

# Tobacco Control: A case for poverty reduction and improving achievement in other MDGs



Case Study Brief Series No. 6

April 2013



United Nations Regional Thematic Working Group on Poverty and Hunger in Asia and the Pacific

## Introduction

Tobacco use and production are closely linked to poverty and overall development. Though most people are aware of the health hazards of smoking, only few know about the hazards of tobacco farming and manufacturing<sup>1</sup> both in terms of health of the producers and that of the environment. Health threats include the large amount of pesticides being used on the plant and illness related to handling raw tobacco leaves. Green Tobacco Sickness is a type of nicotine poisoning caused by the dermal absorption of nicotine from the surface of wet tobacco plants. Tobacco cultivation also causes environmental pollution and degradation and deforestation.

**Tobacco is intricately linked to the Millennium Development Goals for poverty eradication, gender, child and maternal health and environment.**

Tobacco use as well as production imposes a huge economic burden on families, societies and governments. Escalating health care costs for treating tobacco related chronic illnesses is taking a toll on the exchequer of governments and savings of individuals. People whose livelihood depends on tobacco production are often pushed into debt burden and bonded labour, thrusting them further into poverty. Thus, tobacco is a multifaceted issue that is explicitly linked to many of the Millennium Development Goals (MDGs) such as poverty eradication, gender equality, child and maternal health and environment. Policy and strategic interventions aiming at reducing the production, manufacturing and use of tobacco and tobacco products will, if implemented effectively, contribute significantly towards alleviating poverty and facilitating the growth of economy and uplifting the wellbeing of people.

This case study brief discusses multiple implications of tobacco use and production on MDG achievement by

bringing a case of Myanmar and Bangladesh respectively. The Brief ends with the discussion on alternative cropping as a solution for health hazards of the tobacco producers and of the environment and producers' income poverty.

## **Linkages between tobacco use and poverty: a case of Myanmar**

In Myanmar domestic tobacco products are cheaper than imported ones, and wide varieties of them are readily available in the markets. Since tobacco products are easily accessible, available, and their use is culturally acceptable, the prevalence of both smoking and smokeless forms of tobacco is high in Myanmar.

Numerous studies around the world reveal that tobacco use is common among people in the lower income

groups and a significant proportion of their income is spent on tobacco products. Likewise, a 2005 study in Myanmar reveals that the poor and uneducated people are more likely to use tobacco products than those with higher incomes and more education<sup>2</sup>. Tobacco expenditure as a percentage of income was highest among the lowest income group and declined at higher levels of income<sup>3</sup>. Tobacco users divert their income to purchasing tobacco products instead of spending it on nutrition, health, education and other basic necessities<sup>4</sup>. Such a diversion of income to tobacco products leads families to malnutrition, diseases, illiteracy, financial crash, and impoverishment; not to mention, tobacco's impoverishing effects through catastrophic health expenditures<sup>5</sup> and lower labour productivity<sup>6</sup> due to chronic non-communicable diseases<sup>7</sup>. There have been stark revelations on the relationships between expenditures on tobacco use and potential causes of poverty among people

**Tobacco control could be used as a developmental solution for both health and poverty issues.**

in Myanmar.

### ***Reducing tobacco use as a tool to alleviate poverty***

If the yearly expenditure on tobacco is extrapolated for the whole country, the amount lost in tobacco purchases would run in millions of kyats. With the tobacco use the economic status and the quality of life of the poor would further dwindle and people would continue to fall into the vicious cycle of poverty. Thus, reducing tobacco use is an important element to consider while developing policy and programmatic interventions on poverty eradication and striving towards achieving the MDG 1.

The prices of tobacco products were inversely related to their consumption; the higher the prices of tobacco products, the lesser the people consumed them. It is estimated in Myanmar an increase of 10 percent in the price of tobacco products would decrease consumption by about 16 percent<sup>8</sup>. The most price sensitive groups were youth and low-income groups. Thus, application of effective tobacco control policies can facilitate in alleviating poverty, particularly among those who are in lower socio-economic groups. A combination of evidence-based tobacco control strategies – for example, raising taxes on all forms of tobacco and creating awareness of tobacco use as a developmental issue than merely a health issue by initiating policy dialogue with different development partners – could be used as one of the developmental approaches for a country to bring down the tobacco consumption and hence reducing the level of poverty<sup>9</sup>. A range of tobacco control<sup>10</sup> strategies have begun in Myanmar<sup>11</sup>.

