

# Tobacco Economics - An Insight into Indian Scenario

Poornima Chandra,<sup>1</sup> Prashanth Rajaram<sup>2</sup>

<sup>1</sup> Professor, Department of Oral Medicine and Radiology, Rajarajeswari Dental College and Hospital, Bangalore, Karnataka, India

<sup>2</sup> Reader, Department of Oral and Maxillofacial Surgery, V. S. Dental College and Hospital, Bangalore, Karnataka, India

## Abstract

Millions of people die due to consumption of tobacco each year. Tobacco is also associated with cardiovascular, vascular, respiratory and neoplastic disorders. As a result of this, there has been a lot of discussion regarding tobacco control and its impact on global economics. Health care professionals and tobacco industries are in constant argument regarding the effect of tobacco control on economics of the world. A number of studies done on tobacco economics have proven that medical costs of tobacco use are much more than the revenue generated from sale and taxes of tobacco products. This review article intends to discuss the economics of tobacco which includes cultivation, sales, exports and cost of tobacco-related diseases with emphasis on Indian scenario.

## Key Words

Tobacco control; tobacco economics; transnational tobacco corporations; tobacco-related diseases

## INTRODUCTION

Tobacco is often stated as being the most preventable cause of death. Annually, tobacco consumption kills more than 5 million people worldwide and the number is projected to increase to 8 million by 2030.<sup>[1]</sup> Tobacco, either smoking or smokeless form, is associated with mortality and morbidity and the death rates are still high in developing countries. About 80% of the world's 1.1 billion smokers live in low and middle income countries.<sup>[2]</sup> The disease and death toll is projected to be 70% coming from developing countries by 2020s.<sup>[3]</sup> There is sufficient scientific evidence to suggest that tobacco smoke and smokeless tobacco can cause death, disease and disability. Tobacco smoking causes cancer of lung, oral cavity, pharynx, larynx, nasal cavity, paranasal sinuses, esophagus, stomach, pancreas, liver, kidney and bone marrow. Ninety percent of lung cancers in men and 80% in women are caused by smoking.<sup>[4]</sup> Deaths among smokers between 30-69 years are mainly due to tuberculosis followed by respiratory, vascular and neoplastic diseases.<sup>[5]</sup> Workers engaged in tobacco cultivation suffer from an occupational illness known as green tobacco sickness, an acute form of nicotine toxicity resulting from absorption of nicotine through the skin.<sup>[6]</sup> Tobacco consumption is not only linked to disease but also to poverty and economic development.<sup>[7]</sup>

Passive smoking (second-hand and third-hand) has a positive association with cardiovascular diseases, lung cancer, asthma and other respiratory diseases in adults.<sup>[8]</sup> Youth smoking is currently a huge challenge associated with peer pressure and chances of long-term addiction all of which will make tobacco an even bigger health hazard.<sup>[1]</sup> The prevalence of smoking among women is low as compared to men. But tobacco companies are rigorously promoting their product among women claiming them to be light cigarettes. As a result of this, more women in developing countries are turning into smokers.<sup>[9]</sup> The first international public health treaty was initiated by World Health Organization (WHO) named The Framework Convention on Tobacco Control (FCTC). This represents the most significant tobacco control initiative to date.<sup>[10]</sup> This treaty was then backed by the World Bank encouraging the governments to employ comprehensive strategies to curb this epidemic. The various measures taken by the governments to reduce tobacco demand are higher tobacco taxes, consumer information regarding the consequences of tobacco, bans on advertising and promotion, regulatory policies and measures to reduce supply.<sup>[2]</sup> In opposition to these initiatives by the governments, transnational tobacco corporations (TTC) work to maximize global tobacco consumption. The TTCs have formed International

Tobacco Growers Association. This association, being the representation of the farmers, proclaims that FCTC can have disastrous consequences for millions of people in the world, who depend on tobacco growing for their living.<sup>[7,10]</sup> A number of factors such as trade liberalization, global marketing and communications, and direct foreign investment have made tobacco industry go pandemic. The public health is affected and government treasuries are facing a serious threat owing to increased smuggling of tobacco.<sup>[11]</sup>

### GLOBAL TOBACCO ECONOMICS

Worldwide, an estimated 10 million full-time workers are employed in tobacco farming with almost 2 million full-time employed in the manufacture of tobacco products. Tobacco farming is a very significant form of employment. More than 100 countries currently grow tobacco, of which about 80 are developing countries. China, the USA, and Brazil account for two-thirds of total productions. Approximately, 33 million people are engaged in tobacco farming worldwide.<sup>[12]</sup> The major tobacco companies namely, Philip Morris, British American Tobacco and Japan Tobacco International, together control over 41% of the worldwide tobacco market.<sup>[7]</sup> World Bank in association with World Health Organization began a global study in 1997 on the economics of tobacco control. A team of over 40 economists, epidemiologists and tobacco control experts critically examined the current state of knowledge about tobacco control. The key findings of the study included:<sup>2</sup>

1. Tax increases are the single most effective intervention to reduce demand
2. Dissemination of information, warning labels, restriction in public smoking and increased access to replacement treatments are effective in reducing smoking
3. Reducing supply is effective in reducing consumption
4. Comprehensive tobacco control policies are unlikely to harm economies.

