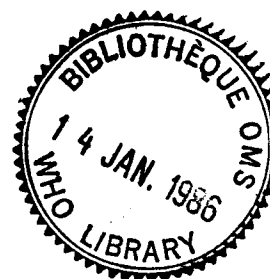




EXECUTIVE BOARD

Seventy-seventh Session

Provisional agenda item 15



TOBACCO OR HEALTH

Report by the Programme Committee

1. The Programme Committee reviewed a draft report on the "WHO Programme on Smoking and Health: The adverse health effects of tobacco use", to be submitted to the Executive Board at its seventy-seventh session in January 1986. It was suggested that the title be changed to "WHO Programme on Tobacco or Health", or "WHO Programme on Tobacco and Disease", or "WHO Programme on Diseases Caused by Tobacco", since the choice was smoking or health, and the pathological agent was tobacco not merely in its smoked, but in all its forms. The draft report had been referred to, and received the benefit of comments from a number of outside experts and organizations. The Committee made a number of suggestions for improving the report before submission to the Board.<sup>1</sup>

2. The Committee noted that the whole problem of smoking and tobacco-related diseases had reached epidemic proportions on a worldwide scale - indeed, a "pandemic". While favourable trends could be seen in a few developed countries, the overall trend in most countries, especially in developing ones, showed continuing, significant increases in the use of tobacco products. In particular, women were joining the ranks of smokers in large numbers, while children and young people were especially targeted as new customers by the tobacco industry. In the battle between health and commercial interests, it was less than clear that health was winning the fight against tobacco; health could and should win this battle.

3. In the field of smoking and health, unlike a number of other programme areas, WHO faced the active opposition of major interest groups. WHO had no vested interest other than concern for health and scientific truth. There was ample, scientifically proven and validated evidence of the direct causal link between a substantial number of diseases and use of tobacco products. Tobacco was clearly addictive and the main cause of at least one million premature deaths a year. Some hazardous chemicals and pollutants which received extensive publicity in the media actually caused far less morbidity and mortality than tobacco, which often received little or no attention as a health risk. The presence of carcinogens and other toxic substances in tobacco smoke and other tobacco products was a known fact. WHO had to state this clearly and unequivocally, since there was constant misrepresentation by adverse interests.

4. WHO was calling for a common sense public health approach and action now, rather than deferral of action pending further basic research. Research was still needed on the behavioural aspects of smoking, but to suggest priority for continuing basic research further to prove the causal relationship between disease and tobacco was unnecessary and would simply buy time for adverse commercial interests.

5. WHO had to take a firm position against any form of so-called "safe" cigarette or tobacco product. Nicotine was clearly addictive and, considering the many tobacco-induced diseases, "safe" tobacco did not exist. There was no safe dosage of tobacco.

<sup>1</sup> The report, originally submitted as document EB77/PC/WP/6, will be distributed separately in revised form as document EB77/22 Add.1.

6. WHO had to take an equally firm position against "passive smoking", which might better be referred to as "enforced smoking" or "involuntary smoking". There was a need to protect the right to health of the non-smokers who were at risk from the practices of their addicted fellow citizens. Attention should be given to establishing or extending segregated smoking areas in all public places, restaurants and transport. Non-smoking was especially important in health-related establishments and among health personnel. This applied particularly to WHO, since reform began at home, and people looked to health institutions for healthy life-style example.

7. A range of strategic, tactical and intersectoral actions had to be undertaken by Member States, with the cooperation of WHO, the United Nations system and other partners, relating to policy and strategy formulation, objectives and targets, political involvement, and advocacy, information, education, legislation, advertising, smoking-cessation, economic aspects and selective practical research as outlined in the Director-General's report. The Committee particularly urged that the revised report on tobacco versus health, and the work that went into it, be exploited widely outside the Board and Health Assembly. It should serve as a technical baseline for a range of promotional activities and publications, such as, for example, the "Winners for Health" effort being jointly undertaken by WHO and the International Olympic Committee (IOC). There was a need for efficient and effective coordination among all programmes dealing with the risks of tobacco both within WHO and in countries. In addition, WHO should foster the exchange of successful experiences and information between countries.

8. The Committee believed that the time had come for WHO to reiterate a clear and firm policy on tobacco versus health, and concluded that the Executive Board should consider proposing a resolution for discussion by the Thirty-ninth World Health Assembly in May 1986. The Director-General was asked to prepare a suitable draft resolution and to report to the Executive Board on the financial implications.

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## EXECUTIVE BOARD

Seventy-seventh SessionProvisional agenda item 15

## WHO PROGRAMME ON TOBACCO OR HEALTH

Report by the Director-General

Tobacco smoking and the diseases that it causes have reached pandemic proportions in the developed countries and are rapidly gaining ground in the developing countries. In many of these countries cigarettes usually yield higher tar levels than those available in the developed countries. An additional major public health problem will shortly arise in the developing countries before communicable diseases and malnutrition have been controlled, and the gap between rich and poor countries will thus be further expanded. Nothing less than the removal of this man-made hazard would be compatible with WHO's goal of health for all by the year 2000.

The objective of the action programme on tobacco or health is, through collaboration with countries, to counteract these harmful trends and, in particular, to prevent tobacco addiction from taking root in youth. In certain developing countries, forms of tobacco use other than smoking are prevalent and cause specific diseases. These forms are also considered in this report.

As tobacco use is a multifaceted problem, multiple approaches are needed to tackle it. Among these are: collection and dissemination of tobacco use data; education and information; legislation to restrict smoking and to limit the promotional pressure of the tobacco industry; help for smokers in stopping smoking; involvement of the health professions, as well as of political, social and - in some countries - religious leaders in an exemplar role; elimination of agricultural, market, and labour dependence on tobacco production; collaboration between WHO and other relevant organizations and bodies of the United Nations system and the nongovernmental organizations active in this field; and international collaboration, including technical cooperation among developing countries (TCDC). Tobacco has proved to have a strong dependence-producing effect, due to its nicotine content, and that effect must be recognized in preventive and treatment strategies.

As a result of increasing public awareness of the harmful health effects of smoking, and thanks to a number of different control actions described in this report, the habit is becoming socially less acceptable and a decrease in smoking is beginning to emerge as a trend, but only in some highly industrialized countries. The extent of the problem regarding tobacco and the essential elements of tobacco control programmes have been determined. What is needed now is the design of relevant national programmes and their implementation through vigorous and persistent action at the country level, with appropriate cooperation and support of WHO and other partners at the international level.

Guidance was sought from the Programme Committee of the Executive Board on the types of action that WHO should emphasize in its efforts towards controlling the smoking epidemic, and on whether a draft resolution on the subject should be submitted to the Executive Board.

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## EXECUTIVE SUMMARY

This report has been prepared in response to the request by the Executive Board at its seventy-fifth session in January 1985.

Resolution WHA33.35 in 1980 requested the Director-General to further develop an action programme on smoking and health. The Executive Board and the World Health Assembly in their 1985 sessions expressed concern and it now appears that the time has come for a programme on smoking and health to be included in the classified list of programmes for the Eighth General Programme of Work of WHO. A recommendation to that effect was already made by the WHO Expert Committee on Smoking Control Strategies in Developing Countries, when it met in 1982.

The present report describes the magnitude and extent of the health problem caused by the use of tobacco (particularly, but not only in the form of cigarette smoking), the apparent advantages and manifest disadvantages of tobacco production and consumption for national economies, WHO activities combating the problem, the effectiveness and the results of national and international smoking control actions, and plans for future activities. The report further contains a request for guidance by the Programme Committee of the Executive Board.

Health problems. Cigarette smoking is the major avoidable cause of ill health and premature mortality in countries where it is widespread. It is responsible for about 90% of all cases of lung cancer, 75% of chronic bronchitis and emphysema, and 25% of cases of ischaemic heart disease, as well as for a number of other types of cancer, pregnancy complications, and respiratory diseases in children exposed to passive smoking. In many developing countries the cigarette smoking habit is already widespread, in others, particularly the least economically privileged ones, the habit is beginning to catch on noticeably and must be stopped before it is too late. In some developing countries traditional forms of tobacco use, for example, reverse smoking and tobacco chewing, bring about other disease manifestations, such as oral cancers. Besides being a cause of premature deaths through the diseases that it causes, cigarette smoking is the leading cause, in industrialized countries, of fires in residential accommodation and of forest fires that entail numerous injuries and deaths, and severe economic losses.

Worldwide use. Whereas in most industrialized countries the smoking habit is decreasing and is becoming socially less acceptable, in developing countries it is on the increase, fuelled mainly by intensive and ruthless promotional campaigns on the part of the transnational tobacco companies. In most developing countries unfortunately, the legislative controls and other measures - which in industrialized countries succeed in limiting the use of tobacco - do not exist or are at best inadequate.

Behavioural aspects. Once the young have experimented with smoking (or other forms of tobacco use) under peer pressure, promotional inducement, or as part of their rebelliousness and risk-taking behaviour, they become confirmed smokers because of the social reinforcement of the habit and the dependence potential of nicotine.

Economic aspects. In the short run, tobacco production is a source of revenue to many governments, as well as to farmers, retailers and others who work in this and related fields. Most of the revenue, however, goes to the transnational tobacco companies. In the long run, developing countries will face greatly increased domestic consumption, increased import of foreign cigarettes, increased public health problems due to tobacco-related diseases, and higher rates of absenteeism from work among smokers. Some developing countries may also face deforestation that occurs partly as a result of tobacco production. All these factors entail, besides the deterioration of the people's health, huge economic losses. Several studies have demonstrated that these losses in the long run outweigh the economic benefits. Economic considerations apart, tobacco use is essentially an ethical and health issue.

WHO action. If WHO's message about smoking and health is to reach the large public and influence national policies, the Organization and its leadership must be seen to act as health advocates in the fight against the spread of the smoking pandemic. Several resolutions of the Executive Board and World Health Assembly have guided, since 1970, WHO's global and regional activities in smoking and health, which have included expert committee meetings, intercountry seminars, assistance to research, the publication of the newsletter

Tobacco Alert, dissemination of information, World Health Day 1980, and support of legislation. Collaboration has also been established with other organizations and bodies of the United Nations system and with nongovernmental organizations.

Future action. This will concentrate on education and information of the public and of sociopolitical leaders, and youth; promotion of national legislation, for example to ban tobacco promotion, limit smoking in public places, and use price policies as a deterrent to tobacco use; operational research, for example to set up national support structures, to identify methods for bringing about large-scale cessation of smoking, to find economically viable alternatives to tobacco production, to involve the mass media as effective health message communicators, and to limit the tobacco industry's promotional drives.

Evaluation of anti-smoking action. Although it is difficult to quantify the results of anti-smoking activities, promising trends can be discerned. In many countries where long-term comprehensive anti-smoking education and other smoking control activities have been carried out, for example, Australia, Canada, Finland, Norway, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America, and others, a decrease in the prevalence of smoking and in per capita tobacco consumption has occurred in most strata of the population. Smoking-related diseases, e.g. cardiovascular disease and, in some countries, even lung cancer rates, are decreasing. Overall, in the industrialized countries smoking is becoming socially less acceptable. Worldwide, the number of countries that have adopted smoking control legislation has significantly increased. The number of national and international conferences, seminars, "no-smoking" days and weeks, intercountry consortia and similar events to counteract the spread of smoking have also been rapidly increasing in number and intensity in both the industrialized and the developing world, thus showing the concern of the governments for this problem. More and more nongovernmental organizations are joining forces with WHO in building up worldwide anti-smoking advocacy.

Guidance is sought from the Programme Committee of the Executive Board on whether the lines of action followed by WHO in tackling the problem of smoking and health on a global scale are sound, whether other approaches are needed, and whether a draft resolution should be prepared for the attention of the Executive Board and the Health Assembly.

## I. INTRODUCTION

1. This report on the smoking pandemic today and the ill effects on health of the use of tobacco in all its forms has been prepared for consideration by the Programme Committee of the Board in response to concerns expressed by the World Health Assembly and the Executive Board at their 1985 sessions. It describes the situation as it is now known, in terms of the extent of the public health problem, analyses worldwide trends in the use of tobacco, and states the case for and against tobacco production and consumption. Strategies for coping with the problem are then outlined, including epidemiological assessment, national and international activities and evaluation of results.

2. Although the WHO programme on smoking and health is a separate programme with its own programme activities, it receives and embodies in those activities contributions from a number of other programmes that are concerned with different aspects of the health problem, mainly those on cancer, cardiovascular diseases, public information and education for health, health legislation and the promotion of mental health.

3. The evidence of a causal relation between the use of tobacco, whether for smoking or for chewing, and ill health is now overwhelming. It has been reviewed by numerous national and international committees whose reports on smoking and health are known worldwide. Reference is made, in this connection, to the series of reports on smoking and health issued by the Surgeon General of the United States of America (1a,b,c,d), the reports of the Royal College of Physicians (2a,b,c), the reports of WHO expert committees (3a,b) and technical programmes (4,5,6,7,8,9), and the reports of the International Union Against Cancer (10a,b) and of the International Agency for Research on Cancer (IARC) (11). The Agency has looked at tobacco chewing (11a), as well as smoking (11b). The reader is referred to the above reports for full details; only a summary of the findings is given here. Only the tobacco industry denies the role of tobacco in causing disease. The onus of proving that tobacco use is not a cause of disease should thus be on the tobacco industry itself.

4. The burden of smoking-related diseases in terms of ill health and human misery and the consequent health and social costs, is staggering and it is WHO's mandate to collaborate with Member States, as well as with other organizations and bodies of the United Nations system and nongovernmental organizations, in containing and eliminating this modern pandemic. In the absence of strong and resolute action, the prospects of achieving the goal of health for all by the year 2000 will be greatly diminished.

5. If present trends continue and effective national action is not taken, morbidity and mortality from tobacco-related diseases will rise, both in the developed countries and, especially, in the developing countries.

### SITUATION ANALYSIS

#### II. EXTENT OF THE TOBACCO-RELATED PUBLIC HEALTH PROBLEM

##### Diseases caused by tobacco use

6. Tobacco smoking is beyond doubt one of the major avoidable causes of ill health and premature mortality in countries where it is widespread. It is responsible for about 90% of all cases of lung cancer, 75% of chronic bronchitis and emphysema, and 25% of ischaemic heart diseases in men under 65 years of age (3a). The use of tobacco, including traditional forms of tobacco chewing, is responsible for 90% of oral cancer deaths in south-east Asia. It is estimated that one-third of all cases of cancer are related to tobacco use. Calculations indicate that at least one million premature deaths occur yearly worldwide because of tobacco use (3b). A report from the United States of America (12) shows that 25% of all deaths in the country can be attributed to the consequences of smoking compared with 5% linked to alcohol and 2% to use of other addictive substances (Table 1). In Cuba, smoking-related diseases account for over 30% of all deaths (13), and in the United Kingdom for about 15-20% (2). According to a report of the Royal College of Physicians, the extent of the problem is such that, of 1000 young male adults in England and Wales who smoke cigarettes, on an average, one will be murdered, six will be killed on the roads and 250 will die prematurely of tobacco-related diseases (2c). Although repeated attempts are made by the tobacco industry and other vested interests to minimize as "only statistical", the evidence of a causative role of tobacco smoking in lung cancer and coronary heart disease, this evidence is overwhelming and beyond any reasonable doubt. It is based on thousands of independent publications resulting from studies of all kinds - prospective, retrospective, clinical, case-control, epidemiological and experimental - carried out in the majority of countries (3b). Environmental pollution, which is often blamed by vested interests in an attempt to side-track attention from the smoking issue, is of lesser importance as a public health problem compared to tobacco smoking.

