

# The Revenue and Employment Outcome of Biri Taxation in Bangladesh Executive Sumary



National Board of Revenue Government of the People's Republic of Bangladesh July 2019



### The Revenue and Employment Outcome of Biri Taxation in Bangladesh (Executive Summary)

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#### **Technical Editors**

Nigar Nargis, PhD Scientific Director, Economic and Health Policy

Research, American Cancer Society, USA (lead author)

Nasiruddin Ahmed, PhD Professor and Senior Fellow of Practice, BRAC Institute

of Governance and Development, Dhaka

Dr Syed Mahfuzul Huq National Professional Officer (NCD), WHO Bangladesh

Dr Tara Kessaram Medical Officer (NCD), WHO Bangladesh

Md. Tariq Hassan Deputy Commissioner and Second Secretary (VAT

Policy), National Board of Revenue, Dhaka

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#### **Steering committee**

Name		Designation and affiliation in 2012	Current designation and affiliation
Nasiruddin Ahmed, PhD	Chairman	Chairman, National Board of Revenue (NBR), Dhaka	Professor and Senior Fellow of Practice, BRAC Institute of Governance and Development, BRAC University, Dhaka
Director	Member	Bangladesh Bureau of Statistics Ministry of Planning, Dhaka	
Deputy Secretary (WHO 2)	Member	Ministry of Health & Family Welfare, Dhaka	
Nigar Nargis, PhD	Member	Assistant Professor, Department of Economics, University of Dhaka	Scientific Director, Economic and Health Policy Research, American Cancer Society, USA
Dr M Mostafa Zaman, PhD	Member	National Professional Officer (Noncommunicable diseases (NCD)), WHO Bangladesh	Advisor, Research & Publication, WHO Bangladesh
Md Abdur Rouf, PhD	Member Secretary	1st Secretary (VAT) and Chief Coordinator, Tobacco Tax Cell, NBR, Dhaka	Complaint Monitoring & Evaluation Specialist, VAT Improvement Programme, Economic Relations Division, Ministry of Finance

#### **Investigating committee**

Name	Designation and affiliation in 2012	Current designation and affiliation
Nasiruddin Ahmed, PhD	Chairman, National Board of Revenue (NBR), Dhaka	Professor and Senior Fellow of Practice, BRAC Institute of Governance and Development, BRAC University, Dhaka
Nigar Nargis, PhD	Assistant Professor, Department of Economics, University of Dhaka	Scientific Director, Economic and Health Policy Research, American Cancer Society, USA
Dr M Mostafa Zaman, PhD	National Professional Officer (Noncommunicable diseases (NCD)), WHO Bangladesh	Advisor, Research & Publication, WHO Bangladesh
Dr Syed Mahfuzul Huq	Technical Officer (Tobacco Control), WHO Bangladesh	National Professional Officer (NCD), WHO Bangladesh
Md Abdur Rouf, PhD	1st Secretary (VAT) and Chief Coordinator, Tobacco Tax Cell, NBR, Dhaka	Complaint Monitoring & Evaluation Specialist, VAT Improvement Programme, Economic Relations Division, Ministry of Finance
Shamim Ara Begum	2 <sup>nd</sup> Secretary (VAT) and Coordinator, Tobacco Tax Cell, NBR, Dhaka	Deputy Project Director, VAT Online Project, NBR, Dhaka
Md. Mir Nabin Ekram	Research Officer, Tobacco Tax Cell, NBR, Dhaka	Program Officer, National Tobacco Control Cell, Ministry of Health & Family Welfare, Dhaka
Md. Tariq Hassan		Deputy Commissioner and Second Secretary (VAT Policy), NBR, Dhaka





Senior Secretary
Internal Resources Division
and
Chairman
National Board Revenue
Ministry of Finance

### MESSAGE

There are concerns regarding loss of employment if tax is increased on biri, However credible data on the size of employment in the biri sector, and estimation of the impact of tax increases on employment in and revenue from the biri sector has not been readily available.

To address this gap in much needed evidence, the National Board of Revenue (NBR) conducted a study in 2012 on `Revenue and Employment Outcome of Biri Taxation in Bangladesh', with support from the World Health Organization (WHO) and Department of Economics of the Dhaka University (DU). The draft report was finalized in 2013. Considering the importance of the issue, the NBR has updated the report with the most recent data, with technical assistance from American Cancer Society (ACS), BRAC Institute of Governance and Development (BIGD), DU and WHO.

