CPD

Working Paper 116

Alternative Approaches to Full Employment in Bangladesh

Role of the Non-farm Sector

Muhammed Muqtada

CENTRE FOR POLICY DIALOGUE

ALTERNATIVE APPROACHES TO FULL EMPLOYMENT IN BANGLADESH

Role of the Non-farm Sector

CPD Working Paper 116

Muhammed Muqtada

CENTRE FOR POLICY DIALOGUE

Publisher

Centre for Policy Dialogue (CPD)
House - 6/2 (7th & 8th floors), Block - F
Kazi Nazrul Islam Road, Lalmatia Housing Estate
Dhaka - 1207, Bangladesh
Telephone: (+88 02) 58152779, 9141703, 9141734, 9143326, 9126402
Fax: (+88 02) 48110414
E-mail: info@cpd.org.bd
Website: www.cpd.org.bd

First Published August 2018

Tk. 85
USD 6

ISSN 2225-8175 (Online)
ISSN 2225-8035 (Print)

Cover design
Avra Bhattacharjee

C42018_3WP116_ARD

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past 25 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach. A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. The other key area of CPD's activities is to undertake research programmes on current and strategic issues.

CPD's dialogues are designed to address important policy issues and to seek constructive solutions to these problems. In doing so, CPD involves all important cross-sections of the society, including public representatives, government officials, business leaders, activists of grassroots organisations, academics, development partners and other relevant interest groups. CPD focuses on frontier issues which are critical to the development process of Bangladesh, South Asia and LDCs in the present context, and those that are expected to shape and influence the country's development prospects from the mid-term perspectives. CPD seeks to provide voice to the interests and concerns of the low-income economies in the global development discourse. With a view to influencing policies, CPD deploys both research and dialogue which draw synergy from one another.

CPD's research programmes are both serviced by and intended to serve, as inputs for particular dialogues organised by the Centre throughout the year. Major research themes are: macroeconomic performance analysis; poverty and inequality; agriculture; trade; regional cooperation and global integration; infrastructure; employment and enterprise development; climate change and environment; development governance; policies and institutions, and the 2030 Agenda for Sustainable Development.

CPD also conducts periodic public perception surveys on policy issues and issues of developmental concerns. With a view to promoting vision and policy awareness amongst the young people of the country, CPD is also implementing a *Youth Leadership Programme*. CPD serves as the Secretariat of two global initiatives. *LDC IV Monitor* is an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. *Southern Voice on Post-MDGs* is a network of 50 think tanks, which seeks to contribute to the ongoing global discourse on the SDGs. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs, Bangladesh*—a civil society initiative that include about 90 Partner organisations, founded with an objective to contribute to the delivery of the SDGs and enhance accountability in its implementation process. In recognition of its track record in research, dialogue and policy influencing, CPD has been selected as one of the awardees of the Think Tank Initiative (TTI) through a globally competitive selection process for two consecutive times.

Dissemination of information and knowledge on critical developmental issues continues to remain an important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out CPD Occasional Paper Series on a regular basis. It may be noted in this connection that since November 2011, the Series has been re-introduced as **CPD Working Paper Series**. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled **Alternative Approaches to Full Employment in Bangladesh: Role of the Non-farm Sector** has been prepared by *Muhammed Muqtada*, Visiting Fellow, CPD, and former Director of Policy Planning in the Employment Sector, International Labour Organization (ILO), Geneva <muqtada1@gmail.com>.

Executive Editor: *Ms Anisatul Fatema Yousuf*, Director, Dialogue and Communication, CPD
Series Editor: *Dr Fahmida Khatun*, Executive Director, CPD

Author's Acknowledgements

This Working Paper was conceived and partly drafted when I was invited to the CPD as a Visiting Fellow during October-December 2017. I had a close interaction and discussion on many of the issues of this paper with several senior members of the Centre. In particular, I would like to express my sincere appreciation to *Dr Fahmida Khatun*, Executive Director; *Dr Debapriya Bhattacharya,* Distinguished Fellow; *Professor Mustafizur Rahman*, Distinguished Fellow; *Dr Khondaker Golam Moazzem*, Research Director and *Mr Towfiqul Islam Khan*, Senior Research Fellow for their insights and comments throughout the course of the study. I would like to gratefully appreciate the valuable research support received from *Mr Muntaseer Kamal*, Research Associate. Support from *Mr Estiaque Bari*, former Senior Research Associate and *Mr Suman Biswas*, former Research Associate is also acknowledged.

Abstract

The slow growth of employment in the modern manufacturing sector has raised scepticism on how far, and how quickly, Bangladesh economy could productively absorb its large pool of surplus labour, and attain full employment. Following Ranis and Stewart (1993), the present paper re-engages (in) and examines the potential role of rural non-farm activity (RNA) in wiping out rural unemployment and underemployment, as it did in the case of some East Asian countries. This paper explores the extent and pattern of RNA growth in Bangladesh, its impact on jobs and incomes, as well as on labour market formations. The study contends that changes in rural labour market are often not reflected as structural change due to the presence of informality within the three traditional sectors. It explores pathways to enhancing rural non-farm employment and assesses the prospects of reaching full employment. Finally, the study stresses the need for a comprehensive policy framework and coordinated strategy for a vigorous growth of rural non-farm enterprises, in order to increase the potential for higher productivity jobs, household incomes, and to enhance aggregate demand.

Contents

List of Tables and Figures

Annex Table and Annex Figures

Acronyms

7FYP	Seventh Five Year Plan
BBS	Bangladesh Bureau of statistics
FI	Financial Inclusion
GDP	Gross Domestic Product
HIES	Household Income and Expenditure Survey
HYV	High Yield Variety
ISS	Informal Sector Survey
LFS	Labour Force Survey
MFS	Mobile Financial Service
RNA	Rural Non-farm Activity
RNF	Rural Non-farm

1. INTRODUCTION

A significant goal of the 2030 Agenda for Sustainable Development, which all countries, including Bangladesh, have committed themselves to, is the attainment of full productive employment and decent work [viz. Sustainable Development Goal (SDG) 8]. Since the 1950s, the developing countries have been relentlessly exploring alternative pathways to attaining higher economic growth and thereby, employment for all. Among the many constructs of development strategies that influenced policy-making during this period in order to create jobs for the large surplus labour,[1] the so-called 'dual model', as pioneered by Arthur Lewis, has perhaps attained the widest currency. Based on the distinction between two sectors, which the author calls the 'capitalist sector' (industry) and the 'subsistence sector' (agriculture), it envisages that the former, with higher productivity and wages, will grow continuously until the surplus labour from the latter is fully absorbed. The role of industry in the process of structural transformation and growth has been widely stressed and documented (Clark, 1940; Kuznets, 1955; Rodrik, 1997), as it has been historically found to play a crucial role in generating higher productivity employment, and in enhancing growth. In the process of economic growth, there takes place a structural shift in the value-added composition, away from the primary sector towards the secondary or industry sector. Kaldor (1967) provided a theoretical rationale for such patterns of structural change that characterised the growth of advanced countries. Since economic growth is historically associated with employment growth, the work force structure is also seen to undergo a similar shift away from the primary sector towards industry.

This development stylisation, informed by the pattern of capitalist growth in advanced economies and arguably reinforced by the East Asian experience, has inspired policymaking among developing countries over the past several decades.[2] However, over this entire period, the growth of employment`s share in industry/manufacturing, i.e. transfer of labour from agriculture to industry, has in most cases been disappointing. In fact, agriculture continues to be saddled with high surplus labour (largely in the form of underemployment) while it is the services sector which has grown the fastest, and in most cases accounts for the bulk of the share of both employment and value-added. This is contrary to growth patterns predicted by Clark-Fisher hypothesis based on differential income elasticities of three traditional sectors; and also to the historical experience of the developed countries, where the tertiary sector expanded in relative terms only when development matured. The shift in the value-added and work force composition in favour of the tertiary sector before industrialisation could mature has resulted in sluggish employment growth, particularly for the unskilled and semi-skilled work force.

