are primarily taverns often sell a variety of other goods as well (see box).

In the beer shop in a Togo village is "an assortment of goods for sale. On the shelves against the rear wall are cigarettes, flashlights, batteries, and a selection of canned goods.... Also on the shelves are bottles of beer, red wine, rum, schnapps, scotch, and soft drinks." The store's refrigerator "is one of a handful in the village. Moreover, it is the only one accessible to the general population. So, most villagers who want a cold drink must come here to get it...."

"During the dry season, a few chairs and tables are placed in front of Djima's shop. This permits customers to sit outside, sipping drinks and engaging in conversation. Patrons may also stand around in the road outside Djima's place. In fact, on certain festive weekend nights, crowds of people assemble on the road and dance to the music from Djima's phonograph. On such evenings Djima obligingly sets out a bright kerosene lamp to light up his veranda and the roadway beyond."

The shop "is much more than just a drinking establishment. It is a site where business is conducted. Occasionally it operates as a bank and lending institution. And it is a place where, at least informally, many public issues are discussed."

"In the course of a day, a range of customers pass through Djima's store. A child may come in to buy some item for his mother. Passengers on their way through town may stop in for a drink. A farmer may come in to obtain a supply of beer for a funeral, wedding or other ceremony. A few truckers may stand around discussing where to get loads. And, in the evening, various people may come in to make small purchases.... after the main marketplace has shut down for the night". (O'Donnell, 1984:28-30)

As places of "public accommodation", taverns are natural meeting-places, and frequently have a variety of functions besides serving drinks. With their wide range of connections with drinkers in the community, tavern keepers are often politically well-connected, and may become involved in politics themselves as well. In most developing societies, taverns are primarily male-dominated spaces, in



Photographer: Justin Willis



Photographer: Walter Hodges, Corbis



Photographer: Owen Franken, Corbis.

Plate 9

The tavern, in diverse forms

Top left: "Gran pulquería 'La Penicilina'" in Mexico – presumably the *pulque* and the camaraderie will cure all ills, like penicillin. Top right: Women toasting with wine at a bar in Hong Kong. Bottom left: Drinkers of local maize beer in a South-west Tanzania beer club. Bottom right: Men and children in a bar in Chile.

part simply reflecting the clientele. But as places of public accommodation, they are also commonly meeting places for those with romantic and sexual relationships in mind. Given that many cultures make a strong association between drinking and sexuality, particularly with regard to women (Leigh, 1995), drinking in taverns often casts questions on a woman's social standing. In quite a few societies it would traditionally put her outside the pale of respectability. On the other hand, particularly in eastern and southern Africa, where making the traditional beverages has been women's work, keeping a tavern, official or unofficial (a "She-been"), has been a major source of employment and support for widowed women and mothers (Jernigan, 1999). Increasing competition from commercially produced beverages, often sold by politically-connected male tavernkeepers, has threatened this traditional source of support for female-headed households (Haggblade, 1995).

In the Seychelles when the Benedicts did their fieldwork, "a woman who drinks publicly is considered a whore". On the other hand, many of the sellers of palm toddy in the Seychelles are women. "Men drink toddy in the yards of the houses where it is sold. A man will stop by the yard of a toddy seller, purchase a bottle, drain it, and go on his way. Sometimes men sit in small groups to chat while they drink, but one rarely encounters more than half a dozen men at any toddy seller's.... A successful woman seller jokes and teases the men as they drink, thus encouraging them to remain and buy more." (Benedict and Benedict, 1982:196, 200)

Besides any pressure the drinker may feel from members of the drinking group, there is a built-in extra source of pressure for more drinking in the tavern. The drinks he or she buys essentially pay the rent for the public accommodation that the drinker is occupying and using. Normally, there is no charge for occupying the space per se; instead, the tavern owner expects to earn the overhead costs and a profit from the drinks the drinker buys. The tavern drinker who does not keep up the expected drinking pace may come under various subtle or open pressures to drink up.