##### Cardiovascular diseases

7. It is well known today that cardiovascular diseases (together with cancer) are major health problems in the developed regions of the world, and that they are becoming serious problems in developing countries as well. For example, in the United States a report of the Surgeon General on cardiovascular diseases (1b) concluded that, during the period 1965 to 1980, there were over three million premature deaths among Americans from heart disease attributed to cigarette smoking and that, unless smoking habits of the American population change, as many as 10% of all people now alive may die prematurely of heart disease attributable to their smoking. Similar trends are now appearing in many developing countries and for example, cardiovascular diseases have already become one of the leading causes of death, in China, Malaysia, Mauritius, and Sri Lanka.

8. The influence of smoking is independent of, but also synergistic with, other risk factors, such as hypertension and high serum cholesterol levels. The relative risk is greater at younger ages; the risk to the smoker increases with the amount smoked, but decreases with cessation of smoking until, some years later, it becomes almost the same as that of the life-long non-smoker. Cigarette smoking seems to be particularly important in causing peripheral artery diseases and sudden death from coronary heart disease, especially in men under 50 years of age. It is sometimes argued that the urge to smoke and the diseases related to smoking are both due to genetic predisposition with no causative relationship. Studies of smoking-discordant male twins, however, have shown that, while psychological scores and life event scales were practically the same between the smoking and non-smoking



co-twins, the incidence of angina pectoris and of myocardial infarction was significantly higher among the smoking co-twins, a finding which supports the conclusion that cigarette smoking is a causal factor in coronary heart disease (14).

#### Cancer

9. The use of tobacco, whether for smoking (6) or for chewing (7), is cause-related to one-third of all cancers globally (8). Prevention of tobacco use would therefore be one of the most cost-effective approaches in cancer control (8,15,16). While cigarette smoking is implicated in many types of cancer, its responsibility is particularly striking for the great majority of lung cancer cases, the number of which has increased notably in all countries where mortality statistics are reliable. This trend is not confined to industrialized countries but is present in the developing countries as well. The evidence of a causal relationship is clear (3a,b,11). On cessation of smoking, the relative risk of lung cancer developing declines slowly almost to the level of the risk for the life-long non-smoker (3a). Along with the prevalence of the smoking habit, lung cancer mortality in women in 28 developed countries increased greatly between 1960 and 1980 (16). For instance, in Australia, the death rates from lung cancer in women rose rapidly from 8.9 per 100 thousand in 1975 to 14.1 per 100 thousand in 1982. In the United States lung cancer is catching up with breast cancer as the leading cause of cancer death in women (17).

10. The disease pattern in developing countries is likely to show an increasingly close resemblance to that of the industrialized countries, and that change has already taken place in many areas. For example, in Shanghai County, an urban area near the City of Shanghai, in China, the leading causes of death in 1961-1962 were infectious diseases, accidents, respiratory diseases, digestive diseases and neonatal deaths (15). By 1978-1980, cancer had become the leading cause, followed by cerebrovascular diseases, heart diseases, respiratory diseases and accidents. This shift in health problems took place over less than 20 years and is marked by the emergence of diseases caused by or related to the use of tobacco. Although the overall consumption of manufactured cigarettes per capita appears to be rather low, because few women smoke, in reality tobacco consumption is very high (18), use of home-grown tobacco being widespread and very largely unreported (19).

11. Perhaps the most important feature in the relationship between cigarette smoking and lung cancer is the strong correlation between the duration of regular cigarette smoking and subsequent lung cancer rates. Doubling the duration of regular tobacco use will result in an approximately 20-fold increase in lung cancer incidence. The earlier an individual begins to smoke the greater the risk of lung cancer developing: the risk is three-fold that of a non-smoker, if smoking starts at 24 years of age, but will be 15-fold if smoking starts in the early teens. All these relationships still hold when other factors, such as diet, stress, atmospheric pollution and urbanization, also associated with cardiovascular and respiratory diseases, are taken into account, thus pointing to the causality of smoking. It has been calculated that 600 000 new cases of lung cancer occur worldwide every year, most of them due to smoking (7). By the year 2000 the yearly number of new lung cancer cases may be as high as two million (20). Smoking also aggravates the cancer risk in certain occupation groups, for example that of bronchial cancer in workers exposed to asbestos.

12. Other uses of tobacco are also implicated in cancer. The habit of chewing tobacco and mixtures containing tobacco - which is widespread in south-east Asia - is responsible for 90% of oral cancer cases (8). The chewing of tobacco and the use of snuff passed its peak many decades ago in industrialized countries, but a resurgence has occurred since the mid-1960s and the habit, actively promoted by the tobacco industry, is becoming popular once again. A working group convened in 1984 by IARC concluded that tobacco thus used, and not smoked, is carcinogenic in man (11a).

#### Acute and chronic respiratory diseases

13. Cigarette smoking acts independently of, and synergistically with, the other risk factors contributing to non-neoplastic respiratory diseases. In developing countries it is now the most important cause of chronic bronchitis and relatively much more important than atmospheric pollution or occupational exposure as a cause of bronchopulmonary diseases. For instance, smoking increases markedly the risk to miners and smelters of developing chronic bronchitis. In purely economic terms, bronchitis is the most expensive of all the smoking-related diseases (3a). Many of the conditions which gave rise to widespread

bronchitis in nineteenth century England are occurring now in developing countries: poor social conditions in urban areas, poor nutrition, overcrowding leading to the spread of respiratory infections, and uncontrolled atmospheric pollution arising from rapid industrialization. A large increase in morbidity and mortality is probably inevitable, if urgent steps are not taken to reduce smoking as far as possible.

#### Other diseases and ill effects on health

14. Besides the major killers - lung cancer, coronary heart disease, and acute and chronic respiratory diseases - several other diseases and disease manifestations are caused or aggravated by the use of tobacco. They include oral and bladder cancers, as well as cancers of other sites, peripheral vascular diseases, gastric ulcer, dental diseases, subarachnoid haemorrhage, and pregnancy complications.

15. Recent evidence also suggests that the consequences of smoking are particularly deleterious to reproductive health (21). They affect contraception and fecundity, pregnancy, birth outcomes, lactation, early childhood development, and the development of cancers of the reproductive system of both men and women. For example, the risk of myocardial infarction among women using oral contraceptives is 10 times greater among smokers than among non-smokers (1e). Recent studies reflect an increased risk of spontaneous abortion, fetal death, and perinatal death rising in direct parallel with the level of the mother's smoking during pregnancy. They also indicate a 20% increase in the perinatal death rate for children of women who smoke less than one packet a day, and a 35% increase for consumption above that level. Smoking in pregnancy is a problem in Latin America where surveys show that, in urban areas, more than 20% of pregnant women smoke (19). Studies have also consistently shown that smoking during pregnancy is associated with a more than two-fold increase in the proportion of small-for-date babies (< 2500 g), the proportion increasing with the number of cigarettes smoked (1e,3a). The mother's smoking also contributes to prematurity, at least 11% of pre-term births being attributable to it. Because the adverse effects on the fetus are so numerous, it has been suggested that smoking by pregnant women may be regarded as a form of child abuse. Heavy cigarette smoking has been linked with decreased fecundity and with infertility, and amenorrhoea; it also appears to cause a dose-response lowering of age at menopause. Possible adverse effects of heavy smoking on male fertility have been reported, including impaired spermatogenesis, sperm morphology and motility, and androgen secretion (21).

16. Deaths and losses of property are also indirectly caused by smoking. Sixty-five thousand fires in residential accommodation, resulting in about 2000 deaths and 5000 burn casualties, are caused each year in the United States of America by careless smoking, mainly of cigarettes (22,23).

17. Although nowadays cigarette smoking is the most commonly practised form of tobacco use, it is not the only one. Others, such as the smoking of hubble-bubbles, hookahs, narghiles, bidis, and so on, and snuff-taking and the chewing of tobacco leaves, either alone or in combination with other vegetable and mineral materials, are both traditional and widespread in many developing countries, and with them the diseases that they cause. Respiratory diseases, for example, are spread by the shared type of hubble-bubble smoking, and oropharyngeal cancer is associated with tobacco chewing and with reverse smoking, i.e., smoking with the lighted end inside the mouth. Bidi-smoking yields very high concentrations of tar and nicotine, and may be regarded as a major contributor to the development of ischaemic heart disease and other cardiovascular disorders, as well as cancers of the lung, oropharyngeal cavity, oesophagus, and larynx. These observations are of capital importance not only with regard to the smoking habits traditional in the developing countries, but also in view of the increasing trend, particularly among youth in some industrialized countries, to use tobacco otherwise than for smoking, e.g., for chewing and as snuff, and to smoke bidis, in an ill-advised attempt to avoid the adverse health effects of cigarette smoking. These forms of tobacco use also bring about nicotine dependence.

#### Effects of involuntary, compared with active, smoking

18. While the disease effects described above are often well-recognized for the direct consumer, insufficient attention has been given to what is known as "passive" smoking, i.e., smoking "enforced" on others. Tobacco smoking is the largest source of indoor pollution; it

affects not only the smoker directly but also, indirectly, those obliged to inhale smoky air. Studies suggest that the lung cancer risk among non-smoking wives of smokers is higher than that of non-smoking wives of non-smokers (25,26). A recent IARC monograph states that "passive smoking gives rise to some risk of cancer" (11b). Early signs of impairment of small airways function have been detected in non-smokers constantly exposed to passive smoking at the place of work (27). The elderly, children, and cardiac or asthmatic, and hypersensitive subjects can be adversely affected by smoke produced in their vicinity. Health hazards apart, smoke in the environment is a nuisance; exposure to it brings discomfort to many non-smokers, and is increasingly considered as socially unacceptable. Consequently, there is an observable trend towards separating areas for smokers and non-smokers in aircraft and other public facilities, transport and enclosed public places.

19. A major aspect of the harm done to children lies in the example set them by adults, but several studies have shown that the inhalation of cigarette smoke is in itself harmful. In particular, smoking by parents has been proved to increase the incidence of acute respiratory infections in small children, for instance the risk of an infant developing bronchitis or pneumonia in the first year of life is doubled if its parents smoke (3b). Children of parents who smoke are more likely to take up the habit themselves as they grow up and, if they do, they develop more respiratory symptoms than do those who refrain. If the mother smokes, the toxic components of the smoke are carried in the mother's bloodstream to the fetus, in effect subjecting it to passive smoking in another form. As mentioned in paragraph 15, more of the babies born of mothers who smoke are small-for-date than those born of non-smokers (1e).

### III. WORLDWIDE TRENDS IN TOBACCO USE

20. Addiction to smoking is spreading like a pandemic throughout the world. Starting as a predominantly male phenomenon in the industrialized countries, smoking is now practised by women and young people too in those countries and in the developing world, where the cigarette is nowadays the predominant form of tobacco use. Indigenous forms of tobacco use for smoking and for chewing are, however, also widespread in many developing countries, where the materials smoked or chewed are usually even more noxious than those used in the developed countries, and yield much higher levels of toxic components, particularly tar and nicotine. Such indigenous habits of tobacco smoking and chewing cause an incidence of diseases such as oral cancer and respiratory infections unknown in the industrialized countries. Poor housing and environmental conditions, malnutrition, absence or inadequacy of legislative measures to control tobacco promotion and use and the lack of public education and information about the dangers of tobacco, make the populations in developing countries especially susceptible to the forthcoming epidemic of tobacco-related diseases. According to some analysts of the tobacco economy, "a major factor enhancing tobacco export possibilities from developed countries to the Third World was the perception of cigarettes as an affordable luxury in the poorer areas of the world (28). At present, cigarette consumption per capita in most of the developing countries is much lower than in the affluent countries (Table 2), but the prevalence of smoking is higher than in the developed countries, where intensive and sustained education and information action has brought about significant decreases in the number of smokers (Table 3). The number of manufactured cigarettes may not, however, provide an accurate picture of the intensity of smoking in certain developing countries where the use of bidis and home-grown tobacco is widespread.

21. Many governments will act with great speed when pharmaceutical products or food additives are merely suspected of harmful health consequences that might entail only a remote chance of the development of cancer, for instance. This is in marked contrast to common government reluctance to act on tobacco, which is demonstrably a cause of avoidable mortality and morbidity on a scale unmatched by any other currently available product for human consumption (3b). The message is clear: in the absence of strong and resolute government action, we face the serious probability that the damage done by the smoking epidemic will have started to take effect in the developing world within a decade and that a major avoidable public health problem will have been inflicted on the countries least able to deal with it as a result of unscrupulous commercial enterprise and government inactivity. Smoking diseases will appear in developing countries before communicable diseases and malnutrition have been controlled, and thus the gap between rich and poor countries will widen further (3a). This prediction is, unfortunately, now starting to be fulfilled.

22. In China and in India, 25% to 30% of all males are dependent on tobacco smoking before they are 20 years old. Rates of adult male smoking in excess of 50% are found in a great many countries, especially developing ones. Although, in some developing countries, the prevalence of smoking is very low among certain groups of women, such as Moslem women, in others it approaches that of men. In rural areas of Andhra Pradesh in India, 67% of the women smoke, as compared with 81% of the men. In Papua New Guinea 95% of women and 97% of men are reported to smoke. Similarly high smoking rates among women are also found in Nepal (19,29).

23. Worldwide tobacco consumption is now stagnant. But the decrease in smoking in industrialized countries is offset by rapid population growth particularly in developing countries. This has fostered increased demand for cigarettes (30). Per capita consumption in Kenya increased by 32% between 1970 and 1980, and in Latin America by 24%, as compared with only 4% in North America. Cigarette consumption in Kenya increased from 3310 metric tonnes in 1972 to 4524 tons only eight years later, and is still increasing at the rate of about 8% per year (31). Tobacco consumption between 1976 and 1980 increased 5% in Indonesia and Malaysia, 3% in Brazil, 6% in Turkey, while it decreased in many developed countries, e.g., 7% in France, and 2% in the United States of America. In the United States the yearly per capita cigarette consumption was 610 in 1920, it had climbed to 1820 by 1940 and to 3850 by 1973 (32). Since then, it has decreased to 1678 cigarettes in 1982 and for three consecutive years during the early 1980s domestic sales have fallen as a result of increased public health consciousness (33). In Pakistan, total cigarette consumption increased from 24 000 million in 1970 to 39 000 million in 1980. In India, it rose 400% during the same period. In Papua New Guinea the consumption trebled from 1960 to 1980 (34). In Brazil, about 135 thousand million cigarettes were smoked in 1981, while cigarette-related diseases far outstripped the infectious diseases as the leading cause of death (35). In Iran, yearly cigarette consumption reportedly increased from 14 thousand million in 1980 to 32 thousand million in 1983 (36). Tables 4 and 5 show that the largest increases in consumption are in the developing countries. FAO has published per capita tobacco consumption figures for 1985 for 56 selected countries (37); these data are summarized in Table 4. The consumption projection to 1995 by the World Bank (Table 5) shows a very significantly greater increase in the developing countries than in the developed free-market economy countries.

24. Overall demand for tobacco is still rising, but production in the industrialized countries is expected to remain steady while that of the developing countries is expected to increase. A small number of large enterprises are responsible for manufacturing operations throughout the world, in both the developed and the developing countries. About 37% of the world's cigarettes are produced by state-controlled industries in centrally-planned countries, a further 17% are manufactured by state monopolies - e.g., in Austria, France, Kenya, Italy, Tunisia, Turkey, etc. whose aim is to maximize government revenue. The remainder of the market is dominated by seven international conglomerates which, although primarily interested in tobacco, have diversified their activities widely in other manufacturing sectors or trading enterprises.

25. The summary given in Table 6 clearly shows the upward trend in cigarette production throughout the world. The production of tobacco for purposes other than smoking, i.e., for chewing, or as plug, moist snuff, dry snuff, etc., has been increasing over the past five to ten years, but information is scattered or incomplete. In the United States of America production of tobacco in these forms increased about 3 to 4% per year during the 1960-1980s, and consumption increased by 11% per year (38). In most industrialized countries the percentage of leaf tobacco used for manufacturing snuff is very small, and in most countries chewing tobacco accounts for less than 1% of total leaf usage, except in the United States of America where the proportion is about 6%. Strong attempts are being made by the tobacco industry to revivify this sector of the market in many industrialized countries, thus bringing about additional and growing health problems for the world for instance, cancer of the mouth. This situation calls for action. The main target of these new promotional activities is youth. Tobacco chewing is a fast means to provide addiction leading later to cigarette use.

