

**Addressing Tobacco
and Poverty in Bangladesh:
Research and Recommendations
on Agriculture and Taxes**



This book contains two research reports:

**Tobacco Cultivation and Poverty in Bangladesh,
Suggestions for Appropriate Policies on
Agriculture, Environment, and Health**

and

**Tobacco Taxation and Poverty in Bangladesh:
Research and Recommendations.**

Tobacco Cultivation and Poverty in Bangladesh
Suggestions for Appropriate Policies
on Agriculture, Environment, and Health

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Introduction

While tobacco use has widely been recognized as a significant contributor to disease and early death, only in the last several years has recognition of the connection between tobacco and poverty become more widespread. The first major report on the topic¹ was published in 2001, and revealed that the money spent by the poor on tobacco could help 10.5 million malnourished children have adequate diets if 70% of it were spent on food instead, thereby saving 350 lives a day.¹ Since the publication of that study, much more research has been conducted around the world. In 2004, the World Health Organization chose the theme of tobacco and poverty for World No Tobacco Day.

Tobacco and poverty are linked in several ways. In country after country, it is the poor who are most likely to use tobacco. While wealthier individuals who use tobacco spend more money on it, the poor spend a larger share of their income than the wealthy on tobacco. Money spent on tobacco is money not available for basic needs, and the burden of health problems will be greater among the main users. While tobacco control measures are gaining momentum around the world, they may be stronger and better implemented in wealthier countries. Finally, the poor are 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.²

Fortunately, there is a wealth of evidence from around the world to show what works—and what doesn't—in reducing use of tobacco. A combination of laws and policies has proved effective wherever they are tried. In particular, high taxes on tobacco products have been shown to lead to dramatic declines in tobacco use, and are the single most effective measure for tobacco control. Importantly, taxes have their strongest effect on youth and the poor.³ Yet governments often hesitate to apply these effective measures, due to a number of factors.

This booklet is intended to contribute to the international understanding of the connections between tobacco and poverty, and thus the understanding of the relevance of tobacco control to the development agenda. In particular, it seeks to provide solutions to the problems caused by tobacco cultivation and use, through practical measures that would reduce farmers' reliance on tobacco growing for income, and the attractiveness of tobacco products to low-income users.

This booklet complements existing documents, including those available on the HealthBridge (www.healthbridge.ca) and WBB Trust (www.wbbtrust.org) websites. Specifically, it includes two articles on tobacco and poverty: *Tobacco Cultivation and Poverty in Bangladesh: Suggestions for Appropriate Policies on Agriculture, Environment, and Health* on issues related to tobacco agriculture, based on a study commissioned by the World Health Organization; and *Tobacco Taxation and Poverty in Bangladesh: Research and Recommendations*, on the issue of tobacco tax increases and their likely effect on, and reaction to by, the poor, based on research funded by the Government of Bangladesh.

It is hoped that this booklet will further understanding of the tobacco-poverty connection, suggest possibilities for future research, and contribute to international efforts to address tobacco use as part of poverty reduction strategies.

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¹ Efroymsou, D, S Ahmed, J Townsend, et al. "Hungry for Tobacco: An analysis of the economic impact of tobacco on the poor in Bangladesh." *Tobacco Control* 2001;10:212-217.

² *Tobacco and Poverty, Observations from India and Bangladesh*. HealthBridge (formerly PATH Canada), Dhaka, October 2002.

³ World Bank (1999). *Curbing the Epidemic, Governments and the Economics of Tobacco Control*.

"When the imperialists were here, we were forced to grow indigo. Now we are tricked into growing tobacco."

- a tobacco farmer

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BACKGROUND

Policies on health, environment, and agriculture may find themselves in conflict, when for instance a crop that is harmful to both health and environment, such as tobacco, is favored for economic reasons. Since poverty is itself harmful to health, arguments may be made that curtailing the crop will lead to further health problems and impoverishment, and so the crop must be allowed, or should even be encouraged, in order to reduce poverty.

Before determining which policy will win out, it is helpful to see if the policies are in fact in conflict or not. That is, in the case of tobacco, it is important to see whether growing tobacco really helps improve the economic situation of farmers, and thus justifies the negative aspects of its cultivation and use. Such benefits should also be weighed against the potential benefits of switching to alternate crops.

Determining the exact financial contribution to farmers and the nation of tobacco growing is a complicated process, and beyond the scope of this paper. However, what this paper does do is discuss existing research on the issue, and present results from field work on various issues faced by tobacco farmers, both current and former. Does growing tobacco appear to be the most beneficial to farmers, or can farmers actually do better through growing alternate crops? If the latter, what support do farmers

need in order to make the switch successfully and thereby to ensure better economic and health conditions for farmers and their families? How can different government and other agencies facilitate the process of ensuring sound and mutually supportive fiscal, agricultural, environmental, and health policies?

The Government of Bangladesh has taken many strong initiatives to reduce tobacco use in Bangladesh. In 2003, the Government signed the WHO Framework Convention on Tobacco Control (FCTC), and in 2004, the Government ratified the Convention. In 2005, the Government passed a comprehensive tobacco control law, and in 2006, passed the rules to accompany the law. The main focus of government policy has been on demand-side measures. Reducing supply will not necessarily lead to a reduction in tobacco use, as tobacco is also exported from other countries. However, the plight of low-income tobacco farmers merits further attention, as do the negative impacts of tobacco growing on farmers' health and on the fertility of the land.

METHODOLOGY

Research for this case study occurred in the winter of 2007, and involved travel to key tobacco growing regions of Bangladesh (Lama Alikadam, Bandarban district; Gangachora, Rangpur district; Pathgram, Lalmonirhat district; Saharhati village, Meherpur district; and Shoyilakupa, Jhenaidah district), as well as collection of information in Dhaka from various sources. During the fieldwork, researchers observed the situation of tobacco-growing and vegetable-growing areas, and spoke to current and former tobacco farmers about their economic situation, and their reasons for growing tobacco or switching from tobacco to other crops.



TOBACCO CULTIVATION IN BANGLADESH

In Bangladesh overall, from 1990 to 2003, there has been a gradual decline in tobacco cultivation (Table 1). Despite the overall decline, there are indications of increases in production in various local areas. For example, in 1995-96, Bandarban, a hilly district in southwest Bangladesh, had about 300 acres of land under tobacco cultivation. By 2002-03, this figure had risen to 1,810 acres – an increase of 600 percent. During the same period, another district of Bangladesh, Kushtia, saw an increase in tobacco acreage from about 13,200 acres to more than 20,000 acres. In the northern district of Rangpur, about 48,000 acres of land is devoted to tobacco farming.



Table 1: Tobacco acreage and its importance in Bangladesh agriculture

Year	Chittagong Hill Tracts	Kushtia	Rangpur	Bangladesh	Proportion of total agricultural land
1990-91	1,620	9,950	55,135	93,950	0.47
1995-96	1,080	13,200	64,300	89,525	0.46
2000-01	2,640	17,000	48,200	73,870	0.37
2002-03	2,700	20,425	47,885	76,110	0.38

Source: BBS (2003)

Like many other low-income countries, poverty and malnutrition are widespread in Bangladesh. With a population of more than 132 million concentrated on 147,570 square kilometers of land, Bangladesh ranks as one of the most densely populated countries

in the world. A persistently high rate of population growth has resulted in severe pressure on the land. Food insecurity is one of the country's most daunting problems. The deteriorating ratio of land to population makes it difficult to sustain progress in achieving food security.

Domestic food grain production remains susceptible to natural calamities, which perpetuate the threat of major production shortfalls and inadequate food availability. Complete or virtual landlessness of the rural poor means that even those laboring hard to farm derive little benefit from their labor, while wealth continues to grow in the cities. Moreover, increases in cereal production have been almost solely attributable to rice, with the production of most other food items either stagnant or declining.

A per capita income of US\$440¹ implies that most people spend the bulk of their income on food. More than 40 percent of the population lives below the food consumption-based poverty line, lacking sufficient resources to afford a diet of 2,122 kilocalories (kcal) per person per day, or other basic necessities. Approximately 25 million people, constituting about 20 percent of the population, are living in hard-core poverty (consuming less than 1,805 kcal per person per day) (BBS 2003). Though this percentage has been on the decline over the past decade, absolute numbers of people living in poverty have been increasing. Amidst such a backdrop, it appears wasteful to use precious land (however little in comparison to total cultivated area) to grow tobacco. But the fact remains that tobacco has been grown in Bangladesh for a long time, and a major cause of its proliferation has been the notion of tobacco being a "profitable" crop.

KEY ISSUES IN TOBACCO FARMING AND ALTERNATE CROP PRODUCTION

Economic issues: do farmers prosper growing tobacco?

At the root of the question of whether to promote tobacco cultivation or cultivation of other crops is the question of whether tobacco farmers are gaining a good livelihood. Concerns about the effects of tobacco cultivation on the environment and farmers'

¹ Per capita income tells nothing about the distribution of wealth, which in Bangladesh as in many other countries, is highly uneven; figures on the proportion of the population living in poverty are thus more illustrative of the actual situation.

health, as well as the negative effect on health of those consuming the tobacco, may be sufficient in any case to outweigh arguments about the economic benefit of tobacco cultivation, but the case is even simpler if a significant portion of tobacco farmers are *not* gaining significant economic benefits from tobacco cultivation. It is very easy to act in favor of the environment and public health when little or no conflict with economic goals will result.

It is thus important to examine what the situation is, both of current and former tobacco farmers. That is, do farmers earn a fairly good living through growing tobacco?

There is no question, of course, as to whether growing tobacco is profitable. The question is whether enough of that wealth falls into the hands of the farmers to make tobacco cultivation worthwhile for them.

Registered and unregistered farmers

It emerged from the research that the principal reason behind farmers choosing to grow tobacco is that it is considered to be more profitable than other crops. Farmers explained that tobacco has a guaranteed market, and on



disposal of the product the farmer receives the entire money for his produce at once. Behind these so called “attributes” of tobacco farming is the patronization by tobacco companies. That is, rather than tobacco necessarily being a profitable crop, the tobacco companies offer certain advantages to farmers which make tobacco growing attractive to them. Facilities and perks extended by the companies include having the companies’ extension workers teach the entire procedure for yielding a good tobacco

harvest. The companies also provide the farmers with free seeds, follow-up extension services, and packages that include fertilizers and pesticides.