I am pleased to present the findings of the report within. The report it self and the recommendations made will help policy makers to tax biri based on robust evidence. This will also help the Government to deliver aspecial programme for welfare of the workers of the biri industry including support for alternative livelihoods; generate more revenue from biri sector, and save lives by reducing consumption of biri.

This report is an example of high quality normative work that NBR has led. I take this opportunity to thank the experts and academicians from WHO, DU, BIGD, ACS and NBR for their collaboration and look forward to reflecting these recommendations in public policy.

Md. Mosharraf Hossain Bhuiyan, NDC

#### **Abbreviations**

BDT Bangladesh Taka

BRAC Bangladesh Rural Advancement Committee

CBMI census of biri manufacturing industries

FGDs focus group discussions

FTE full-time equivalent (employment)

GDP gross domestic product

HDS health development surcharge

ILO International Labour Organization

IRD Internal Resources Division

LFS labour force survey

NBR National Board of Revenue

NGO nongovernmental organization

MFI microfinance institutions

MoF Ministry of Finance

VAT value added tax

VGD Vulnerable Group Development

VGF Vulnerable Group Feeding

WHO World Health Organization

#### **Executive summary**

#### INTRODUCTION

Biri is a very cheap form of smoked tobacco in Bangladesh that is popular particularly among the poor population. The production process of biri is labour intensive. There is fear among biri manufacturers that increasing tax and price of biri would cut down biri consumption and production significantly resulting in huge loss of employment in the biri industry. In order to understand the size of employment loss and livelihood consequences of the population that can be adversely affected by the downsizing of the biri industry, the National Board of Revenue (NBR) of the Government of Bangladesh undertook a comprehensive study in 2012 entitled "The revenue and employment outcome of biri taxation in Bangladesh", with technical assistance from the Department of Economics, University of Dhaka and the World Health Organization.

The NBR study used three different survey instruments to collect data on the employment aspects of the biri industry in Bangladesh. Using the census of biri manufacturing industries (CBMI), all workers were enumerated in the 198 currently operational biri factories across the country. A labour force survey (LFS) of biri workers was undertaken to collect detailed information on the household socioeconomic status, sources of employment and income, receipt of government transfers and benefits, interventions by NGOs, characteristics of current employment, and alternative livelihood opportunities of the selected workers. Focus group discussions (FGDs) were held to brainstorm on questions of alternative livelihood options for biri workers from a regional point of view. In addition, a case study was undertaken based on the interview of a former biri worker who is currently employed in a different sector. This report is based on the findings and analyses of data from the NBR study.

#### **CONSUMPTION**

Bangladesh recorded a remarkable reduction in adult smoking prevalence from 23% in 2009 to 18% in 2017 according to the Global Adult Tobacco Surveys conducted in 2009 and 2017. This decrease in smoking rate was reflected largely as reduction in biri smoking – while the prevalence of cigarette smoking remained almost the same (14.2% in 2009 and 14.0% in 2017), prevalence of biri smoking decreased to less than half from 11.2% in 2009 to 5.0% in 2017.

The tax-paid sale of biri was 51.19 billion sticks in the fiscal year 2012–13. By 2016–17, tax-paid sales of biri decreased remarkably by 26.7% in four years to 37.53 billion sticks. A small part of this decrease (14%) can be explained by the biri price increase over this period. The remaining 86% decrease can be attributed to the declining trend in biri demand due to shifts in composition of smoked tobacco products in Bangladesh from biri to cigarettes, and other unobservable random disturbances.

#### **EMPLOYMENT**

A total of 32,180 persons worked (1,517 administrative staff and 30,663 production workers) in the 198 functional biri factories. Among the production workers, daily labourers accounted for 94%, female employees 33% and child employees 4%, of all persons employed on the factory premises. The majority of production workers worked on a temporary (94%), or part-time (75%) basis. They were categorized as skilled (having mastery) in biri making (91%) by the biri manufacturers.

Apart from the regular employees working on the factory premises, biri factories contract out biri rolling and tobacco dust filling to contractors who then commission the work to their family labourers; this segment totaled 134,927 workers. About 10% of these people received contracts for biri rolling and tobacco dust filling from the factories and the rest worked under their supervision. An overwhelming majority (75%) of these contract workers were women and children (below 18 years of age).

On average, regular production workers on the factory premises worked for 18.6 days a month and 8.9 hours a day: full-time employees worked 20.7 days a month, 10 hours a day, while part-time employees worked 16.9 days per month, 8 hours a day. A similar trend was observed when permanent workers, daily labourers/temporary workers and unpaid family labourers were compared.