26. In many of the developing countries, the picture is different and complex because, in addition to the accountable tobacco industry, there is also a very large cottage industry whose activities are difficult to assess. India probably presents the greatest challenge in this respect, but Bangladesh, Pakistan and Sri Lanka also have sizeable cottage industries producing bidis and chewing tobacco.

27. The worldwide picture of trends in tobacco use is not equally bleak everywhere. Indeed, it is important to note that in a number of countries, thanks to vigorous national action and increased public awareness, the trends in smoking, tobacco consumption and tobacco-related diseases have actually been reversed, particularly among the male population. These trend reversals are further discussed in paragraphs 129 to 141 below. In addition, information on the economic advantages and disadvantages of tobacco production and consumption is provided in Section V.

#### IV. BEHAVIOURAL ASPECTS

28. Why do people smoke? Probably the earliest mode of tobacco use was pipe smoking, which had ceremonial importance in the cultures where it originated. As a vehicle for tobacco, however, the machine-made cigarette outstripped the other forms of use as from the turn of this century. Smoking was traditional in China even before the 15th century, although it has not been established that the substance smoked was tobacco rather than other herbs. The actual discovery of tobacco by Europeans is considered to date from when Christopher Columbus landed in Central America at the end of 1492. The habit of smoking was popularized in Europe by soldiers returning from the Peninsular War (1808-1814) (39) and the Crimean War (1853-1856). From then on the habit spread to the rest of Europe and thence to Africa and Asia brought in by explorers and traders.

##### Starting to smoke

29. Cigarettes are often tasted during childhood, i.e., at least in the case of boys, at the early age of 6 to 9 years; their use becomes more regular during adolescence. Then, unless the formation of the habit is stopped, experimenters become confirmed smokers in their late teens. Smoking being regarded as socially attractive, the wish to imitate adult behaviour, accompanied by rebelliousness towards adult disapproval of smoking by the young, the tendency to experimentation and to risk-taking, often suggested by cigarette advertisements, and peer group pressure are among the important factors that induce children to smoke. Tobacco is often a "gateway" drug, which is followed by alcohol and sometimes by other substances. Particularly in relation to adolescent behaviour, the factors, including risk-taking, which are important in relation to tobacco, are equally relevant to the consumption of alcohol and other drugs. In terms of socialization processes, smoking and drinking are frequently simultaneous rather than alternate activities.

##### Reinforcement of the habit and the addiction potential of nicotine

30. The initial habit is reinforced by such factors as peer pressure, the imitation of exemplars, the status symbol value of smoking in some cultures, its value as a tool for social identification and interpersonal relations, and in most countries, by the promotional activities of the tobacco industry which, through seductive imagery, constantly associates smoking with desirable life situations, youth, success, and sex appeal. Then, in addition, the addictive potential of nicotine - the active alkaloid in Nicotiana tabacum - plays a predominant role in keeping smokers slaves to their habit. Smoking is the most efficient way of delivering a drug like nicotine, which reaches the brain within a few seconds. Most smokers experience withdrawal symptoms when they try to stop smoking, so that the desire to avoid the unpleasant effects of nicotine deprivation is a potent factor determining the continuation of the habit. Smoking can be even more addictive than alcohol or heroin, and a habit that is just as difficult to break.

31. The National Institute on Drug Abuse in the United States of America considers that dependence "in the classic sense is characterized by: (a) persistent regular use of a drug, (b) attempts to stop such use which lead to discomfort and which often result in termination of the effort to stop, (c) continued drug use despite damaging physical and/or psychological problems, and (d) persistent drug-seeking behaviour". WHO's International Classification of Diseases (ICD), Ninth Revision (1975), defines dependence as "A state, psychic and sometimes also physical, resulting from taking a drug, characterized by behavioural and other responses that always include a compulsion to take a drug on a continuous or periodic basis in order to experience its psychic effects, and sometimes to avoid the discomfort of its absence". By all these criteria, the use of tobacco, especially in the form of cigarettes, qualifies as a dependence-producing process. In the United States of America cigarette smoking has been found to be the most widespread example of drug dependence. Indeed, while only one in ten alcohol users and four in ten morphine users are compulsive daily users, nine in ten

cigarette smokers are compulsive daily users (33). Russell (40) writes that "cigarette smoking is probably the most addictive and dependence-producing form of object-specific, self-administered gratification known to man". The Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association defines both a "tobacco withdrawal syndrome" and "tobacco dependence disorder". The Ninth Revision (1975) of the WHO International Classification of Diseases also includes tobacco dependence.

32. Nicotine, the dominant alkaloid present in tobacco, is rapidly absorbed from the lungs when presented as the sub-micron aerosol resulting from the high-temperature combustion of cigarette tobacco, and it is quickly distributed to the brain and the rest of the body. The role of nicotine is probably critical in both the acquisition and the maintenance of tobacco dependence, and this explains the difficulty some have in stopping smoking, as discussed in paragraphs 85 to 91. Nicotine is a powerful pharmacological agent which stimulates the release of a variety of endogenous neurotransmitters and hormones and, being mood-altering and psychoactive, produces an initial euphoria. Once smoking is established as a habit, consistency of pattern is ensured by environmental influences, as well as by pharmacological regulation. The smoker may perceive many immediate gains from smoking, whereas the deterrents may seem remote.

33. Psychological habituation, besides physiological addiction, also plays a role through the manipulation of the smoking material, i.e., having something to do with the hands and mouth. The importance of social rituals associated with smoking behaviour must also be acknowledged. Physical dependence, though probably the case of a number of smokers, is by no means general and many ex-smokers had little difficulty in "quitting".

34. Smokers find it difficult to concentrate and to perform at work under pressure or in repetitive or boring situations if deprived of cigarettes. High-nicotine yield cigarettes improved the performance of smokers in a rapid information-processing test, whereas deprivation of smoking decreased performance. The nicotine contained in cigarettes appears to reduce pain and anxiety in smokers taking part in these performance tests.

35. A further obstacle to individual discontinuation of smoking is the fear of gaining weight. This is particularly true among women. The mechanism of weight gain is poorly known. It is usually attributed to increased food intake, often of sweets, by the ex-smoker to overcome the oral withdrawal symptoms. Weight gain is, however, temporary and can be checked by sound eating habits and physical activity.

#### Low-tar cigarettes

36. In order to allay the fears of health-conscious cigarette smokers, the tobacco industry has intensively promoted a great variety of cigarettes which, when smoked in a smoking machine according to standard procedures, yield lower emissions of tar and nicotine. Such emission yields, however, cannot be extrapolated to real life situations in man. The amounts of tar and nicotine actually inhaled by the smoker may be higher in practice than is indicated by the test procedures (1d).

37. Nicotine is known to be a highly addictive drug. It is not a drug which is taken occasionally; it is one of the few which regular users need every few hours in order to prevent withdrawal symptoms. Most smokers will not tolerate for long very low nicotine or nicotine-free cigarettes as substitutes for "the real thing". They appear to regulate their smoking to achieve and maintain a desired level of nicotine in their blood stream, and are unwilling to tolerate a gradient of reduction in blood nicotine consequent on change to the use of cigarettes with low tar and nicotine yields. Such smokers compensate for lower delivery by such devices as crushing the end of the cigarette and thus blocking the ventilation holes, or by inhaling more often and more deeply, or by smoking more cigarettes. This behaviour really brings about an increase in inhaled tar, carbon monoxide, and other noxious substances present in the smoke.

38. From epidemiological studies it would appear that changing to low-tar cigarettes may have contributed to some reduction in the number of lung cancer cases. However, the harmful health effects of smoking in terms of cardiovascular function, pregnancy complications, and respiratory impairment, do not decrease (1e,3b,11). Another serious drawback is that children and women find it easier to start smoking these "light" cigarettes, so that in the long term, the availability of "light" cigarettes, far from helping people to stop smoking,

may actually encourage them to smoke. For these reasons, it is the policy of WHO to discourage the idea that low-tar cigarettes are "safe" cigarettes (4). Tobacco manufacturers should not be given any opportunity to suggest that low-tar cigarettes are safe to smoke; indeed, it must be made clear that there is no such thing as a "safe" cigarette.

## V. POSITIVE AND NEGATIVE EFFECTS OF TOBACCO PRODUCTION AND CONSUMPTION

### Tobacco production

#### Short-term benefits

39. Tobacco is produced in about 120 countries under all latitudes, except those in the cold climates of northern Europe and in the arid climates of some of the Arab countries. The contribution of developing countries to world tobacco production has increased from 50% in 1963 to 63% twenty years later, to an estimated 68% in 1995. The major tobacco producing and consuming countries are China, United States of America, Union of Soviet Socialist Republics, India and Brazil (18). On a short-term basis, tobacco production is of tangible economic significance to many producing countries (18). It provides jobs and income to tens of thousands of families engaged in tobacco growing, manufacturing and trade throughout the world. Tobacco provides revenue to a flourishing advertising industry (which, however, can easily find other sources of income), tax revenue to governments, and foreign currency when exported. Some developing countries, such as Brazil, Malawi, United Republic of Tanzania, and Zimbabwe, rely heavily on tobacco-generated income. It should be underlined, however, that most of the profits go to the transnational tobacco companies rather than to the local producers. (See paragraph 50.)

40. In 1979-1981 the land used throughout the world for growing tobacco totalled 4.3 million hectares, of which 72% was in the developing countries (18). The growing of tobacco provides a reliable source of foreign exchange for many countries. The relative stability of tobacco prices contrasts with the instability of many other commodity prices and makes it an attractive proposition to many developing countries, where unstable commodity prices have proved to be a constant burden. It also generates a large number of jobs for small farmers and their families - tobacco is generally grown on very small family farms. It has been estimated (41) that worldwide some 35 million small farmers and their families rely on tobacco cultivated on plots ranging from 0.5 to 1.5 hectares. FAO statistics (18) show that, in Zimbabwe, the industry is the largest employer, supporting 17 000 farmers.

41. In Malawi, 100 000 families rely on the cash income tobacco brings, while in the United Republic of Tanzania, 370 000 (2% of the population) are dependent upon tobacco cultivation. In the south of Brazil, 115 000 farmers and a further 650 000 people gain a livelihood from the tobacco industry; in the Indian State of Andhra Pradesh, tobacco provides a living for 75 000 farmers and about 2 million other workers engaged in tobacco-related occupations. Even in the developed countries, where production is extensively mechanized, tobacco generates employment on a very large scale; for instance, half a million farm families in the United States of America are directly involved in tobacco production.

42. Furthermore, tobacco earns twice as much as sugar, five times as much as cotton and ten times as much as maize. By contrast with the US\$ 375 and US\$ 750 per hectare earned from corn and soybeans respectively, the gross income per hectare of tobacco ranges from US\$ 7500 to US\$ 10 000. Similarly, in Malawi the receipts from tobacco are three times higher than for tea, five times higher than for sugar and ten times higher than for groundnuts. This is true if income is calculated on the basis of land surface cultivated; but in financial investment terms, other crops are more profitable (18,42).

43. As with tobacco growing, the manufacturing operations involving tobacco generate employment and income. While in some large developing countries where manual methods are used the work-force thus employed can number hundreds of thousands, in the principal industrialized manufacturing countries it numbers less than 60 000. In income terms, in 1977, India's 300 000 tobacco workers earned US\$ 240 per year each, whereas a worker employed in the tobacco industry in Belgium earned US\$ 10 000. Similar comparisons can be made between other developed and developing countries. In Canada, stagnation of the tobacco market is causing large economic losses to tobacco farmers, who could however, with government assistance, convert to other crops.

44. The contribution of tobacco manufacturing to total industrial output is higher for the developing than for the developed countries. The role of tobacco in the economies of countries such as the United Republic of Tanzania and Zimbabwe is well known. In a number of African countries (Algeria, Burundi, Cameroon, Central African Republic, Madagascar, Mauritius, Morocco) the tobacco industry is listed among the eight most important revenue-earning undertakings. In Mali and Sierra Leone, it ranks first (43). Because of the predominance of large state-controlled concerns and multinational corporations with a network of licensing agreements, the majority of the world's manufactured tobacco products are for domestic consumption and less than 10% enter international trade.

45. Only a very small share of the total value of exports accrues to the developing countries, and even this has diminished during recent years as a result of rapidly expanding shipments (chiefly of cigarettes) from the United States, United Kingdom and the Netherlands. In 1976-1978 the developing countries accounted for 9% of world exports by value, but by 1981 this had fallen to less than 6%. Table 7 shows trends for cigarette imports and exports over the period from 1973 to 1981.

46. Tobacco growing is a valuable source of cash income to farmers. The proportion of agricultural income derived from tobacco is considerable, even where, in absolute terms it is small. For example, Zimbabwe had a total income from tobacco in 1980 of US\$ 110 million - which is small compared with the tobacco incomes of Brazil (US\$ 200 million), Greece (US\$ 500 million), Turkey (US\$ 525 million), Japan (US\$ 1300 million) and the United States of America (US\$ 2700 million) - but that represents for Zimbabwe almost a quarter of agricultural earnings. Table 8 shows the gross income from tobacco crops and its contribution to agricultural income in selected producing countries.

#### Manifest disadvantages

47. Economic and environmental losses. On a long-term basis, however, tobacco production entails economic and environmental losses to the producing countries, especially the developing ones. Reports by United Nations agencies (44), as well as by other official bodies, e.g., the Ministry of Agriculture of the United Republic of Tanzania (45) and independent investigators (46,47), have documented such losses. In spite of this knowledge, however, no action is being taken to decrease tobacco production because immediate political realities command higher priority than future adverse environmental and health consequences.

48. The negative effects of tobacco production on the environment and economy of the developing countries are many and far-reaching and are superimposed upon the ill health and mortality consequent on tobacco consumption. World leaf trade is no longer expanding rapidly and on occasion it slumps. The overall trade fell by 3.4% in 1983 owing to the very large surpluses on the world market, to reduction in consumption in the developed countries, and to new manufacturing techniques which have reduced total leaf requirements. The long-standing price stability of tobacco in otherwise unstable agricultural commodity markets, which has made tobacco production so attractive to the developing countries, may therefore not continue.

49. Cigarette manufacturing trends are becoming less favourable to the developing countries in that their share of the export markets is falling and their cigarette imports are rising (Table 7) due to the prevalence of a tobacco habit encouraged and perpetuated by their own involvement in tobacco production. Thus there is a loss of foreign currency due to a reduction in leaf exports, a reduction in the export of manufactured tobacco products and an increase in imports of cigarettes, possibly resulting, in the longer term, in an overall net loss.

50. According to the United Nations Conference on Trade and Development "the developing countries are totally at the margin in the marketing decision process. They gain only an insignificant share of the total profit made from tobacco growing as their aggregate receipts from the tobacco industry are based, almost exclusively, on the demand response and the marketing decisions determined by the transnational tobacco companies" (44). These are mostly foreign-based.

51. Adverse effects of tobacco cultivation on the availability of food are well documented, although little known. Smokers worldwide spend between US\$ 85 and US\$ 100 thousand million annually to buy four billion ( $10^{12}$ ) cigarettes, i.e., more than 1000 cigarettes for each man, woman and child (48). When land or labour is scarce, any used for tobacco cultivation



reduces that available for food production. Similarly, to the extent that cash is spent on buying tobacco correspondingly less is likely to be applied to the purchase of food, and so the nutritional status of the poor will decline. Reduced local food production may also lead to higher prices, which will penalize even non-smoking families. Because tobacco provides ready cash, food crops, such as rice in Nigeria, become a second choice for cultivation. The net result of such displacement of a staple food crop is that, as in the case of Nigeria, food has then to be imported (49).