The tobacco companies recruit mostly well-off farmers, and it is for the registered farmers that tobacco cultivation may prove advantageous. Since the registered farmers deal directly with the tobacco companies, they are more likely to get a fair price for their produce. They in turn buy any needed additional leaf, at low cost, from the unregistered farmers. Poorer farmers in the community, observing their neighbors getting ready cash the moment the crop is ready, may decide to turn to tobacco farming to receive similar benefits. After all, with other competing crops like vegetables, such advantages do not accrue. The harvest is ready in batches, and there is always uncertainty about finding a market on time.

For those poorer farmers copying their richer neighbors, benefits are very limited. Being small, they are unlikely to become registered with any company. Unregistered farmers often receive a lower price for their tobacco leaf, depending on



registered farmers to buy whatever quantity they may need. While accurate statistics throughout the country are not available, observation and previous research (Deb and Sujon 2002) suggest a figure of 10% of tobacco farmers being registered, with unregistered farmers receiving very little economic benefit from cultivating tobacco. In one area of Meherpur, fieldwork results find that there are 495 tobacco farmers, of whom 211 are registered—a far higher percentage, but still only 43% of the total tobacco farmers, meaning that the majority receive little benefit from growing tobacco.

The high cost of labor

In fact, contrary to popular notions about tobacco being a lucrative crop, studies have shown that the profitability of tobacco is over-estimated, and that there are various profitable and realistic alternatives to tobacco production (Naher and Chowdhury 2002; Jha and Chaloupka [eds.] 2000). Naher and Chowdhury conducted a survey on tobacco cultivation, commissioned by BRAC, one of the largest non-governmental organizations in Bangladesh. They have shown that the “profitability” of tobacco emerges from the fact that most farmers economize on the cost of labor required for producing this highly labor-intensive crop by using their own labor and that of their families (especially of women and children).

Since this labor comes for “free”, tobacco farmers do not feel the pinch of the high labor cost. The BRAC survey showed that more than 50 percent of the labor required was provided from the farmer’s household itself. If the imputed value of this “free” labor is taken



into account, tobacco loses much of its profit margin. The high labor cost reduces the net return to labor. The survey also revealed that most farmers are aware of this, saying that tobacco yields little for the farmer who has no household labor (see box below). Despite knowing this, farmers are reluctant to shift to other crops, citing a number of reasons: 1) difficulty in obtaining seeds to grow vegetables; 2) uncertainty in finding a good market for other products; 3) easy perishability of other crops; 4) difficulty securing loans for non-tobacco crops; 5) poor knowledge of plausible alternatives; and 6) unavailability of free inputs and other facilities for non-tobacco crops.

Box 1: The woes of Muyichi and Mopro

Muyichi is a large tobacco farmer in the Ali Kadam area of the Chittagong Hill Tracts. He is a contract grower for Dhaka Tobacco Company. This season he has spent about Taka 60,000 to grow tobacco on about 5 acres of land. He hopes that if the quality of his produce meets the standard set by the company, it will fetch him about Taka 160,000. He uses his own labor and that of his family to grow the crop. “It involves long hours of back-breaking labor. During the harvesting season, I cannot send my children to school as I need extra pairs of hands to help me in the field. When the leaves are being dried, I cannot even sleep properly. Sometimes, I have to ask my children to monitor the heat in the barns, irrespective of whether they are sleeping or studying”.

Mopro is another tobacco farmer of the same region, contract growing for Nasir Tobacco Company. Since he is unable to use his own family labor, he has to hire labor. This season he has spent about Taka 30,000-40,000 for labor alone. He used to grow food crops on his land, which ensured him a daily supply of food for himself and his family. In those days, he rarely had to buy supplies from outside. “Now I have to spend Taka 100-120 every day on buying food for my family”. He started to grow tobacco, since it brings him a sizeable amount of money at a time, and he can use that money to fix up his house, or to buy a cycle, but he has to borrow from neighbors for his family’s daily food and other needs.

It is important to note a further cost to the high labor required for tobacco cultivation: by taking children out of school to work in the fields, parents are reducing their children’s future opportunities for a better life. That is, skipping school is an often uncounted, but possibly quite significant, further cost to tobacco cultivation. Previous research in Bangladesh has shown the inhumane conditions and extremely low wages of some tobacco-related work (Blanchet 2000, Deb and Sujon 2002).

Farmer or factory worker?

Another issue is worth mentioning. It is a very different matter to grow crops for one's own use and local sale, and to grow crops for a multinational corporation. These issues go beyond profitability to include ability to make independent decisions about the use of one's land, including when, whether, and how much of a crop to grow.² Although beyond the scope of this case study, international evidence³ suggests that the spread of transnational companies has hardly resulted in improvements in living standards of those working for them.

Loans for tobacco cultivation: debt bondage

The entire process of tobacco cultivation is input-intensive, which makes it an expensive crop to grow. The bulk of the cost is on account of seed and seedbed preparation, fertilizers and curing (Naher and Chowdhury 2002). Farmers complained that the fertilizer requirements for growing tobacco increase each year, leading to steadily declining profitability. The high cost of cultivating this crop implies that farmers often have to access loans or credit from external sources. The BRAC survey revealed that most tobacco growers who seek external credit are marginal farmers with less than 0.5 acres of land. These poor farmers borrow at the commencement of the tobacco growing season and repay once the produce has been sold. The share of proceeds that they are left with barely lasts them till the next tobacco season, which forces them to borrow again. They thus fall into a vicious cycle of indebtedness, from which they find it difficult to extricate themselves.

Loans for growing tobacco are provided primarily by tobacco companies. The tobacco companies have different loan strategies for different areas. In greater Kushtia, they normally provide in-kind assistance through the provision of seeds, fertilizers, pesticides and extension services. Seeds are given out free of cost, while the cost of other inputs is recovered during the procurement of the harvest. However, in the Chittagong Hill Tracts,

² This issue is treated in some detail by Schlosser (2002). Although he writes specifically about US producers of potatoes and beef for the fast food industry the issues are relevant to tobacco farmers internationally.

³ See, for instance, Farmer (2005) and Campaign for Tobacco Free Kids (2001).

the tobacco companies provide cash. This region is relatively less developed, and the people here are very poor. For these people, getting hard cash in hand is a boon. The tobacco companies are well aware of this, and try to exploit the situation as much as possible. In 2005, these companies gave a loan of Taka 4,000 per acre. The year after, the amount was increased by 25 percent to Taka 5,000 per acre. Once a farmer avails a loan from any company, he is bound to sell his produce to that company only. When the harvest is ready for sale, the loan is deducted and the balance is given to the farmer.

The loan procedures of banks require mortgage of the land against which the loan is sanctioned. The marginal farmer who has no land to mortgage is automatically disqualified for the loan. During our group discussions, farmers also complained about getting loans less than the amount applied for. Corrupt practices of bank officials and other influential local people often adversely affect the prospect of deserving farmers getting a loan. For those having political connections, securing a loan is certain and easy, even if the farmer is unworthy and a bad credit risk. Bribing bank officials to get a loan is also reportedly a common occurrence.

For those who do not grow tobacco for any particular company, the principal source of credit is the village moneylender or *Mahajan* who gives loans at exorbitant rates of interest, often exceeding 100 percent. Though loans are available at much lower rates from banks, the high transaction costs—including repeated trips to far-off branches and complicated paper work—dissuade farmers from availing bank loans. This becomes a drain on the



resources of a low-income farmer (see Box 2). Also, loan application procedures involve filling out lengthy forms, which is daunting for the illiterate or poorly-educated farmer. Tobacco companies, on the other hand, provide easy loans for growing tobacco, which act as a major attraction for farmers to grow the crop.

Box 2: How will I feed my family?

Kuddus Ali, 31, is a tobacco farmer from the Lama region in the Chittagong Hill Tracts. He has been growing tobacco for the past three years. Initially he wanted to grow vegetables on his land. Since he did not have the initial capital to start with, he applied for a loan at a bank. After traveling several times to the bank branch, which is situated 10 miles from his home, he abandoned the hope of getting a loan. "I have to spend 20 taka on transport every time I visit the bank. If I have to make 8-10 trips to get my loan sanctioned, how will I feed my family?"⁴

Continual inflation creates another problem with crop loans. Loan amounts are predetermined at particular rates, but by the time the loan is actually disbursed, input prices often go up substantially, making the loan inadequate. As a tobacco farmer



remarked, "When I apply for a loan to grow potatoes, the price of fertilizers is Taka 200 per bag. But by the time I get the loan, the fertilizer price has become Taka 800 per bag. What will I do with this paltry sum? Should I just buy one bag of fertilizer when I need four?"

Marketing issues: finding a fair price for one's produce

As with most other agricultural commodities, the market for tobacco is imperfect. Only registered (contract) growers have an

⁴ A creative solution to this particular problem would be to provide loans to farmers to buy bicycles which could assist them both in reaching banks, and in reaching markets to sell their produce. On a bicycle, one can carry 3-4 times what a person can carry on their head, and at easily triple the speed of walking. A one-time investment in a bicycle also means long-term savings in transport costs a further significant help to low-income farmers (Efroyimov and Rahman 2005).

assured market, since they sell directly to the companies. However, if the leaf grade does not meet the company's standards, the produce is either not accepted or the farmer is given a very low price for it. Further, the companies do not accept more than the stipulated amount of leaf. These contract growers, then, have to sell any extra leaf in the open market or to middlemen (*beparis*). The middlemen have an understanding with the tobacco companies and, thus, the former re-sells the produce to the latter at a higher price.

The non-contract or unregistered growers, who form the bulk of tobacco farmers, sell their produce to the middlemen. The *beparis* themselves come to the farmers, which saves them the hassle of transporting the leaves. *Beparis* are well informed about



prevailing market conditions. *Beparis* are well informed about prevailing market conditions. They operate like a cartel, sharing among themselves all market-related information. They also have affiliations with different trade unions, and are thus a strong group with an established right to the final word on the price. The farmers, on the other hand, are inadequately informed, weak and unorganized. While prices are fixed in the open market, farmers do not receive the full price, as they often sell their produce to *beparis* under distressed circumstances. Their indebtedness forces them to dispose of their crop as fast as possible. The middlemen are perfectly aware of this and exploit the farmers to the fullest. Often the *beparis* collude to offer a uniformly low price to the farmers. The *beparis* also keep a commission from the farmers, which ranges from a minimum fee per unit of crop sold to a fee as high as 10 percent of the produce. Sometimes if the leaves are small or not of a desired color, the price offered can drop by 50 percent.

On the whole, tobacco farmers do not have much of a problem in disposing of their harvest. Whatever be the supply, there seems to be a market for it. Though the farmers have to compromise on the price, they look at the brighter side, which is getting the entire amount of money at one time. The possibility of the leaves perishing fast is also low. Thus, in the case that any farmer is unable to sell his harvest, he has some time to seek out a buyer.