Considering 65% utilization rate of the full-time capacity of a regular employee working on the

factory premises and 26% utilization rate of the full-time capacity of a contract worker, that account for actual production at 33% of potential output, the total full-time equivalent (FTE) employment in the biri industry, including regular and contractual employment, was estimated at 55,682. Among them, FTE employment of only production workers amounted to 54,694. With children excluded, FTE of production workers decreased to 46 916.

The total full-time equivalent employment in the biri industry was estimated at 46,916 with children excluded.

The average monthly salary ranged from the lowest for daily labourers (below Bangladesh Taka (BDT) 2,000), to the second lowest for permanent workers (BDT 2,000–4,000), to the clerk (BDT 4,000–5,000), to the managerial staff (BDT 6,000–9,000), and finally to the much higher-level owner employees (BDT 20,000–30,000). For each category of employees, females generally received lower salary than their male counterparts. The average daily wage rate was BDT 146 for the daily labourers in biri making – BDT 174 for males and BDT 117 for females. Those who worked on a piece rate basis were paid BDT 22 per 1000 sticks on average.

#### ECONOMIC IMPACT OF BIRI TAX INCREASE

The excise tax on biri, known as supplementary duty, is tiered ad valorem varying by filtered/nonfiltered type – 30% of retail price for nonfiltered and 35% of retail price for filtered biri. In addition to the supplementary duty, a 1% health development surcharge and a 15% value-added tax are imposed on the retail price of biris.

As a way forward from the current state of biri taxation in Bangladesh, we considered two scenarios that would yield equivalent increases in price. The first scenario involved increasing the supplementary duty on biri to 55% of retail price, which would bring parity with the

current supplementary duty for 'low' segment cigarettes. The second scenario involved introducing a specific excise on biri at BDT 0.20 per stick and increasing the supplementary duty to 40% of retail price. In either scenario, the price increase was expected to be 111% for nonfiltered 25-stick packs and 89% for filtered 20-stick packs, under the assumption of full pass through of the increase in tax to consumers.

Following tax and price increase, annual revenue from biri would increase by up to BDT 10,948 million.

These tax and price increases imply increase in excise tax share from 31% for nonfiltered biri and 36% for filtered biri to 56% for both types of biris. The total tax share including supplementary

duty, health development surcharge and value-added tax would account for 71% of retail price for both biri types.

Following biri tax and price increases, as mentioned above in the first scenario, biri tax revenue would more than double from the current estimated level of BDT 7,408 million to BDT 17,654 million (equivalent to USD 211 million), marking BDT 10,246 million in additional revenue or 125% increase after adjustment for inflation. The revenue gain is expected to be larger in the second scenario – BDT 10,948 million or 134% increase in real terms.

Following the price increase, annual biri sale was expected to decrease by 24% (based on a price elasticity of biri demand at -0.22). With additional decrease in biri sale by 6.5%

attributable to declining trends, total annual biri sale was expected to decrease by about 10 billion sticks. The reduction in biri sale was expected to lead to a similar reduction in biri production, under the assumption that all were tax paid sales.

The reduction in production attributable to tax and price increase is expected to result in 18% reduction in FTE employment (based on an output elasticity of employment at 0.72), or loss of 7,012 full-time jobs. The declining trend of the biri industry is likely to cause further decrease in FTE employment by 1,862 full-time jobs totaling 8,874 jobs.

The estimated annual loss of income to biri workers, who would lose their job because of the tax and price increase and/or declining trend, was only 3.5% of the estimated revenue gain of BDT 10,246 million in scenario 1 or 3.3% of the estimated revenue gain of BDT 10,948 million in scenario 2. The net benefit of increasing biri tax thus appears to be positive and significantly high. It implies that biri workers can be easily compensated for their income loss if the extra revenue is channeled to the cause of retraining and deployment of unemployed biri workers. The extra revenue generated from biri tax increase can be allocated to boost gainful economic activities in the biri

Tax and price increase and declining trend of the biri industry together would cause loss of 8,874 full-time employment.

Biri workers can be easily compensated for their income loss if the extra revenue generated from increasing tax on biri is used to train and re-deploy unemployed biri workers.

A targeted government intervention would be necessary at regional level to provide livelihood and income support to unemployed biri workers.

producing regions so that unemployed biri workers can find better alternative employment opportunities.