52. Tobacco, exported from a developing country generates valuable foreign exchange. If, however, most of the tobacco produced is consumed in the country of origin, the expected benefits are reduced by this loss of export earnings and by the costs of damaged health. In addition, the increased popularity of imported cigarettes may entail a huge drain on foreign currency. In Sudan, for instance, imports of foreign cigarettes in 1982 cost at least 40 million Sudanese pounds of badly needed foreign exchange (50). Similar situations have been recorded in Egypt (51), where 25 million Egyptian pounds were spent in 1976 on imported tobacco - an increase of 20% from 1975.

53. Soil degradation. Tobacco requires either fertile soils or regular inputs of commercial fertilizer into marginal agricultural land. However, most tropical soils are characterized by low nitrogen content, as well as by deficiency in phosphorus, and sometimes potassium. Tobacco production therefore depends on commercial fertilizer, the prices of which, especially those rich in nitrogen, are rising so sharply that already they are out of reach of most farmers. An alternative to dependence on commercial fertilizer is to exhaust soil fertility in one or two years, then to deforest for a new plot.

54. Pesticides. Tobacco is one of the crops that require the heaviest treatment with pesticides and herbicides. Vast quantities of pesticides are used on tobacco crops virtually throughout their seven-to-eight-month growing season. Most of these pesticides are toxic, and some are carcinogenic to the farmer and can contaminate village water supplies. Most developed countries either ban or severely restrict the use of persistent organochlorine pesticides, such as aldrin, which is instead supplied by the international tobacco companies to some developing countries (46). Furthermore, not only do these pesticides constitute a danger to those handling them, they also find their way into the tobacco leaves which are eventually smoked or chewed and become dangerous to the consumer on that account as well. Thus where tobacco is home grown, treated with pesticides, and processed and consumed locally, the hazards to health are even more immediate.

#### Deforestation and desertification.

55. Tobacco curing is highly energy intensive. Much tobacco is sun-cured, but where wood is used as fuel it accounts for 10 to 15% of the product price - as in the case of Thailand, for instance. The Economist Intelligence Unit estimated in 1980 that 80% of timber-generated fuel is used in tobacco curing. For every 300 cigarettes made in the developing world, one tree is burned (42); for every acre of flue-cured tobacco grown in developing countries, one acre of woodland is burned. In other words, one ton of wood is needed to cure one ton of tobacco. Pakistan alone annually consumes 1.5 million cubic metres of wood for tobacco curing. About 8000 hectares of forest in Ilocos, Philippines, are consumed annually for curing. Similar destruction of forests is reported in Brazil. It has been estimated that in the State of Rio Grande do Sul the 100 000 tobacco farmers need the wood of 60 million trees, i.e., nearly 600 000 hectares of forest, in one year (52). Worldwide, about 2.5 million hectares of trees have to be used each year to flue-cure 2.5 million tons of tobacco (46).

56. In 1977, the United Nations Environment Programme warned that the shortage of firewood was rapidly becoming the poor person's energy crisis. The deforestation caused by the use of wood for fuel and industrial demand, including tobacco curing, in many areas of Africa contributes to the problem of accelerating desertification, as also does the clearance of the land for agricultural projects, including tobacco cultivation. The use of wood for curing competes with its use for cooking, warmth, and construction. The environmental impact of tobacco production can be clearly seen in the United Republic of Tanzania where the tobacco industry is one of the main exploiters of forests on a regional and national level. About 600 000 m<sup>3</sup> of fuel wood are consumed annually for tobacco curing in the woodland regions of the United Republic of Tanzania. According to the Economist Intelligence Unit (52a), there are a number of countries in which fuelwood is the only effective source of tobacco curing, including Bangladesh, Pakistan, Brazil, Malaysia, Malawi, the United Republic of Tanzania, Kenya, and Sierra Leone.

57. Fuel-wood requirements for the flue-curing of tobacco thus contribute to the serious and intensifying problem of deforestation in developing countries. Current tobacco production depletes natural forest by 2.5 million hectares annually, and so is not sustainable. Sustainable tobacco projects would need 17.5 million hectares of fuel-wood plantations.

58. In summary, disappearing woodlands are now an identifiable environmental problem resulting from tobacco cultivation and processing in, for example, Nepal, Pakistan, Sri Lanka, Sudan, United Republic of Tanzania, and other developing countries. The reforestation that the tobacco industry claims to do appears to be mostly cosmetic in nature.

#### Tobacco consumption

59. Between 1976 and 1980 tobacco consumption slowed down at the rate of 1.1% per annum in the industrialized countries, but continued to rise at a yearly rate of 2.1% in the developing countries (20). In most developing countries the tobacco industry is expanding practically unchecked, and marketing efforts capitalize on the concept that smoking symbolizes modernism and affluence.

#### Short-term benefits

60. The apparent economic benefits of tobacco consumption (i.e., smoking, chewing) can be summarized as follows:

- tax revenues (which, however, do not increase GNP and could be raised in other ways);
- income to retailers;
- income to the medical profession engaged in treating smokers affected by smoking-related diseases; and
- savings in old age pensions (as smokers live on average eight years less than non-smokers, at least in the highly developed countries).

The last two of the above benefits, although real ones in terms of economics, are obviously unacceptable on ethical grounds.

#### Manifest disadvantages

61. In the developed countries, a great disadvantage of tobacco consumption is the enormous burden placed on the community by the costs of the consequent ill health and mortality - a burden that can be measured in terms of the increased costs of medical services and use of scarce medical care facilities, along with reduced productivity and increased reliance on social assistance for family support. Tobacco consumption brings about major economic losses to society in terms of:

- increased medical expenditure due to smoking-related diseases;
- reduced productivity due to higher work absenteeism of smokers, and to their higher disablement and pre-retirement death rates;
- damage to property and loss of life resulting from the substantial number of forest and domestic fires that are caused by careless smoking (for instance, as mentioned in paragraph 16, in the United States of America every year 65 000 domestic fires entailing about 2000 deaths can be attributed to careless smoking);
- loss of manpower (which, in many developing countries, is usually the heavy-smoking intellectual and industrial élite) due to excess morbidity and premature mortality among smokers;
- miscellaneous but quantifiable costs, such as spoiled furniture and cleaning expenses; and
- other negative effects that stem from the increasingly competitive nature of the tobacco trade.

62. Several studies carried out in Canada, Poland, Sweden, Switzerland, United Kingdom, and United States of America have demonstrated the economic losses to society due to smoking (47,53,54). In the United States losses on account of tobacco consumption exceed earnings from tobacco production by some US\$ 8000 million per annum. In Canada, the yearly loss is about US\$ 3000 million. As mentioned in paragraph 52, imports of foreign cigarettes cost Sudan at least 40 million Sudanese pounds per year of badly needed foreign exchange (50). Similar economic losses in foreign exchange were reported in Egypt (51). Between January and September 1984, as an example, certain European tobacco companies exported massive amounts of cigarettes (over one thousand million sticks) to some of the poorest, famine-stricken, African countries - Burkina Faso, Djibouti, Ethiopia, Niger, Somalia, and Sudan. These imports have to be paid for in hard currencies that these countries lack (28).

63. In addition to the perceivable economic losses due to the use of tobacco a negative effect of enormous magnitude is the human misery caused by diseases related to tobacco smoking and chewing. Therefore WHO takes the view that, in the face of the ensuing health hazards, tobacco production cannot be defended any more than the production of other, even more remunerative crops, such as coca, opium poppy, or cannabis.

#### STRATEGIES TO COMBAT THE PROBLEM

#### VI. WHO ACTION TO ASSESS THE MAGNITUDE OF THE PROBLEM AND TO DEFINE PREVENTION STRATEGIES

##### Resolutions of WHO governing bodies

64. Bearing in mind resolutions EB45.R9, WHA23.32, EB47.R42, WHA24.28 and EB53.R31, concerning the health hazards of smoking and ways towards its limitation, the Twenty-ninth World Health Assembly (1976) recognized "the indisputable scientific evidence showing that tobacco smoking is a major cause of chronic bronchitis, emphysema and lung cancer as well as a major risk factor for myocardial infarction, certain pregnancy-related and neonatal disorders and a number of other serious health problems" and adopted resolution WHA29.55 which recommended governments of Member States "to create and to develop effective machinery to coordinate and supervise programmes for control and prevention of smoking", "to strengthen health education concerning smoking, as a part of general health education" and "to give serious consideration to the legislative and other measures suggested by the WHO Expert Committee in its report on smoking and its effects on health".

65. Two years later, in resolution WHA31.56 the Thirty-first World Health Assembly (1978) stated that it was "seriously concerned at the alarming increase in production and consumption of cigarettes during the last two decades in some of the countries, particularly developing countries, in which it was previously not widespread" and noted that "few countries have so far taken comprehensive action to effectively combat smoking through educational, restrictive and legislative measures for the control of publicity and advertisements in the news media, combined with coherent taxation and price policies for tobacco cultivation and cigarette production".

66. The WHO programme on smoking and health as such was established in 1980, based on resolution WHA33.35, in which the Thirty-third World Health Assembly reiterated "its firm conviction that the effect of tobacco smoking is now a major public health problem in all industrialized countries and in many developing countries and that it will become so in the near future in all other developing countries unless action is taken now", urged Member States to strengthen, and to initiate where lacking, the smoking control strategies outlined in the previous resolutions and in the report of the WHO Expert Committee on Smoking Control (3a), and requested the Director-General "to further develop an effective WHO action programme on smoking and health".

67. Three expert committees have been convened. The first, on smoking and its effect on health, was held in 1974, summarized the evidence on the harmful effects of tobacco and to propose actions directed towards discouraging the use of tobacco. This expert committee concluded that "epidemiological evidence from many countries implicates tobacco smoking as an important causative factor in lung cancer, chronic bronchitis and emphysema, ischaemic heart disease, and obstructive peripheral vascular disease", and recommended that "governments should accept the responsibility of carrying out smoking control action by their own agencies

and of stimulating nongovernmental organizations to take action also. Action should include the dissemination of information, support for activities to help people to stop smoking, the promotion of legislation if further powers are needed, and research".

68. In 1978 an Expert Committee on Smoking Control met to review the latest evidence on the harmful effects of tobacco smoking, to review the world situation in regard to smoking control, and to suggest ways of helping Member States to prevent the spread of the smoking habit. This Committee stated that there can no longer be any doubt among informed people that in any country where smoking is a common practice, it is a major and certain removable cause of ill health and premature death, and that cigarette smoking is responsible for significant mortality from lung cancer, ischaemic heart disease, chronic bronchitis and emphysema. Detailed approaches were outlined for public information and public education programmes and legislative and restrictive measures to control smoking along with strategies at the national and international level.

69. In response to increasing concern at the rapid spread of the smoking epidemic in the developing countries, an Expert Committee on Smoking Control Strategies in Developing Countries was held in 1982. This Committee reported that the scientific facts are inescapable, and are equally valid in all countries: tobacco smoking is a cause of cancer of the lung, coronary heart disease, chronic bronchitis, and a number of other conditions, leading to disability and premature death. The Committee reviewed the evidence demonstrating the harmful consequences of smoking to health in developing countries and confirmed that anti-smoking and health campaigns should be a major public health priority all over the world.

70. In addition to problems of cigarette smoking, the Committee considered evidence of damage to health caused by more traditional forms of tobacco use in the developing countries, including the smoking of bidis (a hand-rolled cigarette), chutta (a cheroot smoked with the burning end inside the mouth), and the chewing of tobacco in the betel quid. The Committee, however, expressed its disappointment at the omission of smoking control activities from the WHO Seventh General Programme of Work (1984-1989) and, recommending that high priority be given to smoking control activities, stressed that "although other health problems may seem to be more pressing, only action now can prevent these problems from being exacerbated by smoking-related diseases".

## Fact-finding and research

### Seminars and other meetings

71. The smoking and health programme at global level has been involved in a number of regional and national tobacco control workshops and seminars.

72. The first International Conference on Smoking and Health in the African Region was convened in Mbabane, in April 1982 (55). Smoking control actions and country profiles for nine countries were reviewed, in June 1984, at an international seminar on smoking and health for English-speaking African countries, held in Lusaka (56), and, in November 1985, a training workshop is being held in Lomé for the media people responsible for anti-smoking messages in the French-speaking countries.

73. In the American Region, a survey of smoking habits in several capital cities of Latin American countries was conducted in 1975. A series of seminars on smoking and health is planned with the aim of covering all the developing countries of the Region. The first will be held in November 1985, in Buenos Aires for the countries of the "South Cone" region of Latin America. The main purpose of these seminars is to promote a clear commitment to smoking control at a political level, and to establish the basis for a multisectoral approach to the planning and implementation of a plan of action to control the spread of tobacco use in each participating country.

74. Two intercountry meetings on tobacco and health have been held in the South-East Asia Region - a workshop in Colombo in 1981 and a regional seminar in Kathmandu in November 1984 (29,57). Smoking surveys, and research and intervention to reduce the incidence of the forms of cancer associated with tobacco chewing and smoking are under way in several Member States of the Region. An intercountry seminar aimed at mustering government commitment was held, in July 1985, in New Delhi. Several national seminars in, for example, Bangladesh, India, Indonesia, Mongolia, and Nepal were also held in 1983-1984. As long ago

as 1970 the Regional Committee drew the attention of Member States to the adverse effects of tobacco smoking and to the need for educating the public on the subject; and in September 1985 it reiterated its concern about the mounting problem.

75. The European Region has established a well-defined regional programme on smoking and health with staff and consultants specifically involved in its implementation, the objective being to attain a 50% reduction in tobacco consumption and to establish a rate for the Region of 80% or more non-smokers by the year 2000. Significant progress has been made in some countries, particularly those in Scandinavia, some of which are aiming to eradicate the habit entirely by the year 2000. A southern European group on smoking and health, established following a symposium in Barcelona in 1984, has started a survey of smoking habits among health professionals in France, Greece, Italy, Portugal and Spain. A workshop on women and smoking is being held in Lisbon in November 1985; and in 1986, in Yugoslavia, a European conference on government action to combat smoking is planned. An international poster competition to promote the positive image of non-smoking has also been held and the winners were announced at the World Conference on Health Education (Dublin, September 1985). The seminars and similar meetings organized or co-sponsored by the Regional Office are too numerous to list here.

76. A seminar on smoking and health was held for countries of the Eastern Mediterranean Region in Khartoum, in 1984. Other seminars were held, for instance, in Egypt, Kuwait, Pakistan, in collaboration with the International Union Against Cancer.

77. Several countries in the Western Pacific Region are currently developing tobacco and health activities. Representatives from countries in this area participated in the above-mentioned seminar in Sri Lanka. Lectures on smoking and health were also given at the WHO Regional Training Course on Epidemiology and Community-based Control of Cardiovascular Diseases, held in Beijing in 1982 and in Kuala Lumpur in 1984. Already in 1971 and 1972 the Regional Committee adopted recommendations for the control of the health consequences of smoking. The Sixth World Conference on Smoking and Health will be held in Japan in 1987 and there are plans to organize the first Western Pacific regional seminar on smoking and health on that occasion.

#### Research on trends in smoking and smoking-related diseases

78. In order to facilitate the collection of comparable data on the prevalence of smoking, WHO has proposed guidelines, including standard survey questionnaires and procedures, for the assistance of Member States. These questionnaires and procedures have been used in Nepal and Zambia, among other countries, with financial support from the Organization, to collect information on the smoking habits of their populations. Research on the smoking habits of health professionals is under way, using these guidelines, in France, Italy, Portugal, Spain and Sweden. In addition, WHO has been collecting published and "fugitive" data on smoking trends in developing countries and in youth, and has itself produced several reports consolidating this information. The Regional Office for Europe is carrying out its fourth survey of smoking habits in the Region. Surveys of smoking habits and research on monitoring trends and on intervention to decrease the incidence of smoking-related forms of cancer and cardiovascular diseases, for example, the MONICA project,<sup>1</sup> are under way in several Member States with WHO support. Some such research, such as that on the prevalence of smoking among medical students, is being carried out in collaboration with the International Union against Tuberculosis (IUAT).