Tobacco cultivation: health issues

In addition to the economic issues involved in growing tobacco, there are other costs borne directly by farmers, or by the government, from the cultivation (and use) of tobacco. For instance, the WHO (WHO 2005) has conducted research in Bangladesh which finds that government spending on treating tobacco-related disease is greater than profits from the production and sale of tobacco. In addition to the health costs borne by government are the other health costs of tobacco cultivation and use, as borne by individual families. Since far more tobacco is imported than exported, the country also loses precious foreign exchange from tobacco use in Bangladesh (BBS 1998).



Though most people are aware of the hazards of smoking, far fewer are informed about the hazards of tobacco farming, both in

terms of health of the farmer and of the environment. In fact, it has been documented that the seriously damaging health and environmental impacts caused by tobacco farming parallel those caused each time a cigarette is lit (Campaign for Tobacco Free Kids 2001).



Health threats include the large amount of pesticides used on the crop, as well as illnesses relating to the handling of raw tobacco leaves. Dermal absorption of nicotine while harvesting the wet green leaves leads to an illness called Green Tobacco Sickness or GTS. The symptoms of GTS include nausea, dizziness, vomiting, headaches, weakness, abdominal cramps and difficulty in breathing, as well as fluctuations in blood pressure and heart rate. Use of tobacco, whether smoked or taken in other ways, causes a wide range of diseases as well as early death.

Tobacco cultivation: environment issues

Since tobacco requires large quantities of water, fields are mostly located near water bodies. Since large amounts of pesticides are used on the tobacco plant, the chemical residue flows back to the water bodies when the fields are irrigated. Needless to mention, the contamination spreads when this water is used for domestic purposes. Not only pesticides, but huge amounts of fertilizer are also required during the cultivation of tobacco. Since tobacco rapidly depletes the soil of its nutrients, the soil has to be replenished over time using expensive chemical fertilizers. A survey revealed that on an average 300 kg or more of chemical fertilizers such as urea, triple super phosphate and zinc are used for cultivating an acre of tobacco (Naher and Chowdhury 2002). In addition to fertilizer costs, the harm tobacco cultivation does to soil fertility is a further cost of tobacco cultivation.

For flue-cured tobacco, large rooms or barns are constructed and these are kept at a constant temperature for about 72 hours till the leaves acquire the characteristic tobacco taste, aroma and color. In Kushtia and Chittagong Hill Tracts, where flue-cured tobacco is more popular, wood is primarily used for curing. About six tons of wood is required to cure the tobacco grown on just one acre of land. Huge areas of forests in the Chittagong Hill Tract region have disappeared over the past few years, and a substantial portion has been tobacco-related deforestation (see table 2). About 30 percent of the total cost of tobacco production is for curing the leaves. In the hilly region, hills are also being cut to create flat land for growing tobacco.

Table 2: Rates of deforestation caused by tobacco

Country	Total annual wood consumption ('000' tons)	Total annual deforestation ('000' hectares)	Percentage of total tobacco related deforestation
South Korea	272.2	13.0	45.0
Uruguay	7.6	0.4	40.6
Bangladesh	128.0	9.0	30.6

Source: Geist, 1999.



Alternate crops

Farmers who are growing tobacco mention various problems they face in trying to grow other crops; similarly, those who have successfully made the transition from tobacco to other crops mention various obstacles they had to overcome.

In the case of food crops such as vegetables and fruits, the possibility of their rotting fast or getting infested with insects is very high. The farmers themselves have to search for buyers once the harvest is ready, and the possibility of not being able to find one on time, who will give reasonable price, is high. Often the farmers themselves have to carry their produce as head loads⁵ to different places in search of a reasonable buyer. To save the cost of a ticket, they even risk their lives and travel to distant places on the roofs of buses or trains with big baskets of fruits and vegetables. Unlike tobacco, there are no preset marketing facilities for food crops. If the farmer is fortunate, he succeeds in making a deal with a *bepari* to sell his produce at a reasonable price.

The absence in tobacco-growing regions of sufficient cold storage where farmers can store their food crops till an appropriate buyer is found, further compounds their problems. For instance, in Comilla district⁶, which is quite well-developed compared to the Chittagong Hill Tracts, there are a large number of cold storage facilities, and essentially no tobacco is grown there. In tobacco-growing regions, there are also not enough wholesale markets or marketing groups. Related to the storage problem, and coupled with such issues as collusion among traders, is the issue of price fluctuations. The price of food crops is very volatile. It often happens that when the seeds of a food crop are sown, the market price is high, but once the harvest is ready for sale, the prices have come crashing down. In the words of a crestfallen farmer, "When I began growing potatoes this season, the price was 30 taka per kg, but now when my potatoes are off the field, the price has come down to 5 taka per kg."

Crop agriculture remains a risky enterprise for farmers. An attempt to establish a crop insurance program was made on a pilot scale many years ago by the Sadharan Bima Corporation

⁵ As noted above, simply having a bicycle would greatly alleviate this problem.

⁶ This district has almost 100 percent literacy. Though less than one-third the size of Chittagong Hill

(SBC), but it did not succeed. Since then several studies were undertaken on the prospects of crop insurance. The present situation calls for an in-depth review of the issue in the light of past experience and information, and formulation of a viable solution.

Another reason cited by farmers for not wanting to shift out of tobacco is the excess supply argument, that is, when everybody in the area is growing similar crops such as vegetables, the prices tend to be depressed. With tobacco, the situation is different since markets almost always exist. Even though tobacco growers are at the mercy of the buyers who establish the grade of the leaf, which in turn determines the price, they do not mind so much. As one of the farmers put it, "getting something is better than seeing your entire harvest lie and rot". In sum, the uncertainty surrounding the marketing of food crops is a major reason for farmers not to switch out of tobacco growing.

Farmers who have switched from tobacco to vegetables emphasize the many benefits of the switch. In field visits made to prepare this report, farmers in various districts explained that for the first two or three years of growing tobacco, the quality of the leaf is high and they thus have the chance to earn a decent income. However, after three years, the quality of the leaf, and thus the profitability of growing, declines significantly. As a result of growing tobacco, they explained, there is a root that appears in the soil that prevents other crops from growing well. They are thus afraid to continue growing tobacco for several years. Even after five years of growing vegetables rather than tobacco, they are still finding the harmful root from tobacco.



Many farmers also explained that a great advantage to growing vegetables is that they can always harvest some vegetables to sell in the market when they suddenly need money, whereas with tobacco, they must wait for the full harvest to come in. While some tobacco farmers appreciate the sudden input of a sizeable quantity of money, on further questioning as to how they survive day-to-day, they explain that they must take out loans to meet their basic needs until the harvest. Vegetable farmers do not have this problem. In addition, the large amount of money coming in at once from tobacco can be, in a sense, a mirage, since the farmers have taken loans for the various inputs, which must be repaid out of the harvest. Vegetable farmers are always ensured of a supply of vegetables to feed their own family.

Farmers described a further benefit to growing vegetables. The wastage from growing vegetables can be used as fertilizer, thereby further enriching the fertility of the land at no cost. In addition, some of the waste can be fed to cattle. Neither of these is the case with tobacco. Thus while the waste from rice harvest is fed to cows by those who grow vegetables, it is used as a fuel to cure tobacco by tobacco farmers. This helps explain the surprisingly large, healthy cows seen only in primarily vegetable-growing areas. Also, there is far less labor involved in growing vegetables than tobacco.



Particularly spectacular success in making the transition from tobacco farming to other crops such as maize, pumpkin and other vegetables has occurred in Saharhati village. Tobacco was widely grown in Saharhati village, Meherpur district from 1972 to 1985. In 1983, an artist from the area, after finishing his Masters in Fine Arts from Dhaka University, returned to his village and decided to experiment with growing watermelons. He encouraged the local people not to grow tobacco. People considered him crazy, and said that he knew nothing about agriculture. But gradually, as people saw that he was profiting from his experiments, they began imitating him. As a result of his efforts over the years at motivating tobacco farmers to switch to food crops, and the witnessing of the profitability of such a move, tobacco is no longer grown in the area. At present people are growing cauliflower, cabbage, leafy green vegetables, wheat, corn, sugarcane, mustard seed, potatoes, garlic, onion, bitter gourd, and various other local vegetables.

In terms of marketing of the produce, people initially sold their vegetables to brokers, who took them to big cities such as Dhaka and Chittagong. The price was so low that they decided to take the vegetables to market themselves, but again sometimes the price was so low that they simply dumped them on the roadside and returned home, losing money on all their inputs and transport costs. Now they use mobile phones to check on the price of vegetables in markets in different cities, and sell when and where it is profitable.

Observation during fieldwork revealed some key issues in Saharhati. There was a vegetable garden in front of nearly every house, which is now unusual in Bangladesh. There was abundant livestock, such as chickens, ducks, goats and cows, all well-fed; in fact, the cows were the healthiest, biggest cows the researchers had ever seen in the country. Most people are literate and many are culturally-minded, with much interest in music, art, and drama. They claim that there is almost no violence in their area due to the high employment rate, while people still enjoy the free time to be involved in cultural activities. The villagers are proud of the fact that they are materially far wealthier than their neighbors in a tobacco-growing area. One man from Saharhati told the researchers, "I married a woman from the neighboring tobacco-growing village, but they can't even feed me properly when I go for a visit, they are so poor."

Box Three: Eggplants prove more profitable than tobacco

Abdul Salam is a landless farmer who used to grow tobacco, but has since switched to growing vegetables. He rents 40 decimals (there are 100 decimals to the acre) of land, which he uses to grow eggplant. Each season, he spends 12,000 taka (for land rent, seeds, fertilizer, etc.), and earns 1,500 taka each week from selling eggplants, or 6,000 taka per month. There are ten members of his family, and he is the only income earner, but is able to provide for the entire family off of the income he earns growing eggplants. When he grew tobacco, he had to take out many loans, his family had to provide an enormous amount of labor, and yet they always faced economic difficulties. Another advantage of growing eggplant is that he can sell them whenever he needs money, and the money comes in frequently during the season, as the eggplants mature. With tobacco, he would have to wait till the end of the season to sell all the tobacco at once. For instance, if he suddenly needs 1,000 taka, he can simply go out to his field and pick enough eggplant to sell in the market to raise the money, whereas with tobacco, he would have to take out a loan with interest in order to meet a sudden financial need. Finally, he is able to feed his family some of the eggplants that he does not take to market, ensuring that they consume some vegetables.