### ***Linkages between tobacco cultivation and poverty – case of Bangladesh***<sup>12</sup>

Bangladesh has a long history of growing tobacco. Tobacco accounts for only 0.4 percent of total agricultural land, amounting to about 75,000 acres of land being under tobacco cultivation, and there has been a gradual decline in tobacco cultivation in the last few years. Despite the overall decline, there has been a substantial increase in production of tobacco in certain local areas. People have the misconception that tobacco is a profitable crop, and they invest their resources and efforts in making tobacco as one of their main sources of income.

#### *Linkages between tobacco cultivation and income poverty*

This perception of profitability is based on the fact that tobacco has a guaranteed market; besides, there is the patronization by tobacco companies. The companies try to draw farmers into growing tobacco by providing different facilities and perks. Once the farmers become their registered growers, the company's extension workers teach them the entire procedures for yielding a good tobacco harvest. They also provide farmers with free seeds, fertilizers, pesticides and follow up extension services. The benefits of tobacco growing are mainly in the

case of registered farmers only, and in reality, the companies recruit mostly well off farmers.

The contract growers of tobacco sell leaves directly to the companies. However, if the leaf grade does not meet the company's standards, the product is either rejected or the farmer is given a very low price for it. Further, the company does not accept more than the stipulated amount of leaf. These contract growers then have to sell their product in the open market or through the middle person.

The bulk of the non-registered farmers also sell their tobacco to the middle person but receive a lower price than those registered for the quantity that a middle person may need to buy after purchasing from registered farmers. The possibility of the leaves perishing fast is low, so that farmers have time to wait for next buyers. Even though the farmers have to compromise on the price, they know they can sell their harvest eventually.

International evidence suggests that the spread of transnational companies has hardly resulted in improvements in the living standards of those who worked for them. On the contrary, studies have shown that the profitability of tobacco is overestimated. The profit of tobacco production, if any, emerges from the fact that most farmers economize on labor cost required for producing this highly labour intensive crop by using their own labour and that of their families. Families often take their children out of school to work in the fields. If the value of this free labor is taken into account, tobacco loses much of its profit margin.

The entire process of tobacco cultivation is input intensive, making it an expensive crop to grow<sup>13,14</sup>. The high cost of tobacco cultivation means that farmers often have to access loans or credit from external sources. Most of the poor farmers borrow money during the tobacco growing season and repay once the produce has been sold. The share of returns that they are left with barely lasts until the next tobacco season, which forces them to borrow again, leading them into a vicious cycle of indebtedness.

Tobacco companies provide loans for growing tobacco. They are well aware of poverty among the villagers and they indeed exploit this situation. Once a farmer avails the loan from a company, he is bound to sell his produce to that company only, even if he could get a higher price from other companies.

#### *Linkages between tobacco cultivation and other MDGs*

Malnutrition is a serious problem in Bangladesh. A recent survey shows that 43 percent of children below five are stunted and 47 percent underweight. Also, nearly a third of women are undernourished and have a low body mass index<sup>15</sup>. This dietary imbalance reflects, amongst others, insufficient of domestic production of food crops.

Not only does land under tobacco directly compete with other crops such as fruits and vegetables but also the tedious farming process leaves no time for growing other food crops. Also returns left for the household after paying off all the loans is too meager to afford a balanced diet. During the curing process, when families run out of wood, they sometimes have to cut down their large fruit bearing trees in their yard, further depriving families of their fruits intake.

Tobacco cultivation also causes environmental pollution and degradation. Tobacco fields are mostly located near water bodies. The chemical residue from the pesticides used for the cultivation of tobacco flows back to the water bodies. The contamination spreads when the water is used for domestic purposes. Since the tobacco depletes the soil of its nutrients, farmers have to use expensive chemical fertilizers to regain its fertility. The harm tobacco cultivation does to soil fertility is another layer of hidden cost of tobacco cultivation.



Women involved in tobacco cultivation with tobacco green sickness

Tobacco cultivation also causes deforestation. Firstly, hills are cleared for creating the flat land for growing tobacco. Secondly, about 30 percent of the total cost of the tobacco production is for curing the leaves. Six tons of wood is required to cure the tobacco grown on just one acre of land. Huge areas of forests have disappeared over the period of time in some of the districts in Bangladesh and substantial part of this deforestation is attributed to tobacco cultivation.