79. Although much is known on the harmful health effects of smoking, in some countries there are situations where research on smoking-related diseases may still be warranted. For instance it may be politically and socially very useful in some developing countries to demonstrate the reality of smoking-related health hazards in situ rather than to rely on data obtained in remote industrialized countries. Developing countries, moreover, sometimes have typical disease situations, in which the use of tobacco is involved, for example, in Egypt bladder cancer occurs in association with smoking and schistosomal infection, and in the Indian subcontinent oral cancer is associated with the chewing of tobacco mixtures. Such research, although marginally useful, should not be interpreted as a prerequisite for action as that would cause delay and thus play into the hands of the tobacco industry.

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<sup>1</sup> Multinational monitoring of trends and determinants in cardiovascular diseases.

Research on levels of toxic substances in cigarettes

80. WHO is carrying out a research project to ascertain whether the tar, nicotine and carbon monoxide yields of the cigarettes imported into or manufactured in developing countries are high and to assist these countries in monitoring and lowering the limits for such yields. Cigarettes are purchased in developing countries and their yields are ascertained in a WHO collaborating laboratory in Canada. The Organization is assisting some Member States in the Eastern Mediterranean Region in setting up laboratories for that purpose and has provided technical advice, training capability and laboratory equipment. The issue of pesticide content of tobacco leaves is mentioned in paragraph 54.

Socioeconomic research

81. Expert committees have repeatedly recommended, in their reports, and the Health Assembly has on many occasions, in its resolutions, requested the Director-General to assist Member States in carrying out research on the economics of tobacco in relation to the health and social costs of smoking-related diseases, and to study the feasibility of diversifying production to eliminate tobacco.

82. According to the World Bank, the identification of alternative crops and diversification away from tobacco are not only desirable for health reasons but also economically feasible. A Bank report states: "The Bank can increase investments in other products commensurate with a withdrawal from tobacco production. Tobacco projects and those with major tobacco components merit phasing out."

83. In order to pursue this research the Organization has been collaborating at the technical level with the Food and Agriculture Organization of the United Nations and with other institutions, for example in Canada, taking part in the study of the significance of tobacco in agriculture and in health economics. WHO is now also planning to collaborate in a research project with the United States National Cancer Institute to ascertain the burden in terms of lung cancer, and other health and social costs imposed by the use of tobacco in selected developing countries, and thus provide an econometric model for use in other developing countries.

84. Regular and substantial price increases of tobacco products have been shown in the United Kingdom and other countries to be effective in reducing consumption. Cigarette consumption in the Federal Republic of Germany declined by 17% in 1982 following a price increase of 25%. A sudden increase in cigarette prices brought about similar results in Malaysia. There may be a case for exploring further the usefulness of price increases in contributing to the decrease in cigarette consumption while at the same time maintaining the taxation revenue to governments. The possibility of excluding tobacco from the national price indices should also be explored.

Research on behavioural changes and on smoking cessation

85. The extent of the problem regarding tobacco and the essential elements of tobacco control programmes have been determined. The need now is for the implementation of national programmes. In planning measures for the reduction of smoking, it is necessary to look at the "why" of smoking at a number of different levels, so as to be able to design strategies that maximize the gains at each level and ensure synergy of action. For the smoker the habit has attractions at the pharmacological, the psychological and the sociocultural levels, at each of which there is potential for behavioural change. The most important of these levels is the pharmacological one, as described in paragraphs 30 to 32.

86. There are also many psychological reasons why smokers adopt and maintain the habit. These include modelling, and may stem from an individual's personality structure and current patterns of work and leisure. There are, therefore, important similarities between smoking and other forms of strong habitual behaviour such as, for example, regular indulgence in alcoholic drinks.

87. The use of drugs for social reasons has been characteristic of most societies throughout history, and so the importance of sociocultural factors must be recognized. Research is needed for an understanding of the forces that maintain cigarette smoking as a culturally accepted habit. They include tobacco marketing practices, popular culture and apparent

economic incentives for governments. These forces are increasingly at work in many developing countries as well. It should not therefore come as a surprise that the cessation of the habit is not likely to be easily achieved. Action to this end at any one of the levels enumerated above is unlikely to be successful on its own; what is needed is an integrated approach, at all levels. Research on behavioural aspects of drug taking in general could benefit from a similarly integrated approach.

88. In retrospect the success achieved in a few countries where the prevalence of smoking has declined in the past 20 years, for example Finland, Norway, Sweden, the United Kingdom of Great Britain and Northern Ireland and the United States of America, seems clearly to have been primarily due to increasing awareness, brought about and supported by education and legislation. Awareness is a necessary but not sufficient condition for a decline in smoking, since there are many countries where the dangers have been widely publicized yet there has been no decline in prevalence. The first step would therefore be to inform the public and the decision-makers of the immediate and long-term health consequences. A significant reduction in smoking is likely to occur without any therapy once people understand that smoking is dangerous and are informed about possible methods of stopping, but research is needed on how to transmit information in a way that is accurate and culturally valid for the population in question. The majority of smokers who "quit" do so on their own - there are calculated to be about 9 million ex-smokers in the United Kingdom and 33 million in the United States.

89. In regard to the efficacy of particular methods of therapy, there is a large literature. These methods have typically involved information on the health risks, guidance on methods of stopping, group interaction therapy and sometimes specific training in particular methods of changing behaviour, including the use of pharmacological aids. In general all these methods are labour intensive and many are reported to have a relatively high rate of successful outcome, but they also have high relapse rates. They may be of particular value for special high-risk groups (such as those who have suffered a heart attack) where intensive help in smoking cessation would be cost-effective in preventing the need arising for future treatment. Programmes may also be useful as political exercises to dramatize the problem of smoking and educate health professionals both in the need to combat smoking and in methods by which it might be done.

90. Less attention has been paid to the effectiveness of mass methods of cessation, using for example written material, radio, television or postal advice. The few controlled evaluations which have been carried out suggest that such methods have fairly low success rates in terms of abstinence for one year (from 3 to 5%) but that the cost-effectiveness is considerably higher than the methods for individuals or small groups described above. Likewise, even a small success in cessation rates achieved through simple counselling by general practitioners and other health personnel would result in large numbers of "quitters" in the population (58). In behavioural interventions, relatively small positive outcomes are important, not only because they may involve large numbers of individuals, but also because they may mark the beginning of major behavioural trends. WHO is already involved in studies on the effectiveness of simple treatment interventions in the areas of alcohol and drug dependence; similar studies should be undertaken with respect to tobacco, which would benefit from a comparison of programmes designed to have an impact upon different types of substance abuse.

91. Action on smoking is more likely to have an impact if it is brought to bear not only at the health level but also at cultural and political levels. It is likely that the less smoking is allowed in public places and centres of work and leisure, the more it will be seen as an unacceptable behaviour and the more social support there will be for non-smoking.

#### VII. WHO ACTION TO DECREASE THE MAGNITUDE OF TOBACCO-RELATED HEALTH PROBLEMS

92. Basically three lines of approach are followed by WHO, as outlined in the global medium-term programme: collaboration with Member States, collection and dissemination of information, collaboration with international agencies.

##### Technical cooperation with Member States

93. Technical cooperation in various forms has already been described in paragraphs 71 to 83. Assistance to research on smoking and health issues including smoking prevalence

surveys and smoke analyses, and collection and dissemination of information, are examples of collaboration. Technical collaboration among developing countries (TCDC) was advocated as long ago as 1982 at the first WHO International Conference on Smoking and Health in Africa that was held in April of that year in Mbabane (55), while the need to use the primary health care approach in anti-smoking education was advocated at a workshop in Colombo in 1981 (57).

94. Other forms of collaboration consist in the implementation of guidelines and strategies proposed by WHO to assist Member States in their smoking control efforts. Almost all governments find themselves in the dilemma of how to protect, at one and the same time and despite the pressures, both the health of their people and the income that derives from tobacco. It is all too common to find governments launching educational campaigns against smoking while, at the same time, allowing tobacco publicity, providing tobacco subsidies and, in some cases, owning a tobacco industry as a state monopoly. The ambivalence and hesitation of governments vis-à-vis the tobacco problem must change. Collaboration with the Council of the Arab Ministers of Health is a good example of how joint action, including information and educational anti-smoking campaigns, adoption of uniform anti-smoking legislation, and involvement of religious institutions in promoting non-smoking behaviour, can be coordinated.

95. The goal of such a collaboration as described in the medium-term programme is to strengthen or build up - where there are none - national smoking control programmes with emphasis on: collecting information on smoking trends; promoting smoking control legislation; promoting education and information activities; training primary health care workers in smoking and health issues; promoting the exemplary role of schoolteachers as non-smokers; introducing smoking and health issues into the curricula of health professionals; and organizing seminars and conferences. Programmes of education against the smoking and chewing of tobacco are needed for primary prevention of cancers due to known causes, as well as for the primordial prevention of cardiovascular diseases, and are also given due emphasis in the WHO programmes on cancer and on cardiovascular diseases. Examples of WHO-supported country-specific action in cancer control are the national cancer control programmes that have begun and the legislation on tobacco use that is being developed in Sri Lanka, India and Chile. Intensive anti-smoking programmes, consisting of education and legislation, should be the core of current strategies for the control of tobacco-related cancer. An Expert Committee on Community Prevention and Control of Cardiovascular Diseases, in December 1984 (5), outlined national action plans including community organization for health education, education and involvement of youth, use of community and national media and involvement of the medical profession. The Committee concluded that prevention is the most powerful way to reduce the burden of cardiovascular diseases in the community and to control its escalating medical costs and recommended that governments, national medical associations and other influential organizations be urged to declare a commitment to the goal of a smoke-free society and to plan for the achievement of this goal (5).

#### Dissemination of information

96. This type of activity began in 1974 with the convening of the first Expert Committee on Smoking and its Effects on Health and, with the establishment of what for a time became known as the WHO Clearinghouse of Smoking and Health Information, it was intensified. Information is collected mainly through:

- (a) WHO meetings of experts, including expert committees, seminars and consultations; and
- (b) ad hoc literature search by consultants, including published as well as "fugitive" literature; government reports; private communications; literature surveys provided by the Office on Smoking and Health, United States of America; reports by research institutes; reports by nongovernmental organizations and organizations and bodies of the United Nations system; and reports on WHO funded research activities in countries, etc.

97. The information is collated and included in WHO reports of various types as appropriate. These are sometimes translated, and widely distributed through: official WHO channels for distribution and sales; as well as other distribution mechanisms including, for instance, the mailing lists of the WHO programmes on smoking and health, cardiovascular diseases and public information and education for health; the Expert Advisory Panel on Smoking and Health; and directly in response to the very numerous requests by institutions,



newspapers, libraries, individuals, government departments, and so on. The reports of the Expert Committees have been published and widely distributed in many thousands of copies in several languages. These reports not only disseminate information on various smoking and health issues but also provide public health authorities with guidelines on smoking control strategies.

98. The theme of World Health Day 1980 was "Smoking or health - The choice is yours". This information campaign appears to have reached every country in the world. Actively supported by national information campaigns and by nongovernmental and civic groups, for the first time awareness of the smoking epidemic spread world-wide. Many governments took this opportunity to launch programmes to limit the spread of the smoking epidemic, particularly in developing countries. Nongovernmental organizations also carried out mass campaigns to raise public awareness and the mass media played a major role in bringing the message to the public.

99. The Organization has prepared documents on the geographical prevalence of cigarette smoking in younger age groups, smoking prevalence in developing countries, economic benefits and losses associated with cigarette smoking, exposure to environmental tobacco smoke in aircraft, guidelines for the conduct of surveys of tobacco smoking among health professionals and the general population. It also produces a quarterly newsletter "Tobacco Alert" (5000 copies in English, 4000 in French; a Spanish edition is in preparation). Following the publication in 1976 of a survey on smoking control legislation, a second and more comprehensive survey entitled Legislative Action to Control the World Smoking Epidemic was published in 1982 and has been widely distributed. This is currently being updated to cover recent developments (59,60).

100. WHO activities on smoking and health have been the subject of numerous radio, newspaper, and television interviews facilitating massive spread of information to large strata of populations all over the world, and also underlining WHO's concern. The Organization also disseminates information indirectly but, nonetheless, effectively through such channels as nongovernmental organizations and consumers' associations. Through joint seminars, joint research, published articles and other joint activities with the International Union Against Cancer (UICC), the International Union for Health Education (IUHE) the International Society and Federation of Cardiology (ISFC) and the International Union against Tuberculosis (IUAT), information is spread to the national constituencies of these nongovernmental organizations. Recently, the International Council on Alcohol and Addictions has introduced tobacco issues in its programme and has held a special workshop on smoking and health on the occasion of the International Congress on Alcohol and Addictions, held in Calgary (Canada), in August 1985. The International Organization of Consumers Unions, a powerful pressure group, has also decided to concentrate on tobacco as a market product which is harmful to consumers. The national and intercountry seminars mentioned above are invaluable disseminating information and exchanging ideas.

101. As part of its action in spreading information and arousing worldwide awareness WHO has co-sponsored the Third, Fourth and Fifth World Conferences on Smoking and Health, the first International Conference on Smoking and Youth, and numerous international conferences on health education which had smoking issues in their programmes. The Sixth World Conference on Smoking and Health scheduled to be held in Japan on World Health Day 1987 will also have WHO input.

102. Thanks to WHO and UICC seminars on smoking and health in Islamic countries, the issue of smoking as a harmful habit and therefore unacceptable on religious grounds has come to the fore. Religious authorities attending these seminars have suggested that smoking be considered unlawful (haram) and contrary to the spirit of Islamic ethics. The spread of that moral concept would give millions of actual or potential smokers an incentive and support to stop smoking or not to take up the habit.

#### Joint action with other international agencies

103. As the political, economic, and psychological pressure by the tobacco industry is transnational in nature, WHO action must also be transnational in mustering collaboration, support, and political will. The United Nations system can be a powerful tool in this context, and has already shown its concern for WHO's efforts. Indeed, several organizations of the United Nations system have decided not to allow smoking any longer at their meetings and in conference rooms. Action by WHO at high executive level is necessary to mobilize consensus and support by the United Nations family.

104. A United Nations interorganization consultation in 1981 (61) attended by nine other organizations and bodies expressed support for WHO's action. Over the past few years, the United Nations and some of its specialized agencies have banned smoking at their official meetings pursuant to a request by the Director-General of WHO. FAO and the World Bank have already expressed their readiness to study crop diversification to replace tobacco, if so requested by Member States.

105. FAO has reduced the number of tobacco production and marketing projects that it supports: whereas in the mid-1970s it was involved with eight such projects, in 1980 it was supporting only two (3a), and no moves are being made to start new ones. Although FAO has, on occasion, stressed the advantages of tobacco as a remunerative cash crop (18), it has nevertheless announced that before embarking on country projects involving tobacco it will review the importance of the crop to the country and, where tobacco is not yet an established crop, it will draw attention to WHO resolutions on smoking and health, and offer help in exploring whether alternative crops are feasible (61). Subject to availability of funds FAO is ready to assist any government requesting investigation of the possibility of crop diversification away from tobacco.

106. The World Bank has also declared its readiness in principle to emphasize the desirability of production of alternative crops in its financing of agricultural and rural developments in developing countries, if this is seen to be in line with the economic requirements of the country. More pressure coming from the international community would strengthen the position of the World Bank in considering investment proposals in crop diversification to decrease tobacco production (61). The Bank does not seek opportunities to finance tobacco, and tobacco financing is of very minor importance in Bank programmes.