The labour market slack in Bangladesh continues to remain pervasive, and the nature of economic and labour market formations have tended to obscure the binary division of the economy as in Lewisian scheme, especially through the rapid growth of the services sector on the one hand, and of the informal and rural non-farm activities (RNA) on the other. There have been various postulations and debates regarding the possibilities of attaining the Lewisian turning point through one of these three sectors. Empirical validation has been scanty. Ranis and Stewart (1993) in their well-known paper, have contended that a dynamic RNA or the so-called Z-goods sector, under appropriate policy framework, can be a significant factor in accelerating growth of employment and incomes, and in wiping out rural unemployment and underemployment.[3] In Bangladesh, given the rather slow growth

[1]The 'dual model' (Lewis, 1954) of economic development; the 'investment criteria model' (Chenery, 1953); the thesis of 'critical minimum effort' (Leibenstein, 1957); the theory of 'Big Push' (Rosenstein-Rodan, 1943); and the 'tunnel effect' (Hirschman and Rothschild, 1973) are major examples of such efforts.

[2]Nearly a century ago, in 1918, B.R. Ambedkar recognised the seriousness of the problem of "disguised labour" in agriculture, and stressed the need for industrialisation to absorb surplus labour (Krishnamurthy, 2008).

[3]Citing analysis of the role of RNA in Taiwan, and contrasting the experience of the Philippines, Ranis and Stewart demonstrates "…how a dynamic Z-goods (non-agricultural goods such as textile, garments, processed food, etc.) sector can lead to a broader spread of employment and incomes, with a more egalitarian distribution of income and the elimination of rural underemployment," i.e. leading to a state of rural full-employment.

in the employment share of the modern manufacturing sector, can RNA be the alternative catalyst to progress towards full-employment?

The experience of Bangladesh, in respect of structural transformation, broadly resembles that of many developing countries as mentioned above. The present paper will examine the potential of RNA in enhancing rural incomes and employment towards affecting structural change. In Bangladesh, share of employment in manufacturing, in relative terms, has remained low and sluggish, while there has been a rapid growth of RNA (see Hossain, 2004; Raihan, 2016). The present paper will explore the extent and pattern of RNA growth in Bangladesh, and examine how far it carries the prospects, if at all, for Bangladesh to retrace the Lewisian turning point towards full-employment. First, however, what is the status and level of unemployment in Bangladesh? How far is Bangladesh away from achieving full-employment? According to the Bangladesh Bureau of statistics (BBS), Bangladesh currently has an unemployment of 4.2 per cent and underemployment of 3 per cent. This is a highly improbable scenario given that there exists pervasive slack in the labour market, especially in the rural and informal sectors. The present study, in the Annex, provides some reflections on the above statistics and their gaps, and on several other labour market statistics.[4]

The study is organised as follows. Section 2 provides a cursory view of the issues and debates related to the role of rural non-farm (RNF) employment in affecting structural change and towards the goal of full-employment. Examples are drawn from some of the East Asian countries. In Section 3, based on published data, the study assesses the trends in and patterns of non-farm employment in Bangladesh, and examines whether and to what extent the RNA can be perceived as a dynamic sector. Section 4 attempts to offer proximate explanations of the rapid growth of the RNA. In particular, the study points to various conducive factors such as, inter alia, the growth of food-agriculture and better penetration of rural finance, which, in turn, have influenced the "push-pull" factors in individual household decisions. Section 5 probes further into the changes in labour market brought about by the rise in RNA, and assesses whether these reflect tangible structural change. The study contends, in Section 6, that various changes in rural labour market do not get appropriately reflected as structural change because of the vast and pervasive existence of the so-called informal sector in all the three traditional sectors. This is particularly due to the lack of any systematic evidence to assess the relative importance and role of informal activities and role of job, enterprise and productivity growth within the respective sectors. Section 7 examines the potential of RNA to bring about structural change and rural full-employment. In this regard, it explores the potential pathways; in particular, the future growth of agricultural productivity; the trends in RNA productivity and earnings; the rising household income and demand for RNA goods and services; and emerging role of remittances in rural Bangladesh. Section 8 provides some concluding remarks, especially in articulating a case for a more vigorous attention to growth of RNF enterprises, and the need for a comprehensive policy framework and coordinated strategy, in order to approach the goal of full-employment in Bangladesh.

2. EMERGING ROLE OF RNF EMPLOYMENT: ISSUES AND DEBATES

There can hardly be much contention that developing countries like Bangladesh must continue to expand the modern industry sector, especially manufacturing, in order to raise productivity, employment and incomes. In a planning perspective, major considerations need to be given on the relative weights and the incentives to various sectors vis-à-vis the overall strategy undertaken to enhance growth and employment. The prolonged slow growth of manufacturing employment in Bangladesh, the lack of diversification in the sector are important considerations in the country's pursuit of structural transformation and inclusive growth. Besides, the pursuit of a strategy by which

[4]See Annex 1 on the question of full-employment in Bangladesh.

labour would seamlessly move to higher productivity modern sectors, is confronted with various issues and constraints:

- In economies like Bangladesh, where the initial stock of surplus labour is high, it would be difficult to rely solely on the modern manufacturing sector in 'moving the demand curve for labour outward' to absorb labour fast enough to raise the supply price of labour (Mazumdar, 1999).
- A nascent, emerging modern industry sector can face its own 'binding constraints' that could stall the unbridled growth of the sector (Rodrik, 2006), and hence limit the mobility of labour.
- Surplus labour is not a given stock. That is to say, any 'unlimited labour' theory should not rest on the premise of getting some of the workers out of agriculture without affecting production in a timeless analysis. Industrial development occurs over time and the real problem of employment needs to articulate a strategy of creating job opportunities through multiple avenues, and not simply by diverting the unemployed and underemployed from agriculture.[5]

The above implies that alternative avenues and sources of (productive) employment growth need to be further explored. Industrialisation is critical for structural transformation, but to pursue it, at any cost, such as through an 'urban bias' and rents and other privileges, which are likely to introduce distortions, takes attention away from other key sources of employment growth, such as through increased growth of agriculture and agricultural productivity, and non-farm activities and enterprises. As widely observed, agricultural growth is critical not only to address a potential 'wage-goods constraint', (that could raise food prices and wages, and thereby slow down labour absorption in the modern sector), but also to enhance earnings in the sector itself. The latter, in turn, would likely enhance demand for non-farm goods and services.

Given the slow growth of industrial employment, and limited opportunities of productive and remunerative employment in agriculture, employment has been growing rapidly in the non-farm activities in Bangladesh, which we shall examine shortly.

It is noteworthy that the analytical and empirical literature on the role of RNF activities/enterprises is rather scanty, since much of the development paradigms were confined to exploring agriculture-industry resource and labour flows, and subsequently led to the burgeoning literature on the catch-all informal sector.

The attention to the significance and dynamics of the role of RNA in accelerating growth and in supporting equity came from some forceful expositions on the East Asian economies (e.g. China, Taiwan-China, South Korea and Japan). While the 'miracle' countries of East Asia are often seen to have pursued the traditional tenet of industrialisation as the main engine of growth (Grilli and Zanalda, 1999), the significant role of RNA in those countries as 'irrefutable agents' of change has often been underreported. The experience of the early development of East Asian countries, especially Japan, China, South Korea and Taiwan-China, offers formidable illustrations. The story of Japan's industrialisation, which is estimated to have taken half a century to reach the Lewisian turning point, brings out clearly how Japan relied heavily and cautiously on the small and rural enterprises. China, under a different economic set-up, and South Korea and Taiwan-China, under a different time frame, also underscore similar experiences. In South Korea and Taiwan-China, in the early phase of their transition, there was a dominant non-factory proportion in manufacturing; and even when manufacturing started growing fast there was a dominant proportion of small scale enterprises although non-factory production declined substantially. In case of Japan, there are numerous examples to show how policies were carefully planned on ancillary activities, subcontracts and rural location of industries to produce

[5]For example, Adelman (1984) had contested the industry-first orthodoxy and advocated an agriculture-demand led industrialisation.

effective growth linkages between the small and the relatively large enterprises. This further illustrates how a country could plan undoing demand constraints that often inhibit the growth of the small RNF enterprises.