Over the years, governments in many places have sought to control or eliminate the pressures on the tavern drinker to drink more. Governments often took over operation of taverns themselves, to remove the private profit interest in greater sales. With a mixture of this motive and a concern for social control of the black population, European-controlled governments all over southern Africa set up municipal beer halls in the early 1900s as the main legal venue for drinking by the black working class (Swanson, 1976; la Hausse, 1992; Parry, 1992). While it can be argued that the halls did hold down some problems from drinking, it is clear from the subsequent experience that governments themselves are not immune to the desire to profit by increasing sales (see e.g. Jernigan, 1997).

There are a variety of public health interventions that may be undertaken in drinking settings; these we will describe below in Chapter Eight. From the levels of culture and customs, we now move to the individual, and to considering the available evidence on how individuals in developing society use or do not use alcohol.

Individual patterns of drinking: evidence from population surveys

Whether an individual drinks, and how often and how much, is thus influenced both by norms at the cultural or subcultural level and by the norms specified in particular drinking customs and contexts. However, an individual's patterns of drinking also reflect personal history and inclination. Even within a given culture and status group, there are variations between one individual and another in the pattern of drinking.

We turn now to the evidence from surveys of probability samples of the general adult population concerning patterns of abstinence, drinking and heavy drinking at the individual level in developing societies. With some exceptions (Room, 1988a), such surveys have usually been carried out to compare patterns between individual drinkers or social groups in a single country. In the context of a single society, some commonalities can usually be assumed, even if the comparisons are between different cultural groups in the society—for instance, the drinks usually come in standard-size containers. Many such commonalities cannot be assumed in comparisons across societies. In the following, we thus confine ourselves to simple levels of comparison.

The comparisons draw on two main sources: published analyses of studies, and reanalyses of existing data-sets carried out for a WHO initiative on Alcohol Epidemiology in Developing Societies (Demers et al., 2001). Although the reanalyses were carried out in accordance with a common plan, their comparability is still limited by differences in the underlying questionnaires. The available material also falls far short of representing the range of variation of drinking patterns in developing societies.

Like all methods of measuring drinking, surveys of probability samples of the general population have their weaknesses. Methodological studies in developed societies have shown that surveys often fall far short of accounting for all the alcohol sales recorded for the population studied; the proportion of recorded consumption covered is often as low as 40% (Mildanik, 1982). One reason for surveys falling short is the failure to sample or interview parts of the population that disproportionately include heavy drinkers. Another reason may be a failure to ask appropriate questions. For instance, being an abstainer may be defined either in terms of a self-defined status or in terms of behaviour in a given time-period, for instance, not having had an alcoholic drink in the past year. Asking a question in one of these terms will not always yield the same answer as asking in the other (Lindgren, 1973; Nelker, 1973). A third reason is erroneous answers or misestimation by the respondent. This may be a matter of simple forgetting (Mäkelä, 1971). Or it may reflect concealment or underestimation, whether deliberate or with an element of self-delusion. Generally, underestimation is more likely where the behaviour asked about is potentially discreditable, just as there may be overestimation where the behaviour is positively regarded (Cahalan, 1968-69). Where societies or population subgroups differ in drinking norms, with a behaviour that is accepted in one group considered to be discreditable in the other, a comparison of survey responses may thus give a somewhat exaggerated picture of the differences.

The problems discussed so far are common to surveys in both developed and developing societies. There are also potential problems specific to the context of

some developing societies. The usual population survey is methodologically individualistic: an isolated individual is being interviewed personally about his or her attitudes, behaviour and experiences. In principle, the interview takes place outside the surrounding social context, and out of earshot of others. In a developing society, however, arranging privacy for an interview may be difficult or impossible. At a deeper level, the idea that opinions are a matter for individual rather than collective preference may be new and foreign to the respondent, and this may affect the answers that are elicited (Lerner, 1958). Partanen (1990) discusses some of these sources of uncertainty concerning the meaning of survey answers on abstinence in Africa.

Surveys in both developed and developing country contexts have also used a wide variety of methodologies and definitions, of drinking, of heavy drinking, of a drink, and so on. This variation can render cross-country comparisons difficult. Although WHO recently published guidelines for monitoring alcohol consumption and harm, in an attempt both to encourage such monitoring and to standardize and improve the comparability of the measures used (WHO, 2000a), it will take time for this effort to bear fruit.