107. UNCTAD has produced a seminal report on the marketing and distribution of tobacco (44) disclosing the oligopolistic power of the transnational tobacco companies, which fully control tobacco marketing while relegating the developing countries to the margin of the decision-making process. Further UNCTAD involvement in tobacco issues would be needed.

108. ILO is always prepared to support activities aimed at reducing occupational risks, and the fact that smoking is an aggravating factor in the development of certain occupational diseases should be taken into account. ILO might envisage further increasing the awareness of governments, employers, and workers of the adverse effects of smoking, thus supporting the fight against smoking and promoting the safety and health of the working population (3a). Workers represent in many countries a "captive audience" or target group of great educational potential. Health-oriented messages, including discouragement of smoking, can be transmitted to the workers and through them, to their families by factory doctors, nurses, and other suitable media. ILO has expressed readiness to respond to WHO proposals and this line of collaborative approach should be used. The unions in some industrialized countries often support smoke-free worksites because to do so cuts down on health costs, prevents accidents and makes for other savings, that can be passed on as benefits to the workers. Workers' unions would therefore be a very useful ally.

109. Other valuable target groups are mothers and children. The harmful health effects of smoking on these susceptible groups are well known and have been outlined in the situation analysis above. UNICEF and UNESCO should consider their responsibility to help in protecting the health of the millions of those who may yet become smokers by launching educational activities aimed at young mothers and children. UNESCO has started activities in this area since 1971, and its policy is "to contribute to the solution of the problems related to the use of licit and illicit drugs through preventive education forming an integrated part of the educational process".

110. In view of the recent and convincing evidence of environmental deterioration brought about inter alia by tobacco cultivation and processing, UNEP would also have an important role to play. This agency expressed concern that excessive tobacco cultivation contributes to the destruction of forests and resulting problems. It collaborates with IARC in a project on "involuntary" or "passive" smoking as a source of environmental carcinogen intake and expressed its readiness to collaborate further with WHO in the control and discouragement of the use of tobacco. UNIDO has so far been minimally involved with tobacco but is conscious of the health problems and is considering the possibility of touching upon tobacco in its worldwide study on pharmaceuticals to be issued in 1986. As to UNDP, this agency is presently financing only two tobacco projects, one of which will be completed shortly. This

can be seen as a marked down-trend from the 1970s when a number of governments were receiving UNDP assistance in this area. In the past, UNDP also provided assistance in diversification and production of alternative crops; it continues to provide assistance to governments in these areas on request. In summary, the position of these organizations of the United Nations system is that they would be ready to cooperate if there were consensus within the United Nations, but the approach should be made at a high executive level (61).

111. Several international nongovernmental organizations have a strong interest in smoking and health issues and collaboration with them is crucial. Their action can be considered as mostly in the nature of advocacy, through seminars and sensitization of the health profession. The International Union Against Cancer passed a resolution on smoking and health in 1971 and established a programme on smoking and health in 1975 (62). It has published works of reference (10a,b) and held many seminars in this field in many developing and developed countries. The International Society and Federation of Cardiology (ISFC) issued a statement on its own programme on smoking and health in 1980 (63) and its journal, Heartbeat, regularly carries articles and illustrations showing anti-smoking publicity material. The International Union for Health Education (IUHE) actively collaborates with WHO although it does not have a programme specifically devoted to smoking and health issues. The International Union against Tuberculosis (IUAT) has recently established a scientific committee on smoking and health. This Committee brings out new information material on smoking and health for distribution through IUAT members and affiliated bodies, and is sponsoring surveys of smoking habits among medical students in selected countries. The Committee has also recommended that IUAT hold a session on smoking and health at all its international and regional conferences, which in future will be non-smoking.

112. The International Olympic Committee (IOC) and WHO agreed, on the occasion of the Thirty-eighth World Health Assembly to collaborate in a health-oriented project called "Winners for health", the aim of which is to emphasize the role of sports and physical fitness in healthier life-styles, as well as avoidance of tobacco and other drugs, moderation in use of alcohol and in food intake and increased personal responsibility in health matters. The International Council on Alcohol Addictions (ICAA) as well as the International Organization of Consumers' Unions (IOCU) have recently taken up tobacco in their programmes. On a more technical ground, WHO has consulted with the International Air Transport Agency (IATA) to ensure that non-smokers receive effective protection against passive smoking in aircraft, and that the current airline measures to separate smoking and non-smoking zones be maintained and improved (64).

#### Future action and new strategies

##### Programmes at national level

113. Effective national programmes are the key to an effective global effort to control the use of tobacco and to prevent the tobacco-caused diseases. The basic components of a tobacco control programme are education and information, legislation and operational research. However, focusing on any single component, for instance on public education alone, at either the national or international level is unlikely to bring success. The optimal strategy is a comprehensive approach, in which all major components are integrated and coordinated and the deployment of the resources allocated to each component is commensurate with its expected effect. On request WHO takes an active role in promoting and establishing national programmes. The Organization also undertakes international activities which will facilitate the development of national programmes and strengthen their action.

114. In the Western Pacific Region, 11 out of 23 Member States have various types of smoking control activities, mostly in the form of legislation and school education. In the Eastern Mediterranean Region almost all Member States have recognized the smoking and health issue, which is being dealt with mainly through legislation. The same trend applies to countries of the South-East Asia Region, e.g. Bangladesh, India, Malaysia, Nepal, Sri Lanka, Thailand, whereas most African Region countries apparently have not tackled the issue yet. Country activities being carried out in Member States of the European Region and in the Americas are too numerous to list here.

115. The strategies for comprehensive smoking control programmes are described in detail in the WHO Technical Report Series (3a,b) and so will not be repeated here, where it will suffice to recall that such strategies generally consist of:

### Education and information

- informing government officials, leaders and key social groups about the nature, seriousness and extent of the tobacco problem and what should be done;
- encouraging health personnel and primary health care workers as well as educators and public figures to take leadership exemplar roles by not smoking and by promoting non-smoking attitudes in the population;
- using mass and other communication media to inform the public about the health risks; tobacco advertisement, both direct and indirect, particularly in mass media should not be permitted;
- encouraging the public, especially schoolchildren, to increase positive health behaviour and never to adopt any tobacco habit;
- encouraging people who use tobacco to stop or at least drastically decrease its use, particularly high-risk individuals, workers in high-risk industries, and pregnant women;
- encouraging trade unions to support smoking prevention campaigns especially for workers in which smoking would multiply the risks of occupational exposure.

### Legislation

- banning tobacco advertising;
- banning sponsorship of cultural and sports events by the tobacco industry;
- placing of health warnings on tobacco product packages and in advertisements (assuming that there is no current possibility of a total ban on sales promotion);
- limiting the amount of harmful substances in tobacco products and specifying the amount on product packages;
- protecting the rights of non-smokers;
- protecting minors;
- increasing taxation on tobacco products and other economic measures.

### Operational research

Some research may still be needed, but it should not delay national action; otherwise it would simply buy time for adverse commercial interests. Research may be useful on the following aspects of the problem:

- organizational and support structures, e.g., whether to establish a national smoking and health agency, or other body, specifically responsible for planning and coordinating the national programmes;
- why people smoke and how to deliver anti-smoking messages successfully;
- socially acceptable methods for smoking cessation applicable on a large scale;
- economically viable alternatives to tobacco production and trade;
- ways and means of involving government departments other than health, in solving the complex problem of tobacco use;
- suitable methods for the evaluation of smoking control programmes;

- the tobacco industry's promotional strategies and the limitation of their impact. It is very difficult indeed to transmit any kind of health- or socially-oriented anti-smoking message in the face of promotional drive supported in 1981 by US\$ 1600 million for the United States of America alone. Worldwide, tobacco promotion is estimated to be supported by about US\$ 2000 million per year (33,44) focused on massive advertising and sponsorship of sports and cultural events;
- assistance to governments in rationalizing their attitudes towards tobacco production and use, so as to emphasize health rather than short-term monetary gain.

116. The implementation of these strategies depends on the sociocultural and other circumstances within the country. The Regional Seminar on Smoking and Health that was held in Kathmandu in November 1984 addressed this very issue, and produced a blueprint for action for governments to follow (29). Some Member States of the Eastern Mediterranean Region have decided to tackle the smoking and health issues (e.g., cigarette analyses, information and education for health, and smoking control legislation) on an intercountry, subregional basis. This is strategically a sound approach which is being attempted in the Region of the Americas as well.

### Programmes at international level

#### Education and information

117. A major component of WHO's smoking and health programme will be a global information campaign, supporting, and coordinated with, national efforts. This campaign on the theme "Tobacco or health" will utilize WHO media, such as the Bulletin of the World Health Organization, WHO Chronicle, World Health Forum, and World Health magazine, supplemented by fact sheets and special media kits directed to the general public, women and youth, and selected nongovernmental organization channels. A concerted effort, involving the provision of information to medical and educational journals and to the media used by specialized bodies, is also planned. Training modules at the introductory and refresher levels will be prepared for both health staff and teacher training centres, to facilitate the development of materials adapted to local conditions. In connection with the above activities, an international "no-smoking" day - similar to the national days already organized in many countries - could be held as recommended at the Fifth World Conference on Smoking and Health. As the year 2000 approaches, it is clear that there is not enough manpower available to run tobacco control programmes at the national and state levels. Organized training is needed in this area, and international training seminars should be arranged at which country-level programmes and experiences would be studied. WHO also has a role to play in developing and disseminating simple guidelines on the role of primary health care workers in discussing tobacco use and in counselling individuals and small groups on smoking cessation.

118. Tobacco advertising at sports events is emerging as one of the major mechanisms to promote smoking; this approach is particularly effective for vulnerable Third World populations, especially the young. Elimination of tobacco advertising at sports events should be a specific focus for emphasis in WHO's media approach.

#### Legislation

119. In addition to supporting the adoption of national legislation on smoking and health issues, WHO should recommend that exported tobacco products carry the same health warnings as the products for domestic consumption existing in the exporting countries and that the amount of harmful substances in exported tobacco products does not exceed the level permissible in the producing countries.

#### Organization and support

120. WHO will take a leadership role in the promotion of national tobacco control programmes on an intercountry basis. Collaboration on the tobacco programme between WHO and relevant organizations and bodies of the United Nations system will be strengthened with a view to the development of the requisite common policy aimed at decreasing the use of tobacco and bringing about a shrinkage of the tobacco market. In this connection economic interests of developing countries will have to be considered and cooperation provided to achieve the necessary diversification and the development of substitute crops. The development of

integrated policies at national level on the health, agricultural and economic issues related to tobacco is a prerequisite. The crucial value of collaboration with nongovernmental organizations has been mentioned in paragraph 111. It should be continued and expanded, as they play an important role in many countries in reducing smoking.

121. WHO's target is that most Member States should have established national tobacco and health programmes, with both education and comprehensive legislative components, and should have attained a measurable decrease in the prevalence of tobacco usage by the year 2000. However, in addition to the classic strategies described above, the need for new strategies is becoming evident. These would include advocacy of all-round healthy life-styles and positive attitudes to health, promotion of a general social environment in which smoking is clearly seen as a nuisance and non-smoking as the norm, and the demystification of smoking. Knowledge and skills on how to apply these new strategies are still inadequately mastered. WHO is promoting their acquisition inter alia by organizing study groups and training seminars, such as the one to be held in Lomé, in November 1985, and by supporting research.

122. The disease-dominated approach has been proved to be of limited value. Positive attitudes should instead capitalize on the appeal and the value system of suitable trend setters, e.g., young actors, singers and athletes. WHO's new information and education project "Winners for health" is a step in the right direction. In several countries emphasis is being placed on sports activities both of a competitive and non-competitive nature in order to channel youthful energy away from the use of illicit and abuse of licit drugs. For smoking decreases sports performance, and the intense revival of physical activity and physical fitness that is now taking place as a mass phenomenon worldwide should be turned to good use in order to prevent the uptake of the smoking habit. This indeed is the purpose of the collaborative health-promotion agreement which has recently been reached between the International Olympic Committee and WHO, as mentioned above (paragraph 112). The above-mentioned project offers a ready channel for getting the health message about smoking to the public throughout the world at grass-roots level. This can be done in conjunction with local and national Olympic committees and other nongovernmental organizations involved in youth and sporting activities.

#### VIII. EVALUATION OF THE EFFECTIVENESS OF SMOKING CONTROL ACTION

123. In so complex an issue as smoking and health success, in terms of decreases in smoking rates, when they occur, cannot be attributed to any single action. This is true both at country level regarding national smoking control action, and at global level regarding the impact of WHO action. The tobacco-smoking problem is compounded of actions relating to individual and mass behaviour and value systems, and involves pharmacology, education, public information, and legislation, as well as agriculture and its political and socioeconomic implications. Changes in any of these factors can entail changes in population smoking rates and, consequently, in the rates of smoking-related diseases.

124. On account of the multiplicity of these factors, and of their interrelationships, it is clearly impossible to disentangle the interreactions and thus identify which type of control action has brought about a decrease in smoking rates. Nevertheless, results are available and they are encouraging.

##### Effectiveness of national action

Some of the effects of national smoking control activities can be summarized as follows:

##### Legislation

125. Legislation to limit the spread of tobacco smoking is becoming more stringent and more widely enacted and enforced. Following the initial example of Sweden where cigarette packets and tobacco products have a system of 16 health warnings delivering different messages in succession, the United States of America, Canada, Australia, Iceland and Norway have adopted the system of multiple warnings. According to available information, the number of countries adopting smoking control legislation has increased from less than 30 in 1967 (65) to 57 in 1982 (59), and to 64 in 1985 (60). Many countries made their past legislation more stringent and/or more comprehensive. In the United States of America, available information indicates that four States and 31 cities or counties have enacted statutes or other legal instruments to restrict smoking at the workplace (66).

### Social attitudes

126. These are becoming more critical of smoking. The non-smoking areas in public places and transport are constantly increasing. In the United States of America, more and more employers are enforcing non-smoking at the workplace as a matter of policy, or refusing to employ smokers (67,68).

### Health education and public information

127. Activities of this kind have multiplied all over the world. A survey by ISFC in 1980 showed that smoking control activities were in progress in 30 countries. Now nearly all countries have such activities.

128. The most important short-term measures of the impact of a tobacco and health programme is the change in the prevalence of tobacco habits, especially in the young age groups. The strongest evidence of effective programmes comes from the Scandinavian countries where comprehensive anti-smoking programmes have been implemented, but even in countries with more limited legislation - Canada, the United Kingdom and the United States of America - there has been a marked decline in smoking.

### Improvement or reversal of smoking trends

129. In Sweden, where strong comprehensive smoking control action was started in the early 1960s, followed by the introduction of health warnings on tobacco products in 1975, the percentage of daily smokers declined steadily between 1970, when 50% of adult males were daily smokers, and 1984, when only 29% were daily smokers. Among 13-year-old boys, the percentage of smokers declined from 14% in 1971 to 5% in 1980; for 13-year-old girls the decline was from 16% in 1971 to 6% in 1980. In the United Kingdom, 65% of adult males were smokers in 1948, but only 38% in 1982. Among women, the figures are 41% and 33%, respectively.

130. When the Tobacco Act entered into force in Norway in 1975, 52% of adult males were daily smokers; but by 1982 the proportion had dropped to 40%. In 1974, 40% of boys and 14% of girls smoked daily, but in 1983, the figures were 21% for boys and 26% for girls.

131. In the United States of America, the proportion of smokers declined from 42% to 33% between 1965 and 1980. The percentage of 17- to 18-year-old boys who smoked declined from 30% in 1968 to 20% in 1979; among 17- to 18-year-old girls an initial increase from 18% in 1968 to 25% in 1977-1978 seems to have levelled off by 1979. Doctors have drastically reduced their smoking prevalence from about 60% in the 1950s to about 10% at present. Altogether, some 33 million Americans - about 30% of all smokers - "quit" between 1970 and 1984.