It has been demonstrated that the economic benefit of tobacco cultivation is far outweighed by the cost of its impact on human health and environment. In addition to environmental problems discussed above, health threats include the large amount of pesticides being used on the plant and illness related to handling raw tobacco leaves – continuous exposure to the smell of nicotine and dermal absorption of nicotine from the wet green leaves. One estimate shows that the cost of tobacco usage to the country offsets its benefits by US\$ 442 million per annum. Hence, tobacco cultivation remains one of the potential causes of poverty in Bangladesh, especially among the low income groups. If the tobacco cultivation is switched to other food and non-tobacco crops, there could a reduction in food insecurity, malnutrition, tobacco related morbidities, health care cost, poverty, and en-

vironmental damages in Bangladesh.

### **Advantage of alternative cropping**

Alternative cropping cases in Kushtia, Bandarban, and Cox'bazar districts in Bangladesh show that net return from cultivation of crops such as potato, maize, spices and pulses was higher than tobacco<sup>16</sup>. Another study on multiple rabi crops combination in the same three districts revealed that farmers got remarkably higher net profit from multiple rabi crops cultivation – Taka 1.42 from each taka of investment – compared to tobacco which requires higher total costs of labour and chemical fertilizers in cultivations<sup>17 18</sup>.

Vegetable and fruits farmers enjoy multiple harvests as opposed to once a year harvest of tobacco. With good mix of varieties of

*One of the major advantages that people are realizing of switching from tobacco to food crop is saving money on labour and fertilizers.*

vegetables and fruits, this provides better food security and multiple opportunities for farmers to sell their produces when they need money. However, some of the common reasons that farmers give as to why they cultivate tobacco instead of other food crops are: difficulty in obtaining seeds to grow vegetables; uncertainty in finding a good market for other products<sup>19</sup>; other crops are easily perishable; difficulty obtaining loans for non-tobacco crops<sup>20</sup>; poor knowledge of plausible alternatives; and unavailability of free inputs and other facilities for non-tobacco crops<sup>21</sup>.

The Tobacco Control Act of Bangladesh, 2005 have provisions on discouraging the farming of tobacco and provisions of loans promoting alternative crops. Shifting out of tobacco into other crops require a broad diversification programme with the help of the government, NGOs and other stakeholders by providing technical assistance in making and sustaining transition to alternative cropping<sup>22</sup>.

### **4. Conclusion**

It is clear that tobacco has devastating consequences not only to the health of the individual using the product or exposed to second-hand smoke, but also to the environment and to the economic health of individuals and governments. Money spent on tobacco products deprives families of much needed income that could be better spent towards necessities such as improved nutrition and education. In

*Successful switching from tobacco to food crops requires provision of good extension services, availability of agricultural and other loans, easy access to markets, appropriate information and services on growing crops other than tobacco, and improving the knowledge of the farmers about the ill-effects of tobacco on human health and environment*

addition, many countries are reluctant to implement strong tobacco control policies and programmes as they mistakenly think that this will negatively impact tobacco farmers. At the same time, many tobacco farmers are caught in a cycle of poverty, to which they see no way out, and with proper support would be willing to switch to alternative crops. There is already much documentation which highlights the need for crop diversification, including many studies which outline the problems particular to countries of South East Asia. However, initiatives to address this important issue in the region have been more limited. In countries such as Bangladesh and India, several pilot projects have been conducted and the initial results appear promising, but there is still an imperative need for a multi-sectoral strategy to scale up these types of projects. With a comprehensive approach, including serious dialogue among such groups as government, civil society and UN agencies, appropriate actions can be taken to reduce poverty resulting from tobacco expenditures and also to ensure sustainable livelihoods for farmers who are in need of assistance to switch to alternative crops.