Smoking related medical costs account for 6-15% of health care costs in high income countries.<sup>[13]</sup> In South Asia, approximately 1.2 million people die every year from tobacco consumption.<sup>[1]</sup> India is the second largest consumer of tobacco with approximately 10% of the world's population. Tobacco consumption in India is dominated by non-cigarette and smokeless tobacco use and manufactured cigarettes constitute only 14%.<sup>[13]</sup>

### TOBACCO ECONOMICS IN INDIA

Tobacco industry in India is involved in growing a range of leaf types, manufacturing smoking products and various chewing tobacco products. During 2001-02, 330,000 hectares of agricultural land was used for cultivation to produce 380,000 tonnes of tobacco.<sup>[14]</sup> There are 90,000 registered tobacco growers in Andhra Pradesh and Karnataka. Andhra Pradesh, Gujarat, Karnataka and Uttar Pradesh together account for over 90% of the total tobacco production in the country.<sup>[14,15]</sup> Flue-cured Virginia tobacco, used in the manufacture of cigarettes, is primarily cured in Andhra Pradesh and Karnataka and in Gujarat, bidi tobacco is grown.<sup>[14]</sup> India accounts for about 6% by volume and 0.7% by value of the global tobacco trade. In 2013, the exports of tobacco crossed \$1 billion mark.<sup>[15]</sup> In India, the four major tobacco companies are Indian Tobacco Company Limited, Godfrey Phillips India Limited, Vazir Sultan Tobacco Industries Limited and Golden Tobacco Company Limited. Indian Tobacco Company Limited accounts for more than 60% of total production, 80% of sales and market share. Bidi production is predominant form of manufactured tobacco product.<sup>[14]</sup> Bidi manufacturing is the largest cottage industry and provides employment to more than 4.4 million people, in addition to 2.2 million tribal workers involved in tendu leaf collection.<sup>[8,16]</sup> Nearly 4 million people is engaged in the wholesale /retail sale of tobacco.<sup>[17]</sup> India's share in the world tobacco production was 10.2% in 2000. Europe is the largest market for India's unmanufactured tobacco exports.<sup>[14]</sup> According to Ministry of Commerce and Industry, tobacco contributes to around US \$293 million per annum towards foreign exchange, tax on manufactured tobacco products in US\$1.778 billion per annum from Central Excise.<sup>[16]</sup> Indian tobacco is imported by more than 80 countries to top multinational companies like British American Tobacco, Philip Morris, RJ Reynolds, Seita, Imperials, Reenltsa etc.<sup>[14]</sup> According to ICMR in 1999, the economic loss due to tobacco-related diseases was about Rs. 277.6 billion.<sup>[17]</sup> In 2002-03, the estimated total cost was Rs. 303.33 billion.<sup>[6]</sup> According to the National Family Health Survey (NFHS) -3 conducted in 2005-06, tobacco use is more prevalent among men, rural population, illiterates, poor and vulnerable section of the society.<sup>[8]</sup> Global adult and youth tobacco survey conducted in 2009-10 estimated that

34.6% of adults were current smokers and 14.6% of students between 13-15 years were tobacco users.

Tobacco demand in India is high and yet has not shown any sign of declining. Taxes on cigarettes are low, while taxes on bidis have historically been close to zero in rupee. This makes tobacco products very affordable for people irrespective of the socioeconomic status.<sup>[18]</sup> The total economic cost of tobacco use in India for 2004 amounted to \$ 1.7 billion which is 16% more than the excise tax revenue from all tobacco products and many times more than \$551876 that the Government of India spent on tobacco control activities in 2006. Tobacco-attributable direct costs (\$ 1.2 billion) account for 4.7% of India's total national healthcare expenditure in 2004 (\$ 25 billion).<sup>[13]</sup> A study of the Indian tobacco industry concluded that traditional tobacco products, such as bidis, chewing tobacco and smokeless tobacco, account for 81% of the national consumer market and yet they contribute only 12% of the total tobacco excise collected from tobacco products.<sup>[18]</sup> The 2002 estimates for China concluded that a 10% increase in cigarette price would decrease cigarette consumption by up to 5.4% in the short-run and by 6.6% in the long run. An all India pooled sample report suggests that a 10% increase in prices could reduce rural bidi consumption by 9.2% and rural cigarette consumption by 3.4%.<sup>[8]</sup>

#### **ARGUMENTS FOR AND AGAINST TOBACCO CONTROL:**

Arguments made by tobacco companies and few economists:

1. Some economists argue that smokers know all the risks, bear all the costs of their choice and it is not justified for governments to intervene in tobacco market.<sup>[2]</sup>
2. Although tobacco is associated with health hazards it is very critical for a nation's or region's economy.
3. Tobacco control policies will cause severe economic set back in certain non-tobacco industries.
4. Large tax will reduce government revenues by causing decrease in smoking and increase in smuggling of cheaper products from neighboring countries.
5. Burden of increase in tax will fall disproportionately on the poor.