In the classic version of the dual model of Lewis (1954) the binary division of the economy, i.e. the subsistence (agriculture) and modern capitalist (industry) sectors, fails to recognise the existence and role of RNA. According to Lewis's postulation, the subsistence sector was seen as a provider of raw materials and wage-goods (marketable surplus), while the modern sector expanded continuously to absorb unlimited surplus labour from agriculture, until a full-employment equilibrium was reached. Nevertheless, historically speaking, irrespective of the economic level of the less developed economies, there always existed a varied spectrum of non-farm and RNA that produced variable proportions of self-provisioning as well as tradable goods. During the post-colonial, post World War II period, development planning drew inspiration from the dual models. However, with very limited resources, countries were caught in the perennial dilemma of allocating resources between modernisation/ industrialisation (to increase productivity in jobs) and agriculture (to address acute poverty and food shortages). Recognition of and support to RNA were confined to paltry budgetary allocations to support non-farm, small and cottage industries, that were largely to serve a 'pro-poor' stance rather than integrating them in a 'pro-growth' strategy.[6] There were exceptions. Countries, as those in East Asia, in their early stages of growth, according to many experts, viewed the role of RNA and rural industrialisation as pivotal to acceleration of growth (Saith, 1987; Oshima, 1988).

Apart from a handful of economies such as India, RNA failed to be acknowledged and analytically supported as part of a growth strategy. Hymer and Resnick (1969) was among the early authors to denote these as a catch-all sector, "Z, a purposely vague title to indicate the heterogeneity of the group," although in their postulation, these were largely treated as homogenous activities, characteristic of a peasant economy (Hymer and Resnick, 1969). These RNAs, according to Hymer and Resnick, were essentially traits of the economy of the colonial period, and with growth of modern industries and trade in the post-colonial period, would tend to disappear. In their model, on the production side, labour shifted out of Z-goods to increasing cultivation of exportable cash crops; while on the consumption side imported goods from the modern urban sector would tend to substitute the 'self-provisioning' consumption items. All in all, Z-goods would tend to diminish.[7]

Ever since the ILO Kenya Employment Mission 1971 pointed out a strong pervasive presence of goods and services outside so-called formal establishments (and coined these as 'informal sector'), there has been a plethora of studies on the characterisation and relative role of the informal sector, both within the rural and urban sectors of an individual economy. The informal sector was observed to contain heterogeneous activities ranging from subsistence, artisanal products (sponge activities) to a more dynamic range of activities that were productive, profitable and remunerative (see Section 6) The proliferation of informal sector activities, and the surge in the growth of self-employment, was apparently a negation of Hymer and Resnick's postulation (Z-goods after all did not disappear with post-colonial growth).

Writing two decades later, Ranis and Stewart (1990), and with a longer experience and spectrum of the RNA in various countries, challenged the empirical basis and assumptions of the Hymer and Resnick (1969) model and forwarded their own to argue that RNA never perished, but often flourished, and had a positive and critical role to play in accelerating overall growth and job creation in labour surplus

[6]Among others, see (Rosegrant and Hazell, 2000; Haggblade et al., 2006).

[7]Evidently, the Hymer and Resnick model lacked empirical validation, and was also weak on the assumptions that were used. In particular, by assuming labour as the only input (for which the food and cash crops sectors would compete) the possibility of technology and coexistence of multiple activities including RNA is ignored.

economies. They refuted Hymer and Resnick's assumption of a homogeneous Z-goods sector which tend to disappear as labour and land shift to production and exports of cash crops (A_E) during the post-colonial period. Instead, they introduced two post-colonial scenarios for RNA: the unfavourable and the favourable archetypes. Drawing on the experience of the Philippines, they argue that in the unfavourable archetype, the existence of Z-goods is threatened, largely through the urban bias in policies (i.e. the creation of a modern U-sector) as well as through a neglect of the food producing agricultural sector (A_D), both of which resulted in weak rural linkages. In their post-colonial favourable archetype, exemplified by Taiwan-China, the growth of the A_D sector creates the conditions for a dynamic rural sector. In particular, increased productivity in this sector leads to greater resource availability for investment, and higher incomes for increased household consumption. This would generate greater demand for non-agricultural commodities and hence increase RNA. Ranis and Stewart (1990) distinguished between those RNA that were traditional (Z_T) and those that were modern (Z_M).

The growth of RNA would critically depend on both favourable macroeconomic policies as well as those targeted to support RNA such as land reforms, infrastructure (e.g. roads, rural electrification), education etc. In their postulation Z_T would generally tend to shrink as Z_M flourished through the growth of small factories, modern technology and greater linkages to the urban and export sectors.[8] Thus Ranis and Stewart (1990) contended that not only did RNA continue its existence and flourish in the post-colonial period, but it created conditions that supported structural transformation and full-employment in the rural economy. "Z_M gradually replaces Z_T and Z-goods sector retains a substantial, and likely growing, importance at least until the labour surplus has been eliminated."[9]

A critical dimension of the Ranis and Stewart (1990) model is the introduction and role of a third 'Z-goods' sector in the hitherto traditional binary approach to elimination of surplus labour, and to reaching the Lewisian turning point.[10]

In the backdrop of the above postulations on the alternative scenarios on the role of RNAs, the present study purports to examine, in the sections that follow, the growing importance of RNA and non-farm employment in Bangladesh. With appropriate support and policy interventions, can the RNA sector in Bangladesh evolve into the 'favourable archetype' that could generate the potential to achieve a state of rural full-employment? The following sections attempt to provide some insights on the extent and patterns of growth in rural non-farm economy, based on rather sparse data and existing studies.

3. GROWTH OF RNF EMPLOYMENT IN BANGLADESH

During the post-colonial period, and since gaining independence in 1971, Bangladesh has struggled in the face of multiple constraints to recover from a poverty-stricken, food deficient, low-income country to one that is now relatively robustly growing, and aspiring to attain a middle-income country status.[11] It is important to analyse and evaluate the factors that explain this growth, and whether various constraints that are often cited could potentially threaten the progress of the economy. Currently, among the leading constraints appear to be the levels of investment and capital accumulation, and physical and social infrastructures. These are critical for diversification and structural transformation of the economy, which, in turn, could consolidate future growth and job creation.[12]

[8]The existence and growth of rural manufacturing goods in the informal sector was recognised by the ILO's Kenya Mission, 1971.

[9]Ranis and Stewart (1990) further argues "a dynamic Z-good sector can lead to a broader spread of employment and incomes, with a more egalitarian income distribution and the elimination of rural underemployment."

[10]In this context Ranis and Stewart (1990) specifically stressed the spatial dimension to economic growth.

[11]See (World Bank, 2012; also Gimenez et al., 2014).

[12]However, as observed earlier, these changes do not appear to be strictly in the traditionally understood Lewisian model and Kaldorian growth framework where manufacturing is the main engine of growth.

A standard criterion used to capture this structural transformation in an economy is the extent of inter-sectoral shifts in employment of labour, largely from a low-productivity (agriculture) sector to a higher productivity (industry) sector, and following Clarke-Fisher, to a more modern services sector. Although there have been some important changes in the patterns of inter-sector labour mobility, (Hossain et al., 2012), manufacturing employment still remains relatively low; instead services sector employment has grown more predominantly, much of which is in informal activities.[13] In fact, currently informal employment accounts for nearly 85 per cent of the employed workforce.

As can be evinced, within the traditional three-sector framework, the agriculture sector's share in national value-added has declined considerably but its share in total employment remains persistently high (nearly 41 per cent). This implies in general that the sector is characterised by relatively low productivity, surplus labour. Manufacturing employment as percentage of total employed workforce has been increasing, but is still only around 15 per cent, which is significantly lower than the shares achieved by most East and Southeast Asian countries (often 30 per cent or more).[14] The share of services sector has grown in both value-added as well as employment (about 39 per cent). There is hardly any analysis of inter-sectoral employment to establish whether the current growth is associated with strong trends in labour movements, especially from low productivity agriculture to higher productivity manufacturing (and/or services sector).[15]

Beyond the broad sectoral and industry-specific employment figures that are observed from the periodic Labour Force Survey (LFS) (which were 5-yearly until recently) and the Household Income and Expenditure Survey (HIES), it is difficult to gather a firm understanding of what has been happening to labour mobility and the factors explaining such shifts; in particular, from agriculture or farm sectors to non-agricultural rural activities (in goods and services). There are a few important survey-based studies, but these are not capable of producing a long-term trend analysis.

With regard to rural employment, an important structural shift concerns the changes in farm and non-farm employment. The LFS and HIES reports provide the following information. According to these sources, non-farm employment constituted nearly 57 per cent of all rural employment in 2015–16, having increased from around 37 per cent in 2000. Farm employment has declined by nearly 18 percentage points during 1995–2016, while the share of non-farm employment has increased by around 17 percentage points during the same period (Table 1).