Large landowners who rent out their land told the researchers that landless farmers renting land were able to start saving money when they switched from tobacco to vegetables. Farmers switching to vegetables saved money on labor and fertilizer, and made more money due to the duration of the harvest, which is about six months for tobacco, but only three months or less for vegetables (2-3 weeks for some leafy vegetables). Finally, it is possible to multi-crop vegetables, growing various ones simultaneously on the same plot. As a result, said the landowners, the formerly poor farmers now have savings, and have access at any time to 20,000-30,000 taka. While in all areas visited, tobacco farmers rely on loans to grow their crops (suggesting that growing tobacco is far from making them wealthy, or they would not continually need loans), vegetable farmers did not take loans, explaining that they only need a small quantity of seeds or fertilizers, which they can easily borrow from a neighbor.

Visits to the other areas confirmed similar conditions, but without the advantages of Saharhati, due to problems in marketing their crops. Many farmers continued growing tobacco for years, since they had heard that their land was no longer good for growing anything else, now that they had used it to grow tobacco. When former tobacco farmers did try growing vegetables, they were happy with the smaller amount of labor required, and found that vegetables grew well; they were surprised at the fertility of their soil. While the first experimenters in alternate crops in any area benefited, their profits declined when other farmers, following their lead, led to competition and thus a decrease in prices for their produce. Meanwhile, those who realized the problems of growing tobacco for years, in terms of the harm to the soil, were eager to switch to another crop to save the fertility of their soil. That is, the key issue in many areas is not ignorance or lack of desire to switch, but simply problems with the marketing of vegetables.

POTENTIAL FUTURE DIRECTIONS

Reforming and strengthening the formal agricultural loan system

As mentioned above, loans for tobacco growing are easily available from tobacco companies. However, loan facilities for growing other crops are poorly developed. For generations, farmers in this country, especially small and marginal ones, have suffered from shortage of capital to invest in agricultural production. Informal moneylenders have a long history of exploiting poor farmers. The operational inefficiency of specialized banks like the Bangladesh Krishi Bank (BKB) leads to a high accumulation of overdue loans. The co-operative credit system has also proved inefficient and ineffective in satisfying the credit needs of our farmers. A special agricultural credit programme launched in 1977 through the nationalised commercial banks (NCBs) helped to increase the supply of credit, but their performance was not satisfactory due to inadequate field supervision, complicated loan-granting procedures, corruption, and poor recovery.

NGOs follow a simple procedure for loan disbursement with a low real cost of credit and a high loan recovery rate. Though the quantum of loan disbursement by NGOs is much higher than that of the formal banks, only a small part of NGOs' credit is allocated for crop production. Thus, the small and marginal farmers are bypassed by both the formal banks and the NGOs, and consequently they have no recourse but to fall victim to local moneylenders.



New policy measures are needed to streamline the credit system for farmers, especially for small and marginal ones. To ensure easy and timely access to credit by small and marginal farmers at low cost, all commercial banks (public and private)

should be advised to establish special windows with targets in their semi-urban and rural branches for handling farmers' credit. The efforts of National Credit and Commerce Bank (NCC Bank) in this regard are worth mentioning⁷. NCC Bank, in collaboration with Doyal Agro Industrial Complex, has introduced a maize production package for the farmers of Patgram *Upazila*⁸ under Lalmonirhat district, which has a large number of tobacco farmers. The Bank has opened a branch in this area from where farmers can directly access loans. NCC bank officials determine



⁷ It is very unusual for a private bank to operate in an agricultural area. In most of the country, only government banks have branches or operations in rural areas.

⁸ *Upazila* is the Bengali term for sub-district.

the price of the produce based on the market price, and the farmers can market their output to the Doyal Agro Industrial Complex. So far about 4,000 farmers have become motivated to grow maize. It merits mention here that large quantities of maize are imported every year to meet the local demand. The maize produced here is of a better quality than what is imported, and can save large amounts of precious foreign exchange.

Recently the government has taken a laudable decision to launch small capital banks to extend micro-credit facilities in villages across the country under the Micro-credit Regulatory Authority Act. The government should ensure that the service of this facility is available to small and marginal farmers for crop production purposes.

Promoting non-tobacco crops: the dormant role of agriculture extension

Agriculture extension services are very strong for tobacco. These services are provided by the field-level staff of different tobacco companies. From the preparation of the seed bed to the final stage of curing the leaves, these extension workers demonstrate and teach the tobacco farmers all the steps involved in each process. They also provide tips to farmers as to how to make the leaves of a higher grade and superior quality. The non-contract growers of tobacco, in turn, learn these steps from the contract growers. This free learning is very beneficial to them and is one of the driving forces to grow tobacco. Detailed knowledge of tobacco growing gives them a sense of confidence, and they feel that nothing can go wrong with the harvest. Such extension services are rare for other crops.

The Department of Agriculture Extension (DAE) of the Government of Bangladesh is the only public agency responsible for rendering extension services to farmers. DAE does not provide any technical assistance to tobacco farmers. DAE has been in Bengal since the British rule, and its offices are spread all over Bangladesh. The basic mode of operation of DAE has been the 'extension training and visit' (T&V) system, with changes made in

the policy from time to time.⁹ The extension workers used to be very active, and paid regular visits to the field to address the problems of the farmers. Seeds at a concessional rate also used to be available at the DAE branch offices.

The introduction of the New Agriculture Extension Policy in 1996 by the Ministry of Agriculture saw a major shift in the public extension service, as it required DAE to change from a centralized extension service provider to a decentralized pluralistic extension system. But a change in extension policy has brought about little change in the quality of service delivery. The farmers lamented that extension workers rarely if ever visit the fields these days; rather, they themselves have to go to the agriculture office in the event of a problem. The number of extension workers is also far below the requirement.

Recently, NGOs have also embarked on extension activities, marking an important move towards cost-sharing in extension service delivery. Some of the prominent NGOs include BRAC, Grameen Bank, Proshika, Swanirvar Bangladesh, Rangpur Dinajpur Rural Service (RDRS), and UBINIG. UBINIG, for instance, has launched a 'naya krishi andolan', which literally translates as 'movement towards new agriculture', through which they are propagating organic food cultivation. BRAC has many field workers who go from field to field regularly, advising farmers on different crop issues. However, a clear demarcation of the public and private roles in extension service delivery is lacking, which often gives rise to conflict between the principal extension service provider (DAE) and the private partners. The absence of functional and active participation of local government is also a significant problem in the country's agriculture extension system. Overall, there remains much room for improvement in providing quality services to farmers to help them grow food crops that would benefit both themselves and the nation.

Addressing nutritional issues

Tobacco is a powerful economic temptation to farmers, who have previously grown food crops such as rice, wheat, maize, pulses,

⁹ For the purposes of extension work, 800-900 farm families (depending on the intensity of area activities) are treated as a block, which is the lowest unit for field extension work. The model of message delivery was a two-step one, wherein each block supervisor would directly communicate with some chosen contact farmers to deliver technology packages and the latter, in turn, would deliver the information to the non-contact farmers.

oilseeds, fruits and vegetables, on a subsistence basis. In fact, tobacco cultivation and malnutrition seem to go together. Not only does land under tobacco directly compete with other crops such as fruits and vegetables, but the tedious farming process leaves no time for growing other food crops. During the harvesting season, when every possible pair of hands available in the household is on the field, there is no time even to cook (see Box 3). In addition, the returns left for the household after paying off all loans is often too meager to afford a balanced diet. During the curing process, when families run out of wood, they sometimes even cut down large fruit-bearing trees in their yard. Tobacco cultivation is spreading so rapidly in some areas that farmers have abandoned growing vegetables in their backyard and have begun to grow tobacco instead.

Box 3: "I have no time or energy to cook"

Sakina, 30, is the mother of three school-going children. For the past five years they have been growing tobacco. Previously they grew *boro* rice, cauliflower, tomato, brinjal and other seasonal vegetables. Though they were growing food for their own consumption, they would normally be left with some harvest which would be sold in the market. But they can no longer afford such a diverse diet. They do not earn enough money from tobacco to buy sufficient food to feed their family. During the harvesting season, she, her husband and their three children are all working in the field. They do not have the money to hire labour, so during this period their children skip school. Sakina works hard in the field all day long. "I have no time or energy to cook. Last night we had some left-over boiled rice with salt, water and red chilies".

Malnutrition is a serious problem in Bangladesh. The latest Demographic and Health Survey 2004 (NIPORT 2005) reveals that 43 percent of children below five years of age are stunted, while about 48 percent are underweight. The survey further reveals that 37 percent of rural women have a low body mass index, while the figure for urban women is 25 percent. Moreover, the normal diet of an average Bangladeshi is heavily dominated by rice, with more than 70 per cent of calories coming from rice alone.

The consumption of other nutrients such as fats, protein, vitamins and minerals is inadequate. Women and children are especially vulnerable due to their greater nutritional requirements. This dietary imbalance reflects insufficient domestic production of non-cereal foods (vegetables, pulses, oilseeds, fruits, meat, milk and eggs), low incomes, food preferences and lack of



nutrition education. Moreover, the general health environment and caring practices compound the problem of inadequate food intake, further contributing to poor nutritional outcomes. Research has also shown that expenditure on tobacco products among the poor may further contribute to malnutrition by diverting money from food (Efroymsen et al. 2001).

Tobacco does not occupy an important position in the agriculture economy of Bangladesh, accounting for only about 0.4 percent of total agricultural land. However, this still amounts to more than 75,000 acres of land under tobacco cultivation. If this land could be brought under food crops, a dent could be made in the food security and nutrition situation in the country; non-food crops could bring additional wealth. Potential alternative crops include soybean, tomato, okra, pumpkin, maize, brinjal, green chilies and cotton. The planting of fruit orchards and floriculture are also possible in areas where tobacco is currently grown (Kaur 2002).

Shifting out of tobacco into other crops requires a broad diversification program with the help of the government and NGOs. The problems of some vegetable farmers in obtaining seeds suggests another important area of intervention for agriculture extension. It is worth noting that growing reliance on hybrid seed varieties has made it difficult for farmers at times to access seeds, if they either do not have sufficient funds to

purchase them, or supplies are lacking. The former practice of collecting seeds from one's previous harvest for use could well improve the lot of many farmers and reduce their dependence on different corporations, but would require a rethinking of the common practice of promoting hybrid varieties.

Some of the projects run by DAE and targeted specifically at improving nutritional status include agricultural diversification and intensification, Development of Existing Horticulture Center at Chittagong Hill Tracts and Cox's Bazar Regions, North West Crop Diversification Project, Integrated Horticulture and Nutrition Development Project, Crop Diversification Programme and Integrated Maize Promotion Project.