## Endnotes

- 1 While this case study brief focuses on tobacco farming, it is worth highlighting that the tobacco processing is often taking place in cottage industries, and the majority of the workforce are also the poor. For instance, the figures from Myanmar shows that about 60 percent of the workforce of the cottage industries that produce cheroots – a type of cigar, is constituted of women and children. They are not officially registered as employees and they are generally paid low. (Kyaing 2004).
- 2 The sample comprised mostly trishaw drivers, drivers, bus assistants, manual labourers, domestic workers, daily wage and tobacco workers. More than half of them earned less than 1,500 kyats (about 1.5 dollars) per day. About 50 percent of them smoked cheroots (tobacco rolled in a leaf) while others used cigarettes, cigars and pipes. Around 85 percent were daily smokers and 87 percent daily users of smokeless tobacco. Four in every five persons chewed betel quid with tobacco. Many started using tobacco products mainly due to peer pressure and wanting to experiment. Most people used cheroots, while those who earned more smoked manufactured cigarettes. However, people often switched to cheroot from cigarettes because of its lower price as well as the belief prevailing among people that cheroot is less harmful than cigarettes. However, expenditure on smokeless tobacco was almost two times higher than expenditure on smoked products. Kyaing, Percucic and Rahman (2005).
- 3 Ibid. About 6 percent of daily income was spent on smoked tobacco products, 10 percent on smokeless products and 15 percent on both the products. It was as high as 12 percent for smokers, 20 percent for smokeless tobacco users, and 33 percent for users of both smoked and smokeless tobacco products for those belonging to the lowest income group.
- 4 Ibid. Income spent on smoked tobacco products during the past year was 2.4 times higher than its spending on education and 5.5 times higher than on health care. For cigarette smokers, expenditures were much higher than expenditure on education and health. It was estimated that with the amount spent on a pack of 20 cigarette sticks could buy 8 tons of rice that could feed a family of five for a day or 20 tickles of fish/meat or 6 eggs, or 2 viss of lentils (1 tickle=0.525 troy ounce; 1 viss=3.6 pounds). Similarly, money spent on cheroots and smokeless tobacco products per day would fetch sufficient food items to feed a small family. Users of smokeless tobacco spent 3.2 times more than on education and 8.3 times higher on health care. However, users of both smoked and smokeless products spent 13.4 and 43.6 times higher than on education and health care respectively.
- 5 A study from India estimated that the odds of incurring catastrophic health expenditure were 160 percent higher for cancer as compared with a communicable disease (Mahal et al. 2010).
- 6 For instance, absenteeism, loss of job, disabilities and burden of care.

- 7 Tobacco use is the only risk factor that is responsible for all four major NCDs (cancer, diabetes, cardiovascular disease and chronic obstructive pulmonary disease). NCDs are becoming a major threat to low and middle-income countries, which already account for 80 percent of global NCD mortality.
- 8 Kyaing (2003).
- 9 Some other strategies to counter poverty through tobacco control are as outlined below: Informing decision makers about the burden that tobacco use imposes on the poor and the contribution of tobacco use to malnutrition and ill health; Educating poor people and enhancing their knowledge on tobacco use and its implication of health, education, wellbeing and poverty; Incorporating tobacco control elements in all developmental programmes of the country; Developing optimized tobacco interventions for poverty reduction and achievement of the MDGs; and increasing political support for investment in tobacco control from other sectors and from donors.
- 10 Myanmar became a Party to the WHO Framework Convention on Tobacco Control on April 21, 2004.
- 11 A three-minute documentary was produced as a joint collaboration of the National Tobacco Control Programme and Myanmar Radio and Television (MRTV). This documentary shows the high expenditure for tobacco users on tobacco versus expenditure on health and tobacco and suggested in pictograms how the money spent on tobacco could be used for buying food for better nutrition and development. Dissemination workshop was also held for health professionals, stakeholders and the media.
- 12 This section is based on Naher and Efrogmson (2007).
- 13 Molla (2011) found, in his study in Khustia, Cox'sbazar and Bandarban districts in Bangladesh, that tobacco production requires excessive amount of chemical fertilizers. In addition, 80 percent higher human labour is required in tobacco production, and tobacco farmers paid more than 21 percent higher wages per person days compared to multiple rabi crops cultivation. As a result, the total cost per hectare of tobacco production was more than 119 percent compared to multiple rabi crops including potato, maize, lentil, coriander, French bean and felon.
- 14 After three years of growing tobacco, the quality of the leaf dwindles and the profitability of growing also declines significantly.
- 15 Ahmed et al. (2012).
- 16 Tito and Islam (2011).
- 17 Molla (2011).
- 18 Benefits of switching from tobacco cultivations to alternative cropping were also studied in India. For more details, please see Ramakrishnan (2012).
- 19 In case of the 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. The absence of cold storage where farmers store food crops till an appropriate buyer is found further compounds the problem. Another reason for not wanting to shift out of tobacco is the excess supply of food crops which brings down the price of the crops. This is not the case with tobacco, market is almost always there. Therefore, the uncertainty surrounding the marketing of food crops is a major reason for farmers not to switch out of tobacco growing.
- 20 Loan facilities are poorly developed for non-tobacco crops. Farmers have to get loans from the local money lender who gives loans at exorbitant rates of interest. Although loans are available at much lower rates from banks, the high transaction costs, complicated paper works and geographical barriers dissuade farmers from availing bank loans. Farmers have always faced shortage of capital to invest in the agricultural production. Informal moneylenders have a long history of exploiting poor farmers. Logistic constraints and complicated bureaucratic procedures involved in securing an agricultural loan discourage farmers from shifting out of tobacco cultivation. 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. Often loans farmers get are less than what they had applied for. Often corrupt practices of bank officials and other influential local people adversely affect the prospect of deserving farmers from getting the loans. On the other hand, tobacco companies give easy loans for growing tobacco, which act as a major attraction for farmers to grow this crop.
- 21 For example, agriculture extension services are rare for non-tobacco crops.
- 22 Some key policies and programmes include: improved loan services for

low income farmers, technical assistance in switching from tobacco to food cultivation, assistance in making fertilizers and harvesting seeds, provision of marketing facilities and expanded cold storage, loans to increase access to low cost transports and demonstration plots for technical assistance.