Table 1: Share of Farm and Non-farm in the Rural Employment

Sector	**1995**	**2000**	**2005**	**2010**	**2015-16 (LFS)**
Farm employment	60.36	63.12	56.76	55.16	42.7
Crop agriculture	*54.63*	*55.19*	*52.9*	*49.24*	--
Non-crop agriculture	*5.73*	*7.93*	*3.86*	*5.92*	--
Non-farm employment	39.64	36.88	43.24	44.84	57.3
Total	**100**	**100**	**100**	**100**	**100**

Sources: Household Income and Expenditure Survey (HIES), Labour Force Survey (LFS).

Early studies have underscored the rising importance of employment in RNA in Bangladesh. According to Mahmud (1996), estimates for 1991 showed that RNF sector accounted "for about one-fourth of the country's entire labour force, more than half of the non-agricultural labour force and about one-third of the rural labour force."[16] Despite the dominance of the RNA sector in the absorption of the

[13] See BBS (2018) on recent trends in the growth of employment in the informal sector.

[14] (Grilli and Zanalda, 1999).

[15] Also see section below on informal sector and structural change.

[16] These shares increase significantly if the semi-urban areas within rural areas are included (Mahmud, 1996).

rural labour force, the study contends that much of this was due to the expansion of low productivity self-employment in the RNA which, in turn, has constrained the growth of income levels of the sector. In other words, labour shifts appear to have been caused by a land-scarce, overcrowded agriculture. There were limited signs to show that these were due to any strong 'pull' effect. The indicators that Mahmud (1996) uses in support of this contention are in respect of rural poverty, per capita rural income, and agricultural wages, all of which have remained virtually unchanged during the '80s and early '90s.

Such a contention has however been contested by other studies. In fact, early studies on RNA in Bangladesh had already started the debate on whether the RNF economy was truly a dynamic sector or a 'sponge' for absorbing surplus labour (Hossain et al., 1994; Hossain, 2004). One such study, based on a survey of 62 villages, observed that nearly 57 per cent of the households (both landless and land-owning) had at least one member engaged in some RNA. Further, and using a smaller purposive survey of traders and transport workers, the study finds that labour productivity in most of the activities was tangibly higher than the ruling agricultural wage rate.[17] Similarly, on the demand side incremental household incomes led to substantial increases in the demand for non-food goods and services. This was particularly marked in the more agriculturally progressive villages. Based on the above and other related indicators the study concludes that the RNA has the "potential for increasing productivity and incomes through occupational mobility from agricultural wage labour to self-employment in non-agriculture."[18]

The situation in the Bangladesh rural economy has vastly changed during the more recent decades. To use the same indicators as in Mahmud (1996), since the mid-1990s, rural poverty has declined and rural per capita income has increased considerably; agricultural real wages has been generally on an upward trend[19]. A feature closely associated with these developments is the role played by RNA. A closer look at the changing structure of employment and labour force in Bangladesh shows that there have been large increases in RNF employment through major expansions in RNA. While RNF activities and employment have always been a significant feature of the rural economy of Bangladesh, these have vastly increased in importance in the recent two decades. The increase in the share of non-farm employment from around 45 per cent in 2010 to more than 57 per cent during 2015–16 is particularly striking.

More recent studies and evidence on the growth of RNA continue to support such a contention. Employment in non-farm which was growing around 8 per cent till the 1990s (Hossain et al., 1994), maintained its growth momentum during the subsequent decades. Employment in non-farm activities increased from 11.3 million in 2001–03 to 24.5 million in 2013, an increase of 117 per cent. Between the two Economic Census periods, employment growth was nearly 7 per cent, 8.1 per cent in wage employment and 5 per cent in non-wage employment.[20] RNF enterprises grew at nearly 8 per cent while RNF employment grew at 8.5 per cent (see Table 2).[21] The broad and limited data on the relevant indicators suggest a fairly distinct upward trend in the growth of non-farm enterprises and employment.

[17]The study using the rural industry study project (RISP) conducted by Bangladesh Institute of Development Studies (BIDS), 1978–81 finds that the average productivity in rural cottage and small industries was about 57 per cent higher than agricultural wage rate.

[18](Hossain, 2004).

[19]See (Bangladesh Planning Commission, 2015; Khan, 2015).

[20](BBS, 2015).

[21]Various other statistical sources appear to confirm the trend increase in non-farm employment. The HIES also shows the share of employment in 2015–16 to be around 57 per cent of total rural employment increasing from 37 per cent in 2000.

Table 2: Growth of Non-farm Enterprises and Non-farm Employment in Bangladesh (2001–03–2013)

Location	Non-farm Enterprises (Million)		Growth Rate (Per cent)	Non-farm Employment (Million)		Growth Rate (Per cent)
	2001-03	2013		2001-03	2013	
Bangladesh	3.71	7.82	6.78	11.27	24.50	7.06
Urban	1.39	2.23	4.32	5.41	9.50	5.13
Rural	2.32	5.59	7.99	5.86	15.00	8.54

Sources: BBS (2015).

4. EXPLAINING THE RISE IN RNF EMPLOYMENT

There are multiple factors that have led to the expansion of RNA in Bangladesh. First, there have been major developments and policy interventions that have provided the supportive environment for the growth of RNA. Second, there are various micro-level factors that have influenced individual households to engage and participate in RNAs. However, owing to lack of appropriate data on RNA and RNF employment, there have been few (i.e. those that are based on household surveys and panel data) that have attempted to establish the relative importance of factors influencing RNF employment and the changing structure of the rural labour force (Hossain, 2004).

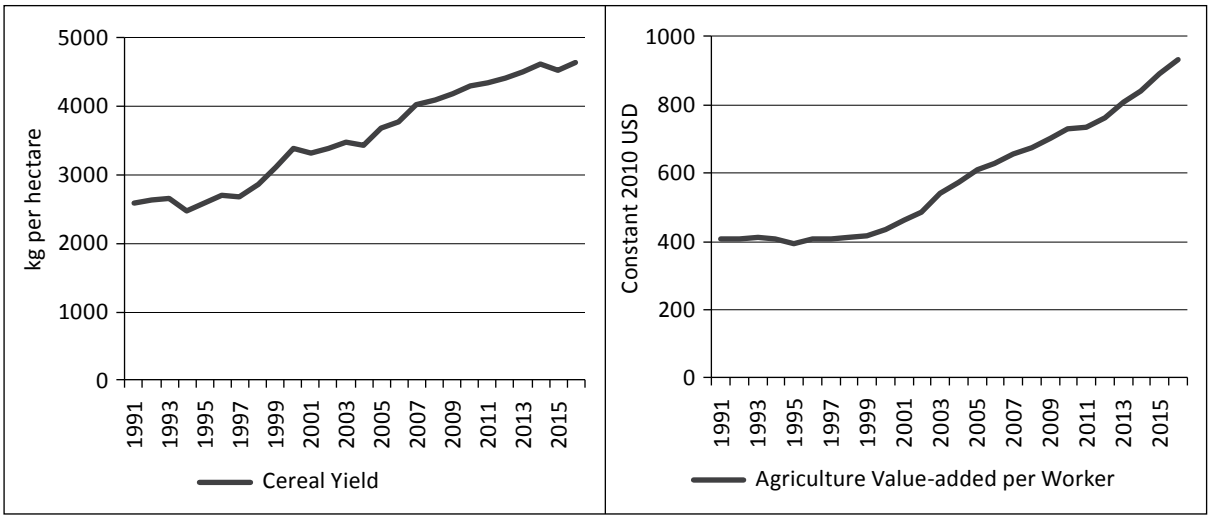
4.1 Conducive Environment

There are several factors that have created a conducive environment for the growth of RNA. The present study would wish to point to at least two major catalytic factors.

4.1.1 Agricultural productivity

Given the land and food scarcity that existed since its independence, Bangladesh pursued a concerted policy towards growth of food-agriculture. A progressive policy stance, and a significant growth in food-agriculture is often critically related to growth and flourish in RNA (as observed in the East Asian countries during the early stages of their development[22]). In Bangladesh too, a rapid intensification in food-agriculture[23], that was intermediated through various policy and pervasive intervention measures

Figure 1: Land and Labour Productivity Trends in Agriculture



Source: World Development Indicator (WDI), World Bank.

[22]See (Ranis and Stewart, 1990; Rosegrant and Hazell, 2000; Shilpi and Emran, 2016).

[23]This was achieved through widespread introduction of high yielding variety (HYV) technology, input subsidies, extension services, irrigation and mechanisation, etc.

