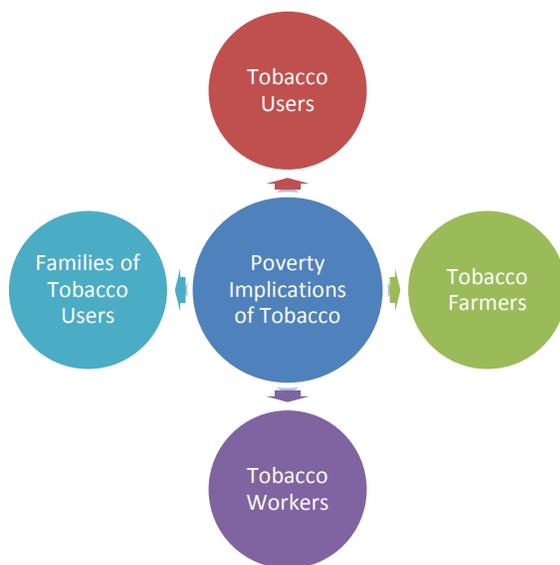


Poverty Implications of Tobacco

Tobacco farming, manufacture, and use have widespread ramifications on multiple spheres. The adverse health effects of tobacco use on mortality and morbidity have been validated by numerous studies. According to the World Health Organization, tobacco use is the leading preventable cause of death in the world and was responsible for 100 million premature deaths in the 20th century. A further 1 billion more people may lose their lives if the tobacco epidemic continues unabated (WHO, 2008). The proportion of the disease burden due to tobacco borne by people living in low and middle income countries is increasing from 50% to 70% (de Beyer *et al*, 2001).

India is the world's second-largest consumer and third-largest producer of tobacco (Reddy *et al*, 2004) and approximately 57% of men and nearly 11% of women in the country use tobacco in some form (NFHS-3, India, 2005-2006). Tobacco consumption has been found to be significantly higher in the poor, less educated, scheduled castes and scheduled tribes (Rani *et al*, 2003; Efroymson *et al*, 2001). This raises the very pertinent question of the relationship between tobacco use and living standards, financial burdens resulting from tobacco, and poverty. This relationship can be explored in several ways:



Tobacco Users: Poor Health, Decreased Productivity, and Increased Health Care Costs

The WHO predicts that in the first twenty years of the 21st century, India will have the fastest rate of rise in deaths attributable to tobacco (WHO, 2008). Another study estimates that smoking in persons aged 30 to 69 years is responsible for about 1 in 20 deaths of women and 1 in 5 deaths of men in India, and that 1 million people will die prematurely in the country each year during the next decade from tobacco use (Jha *et al*, 2008). Poorer individuals are found to be bigger users of tobacco than the rich, and consequently suffer from a higher disease burden.

Tobacco consumption is associated with high direct and indirect costs on society due to the high morbidity and mortality it causes. The total cost of tobacco-related coronary artery disease (CAD), chronic obstructive pulmonary disease (COPD), and tobacco-related cancers was estimated to be more than Rs308 billion (US\$7.2bn) per year in India in 2004 (MoHFW, 2004). In China, tobacco use cost an estimated US\$ 5 billion in medical treatment (US\$ 1.7 billion) and lost productivity (US\$ 3.3 billion) every year (Hu *et al*, 2008). This is over and above the large amounts of money used to purchase tobacco products. Another study in India found that the direct medical costs of treating tobacco related diseases

totaled \$907 million for smoked tobacco and \$285 million for smokeless tobacco in 2004 (John *et al*, 2009). The indirect morbidity costs of tobacco use (including the cost of caregivers and value of work loss due to illness) was found to be \$398 million for smoked tobacco and \$104 million for smokeless tobacco in the same study, with the total economic cost of tobacco use totaling to \$1.7 billion. In 1998 in the United States of America, smoking-attributable personal health-care medical expenditures were US\$ 75.5 billion; and these costs represented an annual cost of US\$ 1,623 in excess medical expenditures for smokers over and above the US\$ 1,760 in lost productivity per capita (CDC, 2002). These costs can be a critical expenditure pushing people at or near the below-poverty line into impoverishment. Moreover, tobacco users affect not only their own health but also that of their families and the people around them by second-hand and third-hand effects of smoke, harmful chemical substances and carcinogens in this smoke, and harmful particulate matter which settle in their clothes and personal belongings, all of which cause the same detrimental health effects in non-users of tobacco.

Tobacco farming is also associated with adverse health effects like green tobacco sickness, pesticide exposure, and nicotine poisoning, which predispose tobacco workers to illness and disease. Green tobacco sickness (GTS) is caused by the absorption of nicotine into the skin and bloodstream from contact with wet tobacco leaves.

Tobacco Farmers: Lack of Alternatives

Tobacco farming encompasses many complex issues ranging from high labor costs, loans for tobacco cultivation and debt bondage, finding a fair price for the crop, equitable distribution of profits, and health and environmental issues. In many areas, tobacco farmers are forced to grow tobacco instead of other crops because of the patronage they receive from tobacco companies even though the earnings from tobacco are insufficient to cover running costs. Many developing countries have a structure whereby tobacco companies operate a "contract system" in which they provide credit in the form of seeds, fertilizer, pesticides and technical support to farmers, making farmers obligated to sell their product to the company at an unfair, set price (Efroymson *et al*, 2001) . The sale these tobacco products by the companies result in enormous profits which are unevenly distributed, with large tobacco companies and manufacturers amassing the maximum gains and the vast number of growers and workers receiving very little remuneration.

Diversion of land, which could otherwise be used for other purposes like cultivating food crops, to tobacco farming, also reduces the food supply in the region and raises the prices of these essential commodities, again ensuring lower availability to tobacco farmers and poorer sections of society.