Despite these drawbacks, population surveys are an indispensable means of describing patterns of drinking and the distribution of drinking behaviour in the population. Unlike alcohol sales or official production statistics, answers to them potentially cover unrecorded as well as recorded consumption, and give us a detailed picture of who in the society is doing the drinking under what circumstances and in what amounts. While ethnographic methods can give us a richer picture of drinking customs and subcultures, probability-sample surveys can more precisely indicate the actual distribution of drinking behaviours and experiences in the population.

Patterns of abstinence

A first step in characterizing drinking patterns is to chart rates of drinking at all. We have already considered, in Chapter 3, estimates of rates of drinking, as against abstaining, in the last year for WHO subregions (Table 3.1). Table 5.2 shows, for eighteen societies, data on the proportion of general-population respondents who report abstaining or drinking. Where data are available, we have distinguished between never having been a drinker at all, having been a drinker in the past but not in the present, and being a current drinker — either within the last year, or within the last thirty days. The selection of societies is heavily biased towards Latin America, since "lifetime use" has been a common question in the illicit drug surveys conducted there in accordance with U.S. models.

In all of the societies shown in the table, lifetime abstinence is common among adults. In this respect, developing societies differ considerably from most industrialized societies. Except in Haiti, rates of lifetime abstinence are generally higher among women than among men. But there are variations in the extent of divergence between the genders, with the samples from India showing the highest levels of consumption than elsewhere, but even here drinking is almost entirely confined to males. In Costa Rica, Guatemala and Brazil, too, about half the women report no drinking during their entire lifetime. In a majority of the societies, at least one-third of the women report no drinking in their lifetime. The lowest proportion of lifetime abstainers among women, 21%, is reported for Peru.

Table 5.2
Lifetime abstainers, last-year abstainers and current drinkers, percent

	Lifetime abstainer	Last-year abstainer	Current drinker
India (Varma et al., 1980)	male (573)	35	24
	female (458)	92	6
India (Mohanan et al., 1980)	male (2064)	34	8
	female (1510)	98	0
Mexico 1998 (Medina Mora et al., 2001) (N=12557)	male	9	14
	female	18	38
Costa Rica 1995 (Bejerrano, 2001)	male (1357)	9	14
	female (1370)	18	38
Chile, 1996 (Fuentelba et al., 1996) (N=8271)	male	9	14
	female	18	38
Namibia 1998 (Mustonen et al., 2001)	male (1012)	25	14
	female (1811)	36	17
Brazil, 1999 (Galduróz et al., 2000)	male (963)	64	36
	female (1448)	43	57
China 1993/4 (Hao et al., 2001)	male (11972)	17	82
	female (11541)	74	26
South Korea 1997 (Park, 1998)	male (1132)	18	82
	female (621)	48	53
Thailand (Deelertuonyong et al., 1992)	male (1867)	30	71
	female (2392)	55	46
Zambia 1978 (Roizen, 1981)	male (421)	43	58
	female (518)	74	26
Seychelles 1989 (Bovet, 2001)	male (504)	25	75
	female (563)	71	29
Nigeria 1988/9 (Obof, 2001)	male (1395)	46	55

Table 5.2 (cont'd)
Lifetime abstainers, last-year abstainers and current drinkers, percent

(all data below from Jutkowitz & Eu, 1994)	Lifetime abstainer	Last-month abstainer	Drank in past 30 days
Haiti, 1990 (N=2100)	Male	41	53
	Female	44	51
Guatemala, 1990 (N=1807)	Male	35	31
	Female	52	29
Dominican Republic, 1992 (N=3015)	Male	26	25
	Female	42	28
Panama, 1991 (N=911)	Male	13	33
	Female	29	48
Bolivia, 1993 (N=6000)	Male	25	23
	Female	38	30
Peru, 1988 (N=6761)	Male	12	30
	Female	21	43

nence is common among men, too. More than one-third of men report this in the Indian, Haitian and Guatemalan samples. Peruvian and Panamanian men are the least likely to be lifetime abstainers, but even there the rate is above 10%.