The tobacco industry claims that it has a major contribution to Indian economy by generation of

1. Employment in agriculture and manufacturing

2. Revenues in the form of taxes and exports<sup>[8]</sup>

Arguments made by the health care professionals:

1. Tobacco farming constitutes a modest source of employment in most countries and tobacco manufacturing employment constitutes well under 1% of total manufacturing employment in most countries.
2. Studies have shown that banning smoking in workplace, restaurants and public places does not affect the restaurant business and tourism. Majority of the people in workplaces are non-smokers and desired a smoke free environment.
3. Non-smokers live longer than smokers, thus incurring expenses for age-related disorders. So, critics argue that costs of treating smoking related diseases may be balanced with expenditures on non-smokers with longer life.
4. Nearly all politically conceivable tax increases will generate increased revenues in virtually all countries.
5. In poor countries, affluent smokers are likely to smoke many more cigarettes per day than do poor smokers. So, increase in tax will pose burden to affluent smokers and not on poor.

#### **HURDLES IN IMPLEMENTING TOBACCO CONTROL**

The farmers in India are not keen in shifting to alternate crops due to 2 reasons.<sup>[15]</sup>

1. They claim that soil conditions are more favorable for tobacco cultivation as it requires less water as compared to other crops.
2. They also say the returns from other crops are much less than the returns obtained from tobacco.

High price of tobacco, great and assured demand for export of tobacco, easy availability of finance and irrigation facilities for tobacco cultivation, low prices of other crops has made tobacco as a cash crop.<sup>[14,16]</sup>

The World Bank remarks that tobacco is a relatively attractive crop for the farmers due to a number of reasons such as<sup>[12]</sup>

1. Higher net income yield per unit of land than most cash crops
2. Global price of tobacco being relatively stable
3. Provision of loans and support from the tobacco industry
4. Significant problems associated with storage, collection and delivery of other crops.

Tobacco companies claim that curbing the epidemic would cause a huge economic setback for

developing countries.<sup>[3]</sup> Transnational tobacco companies try to adversely affect tobacco control policies in two ways, direct and indirect. Direct effects include use of contract lobbyists, campaign contributions to legislators, provision of gifts, honoraria, corporate hospitality and charitable donations and direct links with political parties and leaders.<sup>[12]</sup> Efforts to undermine the scientific evidence adverse effects of tobacco on health indirectly affect tobacco control. Centres like Council for tobacco research, Tobacco documentation centre and Agro-tobacco services eventually seem to be promoting tobacco industry.<sup>[12]</sup>

### RECOMMENDATIONS

Studies conducted by Central Tobacco Research Institute (CTRI) and Indian Council of Agricultural Research (ICAR) clearly indicate that the farmers expressed willingness to change their crop preferences but it was important to provide continued assistance during the initial years of crop alternation. Central Tobacco Research Institute found that there are alternate crops that can replace tobacco and are also economically viable. Studies in Karnataka indicate that sugarcane, soybean and jowar can be good alternative to tobacco.<sup>[16]</sup> Tobacco is the most erosive crop causing a loss of 45 kg of top soil per acre per year. Tobacco is also a cause of deforestation in some regions, as large quantities of fuel wood are needed for curing tobacco.<sup>[16]</sup> The tobacco farmers must be made aware of this significant fact so as to motivate them to shift to alternate crops. Tobacco control can be achieved by three major ways namely, increase in tobacco tax, dissemination of information regarding health hazard associated with tobacco and increased access to cessation therapies. Price increase of 52.8% on bidis and 176% on cigarettes will have a positive impact on public revenue and on tobacco-related health expenditure.<sup>[8]</sup> The following recommendations can be made to curb the epidemic:

1. Alternate feasible and beneficial crops
2. Substantial increase in taxes on bidis and cigarettes
3. Bidi production regulation by strict policies
4. Strengthening of tobacco taxes
5. Increased awareness of tobacco-related health hazard
6. Increased access to cessation therapies

### CONCLUSION

Tobacco has proven to be hazardous to health. A number of attempts have been initiated to curb this global epidemic. There have been arguments about how tobacco control may impact the economics of the world. Considering the health hazards associated with tobacco it has been proven beneficial to control the supply of the tobacco without causing significant economic imbalance. Tobacco control should be initiated from cultivation by shifting to alternate crops. The important point is to reduce the supply of tobacco to consequently reduce the demand for tobacco.

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