(e.g. inter alia input subsidies, irrigation programmes, price support, extension services), greatly supported attainment of near self-sufficiency in food production. This also resulted in a significant increasing trend in both land and labour productivity (see Figure 1). This initial spurt in agricultural growth, among other factors, opened up opportunities for expansion of RNA activities through product, consumption, and labour market linkages. This is consistent with the Ranis-Stewart`s 'favourable archetype' of RNA expansion that is significantly influenced by increased productivity in food-agriculture. The impact of substantial increase in land and labour productivity has led to tangible increase in agricultural wages and rural household incomes. This is further examined in the following section.

4.4.2 Rural finance and financial inclusion

After the independence of Bangladesh in 1971, when the country was struggling to restore growth in the economy, and when more than two-thirds of the people were below the poverty line, microcredit extension at the grassroots level, through various non-governmental organisations (NGOs) and government agencies, started to support rural livelihoods. In the near absence of financial services and lending from the traditional banking and financial institutions, this movement gathered speed and space, largely through the now internationally reputed institutions such as Grameen Bank, BRAC, Proshika, etc. Recently, there has been a major drive towards financial inclusion (FI) initiative to provide greater access to credit markets, and in supporting small-scale enterprises. The objectives of these initiatives are being expanded from being purely poverty-reducing instruments to their wider application to various hitherto under-served and unbanked sectors, regions and population groups. An emphatic development has been the upsurge in entrepreneurship in rural areas (particularly women entrepreneurs). FIs are seen as a major avenue to develop financial structures and to deepen the financial sector by strengthening and extending institutions to non-traditional sectors.[24]

Traditional banking and financial institutions have also recognised the growing needs of the rural economy and in providing better access and services to rural enterprises. Given the rise in rural incomes and savings, these financial institutions are now devising various measures to extend their services to rural sector enterprises, not only through credit lending but also through providing access to savings/deposit accounts. Substantial flow of remittance money to rural households is likely to attract measures to harness larger shares of rural savings and investment in RNA.

There are, of course, many other notable factors that have made significant contribution to the expansion of RNA in Bangladesh. Mention may be made of the considerable expansion in rural infrastructure that has led to the expansion of markets, and facilitation of non-agricultural job growth (self-employment, construction, housing, etc.).[25] Similarly, there has been an increase in education and skills which has supported access to higher paid jobs, especially in the services sector.

4.1.3 The push-pull factors

While the forces and factors described above have created the broad impulses and conditions conducive to the growth of RNA in Bangladesh, the underlying structural changes that may have occurred need to be assessed through an understanding of labour market mobility and the changing

[24]These are important initiatives, and are likely to generate an ethos of expanding credit extension, not only through Corporate Social Responsibility (CSR)-induced programmes, but through normal banking channels as well. Some banks are already experimenting in mobile financial services (MFS). BRAC Bank has recently launched (in 2011) its subsidiary, bKash, which is using the mobile banking platform to reach MFS to millions of unbanked populations.

[25](Hossain, 2004).

structure of the labour force.[26] Understanding the process of such movements and changes however would require extended, regular and purposive surveys on individual household behaviour. Further, whether these labour movements have been driven by so-called push or pull factors would certainly require a detailed mapping of household behaviour factors explaining such mobility.

Very few studies exist on the forces explaining whether and to what extent labour mobility is accounted for by push or pull factors. This is significant, since if it is the former, it would tend to denote an immiserising growth of RNA, while the latter would tend to define a degree of dynamism in the sector. Further, the robustness of the explanatory factors would weigh in on the debates concerning whether it is the push or pull that is currently the more dominant trend. Studies indicate that it is not simply the landless, who due to lack of employment and earnings in agriculture, have engaged themselves in non-farm activities. A sizeable proportion of the landowning households are also observed to have significant non-farm engagements.[27] Apart from the size of landownership there are several other factors that tend to obscure the debate on household behaviour; e.g. whether the survey analysis refers to workers or labour time, to head of household or total members in household, to issues of principal or subsidiary occupations, varying extent of ownership of physical and human capital, or to whether households belong to agriculturally backward or progressive regions, etc.

Most of the early empirical evidence, from the 1980s and 1990s, with a few notable exceptions, tend to suggest that RNA expanded horizontally, soaking up surplus rural labour in marginal low paying jobs. However, others offered an opposing contention. For instance, Hossain (2004) provides important insights, based on a relatively large inter-temporal village level survey and panel data,[28] and attempts to distinguish some of the push-pull factors that tend to explain participation in RNA:

- In general, manual work centric activities, especially transport and construction, appear to be poverty induced; whereas education and access to capital tends to explain greater participation in services and business activities. These are likely to offer higher earnings than in the farm sector.
- The study estimates that labour productivity in the services and business activities is 2–3.5 times higher than the agricultural wage rate. The panel data show that productivity increased across all categories of RNA except cottage industries and rickshaw transport.
- Household income during the panel survey period (1987–2000) has increased tangibly, predominantly through earnings from RNA.
- Income elasticity of demand is positive for all RNA services, business and other non-farm activities.

Based on the above and other interrelated observations, the study contends that there are unmistakable pull forces, notwithstanding their intensity, that account for increasing participation in, and a growing household income from, RNA activities.

Another panel study of rural households conducted over a three-year period (between 2010 and 2012) recorded a sizeable shift of the workforce from farm to non-farm activities. The study also conducted statistical tests to examine determinants of labour mobility. The findings broadly corroborated those in Hossain (2004) as noted above.[29]

[26] Such structural changes could be, for example, "from farm to non-farm, from informal to informal, and from low to high scale economic activities" (Shilpi and Emran, 2016). Also see (Grilli and Zanalda, 1999; Ranis and Stewart, 1990).
[27] (Hossain, 2004).
[28] This is a BIDS-IRRI survey of 1245 rural households from 62 villages in 57 districts, conducted in FY1987-88. This benchmark survey was followed by an IRRI survey of 1,880 households from the same villages, and covered the households in the former survey. See (Hossain, 2004).
[29] See (Pramanik *et al.*, 2014).

While agricultural productivity and intensity of agricultural growth have unleashed the initial impulses of RNA growth[30], there are several other factors that need to be closely examined regarding the relative influence of these push-pull factors. It appears that the push factors are largely associated with poverty-induced and/or technology induced movement of labour from farm to non-farm (which is likely to show ambivalent prospects of earnings and productivity in RNA) (Mahmud, 1996). However, it is the pull strength in the RNA that is likely to determine whether a virtuous cycle of higher productivity and higher household income can establish a secular trend in growth and employment in rural Bangladesh. In other words, a flourish in the RNA sector will be characterised by inter alia a trend increase in demand for RNA goods and services, an increasing labour productivity in RNA sub-sectors, and an increasing differential between farm and non-farm wages (Oshima, 1988).

5. CHANGING LABOUR MARKETS IN RNF ECONOMY: RECENT DEVELOPMENTS

Irrespective of the pull or push forces determining increasing participation in RNA, the sector has shown strong growth, especially during the past two decades. Table 2 rendered a snapshot of the growth of non-farm enterprises and employment, both in rural and urban areas of Bangladesh during 2001–03 and 2013. Average employment size of a non-farm rural enterprise has increased from 2.5 to 2.7 persons per enterprise during the above period. The Economic Census 2013 provides further insights on the growth rates and changing structure of rural establishments and employment (Table 3).

Table 3: Growth Rates of Rural Establishments and Employment (2001–03–2013)

(in Per cent)

Type	Establishment	Employment
Permanent	4.09	7.22
Temporary	6.86	8.05
Economic household*	18.26	13.90
Total (rural)	**7.99**	**8.54**

Source: BBS (2015).

Note: *Economic households—those with non-agricultural economic activities (e.g. cottage, shop, hawkers, etc.).

Establishments, dubbed as permanent, have grown at more than 4 per cent during 2001–2013, and employment in these establishments have more than 7 per cent growth. Economic households i.e. households which engage a significant proportion of labour time in non-agricultural activities (shops, hawkers, cottage activities, etc.) have increased significantly (18 per cent). These characteristics of the rural enterprise sector clearly show the trends towards increasing participation in RNA for additional household income.

The above trends are beginning to be reflected in the changing occupational structures and labour market formation in the rural areas. This is reflected in Tables 4 and 5 which draw on the recent LFS.