In terms of abstaining during the past year, rates among men in Table 5.2 range from 59% to 15% for the ten societies where this is reported, and from 98% to 46% among women. Drinking during the past year is almost exclusively a male pattern in India, and is least gendered in Chile. Current abstention among females is also a majority behaviour, or close to it, in the three additional Asian societies represented, China, South Korea and Thailand, although a woman who drinks is not as much of a curiosity there as in village India. Costa Rica and Mexico fall in between, with about twice as many male as female current drinkers. Rates of abstention in the last year among Mexican women fall from 65% in 1989 to 56% in 1998 (Medina-Mora & Cravioto, forthcoming; Medina-Mora et al., forthcoming). Again, in all these societies, current abstinence is not an uncommon behaviour for a man.

Spotily as they are in geographic coverage, the results in Table 5.2 remind us that there are substantial portions of the adult population even in non-Islamic societies who never drink at all. In most Islamic societies, the proportion of abstainers would also be high. A 1990 study of medical students in Morocco found that only 23% were current drinkers (Touhami & Bouktib, 1990). A survey by Kortinen (1999a) in Malaysia found only one among about 314 Malay (and

Islamic) heads of households who acknowledged drinking alcohol, while substantial proportions of ethnic Chinese (32%) and Indian (23%) heads of households were current drinkers.

The first two columns of figures in Table 5.3 show the estimated proportion of abstainers in 15 world subregions (see Table 3.1 and discussion in Chapter 3). These estimates derive primarily from population surveys, backed up as needed by expert opinion and extrapolation. In general agreement with the data we have presented for individual countries, rates of abstention are high among males and even higher among females in the Middle East and South-East Asia. In Africa, too, about half of males and more than two-thirds of the females are estimated to abstain. Abstention rates are also high among females in East Asia. Among developed regions, only in Latin America are abstention rates found that fall within the same range as those for developed countries.

It is quite common in developing societies for only a minority of adults to be current drinkers (i.e., to have had a drink in the last year). This pattern differs from the current pattern in all developed societies. On the other hand, in some developing societies, drinking begins for some at a very young age. In Zimbabwe, 31% of those aged 14 years and under reported using alcohol, while in Lesotho 9% of children aged 10-14 and 4% of those aged 5-9 currently use alcohol (Acuda & Eide, 1994; Lesotho Highlands Water Project, 1996).

Characterizing drinking patterns

As the data in Table 5.2 suggest, varying the time period asked about will yield considerable variation in rates of abstention in a given society. When we turn to characterizing drinking patterns, the range of possible variations in definition is greater, in terms of the amount consumed, in terms of the way the consumption is patterned, and in terms of the circumstances of drinking and behaviour while drinking. Over the years, differences in patterns of drinking have been characterized in many different ways, although there is increasing consensus among researchers on many of the issues (Dawson and Room, 2000).

One important and conceptually simple dimension in the literature has been the overall volume of drinking, measured in such terms as how many drinks are consumed in an average day or how many litres of ethanol are consumed in a year. This way of characterizing drinking has the advantage of including all alcohol consumed in a single common metric. However, a common average pattern of two drinks per day can summarize quite different patterns of drinking: on the one hand, two drinks each day with the evening meal, or on the other 14 drinks in a few hours every Saturday night.

Reflecting such differences, descriptions of patterns of drinking in the general population have often used typologies. As in the simple typology with which we concluded the section above on the cultural position of drinking, these typologies are usually built around two dimensions: the frequency of drinking occasions, and some measure of the amount drunk on an occasion (Room, 1990). Often, relatively heavy drinking occasions are emphasized in the latter dimension — for instance, whether the respondent drinks five or more drinks on an occasion at least once a week.