Meanwhile during the mid-1980s, homestead gardening was also brought under the purview of DAE. The twin reasons for this were to encourage women to contribute to income generation and to increase food intake through an increase in purchasing power. This project, if implemented effectively, could go a long way towards creating awareness amongst people to cultivate food rather than tobacco. In general, if a suitable environment is provided, many farmers will be motivated to grow indigenous food crops rather than the back-breaking alien tobacco.

Raising awareness about and supporting the cultivation of non-tobacco crops

The general belief that tobacco is a profitable crop is the principal reason for farmers taking to it. Once they begin, the hardship still does not convince farmers to switch to other crops, due both to lack of awareness and knowledge of cultivating other crops and inability to access loans and other services, including



assistance in selling the crop. Through the aggressive activities of the tobacco companies, a farmer is "coaxed" to tobacco farming simply by watching his neighbor "graduate out of poverty" after cultivating this crop. Such a demonstration effect could be achieved for other crops as well. One possibility would be to grow food crops in school gardens and open spaces inside mosques and other public places, which could serve as demonstration plots. The output could be distributed among school children, or even to the destitute, as part of a supplementary feeding program, thus combining programs to encourage vegetable cultivation with alleviation of the most extreme poverty.



When considering such an integrated approach to improve livelihood as well as decrease cultivation of tobacco, a further component could be considered, of introducing ecosanitation. Ecosanitation, by combining agriculture and sanitation, has the dual benefit of reducing diarrheal disease caused by poor sanitation, and improving access of poor farmers to nutrient-rich, safe fertilizer (GTZ). More access to fertilizer means higher yields, and less expense on fertilizer, which itself is produced through polluting chemical processes. Many existing institutions and organizations could be mobilized to promote such integrated programs, thereby simultaneously addressing multiple sources of poverty and ill-health, and ensuring that investments in helping poor farmers switch out of tobacco have multiple benefits to the farmers, their families, and the community.

CONCLUSION AND RECOMMENDATIONS

It would appear that in the case of tobacco cultivation, no difficult choices need to be made. That is, policies to help farmers switch from growing tobacco to other crops would benefit the country's environment, national and individual economy, and health. Moreover, little convincing is needed, as many tobacco farmers would like to switch; the services that are required would greatly benefit farmers, and could be instituted nationwide to improve the situation of many farmers, not just those currently growing tobacco.



Though presently, tobacco vis-à-vis other food and cash crops does not occupy an important position in the Bangladesh economy, its proliferation in specific districts is assuming alarming proportions. Important factors encouraging the cultivation of tobacco include company patronization, good extension services for growing the crop, easy availability of loans for tobacco, lack of information and services for growing other crops, and lack of knowledge about the dangerous impact of tobacco growing on human health.



In order to support a shift towards more growing of food and less

of tobacco, both government and NGOs have an important role to play.

The Tobacco Control Act, passed by the Government of Bangladesh in 2005, specifically mentions discouraging the farming of tobacco, and provision of loans for promoting alternative crops. If farmers are shown alternatives to tobacco production and given technical assistance in making and sustaining the transition, many would likely wish to quit growing tobacco. This was in fact the sentiment expressed by many tobacco farmers during focus group discussions.

Farmers should have easy access to quality inputs, particularly fertilizer and seeds. Projects should teach people how to make their own fertilizer, using animal and vegetable waste, and also by safely combining sanitation with agriculture by using ecosanitation systems. Ecosanitation would reduce fertilizer costs, increase access to fertilizer among poor farmers who otherwise cannot afford it (thereby increasing their crop yields), and reduce diseases caused by poor sanitation. Helping farmers return to traditional systems of harvesting seeds would also save costs, prevent problems caused by lack of access to seeds, and further reduce dependence of farmers on commercial enterprises; as such, a switch away from hybrid seeds is essential.

Further, farmers require assistance with adequate and timely marketing, such as ample provision for storage of crops, particularly by expanding cold storage facilities. Farmers need easy and cheap modes of transporting goods and accessing markets; encouragement to use



and loans to purchase bicycles and

rickshaw vans could help in this regard while avoiding reliance on expensive and polluting fuel. Mechanisms to ensure a fair price to farmers (by helping them bypass middlemen or *beparis*) would also improve the ability of farmers to make a living from growing vegetables.

Demonstration plots for food crops and non-tobacco cash crops could go a long way towards encouraging farmers to stop growing tobacco. Such plots could be strategically located in school gardens, beside public places such as mosques, community centers or hospitals. The output from these plots could be distributed among school children or to the destitute, which could also help in alleviating the food insecurity of these people.

In sum, the key issues to be addressed are:

- Improved loan services for low-income farmers;
- Technical assistance in switching from tobacco to food cultivation;
- Assistance in learning to make fertilizer and harvesting seeds;
- Provision of marketing facilities and expanded cold storage;
- Loans to increase access to low-cost, fuel-free transport;
- Demonstration plots for technical assistance and to supplement diets of the needy.

While the list may seem long, the anticipated benefits would be well worth it. An increase in the cultivation of food crops is vital to an improvement in the nutritional and health status of our population. Further, the lessons learned through improved agricultural extension and other services as outlined above would have benefits far beyond current tobacco-growing areas. Beginning with addressing tobacco cultivation, an overhaul of agricultural practices could lead to the sort of rural reform that would drastically improve the lives of many of the rural poor, thereby enriching not just them and their families, but the entire nation.

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Tobacco Taxation and Poverty in Bangladesh: Research and Recommendations

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Introduction

"The price of essential goods should be low, and of cigarettes high. Smoking won't fill your stomach." --Ziya Uddin, taxi driver, Dhanmondi

The harm of tobacco production and consumption to health, the environment, and individual and national economics are clear. The nature of the tobacco epidemic makes policy-level situations necessary, as it is policy, not public education, that has been proven worldwide to succeed at reducing rates of tobacco use and thus illness, death, and other problems caused by tobacco (World Bank 1999).

As a result, countries around the world negotiated and created the Framework Convention on Tobacco Control (FCTC), the first international treaty addressing health. Bangladesh ratified the FCTC in 2004. One of the obligations which Bangladesh has yet to adequately address in the FCTC is the need for regular increases in tobacco taxation, to ensure that tobacco prices rise above the level of inflation and thus decrease tobacco use. While Bangladesh's previous and current government plans for tobacco control mention the need to implement the FCTC and raise tobacco taxes, no action has been taken yet.

While the hesitation to raise tobacco taxes may be due to a number of reasons, one that has been cited elsewhere is the fear of a negative impact of tobacco taxes on the poor. Since the poor

already have trouble meeting their basic needs, an increase in tobacco taxation that leads to greater expense by the poor could further increase poverty, thereby lessening some of the gains to be expected in health and well-being from raising the tobacco tax. If tobacco tax increases were indeed likely to harm the poor, this would be a serious issue to consider before deciding on tax increases and how to reduce any negative effects on the poor. This report therefore sets out to answer the question of whether an increase in tobacco taxes is likely to harm the poor.

The issue of smuggling, which is also widely given in various countries as a reason for not increasing, or even for lowering, tobacco taxes, is also addressed here. The connection, if any, between taxation levels and smuggling, and potentially effective ways of reducing smuggling, are discussed. Given the contribution of tobacco to poverty, and the extent of poverty in Bangladesh, this report also gives attention to this topic. Finally, the question of whether the public would support or oppose an increase in tobacco taxes is discussed.

The authors hope that this report proves helpful in determining future policy directions on the vital issue of tobacco taxation.

Literature Review

Part One: Tobacco and poverty

According to the WHO (2005b), tobacco control is directly relevant to achieving the Millennium Development Goals (MDGs). For instance, MDG1 addresses eradicating extreme poverty and hunger. The WHO points out that tobacco use increases poverty in several ways: by killing off the family's breadwinner, by diverting income from basic needs, and by further impoverishing those who try to eke out a living through tobacco consumption or production. Tobacco use also has a negative impact on balance of payments, with two-thirds of the world's countries being net importers of tobacco. The WHO states, "To counter the negative economic costs of tobacco and thereby assist in achieving MDG1,

raising government taxes on tobacco stands out as the most effective measure. This will increase government revenue while at the same time discouraging smoking. The positive health and economic effects of reduced tobacco use will help to reduce poverty". The WHO also indicates that tobacco control would help achieve MDGs 2-7. For instance, the intensive labor required for tobacco cultivation keeps children out of school, thus interfering with the ability to achieve universal primary education (MDG2), and tobacco cultivation harms the environment, which contradicts MDG7, Ensure environmental sustainability.

Complementing the information from the WHO on the MDGs, various research studies from Bangladesh have shown how tobacco farming, production, and consumption increase poverty. Blanchet (2000) documents the unjust working conditions and extremely low salaries of women and children in the bidi industry in Bangladesh, including the problem of children being kept out of school in order to earn a few taka under inhuman conditions—as little as US\$0.18 to US\$0.71 per day. Children—many under age 9—complain of sitting all day in the same position, being exposed to unbearable heat, tobacco dust, and lack of ventilation, and the various discomforts and diseases such conditions cause. Generational poverty is a likely result of the work, as Blanchet found that 40% of the children had never been to school in their lives, and 53% were not attending any type of school at the time of the survey, despite being aged only 5-15 years. The earnings, meanwhile, were far too low to represent any significant increase in their family's wellbeing, with bidi work sometimes seen as a way to keep children out of trouble more than as a source of income.

Deb and Sujon (2002) found low literacy rates and entrenched poverty in tobacco-growing districts of Bangladesh. Their case studies from interviews with tobacco farmers indicate that tobacco farmers find themselves in a cycle of debt, where they continually borrow from the tobacco companies to continue growing tobacco, even though they rarely make a profit. On the positive side, farmers noted that they could earn more by growing vegetables

(turnips and corn) than tobacco. Similarly, Naher and Chowdhury (2002) found that growing vegetables and sunflowers can be more profitable than growing tobacco, and without the negative impact on the environment or to the health of the farmer. Naher,

Efroymson and Ahmed (2007) further explore through statistics and fieldwork the issue of tobacco farming, indicating a range of reasons for tobacco growing unconnected to profitability for the farmer, while documenting the experiences of many former tobacco farmers who grew far wealthier after switching to food crops.