According to the LFS surveys, over the past two decades, there has been a substantial decline in the proportion of rural employed labour force in agriculture and allied sector. There has been a general increase in employment in most of professional, sales and services sector work. During the more recent period, 2013–16, the proportion of those employed in agriculture and allied sectors has fallen even more sharply, from 56 per cent to 43 per cent, while the proportion of those engaged in most non-agricultural occupations has increased, notably in construction, wholesale/retail trades, transport/storage, education, etc.

[30]Such a process is historically observed in various other countries, see for example, (Ranis and Stewart, 1990) (for Taiwan-China); (Oshima, 1988) (for Taiwan-China and Japan); and (Shilpi and Emran, 2016) (for Bangladesh).

Table 4: Changing Structure of Employed Labour Force by Sector in Rural Bangladesh

Major Sector	Employed Workforce (as Per cent of Total Employed)	
	2013	2015-16
Agriculture, forestry, fishing	56.2	42.7
Manufacturing	13.9	14.4
Construction	3.4	5.6
Wholesale and retail trade	10.4	13.4
Transportation and storage	5.5	7.7
Admin and support services	0.5	0.6
Education	2.3	3.6
Other service activities	2.2	3.8
Accommodation and food services	1.2	1.7
Financial and insurance	0.4	0.7

Source: Labour Force Survey (LFS).

There are some distinctive changes in the occupational structure of the rural labour force. During the decade 2005–06 to 2015–16, while the total incidence of own account workers was seen to have marginally increased, the proportion of rural females under this category has increased nearly three-fold, from 11.6 to 33.2 per cent. This is a significant development since the participation of rural women has surged in various self-employment activities and microenterprises. This appears to be consistent with the 18 per cent growth rate in economic households, observed in Table 3. Further, the proportion of contributing family workers has declined substantially by 11 percentage points and the share of employees (i.e. paid workers) has increased by about 9 percentage points during the ten-year period. One also observes that there has been a decline in the incidence of domestic helps/apprentices. Although these shifts are not very large, there is, nevertheless, a trend in labour movement away from unpaid/ family/ domestic work towards paid wage employment (Table 5).

Table 5: Changing Occupational Structure in Rural Bangladesh (2005–06–2013)

Occupation	Share of Employed Labour Force								
	2005–06			2013			2015–16		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Employer	0.3	0.2	0.3	0.9	0.1	0.6	3.7	0.3	2.7
Own account worker*	51.5	11.6	42.0	55.9	11.5	42.7	47.6	33.2	43.2
Contributing family worker	11.0	71.7	25.5	5.7	59.0	21.3	4.6	37.6	14.5
Employee**	35.8	12.8	30.4	37.5	26.5	34.3	43.7	28.5	39.1
Others***	1.3	3.6	1.9	0.3	2.9	1.1	0.4	0.3	0.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Labour Force Survey (LFS), (various issues).

Notes: * self-employed in 2005–06; ** includes all paid regular, irregular, and day labourers; *** includes domestic help/apprentices.

The incidence of workers working full-time in rural enterprises has grown at 8.3 per cent, from 53.9 million in 2001–03 to 61.7 million in 2013 (Table 6). During the same period unpaid family workers have declined significantly from 11.2 million to 5.3 million. These are important trends in the changing workforce structures vis-à-vis the growth of RNA in Bangladesh.

The labour market outcomes, as observed in Table 6, reflect perceptible movements of labour away from the unpaid non-wage sectors to wage and salaried RNA activities. Nevertheless, closer analysis and a significant database are required to assess methodologically the extent of these changes in

Table 6: Percentage of Employed Persons (by working status) in Establishments

Working Status of Employed Person	2001-2003 (in Million)	2013 (in Million)	Growth Rate (Per cent)
Working proprietors	31.00	30.01	6.76
Unpaid family workers	11.20	5.29	0.24
Full-time workers	53.90	61.71	8.29
Part-time workers	3.90	1.98	1.02
Casual workers	-	1.01	-
Total	**100**	**100**	**7.06**

Source: BBS (2015).

the labour market structures, and to understand how far the pull factors are consolidating in the RNA sectors. The differentials in wages, productivity, skills in the various sub-sectors of RNA (both in goods and services) need to be monitored over time. In the absence of an adequate and appropriate database, it is difficult to assess how robust this labour mobility is, what factors are responsible, and whether such shifts in labour can continue at an adequate pace vis-à-vis the existing slack in the labour market to bring about a structural change which is sustainable.

6. STRUCTURAL CHANGE IN A MILIEU OF GROWING INFORMAL SECTOR: A RETHINK

A particular reason why in a country like Bangladesh, labour movements in a traditional three-sector analysis fail to show any robust structural change, is the existence of informal activities and employment, in all the three sectors. Table 7 provides some insights from LFS 2013 and LFS 2015–16 on the overwhelming presence of informal employment in agriculture, industry and services sector. The incidence of informal employment in the latter two sectors has marginally declined but remains very high. According to the LFS 2015-16, informal employment represents nearly 98 per cent, 91 per cent and 72 per cent in the aforementioned sectors respectively. The massive dominance of informal employment in all the three traditional sectors implies that when labour moves across sectors, there is a high probability that workers may be moving from one informal occupation to another.

The informal sector employment as registered in the LFS is a catch-all figure which captures unregistered (informal) workers working through informal arrangements, including in both registered or unregistered enterprises, as casual labour, as well as in personal household work (unpaid family or domestic work), or in self-employment.[31] Given the current LFS definition, in the rural areas, practically the entire labour force, barring a paltry 8 per cent, belong to the informal sector through one or more of the above categories. This implies that within each of the three traditional sectors, i.e. agriculture, industry, and services, the large majority of employment is in the so-called informal category.

Table 7: Informal and Formal Employment in the Traditional Sectors

Sector	2013		2015–2016	
	Formal	Informal	Formal	Informal
Agriculture	2.4	97.6	2.0	98.0
Industry	5.6	94.4	9.2	90.8
Services	22.9	77.1	27.8	72.0
Total	**8.3**	**91.7**	**10.7**	**89.3**

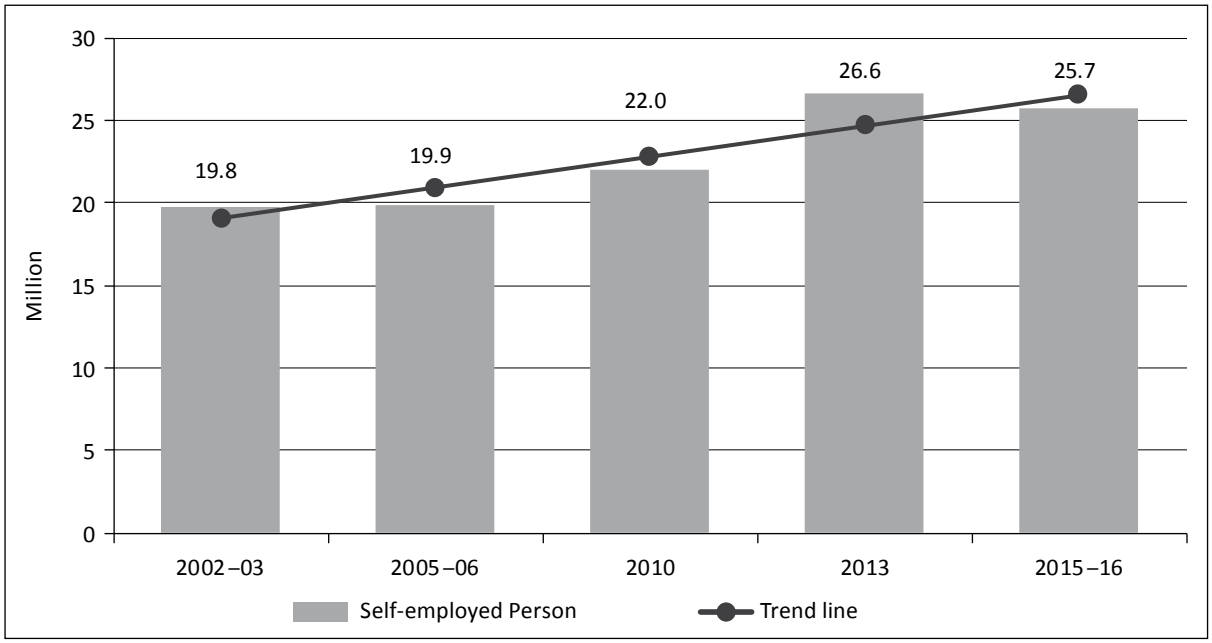
Sources: LFS (2013); LFS (2015–16).