#### PUBLIC HEALTH BENEFIT OF BIRI TAX INCREASE

Currently, there are 5.8 million adult biri smokers in Bangladesh. If the biri tax rate is raised to 55% of the retail price, the number of current adult biri smokers is estimated to fall by

628,467, implying 175,971 fewer premature deaths among current adult biri smokers. In addition, this tax increase could lead to an estimated 541,909 potential future biri smokers to abstain from initiating smoking, averting 216,763 million premature deaths among the current young population. Thus, an estimated total of 392,734 premature deaths attributable to biri smoking could be averted among the current adult and young population

An estimated total of 392 734 premature deaths attributable to biri smoking can be averted by increasing tax on biri.

**by increasing biri tax.** The potentially averted deaths accounted for 12.3% of all premature deaths in the total population that is attributable to biri smoking. The potential for saving lives is even greater with higher tax rates.

#### REGIONAL CONCENTRATION OF BIRI DEPENDENT LIVELIHOOD

The 198 functional biri factories were located in 37 of the 64 districts in the country. The location of biri factories was heavily concentrated in the northern districts of the country – 103 factories (52%) were located in 10 districts of Rangpur and Rajshahi division. Half of these factories (53) were located only in Rangpur district within the Rangpur division. This division is also the most economically depressed region in the country, particularly rural areas. Of all the people employed in regular and contractual jobs in the biri industry, 37.2% were located in Rangpur district. The second largest concentration of biri sector employment was in Kushtia district (20.8%). Thus, these two districts covered 58% of the total employment in the biri industry. The regional concentration of biri factories and employment indicated that a targeted government intervention would be necessary at the district level, with a focus on the Rangpur region, to provide livelihood and income support to unemployed biri workers.

#### SOCIOECONOMIC STATUS OF BIRI WORKER HOUSEHOLDS

Biri workers are generally identified with the underemployed, low income and resource poor segment of the population in Bangladesh, living below the poverty line and missed by the mainstream of economic growth. Several aspects of the socioeconomic status of the biri workers were observed in the study:

- Only 20% of the biri workers was working full time in biri making. The remaining workforce was underemployed in terms of the utilization of their time and earning potential.
- The main source of household income for most of the respondents (43.4%) was biri manufacturing. The second largest source was trade followed by day labour that did not necessarily generate regular income flows. In addition to biri making and daily labour, about 84% of biri worker households survived on casual sources of employment and income, which added to the vulnerability of this population to economic and natural shocks.
- The household heads of two-thirds of biri workers did not have any schooling. The average education level for all members in a household was 2.5 years and the maximum education level was 5.7 years. With extremely low level of education, the potential for transition of biri workers and their family members out of poverty and to alternative employment opportunities on their own would be very limited.
- About 97% of the biri workers were landless. Given the negative correlation between land ownership and poverty, biri workers may be susceptible to worsening poverty in the event of unmitigated job loss.

#### LIVELIHOOD OPTIONS FOR BIRI WORKERS

Biri making has been the mainstay for most biri workers for generations. About 58% reported to be working in biri manufacturing for over 10 years. Several observations were made with regards to livelihood options for biri workers in this survey:

- The parents of 46% workers and the grandparents of 28% workers were employed in the biri industry. When asked if their children would continue to work in the biri industry, 70% workers answered in the negative. It appears that even though biri making had been the source of livelihood for at least three generations, the future generation was unlikely to stay in the same occupation. The intergenerational transition from a decaying biri industry to more thriving industries seems to be already in place.
- 22.5% workers reported that biri making was not their only source of income. They supplemented income by undertaking various other economic activities.