Efroymson et al. (2001) utilized government statistics to analyze the potential effects of tobacco consumption on the living standards of the poorest. They found that the poorest households were twice as likely to smoke as the wealthiest, and that on average, male cigarette smokers spend more than twice as much on cigarettes as per capita expenditure on clothing, housing, health and education combined. Further, they calculated that the typical poor smoker could easily add over 500 calories to the diet of one or two of his children by reducing spending on tobacco, resulting in an estimated 10.5 million currently-malnourished Bangladeshi children having enough to eat.

Finally, the WHO (2005a) finds that government expenditures to treat tobacco-related illness exceed, by nearly 2.6 billion taka per year, the economic benefits of tobacco to the country. This is in addition to the negative balance of trade for tobacco imports in Bangladesh, of almost US\$15 million per year (BBS 1998).

Part Two: Tobacco taxes

Research from many countries, summarized by the WHO (2000) and the World Bank (1999) has shown that increasing the tax on tobacco products, and thereby increasing their price, will have two major effects: government revenue will increase, and consumption of tobacco will decrease. This is despite industry arguments to the contrary. Simply put, such arguments do not

hold up under the evidence. The declines in tobacco use are particularly significant among the poor and youth. Further effects of tax increases include a delayed onset of smoking by young people, reduced consumption by current smokers, and a decrease in the number of ex-smokers starting to smoke again.

The World Bank's landmark publication *Curbing the Epidemic* (1999) covers the experience of many countries around the world on various aspects of tobacco control economics. In country after country, tax increases have been associated with significant declines in tobacco use. Similarly, where countries have mistakenly reduced the tax rate in order to reduce smuggling, such as in Canada and South Africa, consumption has risen. Overall, according to the World Bank's international summary, a price increase of 10% causes consumption to fall by 5%. However, for low-income countries, the effect is even stronger, with a possible decline in demand of 8% following a price increase of 10%.

As the World Bank explains, it is the poor and youth who are the most sensitive to price. Since these are also two key target groups for reducing tobacco consumption, this is a fortunate circumstance, in that by simply raising the price of tobacco products through higher taxes, one can virtually guarantee a decline in (present and future) consumption among these two important groups.

Further, the World Bank has calculated that a 10% increase in price of tobacco products would lead, in South Asia, to 3 million fewer smokers of cigarettes and 2 million fewer smokers of bidis. Such a decline in tobacco use would lead to 1.1 million fewer deaths from tobacco-related disease in the region.

Research in Bangladesh by Howlader et. al. (2003) finds that most households surveyed spend over 10 taka per day on cigarettes, and that prices of cigarettes must increase by a sufficient amount (at least 3 taka) to ensure a decline in consumption, with predicted declines in consumption and quit rates increasing as the price

increases. They found that a large increase (of 20 taka per pack) would cause most urban smokers (73%) and many rural smokers (41%) to stop smoking, while such a large increase would also cause many to reduce their daily consumption significantly.

According to the (WHO 2000), and other sources (e.g. World Bank 1999, Joosens and Raw 1995 and 2000), the tobacco industry claim that tax hikes cause smuggling is also untrue. While some countries with high taxation have low rates of smuggling, others with low taxation have high rates of smuggling. In fact, the industry itself has been shown to be complicit in smuggling. The World Bank (1999) has shown that smuggling rates are in fact related to levels of corruption, not levels of taxation. Finally, the WHO suggests that while reducing tax rates will not reduce smuggling, various other measures are likely to be effective, including "use of excise stamps, use of unique serial numbers on tobacco product packages, and increasing the penalties for smuggling" (WHO 2000). Joosens and Raw (2000) suggest that governments could shift the burden of avoiding smuggling from individual countries to the manufacturers themselves, making them prove that cigarettes have arrived legally at their final destination.

Finally, research by WBB Trust (WBB 2003) found that 80% of smokers and 93% of non-smokers support a tax increase on tobacco products.

Methodology

This study involved both quantitative and qualitative research methods, using a survey of low-income tobacco users and in-depth interviews with various academic, medical, and other professionals, and with low-income tobacco users. The survey questionnaire and guide for in-depth interviews were developed over the course of several meetings with senior tobacco control advocates and researchers. Following the development of the questionnaire, it was field-tested, further revised, field-tested a second time, then revised a final time before being used for data collection.

Survey

Ten people were trained in data collection, over the course of two workshops, in which the purpose of the research, selection of geographic areas and participants for data collection, and the proper technique for filling out the form were discussed. Each of the survey questions was also reviewed and explained.

Eight areas* of Dhaka were selected for data collection, in order to reach a broad range of people: Mirpur, Pollabi, Mohammedpur, Ramna, Motijheel, Dhanmondi, New Market, Shutrampur and Uttara. Specific areas selected within those districts were Lalmatiya, Shyamoli, Kolabagan, Ajimpur, Jhigatola, Dhaka University, and Nobabpur (Motijheel, Mirpur 6, Mirpur 10, Mirpur 12, Dhanmondi, and Uttara were not further subdivided). A total of 1,015 people were surveyed, all of whom were low-income and tobacco users. Of the respondents, 917 were men and 98 women.

During the course of the data collection, two further meetings were organized with the data collectors to discuss any problems they were encountering in their work. The data was analyzed using SPSS software.

In-depth interviews

Of the ten people engaged in data collection, two people were selected and trained to conduct the in-depth interviews. A total of twenty well-educated people were interviewed, including doctors, university professors, journalists, lawyers, and high-level government officials in the Ministry of Finance, Ministry of Health and Family Welfare, Ministry of Social Welfare, Ministry of Commerce, Ministry of Law, Justice and Parliamentary Affairs.

In addition, twenty low-income people were interviewed, both smokers and non-smokers, including vendors, drivers, rickshaw pullers, and laborers. Low-income people were asked about whether the price of different products should increase or decrease; whether they buy nutritious food for their children and

* Areas are delineated as those containing a separate police station.

if not, why not; and their comments in general about what could be done to help the poor.

During the interviews, the researchers took notes on the overall responses and wrote some comments verbatim, which were then summarized by an experienced researcher; some of the verbatim comments are included here.

Results

Survey results

The survey covered 917 men and 98 women, for a total of 1,015 respondents (90.3% male and 9.7% female), from 16 to 60 years old. All respondents were tobacco users. The most common occupation of the respondents (Table 1) was rickshaw puller (28.9%), followed by small businessman (24.7%), service holder (16.8%), and laborer (11.9%).

Table 1. Occupation/profession

Occupation	Percentage
Rickshaw puller	28.9
Small businessman	24.7
Service holder	16.8
Laborer	11.9
Driver	6.2
Day laborer*	2.8
Big businessman	2.1
Tokai/homeless	1.9
Maid/servant	1.7
Beggar	1.7
Housewife	1.1
Sex worker	0.2
Farmer	0.1
Total	100.0

* Day laborer refers to those who rent their labor on a daily basis, as opposed to laborers, or blue-collar workers, whose profession involves physical labor but whose workplace is fairly constant.

Nearly all the respondents earned from 1,000 to 7,500 taka per month (Table 2).

Table 2. Monthly income

Income	Number	Percentage
Up to 1,000	30	3.0
1,001-3,000	326	32.1
3,001-5,000	449	44.2
5,001-7,500	149	14.7
7,501-10,000	47	4.6
More than 10,000	14	1.4
Total	1,015	100.0

As shown in Table 3, the most common form of tobacco used by the respondents was cigarettes (57.8%), followed by zarda (10.2%) and bidis (9.7%). A few people used a combination of different types of tobacco.

Table 3. Type of tobacco used

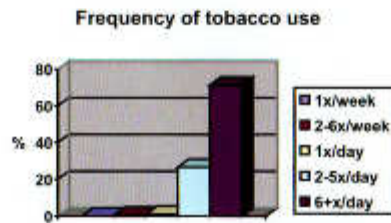
Type of Tobacco	Percentage
Bidi	9.7
Cigarette	57.8
Zarda	10.2
Tobacco leaf	1.2
Gule	0.7
Others	0.3
Bidi and Cigarette	1.1
Zarda, Tobacco leaf and Gule	3.7
Bidi/Cigarette and Zarda	9.7
Bidi/Cigarette and Tobacco leaf	0.8
Bidi/Cigarette and Gule	2.1
Bidi/Cigarette, Zarda and Tobacco leaf	1.1
Bidi/Cigarette, Zarda, Tobacco leaf and Gule	1.7
Total	100.0

Most (71.3%) of respondents reported using tobacco more than 6 times a day, while 26.7% said they use tobacco 2-5 times a day. Very few reported using tobacco once a day or less (Table 4).

Table 4. Frequency of tobacco use

Frequency	Percentage
Once in a week	0.2
2-6 times in a week	0.6
Once in a day	1.2
2-5 times in a day	26.7
More than 6 times in a day	71.3
Total	100.0

Figure 1.

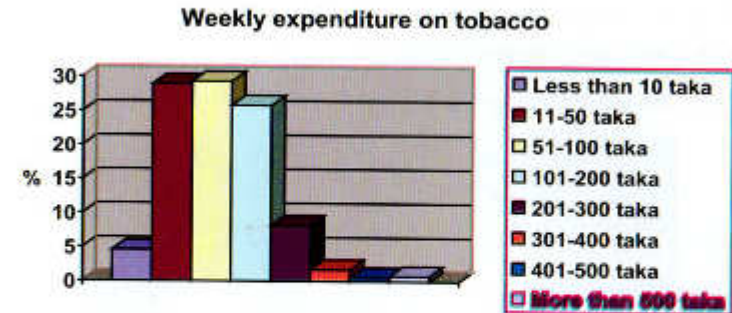


Most people reported spending from 11 to 200 taka per week on tobacco, with the highest figures being for 51-100 taka (29.3%), 11-50 taka (28.9%), and 181-200 taka (25.8%). Over 8% reported spending from 201-300 taka per week on tobacco products (Table 5).

Table 5. Weekly expenditure on tobacco

Expenditure	Percentage
Less than 10 Tk	4.6
11-50 Tk	28.9
51-100 Tk	29.3
181-200 Tk	25.8
201-300 Tk	8.2
301-400 Tk	1.7
401-500 Tk	0.6
More than 500 Tk	0.8
Total	100.0

Figure 2.

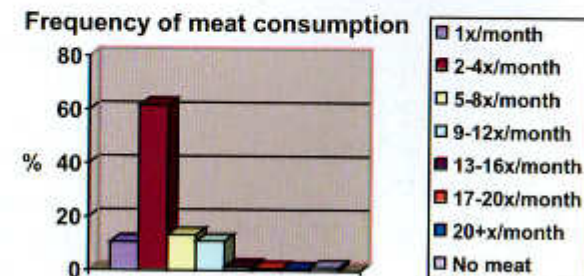


As Table 6 shows, most (61.6%) respondents reported eating meat only 2-4 times a month, while 13.2% reported consuming meat 5-8 times, 10.9% 9-12 times, and 10.6% just once a month. Very few reported eating meat over 13 times a month or not at all.