Though it appears quite generalized, any such typology still has a number of culturally-specific assumptions built into it. A criterion built around weekly patterns will not work very well in a cultural situation where daily life is not organized in

Table 5.3
Estimated proportion of abstainers among men and women,
and hazardous drinking pattern score for different WHO subregions
(population weighted averages)

WHO Region (for definition see Table 3.1)	males: % abstainers	females: % abstainers	Total consumption	Consumption per drinker	Hazardous drinking patterns
Afr-D (e.g. Nigeria, Algeria)	53	73	4.9	13.3	2.5
Afr-E (e.g. Ethiopia, South Africa)	45	70	7.1	16.6	3.1
Amr A (Canada, Cuba, US)	27	42	9.3	14.3	2.0
Amr B (e.g. Brazil, Mexico)	25	47	9.0	14.1	3.1
Amr D (e.g. Bolivia, Peru)	26	40	5.1	7.6	3.1
Emr B (e.g. Iran, Saudi Arabia)	82	96	1.3	11.0	2.0
Emr D (e.g. Afghanistan, Pakistan)	83	99	0.6	6.0	2.4
Eur A (e.g. Germany, France, UK)	10	19	12.9	15.1	1.3
Eur B 1 (e.g. Bulgaria, Poland, Turkey)	23	43	9.3	14.3	2.9
Eur B 2 (e.g. Armenia, Azerbaijan, Tajikistan)	46	67	4.3	9.9	3.0
Eur C (e.g. Russian Federation, Ukraine)	11	19	13.9	16.5	3.6
Sear B (e.g. Indonesia, Thailand)	65	91	3.1	13.7	2.5
Sear D (e.g. Bangladesh, India)	74	96	2.0	12.9	3.0
Wpr A (e.g. Australia, Japan)	13	23	8.5	10.4	1.2
Wpr B (e.g. China, Philippines, Viet Nam)	16	75	5.0	8.8	2.2

Source: Jürgen Rehm (April 2002), based on estimates for the WHO Comparative Risk Analysis within the Global Burden of Disease 2000 Study. See Rehm et al., forthcoming.

terms of weekdays and weekends. Neither will it be very useful in a culture where drinking as often as weekly is uncommon. The unit of "a drink" makes some sense in a culture where alcoholic beverages are consumed from individual containers, and where "a drink" of different alcoholic beverages contains about the same amount of ethanol. But "a drink" is not an easily definable unit when the beverage is consumed by passing a single drinking vessel around a group. Each of these assumptions, in fact, comes into question in one or another developing society.

In the present analysis, we summarize the individual's drinking pattern in terms of two dimensions. The first is the frequency of drinking occasions. We may regard this as a very rough surrogate for Partanen's (1991) dimension of engagement with Alcohol — the extent to which drinking is for special occasions, or is a part of everyday life. The second is whether the respondent drinks a "high quantity" on an occasion at least sometimes — even if only on a minority of drinking occasions. In principle, the "high quantity" was defined for these tabulations as consuming at least 50-60 gm. (about 7 cl.) of pure alcohol on an occasion, and doing this with some regularity. This amount is equivalent to about five 33-cl. bottles of 5% beer, 60 cl. of 12% table wine (i.e., most of a 75 cl. bottle), or 17 cl. of 40% spirits. In very approximate terms, this measure approaches what Partanen describes in terms of Seriousness of Drinking.

Frequency of drinking

Table 5.4 shows results on frequency of drinking occasions from surveys in twelve countries. In most of the societies represented in the table, drinking is not a part of everyday life. In all societies shown, women very rarely report drinking nearly every or every day. Only in the Seychelles and in Nigeria do a substantial proportion of men report drinking daily or nearly every day.

Even if drinking is not an everyday activity, if it happens at least every week it may be regarded as part of a regular life routine. In several of the societies in Table 5.4 — South Korea, Zambia, Nigeria and Seychelles — about half of the men report drinking at least once a week. In Thailand and Papua New Guinea, about one-third of the men report this. Relatively few women, however, report this level of frequency in any of the societies; the highest rates are 16% among Zambian, 14% among South Korean and 13% among Thai women.