## Acknowledgements

Barbara Zolty and Nyo Nyo Kyaing from WHO Regional Office for South-East-Asia coordinated the preparation of this case study brief. Other coordination support, editorial assistance and review provided by Khalilur Rahman of WHO Liaison Office with UNESCAP in Bangkok, Yumiko Yamamoto, Kazuyuki Uji and Anyamanee Somboonsabdee of United Nations Development Programme Asia-Pacific Regional Centre and Phu Huynh of International Labour Organization in Bangkok are acknowledged.

## Disclaimer

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## References

Ahmed, Tahmeed, Mustafa Mahfuz, Santhia Ireen, A.M. Shamsir Ahmed, Sabuktagin Rahman, M. Munirul Islam, Nurul Alam, M. Iqbal Hossain, S.M. Mustafizur Rahman, M. Mohsin Ali, Fatima Perveen Choudhury, and Alejandro Cravioto (2012) "Nutrition of Children and Women in Bangladesh: Trends and Directions for the Future," *Journal of Health Population and Nutrition* 30(1) (March): 1–11. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3312353/>

Kyaing, Nyo Nyo, Anne-Marie Percucic and Khalilur Rahman (2005). "Study on Poverty Alleviation and Tobacco Control in Myanmar," Economics of Tobacco Control Paper No.31. World Bank, Washington DC. September 2005, <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/MyanmarTobaccoFinalSm.pdf>

Kyaing, Nyo Nyo (2004). "Study on Types and Constituents of Tobacco Used in Myanmar," a paper by National Tobacco Control Project, Department of Health, Ministry of Health, Myanmar.

Kyaing, Nyo Nyo (2003). "Tobacco Economics in Myanmar," Economics of Tobacco Control Paper No.14. World Bank, Washington DC. October 2003, [http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Kyaing-Tobacco\\_whole.pdf](http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Kyaing-Tobacco_whole.pdf)

Mahal, Ajay, Anup Karan and Michael Engelgau. (2010). *The Economic Implications of Non-communicable Disease for India*, <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/EconomicImplicationsofNCDforIndia.pdf>

Molla, Md. Mosharraf Uddin (2011). "Economics of Producing Multiple Rabi Crops by Substituting Tobacco in Bangladesh," paper presented at the International Workshop on Impact of Tobacco Cultivation and Policy Advocacy for Shifting to Food and Other Agricultural Crops, Dhaka, Bangladesh, 28-30 March 2011, <http://www.ubinig.org/index.php/home/printArticle/30/english>

Naher, Firdousi and Debra Efroymsen (2007). *Tobacco Cultivation and Poverty in Bangladesh: Issues and potential future directions*. A case study based on the Research conducted by WBB Trust. Dhaka, February 2007. [http://www.who.int/tobacco/framework/cop/events/2007/bangladesh\\_study.pdf](http://www.who.int/tobacco/framework/cop/events/2007/bangladesh_study.pdf)

Tito, Rafiqul Haque and Mujahindul Islam (2011). "Shifting out of Tobacco: Strategies and Actions," paper presented at the International Workshop on Impact of Tobacco Cultivation and Policy Advocacy for Shifting to Food and Other Agricultural Crops, Dhaka, Bangladesh, 28-30 March 2011, <http://www.ubinig.org/index.php/home/printArticle/30/english>

Ramakrishnan, Chandra (2012). "Economically Viable Alternatives for Tobacco Workers and Growers," a Discussion Paper prepared for the National Consultation on Economics of Tobacco Use, New Delhi, India, 20-21 December 2012.



The Case Study Brief Series is part of the Asia-Pacific Regional Roadmap to accelerate the achievement of MDG 1 commissioned by the United Nations Regional Thematic Working Group on Poverty and Hunger. It covers selected on-ground experiences for advocacy and exchange of knowledge on policies and programmes to tackle the persistence of poverty and reduce hunger and malnutrition.

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