Table 6. Frequency of consuming meat

Times	Percentage
Once in a month	10.6
2-4 times in a month	61.6
5-8 times in a month	13.2
9-12 times in a month	10.9
13-16 times in a month	1.4
17-20 times in a month	0.7
More than 20 days in a month	0.4
No meat consumption	1.2
Total	100.0

Figure 3.



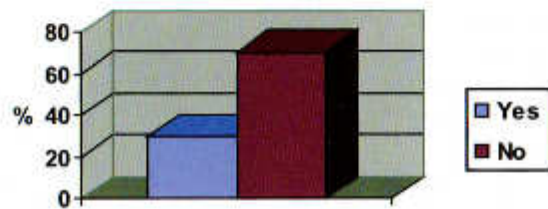
About a quarter (24.6%) of the respondents do not have young children. Of those who do, 29.8% report that they regularly purchase milk for them, and the remaining 70.2% that they do not (Table 7).

Table 7. Regularity of purchasing milk for children

Purchasing milk	Percentage
Yes	29.8
No	70.2
Total	100.0

Figure 4.

Whether regularly purchase milk for children

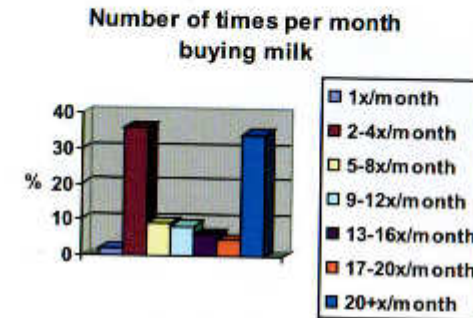


For those who do buy milk, over a third buy it just 2-4 times a month, and another third more than 20 days a month (Table 8).

Table 8. Frequency of milk purchase

Times	Percentage
Once in a month	1.8
2-4 times in a month	36.0
5-8 times in a month	9.2
9-12 times in a month	8.3
13-16 times in a month	6.1
17-20 times in a month	4.4
More than 20 days in a month	34.2
Total	100.0

Figure 5.



Almost all respondents (96.7%) said they would not like their child to use tobacco in the future, while a mere 3.3% said they would like them to (Table 9).

Table 9. Opinion about tobacco use by future generation

Would like child to use tobacco	Percentage
Yes	3.3
No	96.7
Total	100.0

Figure 6.

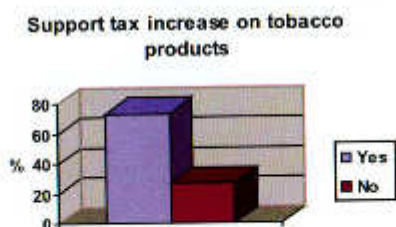


The vast majority of respondents (73.2%) said they think the tax on tobacco should increase, while 26.8% said they think it should not (Table 10).

Table 10. Opinion about increasing taxation on tobacco

Opinion about increasing tax on tobacco	Percentage
Yes	73.2
No	26.8
Total	100.0

Figure 7.



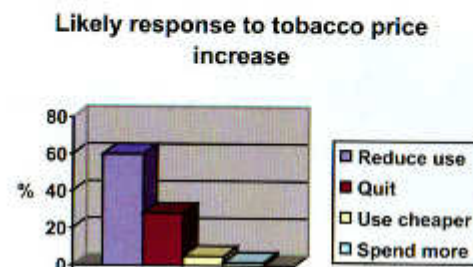
"The tax on tobacco should be as high as possible. The higher the price, the more the poor will be encouraged to stay away from it." --Mahmud Selim, General Secretary, Bangladesh Udichi Shilpi Gosthi (cultural organization)

When asked about their likely response to a potential increase in tobacco taxes, virtually all respondents said they would either reduce tobacco use (60.1%) or give up tobacco entirely (28.2%). Only 5.2% said they would likely switch to lower-priced tobacco, and just 1.9% said they would be likely to spend more money on tobacco and less on other items (Table 11).

Table 11. Likely response to a tobacco price increase

Likely response to tax increase	Percentage
Reduce the use of tobacco	60.1
Give up tobacco use	28.2
Use low price tobacco	5.2
Spend more on tobacco and less on other items	1.9
Other	0.4
No response	4.2
Total	100.0

Figure 8.

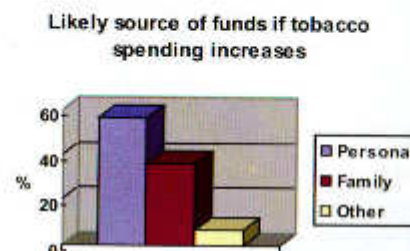


For those few saying that they would be likely to increase their expenditure on tobacco and spend less elsewhere (Table 12), more than half (56.8%) said they would take the money from their personal expenditures, while 36.5% said they would spend less on family needs.

Table 12. Opinions about sources of money if spending more on tobacco

Sources	Percentage
Personal	56.8
Family	36.5
Others	6.7
Total	100.0

Figure 9

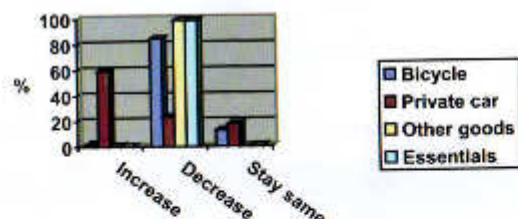


When asked about the optimal price of different commodities, in terms of whether the price should rise, fall, or stay as is, virtually everyone (98.7%) said that the price of daily essentials and other goods should decrease. Most (84.4%) also thought that the price of bicycles should fall, and over half (59.2%) thought that the price of cars should increase (Table 13).

Table 13. Opinion about price change of selected commodities

Selected commodity	Should increase	Should decrease	Should remain as is	No comment
Bicycle	2.3%	84.4%	12.7%	0.6%
Private car	59.2%	22.9%	17.5%	0.4%
Other goods	0.7%	98.7%	0.3%	0.3%
Daily essentials	0.1%	98.7%	0.9%	0.3%

Opinion about change in price of selected commodities



Result of in-depth interviews (IDIs)

Low-income people

"Dal, rice, cooking oil, and so on, the products that are necessary for life, they should have a lower price. Tobacco products—bidis, cigarettes—the price of those should go up. The more the price increases, the less people will use them."
--Md. Sabuj, rickshaw puller, Kolabagan

In the in-depth interviews, *all* low-income people said that the price of basic goods (including food, clothing and housing) should decrease, while the price of tobacco products should increase. They felt that an increase in the price of tobacco, resulting in a decrease in its use, would in fact prove a further benefit to the poor. They said that due to their low income, they are unable to feed their wife and children eggs, milk, meat, and other nutritious foods, but that if the price of such foods decreased, they would buy them in abundance for their family members.

"The price of cooking oil, fertilizer, and medicine should come down. The price of food must come down. Cars, refrigerators, air conditioners—those are for the rich, the price of those can go up." --Abdul Rashid, driver, Dhanmondi

Low-income people said that those preparing the annual budget know that the price of many goods increases each year, with the new budget. Those people also know, they said, what is essential for life, such as rice, dal (lentils), potatoes, cooking oil, and clothing. Since tobacco products are not essential for life, and are even dangerous, the prices of bidis, cigarettes, and other tobacco products should be high. "The higher the price, the less people will consume," was a common refrain.

"The price should be low on the things that people need everyday. If you don't smoke, there's no problem. If you use tobacco, it'll kill you, so there's no problem raising the price." -
-Halima, maid servant, Bangshal

Some of the low-income people suggested that the price of products purchased by the rich, such as luxury goods, mobile phones, perfume, televisions, air conditioners, cars, refrigerators, and gold ornaments should, along with the price of tobacco products, increase. Others commented that while it is always necessary to eat rice and dal, people don't always consume tobacco products; since the latter are harmful, they should have a high price to discourage use. Several people remarked that while the price of necessary items like food should decrease and of unnecessary or dangerous products should increase, government officials know what is right to do, and which products should rise or drop in price.

"The price of things used by the rich should go up, like televisions, refrigerators, cars. Nobody will be hurt if those prices go up. The price of bidis and cigarettes should go up too. If I want, I'll use them, if I don't, I won't." --Md. Habib Molla, van puller, Bangshal

Well-educated people

Various issues were discussed during the in-depth interviews

with well-educated people, included the fact that, while the price of most products has increased steadily over the last several years, the price of tobacco products has remained essentially the same. People were asked what advantages and disadvantages this lack of price increase entailed. Almost everyone responded that there were no advantages, and in fact major disadvantages, to the situation, as it attracted more and more people to using tobacco, which harms the health. That is, people's health is being harmed as a direct result of the low price of—and thus incentive to use—tobacco.

"There is no advantage to the price of tobacco products being low, but there are many disadvantages. As a result of the low prices, people are using a lot of tobacco, and youth can buy it easily, so they are becoming addicted at young ages. As a result, we are seeing many health, mental, and economic problems from its use." --Gulbor Rahman, bank employee, Sonali Bank

People did suggest one benefit to the low price of tobacco—in encouraging more people to use more tobacco, those who sell it receive an economic benefit, albeit at the expense of people's health. Meanwhile, the inducement to use tobacco, they said, has a strong and dual negative effect on the poor: they waste a significant portion of their income on tobacco products, and their health suffers as a result of tobacco use. Higher use of tobacco by the population, in turn, leads to an increase in health spending to treat tobacco-related illnesses, many added.

Others commented that the low price of tobacco products serves to encourage youth to try tobacco, and as a result, to become addicted. Some mentioned the loss to government revenue that would have resulted from raising the tax; others commented on the significant health effects of secondhand smoke, which are worsened by the low price of tobacco products encouraging people to smoke more.

"The higher the tax, the more the number of people using it will fall. But addiction will remain, and some people will still use it, so the government will continue gaining revenue, and

revenue will even go up." --Dr. Anwarul Anam Kibriya, Health and Hope Hospital, Ltd.

When asked how the poor would be likely to respond to an increase in tobacco taxation, people responded that of course they would decrease their tobacco use and spend more money on other products instead, rather than decreasing spending on other products in order to continue using tobacco.