In a number of the societies — Mexico, Costa Rica, Chile, China, and Papua New Guinea — the modal frequency of drinking reported by male drinkers is 1-3 times a month. For women drinkers, this same modal frequency of drinking is reported in Chile and South Korea; in other societies where the distinction can be made — Mexico, Costa Rica and China — the modal frequency among female drinkers is less than once a month. In a sample from 24 major cities in São Paulo State, Brazil, only 8% of men and 1% of women reported drinking at least 3 or 4 times a week (Galduróz et al., 2000).

The data suggest that drinking is not generally an everyday activity for most of the population in developing societies in Latin America and Asia. While in some societies there is a substantial minority of males who drink every day or nearly so, the modal frequency of drinking among drinkers is usually less than once a week. Women are generally much less likely to drink frequently than men, though in some societies — e.g., Zambia and Chile — the gender difference is greater for abstention rates than it is for frequency of drinkers among those who do drink.

High-quantity drinking

Table 5.4
Frequency of drinking, percent (including abstainers)

	abstainer	1-11 x yr	1-3 x mo	1-2 x wk	3-4 x wk	5+ x wk
Mexico (Medina Mora et al., 2001)	male (5237) female (5920)	30 64	22 24	23 8	17 3	3 0
Costa Rica (Bejerano, 2001)	male (1357) female (1370)	45 71	17 15	23 12	11 2	1 0
Chile, 1996 (Fuentelba et al., 1996) (N=8271)	male female	33 46	18 23	42 29	4 2	2 1
China (Hao et al., 2001)	male (11972) female (11541)	17 74	17 16	30 7	15 2	7 0
South Korea (Park, 1998)	male (1132) female (621)	18 48	6 16	22 23	50 13	4 1
India (3 regions) (Mohan et al., 2001)	male (32019) female	72 >97	12 3	10 10	6-7 x wk	6
Thailand (Deelert-yuenyong et al., 1992)	male (1867) female (2392)	30 55	40 33	16 8	15 5	
Papua New Guinea* (Marshall & Lalomiceanu, 1998)	males (715)	22	10	39	28	2

Table 5.4 (cont'd)
Frequency of drinking, percent (including abstainers)

	abstainer	1-12 x yr	2-4 x mo	1-2 x wk	3-4 x wk	daily
Zambia (Rotzen, 1981)	male (421) female (518)	43 74	11 10	3 2	25 10	11 3
Nigeria (Obot, 2001)	male (1395)	abstainer	1-11 x yr	1-3 x mo	1-2 x wk	3-4 x wk
Seychelles (Bovet, 2001)	male (504) female (563)	15 46	34 48	10 2	11 0	30 0

* This is a sample of university students, military men, and employees of a commercial concern with an average age of about 25.

In Table 5.5, we consider respondents' reports of whether their current drinking patterns include occasions of high-quantity drinking (second column of figures). The actual criterion varies somewhat with each dataset, so that the comparisons between samples are by no means exact. For comparison, the proportion with a drinking frequency of at least weekly is also shown in the table (first column of figures). Where available, the proportion who are both weekly drinkers and regular high-quantity drinkers is also reported (last column).

Drinking a high quantity with some regularity is normative behaviour among male drinkers in a majority of the developing societies for which we have data. Among Mexican males who are current drinkers, for instance, 70% drink high quantities fairly regularly; for Papua New Guinean males, the figure is 67%, for Nigerian males 69%, for Namibian males 46%, and for Indian males who drink at least monthly, it is 93%. Only in the two societies on the list where current drinking is most nearly universal among males, Seychelles and South Korea, is high-quantity drinking definitively a minority phenomenon among male drinkers (34% and 27% respectively).

Combining relatively regular drinking (weekly +) with high-quantity drinking is most common in Nigeria among the societies for which we have data; one-third of the Nigerian males report this, while fewer than one-quarter report it in the other societies studied.

The customary pattern of drinking both frequently and to intoxication appears in substantial percentages of drinkers throughout the African region. Of the 74% of Zimbabwean industrial workers who report drinking, 66% drink every weekend and 22% drink daily (Moses, 1989). Another study of Zimbabwean hospital workers found that 93% of male and 63% of female current drinkers drank to intoxication every time they drank (Butau, 1992). In Lesotho, 33% of male and 16% of female drinkers reported spending the entire day drinking, while 29% of men and