132. Ten years after the beginning of the well-known community programme for control of cardiovascular diseases, in North Karelia, Finland, a 28% decrease was found in smoking prevalence among males and 14% among females (69).

### Effects on tobacco consumption

133. Tobacco consumption has been decreasing in several developed countries. In Canada, for instance, cigarette consumption decreased from 66 300 million in 1982 to 61 000 in 1985. This trend is expected to continue for several years, thus giving farmers enough time to find replacement crops (70). From 1974 to 1982, total tobacco consumption per capita declined at the rate of 1.3% (38). In the United States of America consumption of tobacco products has stabilized because of higher prices and of health concern. Consumption per adult (18 years and over) dropped to 3494 cigarettes in 1983, a 10% reduction on the 1963 figure, and the lowest since 1949 (38).

134. In Australia, according to Commonwealth statistics, production quotas for tobacco growing are being reduced to reflect the downturn in tobacco sales, while domestic production of cigarettes has decreased in the past three years, as never before, by about 9% per year (71). In Finland, total per capita consumption between 1974 and 1982 declined by 2.3% per year; in 1975, a drastic increase in the price of tobacco products brought about a 15% fall in consumption (38). In the United Republic of Tanzania, tobacco production declined by 35% between 1978 and 1983 (45).

135. Unfortunately, the downward trends in consumption in many developed countries are being countered by increased tobacco-industry pressure, producing increased consumption, in developing countries, where smoking control action is still lacking. Indeed, as mentioned in paragraph 59, consumption is decreasing by 1.1% per year in the industrialized world and increasing by 2.1% per year in the Third World (20).

#### Reduction in smoking-related diseases

136. In the long run, the effectiveness of national tobacco control programmes must be measured by the reduction of tobacco-associated diseases, such as lung cancer, cardiovascular disease, emphysema and bronchitis. However, since effective national programmes have been carried out for only a few years in a small number of countries, their direct impact in younger age groups has only recently begun to show. Quick results cannot be expected. A few decades must elapse before overt symptoms of lung cancer or cardiovascular diseases appear in a confirmed smoker. Likewise, 10 to 20 years must elapse before the relative risk in ex-smokers drops to the level of that of lifelong non-smokers and a decrease in tobacco-related morbidity and mortality starts to show in populations as a result of a reduction in smoking.

137. In the United States of America, age-specific lung cancer mortality rates among middle-aged men have been decreasing in apparent relationship with the percentage of male smokers, from about 70% in 1955 to less than 40% in 1978. Conversely, increasing smoking rates among women have until recently been followed by increasing death rates from lung cancer (72). According to statistics from the American Heart Association, death rates from heart diseases among men have decreased significantly in recent years, coinciding with a 25% decrease in the prevalence of smoking.

138. A similar pattern of increasing life expectancy, decreasing heart disease and decreasing smoking rates has been reported from Canada in government statistics. Life expectancy there has increased to 71.9 years for men and 79.5 years for women, and that increase is attributed to the fact that more and more Canadians have stopped smoking.

139. The intervention study in North Karelia, Finland, mentioned in paragraph 132 (69), through intensive health education of the public and mass media coverage induced the population to decrease their cardiovascular risk factors, mainly smoking, and fat intake, with the result that hypertension and cardiovascular death rates decreased significantly over a 10-year period.

140. In the male population of the Stockholm urban area, the age-standardized incidence rate of lung cancer shows a downward trend after 1971 following a decrease in the prevalence of smoking among that population established in the early 1960s (73).

141. A study of British male doctors has shown that a reduction in smoking from 43% to 21% between 1954 and 1971 was followed by a reduction of 25% in deaths from lung cancer (3a).

#### Effectiveness of WHO action

142. It is obviously difficult to quantify effectiveness since the results of smoking control action are influenced by so many interacting factors. It is also difficult to ascertain whether, and to what extent, national actions have been influenced by WHO. Nevertheless, it is possible with a certain confidence to evaluate indirectly the impact of WHO's action, on the basis of the following observations:

(a) Since the publication of the reports of the expert committee meetings on smoking and health, and since the launching of World Health Day on 7 April 1980 with the theme "Smoking or health - The choice is yours", activities in almost all Member States have increased significantly.

(b) Following World Health Day in 1980, information and educational approaches and special events, including national "no-smoking" days, postage stamp issues, national smoking and health seminars, etc., have followed one another at an increasingly rapid rate and in more and more countries.



(c) Tobacco Alert is widely read and quoted. Certain nongovernmental organizations have requested hundreds of copies for systematic redistribution to their member organizations.

(d) A number of organizations and bodies of the United Nations system have been sensitized to the issue of smoking and health. Consultations have been held with FAO on the economics of tobacco in relation to health. Following approaches by the Director-General of WHO to the executive heads of other United Nations organizations and bodies, many of them have followed WHO policy of prohibiting smoking at official meetings. This is considered to be of great value as an example to Member States.

(e) Media coverage of smoking and health issues quoting WHO is continuous, intensive, and worldwide. Numerous requests are received from ministries of health for messages of encouragement from the Director-General of WHO on the occasion of smoking control events.

(f) Several nongovernmental organizations are actively collaborating with WHO in tackling the smoking and health issue worldwide.

(g) WHO expert committee reports and other technical publications on smoking and health are always at the forefront in all national and international conferences and seminars on this topic.

#### IX. PLANS FOR FUTURE WHO ACTION

143. These are detailed in the medium-term programme and in the report of a meeting of regional advisers (74) and can be summarized in the following three lines of action:

- (1) cooperation with Member States in strengthening - where present - or establishing - where still absent - national tobacco smoking and chewing control programmes within the primary health care system;
- (2) expansion of WHO's global advocacy role in smoking control; and
- (3) collaboration with appropriate organizations and bodies of the United Nations system and nongovernmental organizations in strengthening global smoking control action.

144. The above priorities would be met by WHO as follows:

(1) Through cooperation with Member States in:

- establishing an intersectoral approach to smoking control;
- establishing a national body, as well as a network of local resource persons, to deal with tobacco and health issues;
- identifying socioeconomic and political issues related to tobacco production and consumption;
- organizing and evaluating research on such quantifiable, measurable targets as trends in tobacco use and tobacco-related diseases, large-scale smoking cessation, and the effects of price policies;
- limiting the impact of tobacco promotion activities, and encouraging health-oriented behaviour;
- banning use of tobacco in all health-oriented institutions;
- involving health professionals in tobacco and health issues;
- identifying and developing strategies for population groups that are difficult to reach by the usual education/information approaches, e.g., non-scholarized youth, populations deprived of mass communication media, illiterates, ethnic minorities;
- ensuring information transfer through seminars, workshops and other appropriate information and education measures.

(2) Through convincing decision-makers, in its advocacy role, of the need for smoking control action at national, regional, and global levels, including:

- enactment of legislation banning, or at least severely restricting, advertising; requiring product labelling giving health warnings and levels of harmful emissions; restricting access to and use of tobacco products; establishing pricing and taxation policies, etc.;
- offering agricultural and trade alternatives to tobacco production and marketing including economic incentives for crop diversification, market support for non-tobacco products, and other measures;
- involving the health professionals, educators, and social and political leaders.

(3) Collaboration with the organizations and bodies of the United Nations system and nongovernmental organizations:

- WHO should take the lead in stimulating the other organizations and bodies into action for, e.g., the limitation of tobacco production, educational and mass information approaches, avoidance of smoking among workers in high-risk occupations, the protection of non-smokers from exposure to passive smoking, and for the involvement of the health professions, and of the media. It should also seek collaboration with regional economic structures, for example the European Economic Community and similar organizations.

#### X. GUIDANCE SOUGHT FROM THE PROGRAMME COMMITTEE OF THE EXECUTIVE BOARD

145. The Programme Committee of the Executive Board provided guidance on the strategies, objectives, and activities of the WHO Programme on Smoking and Health, as described in this report, including items such as the advocacy role of WHO, information and educational activities, support to country action, and collaboration with other organizations of the United Nations system and nongovernmental organizations.

146. The Programme Committee thought that efforts by national health authorities in combating the spread of tobacco smoking and the diseases caused by it would receive more emphasis and achieve greater credibility if supported by WHO. It is essential that WHO assume an active and visible role in smoking and health as part of its effort towards health for all by the year 2000. More active WHO involvement would thus be in accordance with the recommendations of a WHO Expert Committee (3b) which, already in 1982, was "disappointed at the omission of smoking control activities from the WHO Seventh General Programme of Work (1984-1989)" and recommended that "WHO should, as a matter of urgency match its concern at the extent and magnitude of the smoking problem with appropriate planning and greater commitment to smoking control; this should be reflected in WHO's short-, medium-, and long-term programmes of work". Similar concern has been expressed by members of the Executive Board and delegates to the Health Assembly in recent years.

147. The Committee further proposed that the Executive Board might wish to consider submitting to the Thirty-ninth World Health Assembly a draft resolution on a WHO Programme on "Tobacco or Health" for possible inclusion in the Eighth General Programme of Work (1990-1995). It was indeed felt that this new designation would better reflect the increased scope of the Programme to cover not only smoking but all the harmful health effects caused by tobacco use.

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TABLES1. ESTIMATED NUMBER OF DEATHS ATTRIBUTABLE TO CIGARETTE SMOKING:  
UNITED STATES OF AMERICA, 1980<sup>a</sup>

Anatomic site or nature of disease or injury (ICD number)	No. of deaths
Malignant neoplasms (140-209, 230-239) .....	147 000
Diseases of the circulatory system (390-459) .....	<u>240 000</u>
Ischaemic heart disease (410-414) .....	170 000
Other vascular diseases .....	70 000
Diseases of the respiratory system other than cancer (460-519) ...	<u>61 000</u>
Emphysema (492) .....	13 000
Chronic bronchitis and other respiratory diseases .....	48 000
Diseases of the digestive system (520-579) .....	<u>14 000</u>
Diseases of oesophagus, stomach and duodenum (530-537) .....	2 000
Cirrhosis and other diseases of digestive system .....	12 000
Certain conditions originating in the perinatal period (760-779)	
Infant mortality caused by maternal smoking, low birth-weight, and other congenital disabilities .....	4 000
External causes of injury (E800-E999) .....	<u>4 000</u>
Injuries caused by fire and flames (E890-E899) .....	2 500
Other accidental injuries .....	1 500
Miscellaneous and ill-defined diseases .....	15 000
<b>Total</b>	<b>485 000</b>

<sup>a</sup> See para. 6.Source: Ravenholt, R. T. Population and development review, 10(4): 697-724.

Annex 12. CONSUMPTION OF MANUFACTURED CIGARETTES IN 110 COUNTRIES AND TERRITORIES, 1982<sup>a</sup>  
(per capita)

Country or territory	Consumption (per capita)	Country or territory	Consumption (per capita)
Cyprus	3117	Jordan	867
Greece	2927	Algeria	861
Cuba	2857	Belize	850
Canada	2797	Chile	847
United States of America	2678	Nicaragua	846
Spain	2658	Albania	786
Japan	2636	Barbados	785
Hungary	2570	Tunisia	768
Poland	2517	Democratic People's Republic of Korea	713
Bulgaria	2472	Guyana	656
Australia	2340	Jamaica	650
Yugoslavia	2323	Dominican Republic	614
New Zealand	2305	Thailand	605
Switzerland	2171	Panama	599
Austria	2111	Indonesia	577
Belgium-Luxembourg	2055	Iraq	574
Singapore	1961	Honduras	563
Hong Kong	1957	Norway	556
Lebanon	1926	Morocco	537
Germany, Federal Republic of	1867	Congo	531
Italy	1854	Paraguay	521
United Kingdom of Great Britain and Northern Ireland	1818	El Salvador	508
Czechoslovakia	1812	Ecuador	508
German Democratic Republic	1796	Senegal	448
Ireland	1778	Viet Nam	424
Korea, Republic of	1747	Ivory Coast	422
Union of Soviet Socialist Republics	1715	Sierra Leone	419
Libyan Arab Jamahirya	1688	Pakistan	396
Israel	1656	Angola	375
Netherlands	1652	Iran, Islamic Republic of	364
Denmark	1636	Sri Lanka	341
France	1608	Guatemala	325
Romania	1593	Zimbabwe	319
Sweden	1543	Haiti	316
Taiwan	1531	Kenya	283
Portugal	1428	Zambia	223
Philippines	1371	Mozambique	221
Trinidad and Tobago	1318	Ghana	218
Turkey	1305	Peru	216
Uruguay	1241	Lao People's Democratic Republic	209
Malaysia	1222	Bolivia	206
Mauritius	1215	Malawi	197
Finland	1148	United Republic of Tanzania	181
Argentina	1136	Cameroon	175
Venezuela	1089	Bangladesh	170
Brazil	1051	Uganda	146
Syrian Arab Republic	1049	India	141
Democratic Yemen	1038	Zaire	129
South Africa	1002	Cape Verde	117
Fiji	986	Nigeria	98
Suriname	975	Nepal	83
China	900	Burma	71
Colombia	873	Ethiopia	48
Egypt	872	Sudan	37
Costa Rica	868	Equatorial Guinea	17

<sup>a</sup> See para 20.



Annex 1

3. PREVALENCE OF SMOKING AMONG ADULTS IN VARIOUS COUNTRIES AND TERRITORIES  
(LATE 1970s - EARLY 1980s)<sup>a</sup>

Country	Male %	Female %	Country	Male %	Female %
China	90	3	Singapore	49	8
Morocco	90	-	Pakistan	49	5
Nepal	87	72	Sri Lanka	48	2
Papua New Guinea	85	80	Guyana	48	4
Philippines	78	-	Austria	46	13
Indonesia	75	10	Hungary	45	23
Bangladesh	70	20	Mexico	45	18
Thailand	70	4	Chile	45	26
France	70	50	Venezuela	45	26
Denmark	68	49	Israel	44	30
Republic of Korea	68	7	Union of Soviet Socialist Republics	44	10
Spain	66	10	Czechoslovakia	43	11
India	66	26	Senegal	43	35
Poland	63	29	Cuba	40	-
Zambia	63	56	Norway	40	34
Japan	63	12	Egypt	40	1
Hawaii	61	50	Germany, Federal Republic of	40	29
Uruguay	60	32	United Kingdom of Great Britain and Northern Ireland	38	33
Belgium	60	50	Canada	37	29
Argentina	58	18	Australia	37	30
Tunisia	58	6	Hong Kong	37	5
Yugoslavia	57	10	Guatemala	36	10
Netherlands	57	42	United States of America	35	30
Malaysia	56	2	New Zealand	35	29
Jamaica	56	14	Peru	34	7
Italy	56	32	Finland	33	18
Brazil	54	37	Uganda	33	-
Nigeria	53	3	Sweden	30	30
Kuwait	52	12	Ivory Coast	24	1
Colombia	52	18	Brunei	20	7
Romania	52	9	Barbados	10	-
Switzerland	50	37			
Turkey	50	50			
Ghana	50	-			
Ireland	49	36			

<sup>a</sup> Indicative figures collected by WHO from various sources (- = data not available).

Annex 1

4. AVERAGE TOBACCO CONSUMPTION AND PROJECTED DEMAND BY GEOGRAPHICAL AREA<sup>a</sup>  
(per capita, per annum, in kilograms, dry weight)

	Average consumption Projected demand				Increase/Decrease per annum	
	1962-64	1972-74	1976	to 1985	Average 1962-4 to 72/74	Projected 1972-4 to 1985
	kg	kg	kg	kg	%	%
World	1.12	1.17	1.16	1.17	0.4	0.0
Developing	0.78	0.79	0.79	0.84	0.2	0.6
Developed	1.87	2.11	2.10	2.11	1.2	0.0
Africa	0.30	0.36	0.37	0.44	1.9	1.8
America, South	1.08	1.02	1.14	1.19	-0.6	1.3
Near East	0.63	0.80	0.89	1.04	2.4	2.2
Far East	0.72	0.66	0.61	0.71	-0.8	0.7
Asian centrally planned economics	0.93	1.01	1.01	0.99	0.8	-0.2
America, North	3.05	2.72	2.53	2.28	-1.2	-1.5
Europe, EEC	1.93	2.13	2.16	2.20	1.0	0.3
other western	1.38	1.81	1.88	2.02	2.7	0.9
eastern & USSR	1.31	1.72	1.74	1.83	2.8	0.5
Oceania	2.37	2.28	2.11	2.04	-0.4	-0.9
Japan	1.59	2.45	2.57	2.80	4.3	1.1
South Africa	1.29	1.39	1.42	1.40	0.7	0.1

<sup>a</sup> See para. 23.