"As a result of the low tax on tobacco products, government revenue is failing to rise. At the same time, a large number of low-income people, rather than buying necessary goods, are wasting their money on tobacco products." --Akhtar Jaman Khan Kabir, Deputy Secretary, Ministry of Commerce

Many said that it is wrong to sell any product that causes economic, social, and physical harm to the family members of those who purchase it. In terms of the possible economic harm to those relying on tobacco for an income, people suggested that it would be government's responsibility to help such people find an alternate source of income, if in fact they become jobless as a result of decreased tobacco use. Others said that while there are various luxury goods that are unnecessary, tobacco is alone in causing actual physical harm to people (this of course disregards the number of people, particularly pedestrians, killed by cars every year); controls of such a harmful product are of course needed.

"When the price of any product is low, the demand and use of that product increases. With the price of tobacco products low, many people are using them. Yet using tobacco harms their health. Therefore, by keeping the price low, people's health is being harmed." --Habibullah Bahar, Professor and Chairman, Jaganath University, Dhaka

People said that tobacco taxes should be increased sufficiently to cause significant declines in use. As taxes go up, they said, government revenue will increase, and use of tobacco will gradually decline. As a result, people's health will benefit, which in turn will result in lower government expenditures on health. Thus, the government will benefit financially in two ways (as well as from having a healthier population).

"I don't know what benefit there is from keeping the price of tobacco products low. We passed a law for tobacco control, so there can't be any advantage to restricted products. Of course there is an advantage to those in the business of selling tobacco. But there's no advantage to the population of our country." --Dr. Anisul Awal, Ph.D., Deputy Chief, Ministry of Health and Family Welfare

Interviewers mentioned World Bank data showing that an increase in tobacco taxes will have the strongest effect, in terms of reducing future tobacco use, on the young and the poor. Almost everyone responded that tobacco taxes should be increased significantly; an increase in tax, they said, would result in an increase in price. The price increase will lower demand; this is a basic rule of economics. People will reduce their use, or quit entirely, they said. Many said that it will not be possible to achieve significant reductions in tobacco use through law alone; it is also imperative to raise taxes, which will assist in accomplishing the goals set forward in the tobacco control law.

"The tax on tobacco should increase sufficiently to put tobacco products out of the reach of the poor." --Dr. Sunil Kumar Sarkar, Assistant Professor, National Institute and Hospital of Cardiovascular Diseases

Others said that it is not possible to reduce tobacco use by raising taxes alone. They suggested that it is also necessary to create public awareness and to enforce the existing tobacco control law. Both taxation and law enforcement must be enacted in combination, they said, in order to achieve the large and sustained decreases in tobacco use needed to improve public health.

A few people expressed a concern that an increase in tobacco taxes would result in crime or increased corruption, with the pressure to find the money to buy tobacco destroying people's character. In order to create healthy, disease-free, solvent life, tobacco taxes should go up, and there should be controls on selling tobacco to restrict access, said others.

"We of course don't want a lot of people to use a harmful

product like tobacco. We want people to spend their money on essential goods, so that they can live healthy and joyful lives." --Modhumoti Chakraborti, Assistant Professor, Borguna Government College

Some suggested that the tariff rate for tobacco should be based on per capita income and an analysis of tariff rates in other countries. In terms of the potential harm to the most addicted among the poor, who might well suffer economic consequences of an increase in price, people suggested that the government could institute various programs to help them, such as counseling on quitting, anti-tobacco ads, and import and distribution of low-cost cessation aides.

"Not being an economist, I don't want to offer a specific taxation level. But the tax should be high enough to discourage people from using it [tobacco]." --Niranjana Adhikari, Lecturer, Dhaka University

Many people also felt that some of the revenues from an increase in tobacco tax could go towards tobacco control, education, health, and social welfare programs.

Discussion

Many interesting issues emerge in the research. While 71% of respondents reported using tobacco over six times a day, 62% reported eating meat only 2-4 times a month, and of those with children, 70% report that they do not regularly feed them milk. That is, tobacco, seen as highly affordable despite many spending 50-200 taka per week on it, is consumed frequently, while meat and milk, seen as unaffordable, are rarely purchased. The low price of tobacco is, ironically, potentially a contributor to high rates of spending on tobacco, thus further diverting funds from wholesome foods for one's family. In fact, earlier research on tobacco and poverty shows that "Despite—or in fact because of—tobacco prices remaining fairly stable in Bangladesh, per capita expenditure on tobacco has increased significantly" (Efroymson et al. 2001). Low prices contribute to higher use and thus less money available for basic needs.

"The price of rice, dal, and other food should come down. If the price of bidis and cigarettes goes up, I'll think before I smoke. Then when I used to smoke five sticks, I'll only smoke two." --Md. Dilip, shoe repairer, Alubajar

Despite the frequent tobacco use of the participants, virtually everyone (97%) expressed the desire that their children *not* use tobacco in future. This suggests that tobacco use may be more of an addiction than a personal choice, and that part of the reason that the majority (73%) support an increase in tobacco taxes is that they hope it would motivate them to quit or at least significantly reduce use. This suggestion is made clearer by the fact that 28% of respondents felt that they would quit using tobacco if the price increased, while 60% felt they would reduce use. That is, over 88% of respondents believe that they would not increase spending on tobacco if the tax increased. These figures answer two arguments as to the potential effects of a tobacco tax on the poor: it would be extremely popular, and would be unlikely to harm the families of tobacco users faced with higher prices of tobacco products.

"By raising the tax on tobacco, the price of bidis and cigarettes will increase, and as a result, the poor will use less tobacco and many of those who would have started to smoke will not." --Tahmina Begum, Deputy Secretary, Ministry of Finance

Finally, the respondents suggested that they would prefer other products, not tobacco, be kept inexpensive to benefit them. Virtually everyone (99%) believed that basic necessities should be cheaper than currently, and many (84%) also believed that the price on bicycles should decrease. That is, any negative impact on the poor of a higher price of tobacco could easily be offset by reducing the spending by the poor on products that are not simply not harmful, but actually beneficial. For instance, the purchase of a bicycle could greatly reduce transport costs, a benefit that would last for years. Surely this is more sensible than keeping the price of an addictive and dangerous product low, when by doing so, its use is encouraged and spending on it

detracts from spending on basic goods.

"The price of food, clothing, housing and transport should decrease. Bidis, cigarettes, jorda and other tobacco products should increase. If the price of those things go up, then people will consume less. Nothing bad will happen to people for using less tobacco. Those things are harmful. If the price goes up, I won't use them." --Md. Jamal, low-level employee, Kolabagan

The fact that over half (59.2%) of the respondents feel that the price of cars should increase is not surprising, as clearly the poor neither can buy, or are likely ever to be able to buy, a car. The result may also reflect a sensation that while cars are allowed to occupy precious road space for hours at a time on a daily basis at no cost, street vendors either must pay for the space they occupy, or are threatened with eviction by the police. The lack of more universal support for a higher tax on cars could be due to the high status given the rich by society overall, reflected even among those who will never benefit from that status, and who in fact are daily harmed by inequality.

Meanwhile, all the low-income people interviewed in-depth felt that the price of basic goods should come down, and of tobacco products should go up. This universal support among the low-income is notable, and again suggests that a high tax on tobacco could be immensely popular.

The views of the low-income were echoed, though in different language, by the well-educated people interviewed. Again, there was strong support for higher tobacco taxes, with multiple benefits anticipated, including lower smoking rates, higher government revenue, and reduced government spending to treat the health problems caused by tobacco use. Finally, people suggested that tax and tobacco control law—as international experience suggests—complement each other, and are both needed to reduce tobacco use and thus improve public health.

"The tax on tobacco products should be high enough to cause the price of tobacco to go up enough that people will think about it before buying it, and realize that buying tobacco simply means harming both their health and their economic

well-being, nothing more. We have to discourage them from using tobacco by means of high prices." --Mainul Kabir, Deputy Secretary, Ministry of Law, Justice and Parliamentary Affairs

Recommendations

Government policy should explicitly recognize the multiple benefits of increasing taxes on tobacco products, as well as honoring its commitments as expressed in the WHO's FCTC. In order to maintain high prices on tobacco products, discourage current and future use, and reduce the negative consequences of tobacco use, *and* to continue providing a large and growing source of revenue to the government, it would be important to:

- Maintain high prices and taxes for *all* tobacco products, including oral tobacco and bidis;
- Regularly increase taxes in order to raise the price of tobacco products by 20-25% above average rates of inflation and income growth, to ensure that affordability constantly decreases;
- Prohibit all tax-free and duty-free sales of tobacco products;
- Allocate and sustain a significant part of government revenues, including those from tobacco taxes, to fund national tobacco control programs and possibly other programs to improve public health; this is already being done to some extent in four states of Australia as well as Canada, Ecuador, Finland, French Polynesia, Guam, Iceland, Korea, Mauritius, Nepal, New Zealand, Peru, Portugal, Thailand, three states of the US, and Western Samoa (WHO 2000);
- Create appropriate harmonization of taxation and prices of tobacco products, in order to avoid the phenomenon of switching from a highly-priced tobacco product to a lower-priced one;
- Pass a government policy mandating regular increases in tobacco taxation above rates of inflation and income growth.

While there is little if any connection between tax rates and the extent of smuggling, and smuggling rates have been shown to be more related to levels of corruption than to tax rates (World Bank 1999), it is still important to address smuggling. Possibilities include:

- Adopting measures to ensure that all packages of tobacco products sold or manufactured carry the necessary markings and product information, which will allow the products to be effectively tracked and traced;
- Monitoring and collecting data on cross-border trade in tobacco products, including on illicit trade, and exchanging information among relevant national authorities and international bodies;
- Enacting and/or strengthening the corresponding legislation and penalties.

In terms of the final point, it is important to note that often penalties for smuggling are so minor as to be completely ineffective as a deterrent. Strong penalties can help deter potential smugglers.

Finally, Joosens and Raw (2000) suggest that governments could "... require 'chain of custody' markings on all packages of tobacco products, placing the onus on the manufacturers to show that cigarettes arrive legally in their end user markets. Manufacturers might also apply for export licences for cigarettes. Only such action at international level will resolve the problem, but it has now been shown to be soluble." That is, the tobacco industry itself should be forced to become responsible for reducing smuggling, and effective measures are available to address the problem.

WHO (2002), *European Strategy for Tobacco Control*. Copenhagen: World Health Organization Regional Office for Europe.

WHO (2005a), *Impact of Tobacco-related Illnesses in Bangladesh*. Dhaka, Bangladesh.

WHO (2005b), *The Millennium Development Goals and Tobacco Control, an opportunity for global partnership*.

World Bank (1999), *Curbing the Epidemic, Governments and the Economics of Tobacco Control*.