Naher and Chowdhury in a study conducted in Bangladesh in 2002 found that the "profitability" of tobacco cultivation (which requires physical labor to bring the crop to maturity) was due to most farmers cutting down on the cost of labor required by employing their families (especially of women and children) to work in their fields (Naher *et al*, 2002).

Tobacco Workers: A Vicious Cycle of Poverty

The tobacco farmers and bidi industry is disproportionately dependant on women and child labor, with an estimated 20,000 children working in tobacco farms and 27,000 working in bidi-making or packing cigarettes (Reddy et al, 2004) in India. Children working in the bidi industry face difficult conditions and are forced into the work due to the already precarious financial situations of their families. In Bangladesh, a study found that out of the working children surveyed, 13% were below age nine, and of children aged 5-15 in the study, 40% had never been to school in their lives. Work hours were on an average of 11-12 hours per day, making it impossible to combine work with education (Efroymsen, 2003). These children grow up poor and illiterate, and further exacerbate the vicious cycle of poverty.

The poor are also more likely to be exploited by unfair working conditions and low wages in various stages of tobacco manufacture, from tobacco farming, to picking of leaves for bidis, to rolling the bidis at home or in a factory (WHO, 2008).

Families of Tobacco Users: Second-Hand Effects

It is relevant examine the impact of tobacco use on the standard of living of low income households and the second-hand effects on the family members of tobacco users, apart from the detrimental health effects. Tobacco users, especially from lower socio-economic strata invest scarce household expenditures on tobacco, rather than on essential expenditures. Although richer individuals are more likely to spend more on tobacco, the poor spend a greater proportion of their incomes on tobacco, making this expenditure highly regressive in nature. Also, the poor are left with fewer resources to utilize for basic needs like shelter, food, and education.

Studies have also found that tobacco expenditures have high opportunity costs and reduce the nutritional status of low income households by reducing expenditures on food in lieu of tobacco products (Efroymsen *et al*, 2001; Siahpush *et al*, 2003). The poorest 20% of households spend almost 11% of their household income on tobacco in Mexico (WHO, 2008). In Indonesia, poor families spend 22% of their monthly incomes on cigarettes (NHS, 2008). In China, poor urban households spent an average of 6.6% and poor rural households spent 11.3% of their total expenditures on cigarettes (Hu *et*

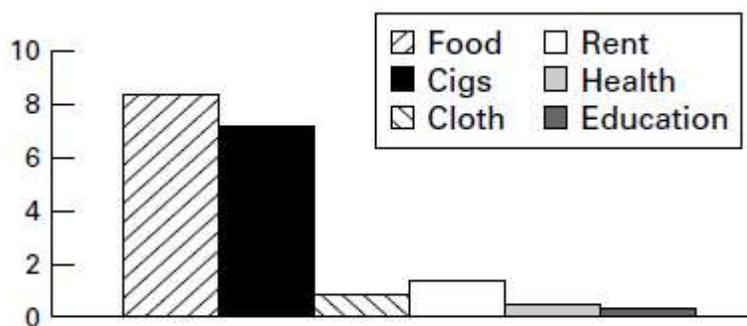


Figure 1 Men's monthly cigarette expenditures versus per capita monthly expenditure for basic needs, 1997. Cloth, clothing.

Efroymsen *et al*, 2001

al, 2005). In Bangladesh, the most poor families (household income of less than \$24/month) are found to smoke twice as likely as the most wealthy families (household income of more than \$118/month) (Efroymsen *et al*, 2001). In the same study, on average male cigarette smokers spend more than twice as much on cigarettes as per capita expenditure on clothing, housing,

health and education combined. In a Vietnamese study, almost half of all households in Vietnam spent some portion of their household income on tobacco (Path, 2006). In the same study, households without smokers spent more on education per student than households with smokers; and very poor smoking households spent six times more on tobacco than on education per student.

In the United States, a study found that living with adult smokers is an independent risk factor for adult and child food insecurity, and is associated with almost double rates of food insecurity and triple the rate of severe food insecurity (Cutler-Triggs *et al*, 2008). This expenditure on tobacco is a loss of resources that could have been utilized on basic necessities such as food, education, shelter, and health care. Tobacco use therefore affects the health, nutrition, education, employment and gender equality of people on low incomes.

Some Examples from around the world (WHO, 2004):

- Over 10% of household expenditure in lower-income households in Egypt was on cigarettes or other tobacco products (Nassar, 2003)
- Students in Niger spent 40% of their income on cigarettes and manual laborers spent 25% of their income on cigarettes (SOS Tabagisme-Niger, 2003)
- In three provinces of Vietnam it was found that in a year, smokers spent 3.6 times more on tobacco than on education; 2.5 times more for tobacco than clothes; and 1.9 times more for tobacco than for health care (Path Canada, 2006)
- The average amount spent by Poor households in Morocco on tobacco was the same as the amount spent on education, and more than half the amount spent on health (Nassar, 2003)
- In Bulgaria, low-income households with at least one smoker spent on average 10.6% of their total income on tobacco (Sayginsoy *et al*, 2003)
- In Nepal, tobacco accounted for approx. 10% of annual household expenditures among the lowest-income households (Karki *et al*, 2003 [cit. *Tobacco and poverty A Vicious Circle*, WHO, 2004])
- In Indonesia, the lowest income group spent 15% of their total expenditure on tobacco (de Beyer *et al*, 2003)

Conclusion:

Tobacco farming, manufacture, and use are widening the gap between rich and poor through their effects on health, employment, education, and nutrition. Tobacco expenditures exacerbate the ill effects of poverty and cause considerable deterioration in the living standards of the poor. Addressing this aspect of tobacco could have a significant impact on the health of the poor and make tobacco control more effective for improved public health.

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