Source: Tobacco: supply, demand and trade projections to 1985. Rome, Food and Agriculture Organization of the United Nations, 1979 (Unpublished FAO document ESC.PROJ. 78/21).

5. ACTUAL AND FORECAST WORLD TOBACCO PRODUCTION, TRADE AND CONSUMPTION  
BY ECONOMIC GROUPING OF COUNTRIES<sup>a</sup>

(in 1000 metric tonnes)

	1961	1970	1975	1980	1985	1990	1995
<u>Production</u>							
Industrial	1 328	1 376	1 576	1 402	1 400	1 500	1 500
Centrally-planned	387	627	755	726	800	900	1 000
Developing	2 033	2 661	3 087	3 257	3 800	4 500	5 400
World total	3 748	4 664	5 418	5 368	6 000	6 900	7 900
<u>Exports</u>							
Industrial	342	369	446	458	523	600	676
Centrally-planned	108	113	120	116	86	73	60
Developing	430	523	687	795	986	1 211	1 488
World total	880	1 005	1 253	1 369	1 595	1 884	2 224
<u>Imports</u>							
Industrial	548	672	889	872	982	1 106	1 245
Centrally-planned	123	123	149	176	200	219	292
Developing	154	225	269	340	418	508	619
World total	824	1 020	1 303	1 388	1 400	1 612	1 864
<u>Consumption</u>							
Industrial	1 533	1 679	2 019	1 816	1 871	1 947	2 026
Centrally-planned	402	637	784	787	900	900	1 100
Developing	1 756	2 362	2 665	2 803	3 300	3 900	4 600
World total	3 691	4 678	5 468	5 406	6 071	6 747	7 726

<sup>a</sup> See para. 23. In some cases the world totals may not add because of rounding up and because some of the figures are estimates.

Source: World Bank, 1982 (75).

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6. CIGARETTE PRODUCTION BY GEOGRAPHICAL AREA  
FOR THE PERIOD 1971/1975 AND ANNUALLY 1976-1982<sup>a</sup>

(in 1000 millions)

Areas	1971/1975	1976	1977	1978	1979	1980	1981	1982	Overall increase %
Africa	105	123	131	137	141	150	151	154	46.7
America, North	760	844	824	855	871	883	907	864	13.7
America, South	181	214	228	237	242	248	235	229	26.5
Asia	1 326	1 472	1 527	1 539	1 588	1 620	1 770	1 827	37.8
Europe	1 287	1 376	1 391	1 414	1 430	1 457	1 461	1 463	13.7
Oceania	36	37	40	40	40	42	42	42	16.7
World total	3 695	4 066	4 141	4 222	4 312	4 400	4 566	4 579	23.9

<sup>a</sup> See para. 25.

Source: Summarized from Tobacco Quarterly, No. 3, 1984. Commonwealth Secretariat, London (76).

7. EXPORT/IMPORT OF CIGARETTES BY GEOGRAPHICAL AREA<sup>a</sup>

(in 100 millions)

Area	Exports <sup>b</sup>					Imports <sup>b</sup>				
	1973/7	1978	1979	1980	1981	1973/7	1978	1979	1980	1981
Africa	3.3	3.9	3.3	3.3	3.4	10.2	12.7	13.4	13.9	14.6
America, North	58.7	76.7	81.7	83.7	84.4	2.7	2.9	3.1	3.1	3.0
America, South	1.9	0.9	1.4	1.5	1.5	2.7	3.0	4.4	4.9	4.6
Asia	8.6	11.5	17.2	21.2	23.5	43.0	65.8	79.8	72.5	70.7
Europe, EEC	70.7	98.1	111.7	120.1	124.2	43.1	52.2	73.3	80.7	78.4
West	85.0	116.0	127.0	137.3	146.3	55.4	65.1	87.0	93.1	87.0
East	64.5	69.9	71.2	75.4	80.6	60.7	62.9	66.0	65.6	74.7
Oceania	0.6	0.2	0.2	0.3	0.3	1.1	1.1	1.2	1.2	0.9

<sup>a</sup> See para. 45.

<sup>b</sup> The sum total of world exports in this table is larger than that of world imports. This may be attributable to massive smuggling and other technical causes too complex to explain here.

Source: Tobacco Quarterly, No. 3, 1984. Commonwealth Secretariat, London (76).

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8. ESTIMATED GROSS INCOME FROM TOBACCO AT CURRENT GROWERS' PRICES AS A PROPORTION OF INCOME FROM TOTAL PRIMARY AGRICULTURAL PRODUCTION IN SELECTED PRODUCING COUNTRIES, 1978-1980<sup>a</sup>

(United States dollars, in millions)

	Value of tobacco crop (estimate)			Ratio of tobacco to total primary agricultural production		
	1978	1979	1980	1978	1979	1980
	US \$	US \$	US \$	%	%	%
<u>Developing countries</u>						
Malawi	67	77	65	7.4	7.9	7.9
Zimbabwe	130	127	110	17.4	23.7	23.8
Mexico	62	76	88	0.7	0.8	23.8
Argentina	86	123	192	1.1	1.1	1.1
Brazil	228	278	200	1.6	1.6	1.4
Turkey	740	715	525	2.9	2.0	2.3
India	395	388	360	0.9	0.9	0.9
Indonesia	55	70	90	1.0	1.0	1.0
Philippines	56	61	63	0.9	0.8	0.9
Republic of Korea	385	358	309	3.1	2.6	2.7
Thailand	90	100	112	2.7	2.9	2.9
<u>Developed countries</u>						
Canada	263	195	276	4.4	3.3	4.2
United States	2 606	2 271	2 672	4.1	2.8	3.5
Greece	422	426	488	6.6	6.9	5.6
Italy	266	304	280	1.4	1.6	1.4
Yugoslavia	285	362	325	2.2	2.2	1.8
Japan	1 217	1 106	1 316	2.5	2.2	2.3

<sup>a</sup> See para. 46.

Source: The economic significance of tobacco. Rome, Food and Agriculture Organization of the United Nations, October 1982 (Unpublished FAO document ESC/MISC.82/1) (18).

CHRONOLOGICAL DEVELOPMENTS CONCERNING SMOKING AND HEALTH

Date

- 1761 Dr James Hill, an English physician, makes the first known clinical report linking tobacco with cancer.
- 1808- Peninsular War. Veterans popularize cigarette smoking on return home.  
1814
- 1853- British soldiers introduced to cigarettes during the Crimean War.  
1856
- 1884 James Bonsack's cigarette-making machine begins production in the United States of America, dramatically raising the productivity of cigarette factories.
- 1899 The first modern national law to protect children from smoking was adopted in Norway.
- 1914- World War I results in a major increase in cigarette smoking. (Example: in 1914  
1918 cigarette production in the United States of America was 18 thousand million; by 1918, it had become 47 thousand million.)
- 1926 The first advertisement campaign specifically directed at women, "Blow some my way".
- 1936 Article in the American Journal of Obstetrics and Gynaecology raising concerns about the effect of smoking on unborn children.
- 1940 Article in the Journal of the American Medical Association links smoking with heightened risk of coronary disease.
- 1940- World War II gives another tremendous impetus to cigarette smoking.  
1945
- 1950 Epidemiological studies published in the United States of America and the United Kingdom of Great Britain and Northern Ireland linking lung cancer with cigarette smoking (both showed that about 95% of those contracting lung cancer were cigarette smokers).
- 1953 Study published showing that tobacco tar condensates induce cancer, when painted on the skins of mice.
- 1962 In the United Kingdom the Royal College of Physicians releases its first report citing cigarette smoking as "the most likely cause of the recent worldwide increase in deaths from lung cancer".
- 1964 The first report by the Surgeon General of the United States linked smoking and lung cancer; in the first few months after the report was issued, cigarette sales dropped by nearly 20%, but soon returned to previous levels.
- 1965 First appearance of health warnings on cigarette packets (in the United States of America).
- 1967 First World Conference on Smoking and Health (New York).
- 1968 Second major advertisement campaign targeted exclusively on women, with its motto "You've come a long way, baby".
- 1971 The World Health Organization adopts its first resolution against smoking.
- 1971 Second World Conference on Smoking and Health (London).
- 1972 Health warnings are included in all cigarette advertising in the United States of America.

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- 1973 Rules requiring separation of smoking and non-smoking sections on all commercial airlines were first established by the United States Civil Aviation Board.
- 1974 The World Health Organization holds its first expert committee on smoking and its effects on health, and recommends that all countries make health warnings mandatory on cigarette packages, ban cigarette promotion, and develop programmes for smoking prevention.
- 1975 The first tobacco Act was enacted, in Norway.
- 1975 Third World Conference on Smoking and Health (New York).
- 1979 The World Health Organization publishes its second Expert Committee report on Controlling the Smoking Epidemic.
- 1979 Fourth World Conference on Smoking and Health (Stockholm).
- 1980 World Health Day, 7 April: "Smoking or health - the choice is yours". Dr H. Mahler, Director-General of the World Health Organization, states: "Smoking is probably the largest single preventable cause of ill health in the world today".
- 1980 The World Health Assembly in Geneva officially requests WHO to establish an effective action programme on smoking and health (resolution WHA33.35, 23 May).
- 1983 The World Health Organization publishes the report of its third Expert Committee on Smoking Control Strategies for Developing Countries.
- 1983 Fifth World Conference on Smoking and Health (Winnipeg, Canada).
- 1985 Iceland introduced the first pictorial, as well as textual, multiple health warnings, appearing prominently on the front of cigarette packets.

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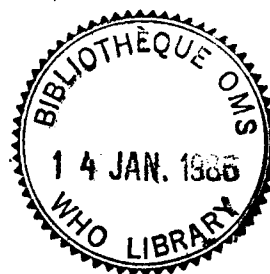


EXECUTIVE BOARD

Seventy-seventh Session

Agenda item 15

TOBACCO OR HEALTH



In accordance with the request of the Programme Committee of the Executive Board (see document EB77/22, paragraph 8), this addendum contains the text of a draft resolution prepared by the Director-General on this item, together with a brief report on the financial implications.

Draft resolution

The following draft resolution on "Tobacco or health" has been prepared by the Director-General in accordance with the request of the Programme Committee of the Executive Board:

The Executive Board,

Having considered the report by the Director-General on tobacco or health;<sup>1</sup>

Believing that the Organization must reiterate its clear and firm policy on tobacco versus health;

RECOMMENDS that the Thirty-ninth World Health Assembly adopt the following resolution:

The Thirty-ninth World Health Assembly,

Recalling resolutions WHA31.56 and WHA33.35 on the health hazards of tobacco and the WHO action programme against tobacco use;

Deeply concerned by the current pandemic of smoking and other forms of tobacco use, which results in the loss of life of at least one million human beings every year and in illness and suffering for many more;

Believing that the battle between health and tobacco must and can be won for the sake of human health;

Encouraged by the existence of total bans, restrictions or limitations on tobacco advertising in several countries;

1. AFFIRMS:

(1) that tobacco smoking and the use of tobacco in all its forms is incompatible with the attainment of health for all by the year 2000 - the choice is tobacco or health;

<sup>1</sup> Document EB77/22 Add.1.

(2) that the presence of carcinogens and other toxic substances in tobacco smoke and other tobacco products is a known fact; and that the direct causal link between tobacco and a range of fatal and disabling diseases has been scientifically proven;

(3) that passive, enforced or involuntary smoking violates the right to health of non-smokers, who must be protected against this noxious form of environmental pollution;

2. CALLS for a global public health approach and action now to combat the tobacco pandemic;

3. DEPLORES direct and indirect practices which attempt to promote the use of tobacco, as this product is addictive and dangerous even when used as promoted;

4. URGES those Member States which have not yet done so to implement smoking control strategies; these, as a minimum, should contain the following:

(1) measures to ensure that non-smokers receive effective protection, to which they are entitled, from involuntary exposure to tobacco smoke, in enclosed public places, restaurants, transport, and places of work and entertainment;

(2) measures to promote abstention from the use of tobacco so as to protect children and young people from becoming addicted;

(3) measures to ensure that a good example is set in all health-related premises and by all health personnel;

(4) measures leading to the progressive elimination of those socioeconomic, behavioural, and other incentives which maintain and promote the use of tobacco;

(5) prominent health warning on cigarette packets, and containers of all types of tobacco products;

(6) the establishment of programmes of education and public information on tobacco and health issues, including smoking cessation programmes, with active involvement of the health professions and the media;

(7) monitoring of trends in smoking and other forms of tobacco use, tobacco related diseases, and effectiveness of national smoking control action;

(8) the promotion of viable economic alternatives to tobacco production and trade;

(9) the establishment of a national focal point to stimulate, support, and coordinate all the above activities;

5. APPEALS to other organizations of the United Nations system:

(1) to support WHO in all ways possible within their fields of competence;

(2) to show solidarity with WHO's efforts to stem the spread of tobacco-induced diseases by protecting the health of non-smokers on their premises, as this action would have a major exemplar role;

(3) to help Member States in identifying and implementing economic alternatives to tobacco cultivation, production and trade;

6. REQUESTS the Director-General:

(1) to strengthen the present programme on smoking and health without waiting for its official introduction in the Eighth General Programme of Work, as a

visible and resolute attitude by WHO would provide Member States with encouragement and support, which are necessary prerequisites to abating the smoking pandemic before the year 2000;

- (2) to mobilize support for the present programme on smoking and health in terms of funds and manpower which would ensure adequate programme continuity on a long-term basis;
- (3) to coordinate activities in support of WHO's action on smoking and health with other organizations of the United Nations system at the highest executive level;
- (4) to continue and strengthen collaboration with nongovernmental organizations as appropriate;
- (5) to ensure that WHO plays an effective global advocacy role in tobacco and health issues and that, in common with other health institutions, it plays an exemplar role in non-smoking practices;
- (6) to provide support to national smoking control efforts;
- (7) to report on progress to the Executive Board at its eighty-first session and to the Forty-first World Health Assembly.

#### Financial implications

The Programme Committee further requested the Director-General to provide the Board with information on the financial implications of the resolution. These are as follows:

##### (a) Present situation

During the 1984-1985 biennium, activities have been carried out with financial support from regular budget funds amounting to about US\$ 150 000 to cover basic staff and operational expenses (in the amount of US\$ 33 000). In addition, funds from the Director-General's Development Programme in the amount of US\$ 134 000 and extrabudgetary funds amounting to US\$ 360 000 were also available.

For the 1986-1987 biennium, provisions are about US\$ 200 000 from regular budget funds, including staff and operational expenses (US\$ 33 600), plus funds from the Director-General's Development Programme in the amount of US\$ 200 000 and extrabudgetary funds in the amount of US\$ 380 000, the latter to be used for a study on health and social costs of tobacco consumption. Other extrabudgetary funds may be forthcoming.

##### (b) Future requirements

To ensure adequate programme continuity on a medium- to long-term basis and to carry out the additional activities implied in the draft resolution, some US\$ 200 000 from the regular budget is needed biennially to cover basic staff and operational requirements as in previous bienniums.

In addition, about US\$ 500 000 biennially from extrabudgetary sources would be needed, since the Director-General's Development Programme should not be used to fund any individual programme on a continuing basis. The extent of activity implementation will therefore depend on the availability of extrabudgetary funds.

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