[31] **Note:** There has been definitional changes in the LFS, of informal employment, one in LFS 2010, which included not only those in informal unregistered enterprises, but also those informally employed in formal enterprises, as well as unpaid family, domestic work that were excluded previously; and again in LFS 2013 that included enterprise criteria of no pension or no contribution to retirement fund. See (Rahman and Al-Hasan, 2018).

A major gap in this regard is the lack of any systematic evidence to assess the relative importance and role of informal activities and employment within the respective sectors (ADB, 2012). Apart from the one single national informal sector survey (ISS) 2010, there is neither any periodic national level survey nor trend analysis or database to 'deconstruct' the informal sector in order to understand the structural changes and dynamism of the economic activities taking place within the sector. It is interesting to note that between the two LFS periods in Table 7, informal employment has declined (and formal employment increased) more tangibly in the services sector. While this is often contrary to the received wisdom that in developing countries it is the services sector which accounts for much of the expansion in informal employment, this must not necessarily imply that the services sector in Bangladesh is a 'sponge' sector.

As mentioned above, much of the analytical attention is geared towards RNA (e.g. manufacturing, construction, services), which hitherto had been, and still are, subsumed under informal activities. Similarly, we also observe a steady growth in self-employment, which too needs to be unpacked to understand which activities/enterprises have been gaining pace and momentum, especially in creating

Figure 2: Distribution of Self-employed Persons by Year



Source: LFS (2013).

Table 8: Labour Productivity by Type of Selected Economic Activity

Economic Activity	Gross Value-added per Job *(Thousand Taka)*		
	Formal	Informal	Total
Agriculture, hunting, forestry and fishery	39.1	49	47.2
Manufacturing	562.1	88.5	185
Construction	1028.6	81.6	213.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	149.7	135.7	140.1
Hotels, accommodation and food service activities	168	34.3	64
Transportation, storage and communication	592.7	60.1	182.2
Real estate and other business activities	1116.6	330.5	697.7
Education	232.5	31.5	143.4

Source: ADB (2012).

a sustained demand for labour. Figure 2 shows that self-employed workforce has increased from 19.8 million in 2003 to around 26 million in 2015–16.

A more searching analysis is required to investigate the changes that are taking place in the patterns of rural employment and labour market structures within the so-called informal sector. Further, owing to increasing modernisation/commercialisation, and use of technology, various activities/products e.g. dhekis and manual handlooms are getting extinct. Thus, in Bangladesh there is the existence of an overwhelming and growing informal sector, where there exists not only tremendous heterogeneity but also exits of traditional activities and the growth of new enterprises and activities. The catch-all informal sector, which contains more than four-fifths of the employed workforce could not be dismissed as stagnant or dormant in a milieu of the overall rapid and prolonged gross domestic product (GDP) growth of the economy. A recent study, ADB (2012), based on the first national survey, the ISS 2010, and Economic Census, underscores not only the growing significance of informal sector's contribution to Bangladesh's GDP, but also its growing efficiency, in terms of labour productivity (largely in non-capital intensive sectors) as well as, their organisation and working conditions (see Table 8). This is broadly in conformity with the findings previously reported on productivity performance of the RNF activities and enterprises which are largely informal.

6.1 Formalising the Informal Sector

As noted in an earlier section, there have been sporadic studies, occasionally based on limited surveys, to show dualism in the informal sector, with some enterprises showing dynamism, and others dubbed as entities for survival. How is this dualism rationalised or reconciled with the formal-informal dichotomy as definitionally established in LFS? Should so-called informal enterprises or entities (e.g. economic households as in Bangladesh Enterprise Survey, 2013) be seen in terms of conventional (LFS) definition of having registration, pension fund contribution and formal contracts? Or in an orthodox development perspective where the differences in enterprises are seen in terms of investment, savings, technology etc.? A recent study, Rahman and Al-Hasan (2018) contends that one can discern the existence of a 'formalisation spectrum' within the informal enterprises, and argues that the formal-informal dichotomy is often blurred.[32] Based on the ISS 2010, and using various criteria to establish the gradations of formalisation,[33] the study contends that productivity and profitability, even after controlling for firm size and owner characteristics, increase substantially along the spectrum. Such a stance in some ways calls for a rethink of the traditional dichotomy, and queries what should be a standard formal enterprise, or employment. This further implies that greater clarity is needed on designing policies that would be consistent with an appropriate strategy towards transitions to formality.[34] This is significant, since there are policy campaigns to 'formalise' the informal sector, usually accompanied by fiscal cover, as observed in many Latin American countries that concentrate on narrowing differences in regulatory frameworks governing the enterprises and the labour markets in the formal and informal sectors. On the other hand, from the findings above, though scanty, there is an equally strong case to pursue the 'formalisation spectrum', i.e. for enterprises and employment to grow in their 'gradations', through strategic support to facilitate access to technology, credit markets, and to domestic and external demand. A careful calibration and sequencing of the two sets of policies would be needed for a smoother transition out of informality, as currently defined in Bangladesh. In other words, for informality to decline (i.e. conditions as defined by LFS 2013), an increase in registration, tax and other regulatory compliances among enterprises are as significant as a decline in unpaid family workers, domestic workers, etc.

[32]For example, out of all registered enterprises, not all are registered for VAT; and from among the latter, not all pay VAT.

[33]These included factors such as technology, financial tools, record keeping, legal dimensions, etc. See (McKenzie, 2010).

[34]See Ghose (2017), who challenges the traditional formal-informal dichotomy, maintaining that such a view is an import from Western analysts on dualism in post-colonial developing countries. Also see (Chen, 2003).

Although there exists several studies on the informal sector, some based on limited, purposive surveys, and others on rural industries and RNA, there is still a dearth of systematic knowledge and understanding of job and enterprise growth along the formal-informal dichotomy, especially trends in sub-sectoral productivity, employment and wages that could allow more convincing conclusions on the structural changes, if any, that are taking place.

7. PATHWAYS TO RURAL FULL-EMPLOYMENT AND ACCELERATED GROWTH

Bangladesh, like many of the contemporary developing countries, is yet to achieve a distinct structural change that is consistent with the Kaldorian pattern of economic transition. The agriculture sector has not been shedding labour at a fast enough pace, nor is the manufacturing sector employment growing adequately enough to absorb the annual additions to the labour force and the existing surplus labour. The pace of structural change, i.e. shifts of labour towards more productive sectors (modern manufacturing or services) is apparently constrained by the productivity and absorptive capacity of the modern sectors relative to the very large initial surplus labour that exists in the agriculture and informal sectors[35], hence the need to look beyond an 'industry fundamentalism'. The critical issue is that in order to ensure structural change, labour would need to shift to higher productivity sectors, irrespective of whether such productivity lies in manufacturing, services or agriculture, and to higher productivity activities, whether these are in formal or informal enterprises and activities.[36]

Structural change primarily rests, among others, on increasing labour productivity and hence, investment and capital accumulation. In East-Asian countries, not only was labour productivity high in agriculture and in modern sectors but it was also more significant than in other Asian countries. While RNA was strongly facilitated by higher productivity in agriculture, there was, equally, a focused policy attention to rural development and RNA growth and its linkages to regional urban and international markets (Ranis and Stewart, 1990; Saith, 1987; and Haggblade et al., 2006). While there are several accounts now that have highlighted the role that RNA has played in the process of growth and employment generation, Ranis & Stewart (1990) as noted above, emphasised its critical role in 'wiping out' unemployment and bringing about a situation of rural full-employment. Similarly, Oshima (1988) has, equally forcefully, pointed out the significant role of RNA, especially in raising the rural household income and aggregate demand that would reduce unemployment, underemployment and raise wages of farm and unskilled workers.[37]

For Bangladesh, there are three critical interrelated variables that, among others, need to be monitored, i.e. those which could enforce a dynamic role of the RNA in achieving a potential rural full-employment. These are (i) rapid and sustained growth in agricultural productivity; (ii) growth in rural non-farm productivity and earnings; and (iii) growth in rural household income. There needs to be a virtuous cycle between increase in productivity and household incomes and the growth of RNA.[38]

7.1 Growth in Agricultural Productivity

In section 4.1.1, the growth of labour productivity in Bangladesh agriculture, and its close association with increased land productivity have been observed. This section will examine the strength of these developments in a comparative context, i.e. in relation to those in some Asian countries.