- The average income of the biri worker who is exclusively dependent on the biri industry was BDT 1,927 per month. In contrast, biri workers who were involved in other economic activities along with biri making made BDT 5,457 per month. For this group of workers, income from biri making constituted 41% of their total income. Apparently, these workers managed to diversify and allocate their work hour to enhance their earnings. They would also be able to recover income faster in the event of job loss from the biri industry.
- 54% biri workers reported that his/her other family members were also involved in biri making. On average, two persons from each family worked in a biri factory.
- About 93% workers reported that income from biri making was not sufficient for subsisting. When asked about means to supplement income from other sources in the event of job loss, an overwhelming majority (70%) reported that they would live off the income of other family members. This indicates that the income pooling mechanism at the family level cushions against the uncertainty and insufficiency of income flow from biri making.
- If alternative market opportunities that could generate income equivalent to what they make as biri workers were available, 22% were willing to take their own initiative to switch to the new occupation, while others (78%) were not willing to leave their current occupation. Relatively few workers saw the advantage of leaving a decaying industry for an income-equivalent job in other growing sectors and noted the flexibility of work hours, independence, proximity of the workplace to their homes, and casual working conditions, that are characteristic of the biri industry.
- However, if the government launched any redeployment programme for biri workers, 78.4% were willing to give up biri making and move to other occupations. Their expected income from an alternative job on average was BDT 4,811, which is more than twice of what they currently make in the biri industry.
- A majority of biri workers (63%) reported that biri making was their first occupation. The second major occupation was as unpaid family labour or housewives (19%). When asked about potential occupations where they could be employed if the biri factory closes, most workers (58.3%) who responded expressed that they did not know where to go or cannot do any other work. This category of workers would need support for employment generating opportunities. The remaining said that they would find some kind of nonagricultural self-employment on their own.
- Nearly 62.6% workers believed that they did not have the necessary skills to make a transition to an alternative employment. Most (75%) of those who believed that they did not have the necessary skills were interested in acquiring new skills. When asked about preference for full- or part-time job, 63% expressed willingness to do a full-time job.
- The role of NGOs or the microfinance institutions (MFIs) in offering alternative income generating opportunities for biri workers appeared to be limited. About 48% workers reported that they or a person from their family were members of NGOs/MFIs that offered loan services to engage in income generating activities, which could be a potential way out for biri workers.
- Nearly 38.5% workers mentioned government programmes for poverty alleviation in their locality, which targeted particular poor and vulnerable population groups, but that biri workers may not necessarily be eligible for receiving the benefits. Only 26% workers reported that they benefitted from one of these programmes.

#### MAJOR OBSERVATIONS FROM FOCUS GROUP DISCUSSIONS

The biri workers associations and civil society representatives made a number of important observations during the FGDs. The major ones are listed below.

- The widespread underemployment of biri workers was attributed to the interruption of production due to diminished market demand for biris.
- The biri manufacturers strategically located their factories in areas where limited number of economic activities were viable, thus limiting the scope of the biri workers to switch to alternative livelihoods.
- Women were more attracted to biri making due to the flexibility of work hours and the ability to work from home. They were not willing and/or able to travel far from home for finding alternative employment opportunities.
- Unskilled and impoverished workers and workers with disabilities are engaged in biri making. It implied that workers who lose their job from biri factories may not necessarily be easily able to train for and work in other occupations. This vulnerable group would need targeted assistance to find new employment, so as not to increase inequities.
- The children of both biri workers and biri manufacturers were finding employment outside of the biri industry. This intergenerational movement is already in place paving the way for a shift from the decaying biri producing sector to other thriving sectors for future generations.

#### RECOMMENDATIONS

Given that biri workers lack household resources, education and skills that are essential to make a smooth transition to alternative livelihoods, the government needs to take preemptive measures, in light of WHO Framework Convention on Tobacco Control Article 17, to counteract the potential loss of welfare of the biri worker families in the event of loss of employment. The resources necessary for such income support can come from increased revenue from higher taxes on biri. In conclusion, this study proposes the following recommendations that could mobilize internal resources for saving lives both through the reduction in consumption of biri and redeployment of biri workers.

- Increase excise tax on biri and earmark it for creating a welfare fund for biri workers. This
  fund would be dedicated to train and build the capacity of biri workers for non-biri
  sources of income generation. It could also be utilized to provide micro-credit
  (interest-free) for entrepreneurial development programmes targeted at former biri
  workers.
- Replace current ad valorem excise tax system with a mixed excise tax system consisting of a specific tax of BDT 0.20 per stick and an ad valorem tax at 40% of retail price, in setting the new system for biri taxation.
- Ensure collaboration and coordination of the National Tobacco Control Cell and NBR with the Ministry of Labour and Employment to explore government and nongovernment initiatives for employment generating opportunities in the districts where the biri factories are located. Local government bodies need to take leadership at the grassroots level and take advantage of existing infrastructure to accommodate the new goal of redeployment of biri workers.
- Build partnerships among local NGOs, biri worker associations and civil society organizations for making a concerted effort to embed the government initiative to help biri workers transition into alternative livelihoods and integrate into the mainstream of development at the community level.
- Create localized and equitable education, training and employment opportunities for biri workers who are primarily women, children, elderly and disabled. Efforts to help their transition into alternative work are needed because of the regional concentration of biri manufacturing units and the high cost of mobility. The heavily biri producing districts of Rangpur and Kushtia need to be prioritized.