[35]One may note that in South Korea during the early stages of industrialisation (1970s), nearly three quarters of the rural labour force that migrated to urban areas were in fact absorbed by the manufacturing sector. See (Edgren and Muqtada, 1990).

[36]Lewis (1954), while proposing the primacy of the growth of the modern industrial sector also acknowledged the significance of improved labour productivity in agriculture in the process of structural change; a potential decline in food/wage goods production would cause a rise in prices and wages.

[37]Oshima (1988) further contended that reaching a state of rural full-employment would facilitate capital labour substitution and help accelerate growth in the overall economy.

[38]See (Oshima, 1988).

Several analytical and empirical studies have weighed-in to point out the significance of agricultural productivity and growth in investible agriculture as a precursor to the progressive growth of RNA.[39] Intensification and diversification of agriculture not only releases resources for RNA, it also relaxes the wage-goods constraint. In Bangladesh, there has been an increase in labour productivity, largely owing to the intensification of food-agriculture. This is consistent with the Ranis and Stewart's (1990) condition for enhancing the favourable archetype of RNA. During the period 1980–2010, agricultural labour productivity in Bangladesh grew at a rate of 2.1 per cent (Table 9), which compares favourably with several Asian countries (except China and Malaysia). The increase in the average productivity of labour in agriculture appears to be positively correlated with average productivity of land (e.g. yield per hectare).[40]

Table 9: Growth Rates of Land and Labour Productivity in Agriculture (Selected Asian Countries)

Country	Value-Added/Agricultural Worker, 1980–2010	Cultivable Area	Land Productivity	Agricultural GDP
Bangladesh	2.1	- 0.16	2.29	2.13
India	1.7	0.07	2.51	2.58
China	3.8	0.50	4.53	4-04
Indonesia		1.27	2.14	3.41
Malaysia	3.2	1.35	1.55	2.94
Pakistan	1.6	0.25	3.18	3.43
Thailand	2.0	0.82	2.17	2.99
Vietnam	2.1	1.70	2.00	3.70

Source: Author's adaptation from Briones and Felipe (2013).

Given scarcity of land and declining trends in cultivable area (declining at -0.16 per cent) the growth in land productivity has supported the growth of labour productivity. Although land productivity has grown appreciably, output per hectare is still below that in some of the Asian neighbours, and far below that attained by the East and Southeast Asian countries during their structural transformation.[41] Considering the role of agricultural productivity and its contribution to overall rural development, measures to intensify agricultural growth and productivity would reinforce RNF growth and rural regeneration.

Bangladesh is, however, reaching a critical limit on how far it can depend on land productivity to enhance labour productivity, and potentially the supply price of labour. The recent increasing trends in land productivity have been achieved due to the overwhelming role of HYV rice and related technological developments and support structures; in particular, the spread of irrigation, input subsidies price support, extension services, etc. This has enabled Bangladesh to increase its total food production three-fold since the 1970s, and to achieve near food self-sufficiency. The predominant role of HYV rice is clear from Table 10.

Table 10: Role of HYV Rice in Coping with Food Self-sufficiency

Year	Share of Rice Land under HYVs (Per cent)	HYV Output as Share of Total Rice Output (Per cent)
1970-75	11	29
1976-80	14	29
1981-85	24	41

(Table 10 contd.)

[39]See (Haggblade *et al.*, 2006; Hossain, 2004; Shilpi and Emran, 2016).

[40]There are empirical studies to show that, assuming fixed input coefficients per unit of output, with increases in yield, there would be an implicit increase in the average productivity of labour, and a corresponding increase in the real agricultural wage rate (Bannerji, 2007).

[41]See (Oshima, 1988).

(Table 10 contd.)

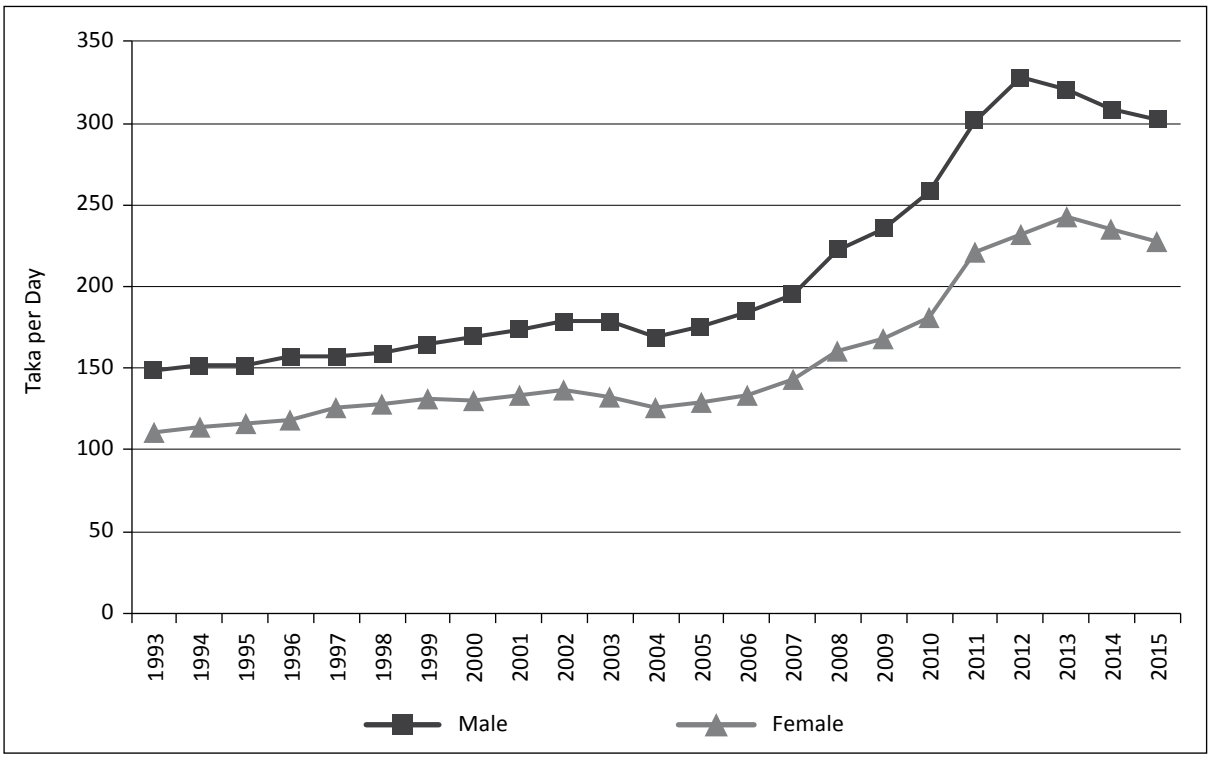
Year	Share of Rice Land under HYVs (Per cent)	HYV Output as Share of Total Rice Output (Per cent)
1986-90	34	51
1991-95	48	65
1996-2000	57	74
2001-2005	66	80
2006-2010	79	89

Source: Alam and Islam (2012).

However, HYV rice which has accounted for growth in yield per hectare, already occupies nearly four-fifths of the cultivable land for rice. In order to further enhance land productivity, which is still significantly lower than most Southeast and East Asian countries, a well-coordinated intensification and diversification of agriculture would be required. However, this will require careful evaluation and calibrated planning regarding available scarce land that would need to be allocated to food, non-food and non-farm activities.

As labour productivity in agriculture, and intensification of cultivation have increased extensively, it has also led to increases in the supply price of labour. Since FY2006–07, there has been a distinct upward trend in real wages in agriculture in Bangladesh, although it has dipped somewhat in the past two years (Figure 3).

Figure 3: Year-wise Real Wages of Agriculture in Bangladesh



Sources: Author's calculation from Bangladesh Bureau of Statistics (BBS) and World Development Indicator (WDI), World Bank data.
Note: Wages without food were considered. Consumer Price Index (CPI) was taken from WDI. All values are in 2015 prices.

7.2 Growth in RNF Productivity and Earnings

Agricultural productivity has substantial impact on wages and earnings. Through interlinkages between a progressive agriculture and RNA, rural household incomes are boosted, which in turn, increases aggregate demand. This was the experience of the East Asian countries in the early stages of their development.

Table 11: Rural Employment and Income Scenario

Sector/Industry	Employed Person (Thousand)			Relative Monthly Income (Agriculture=100)	
	2013	2015–16	Growth (Per cent)	2013	2015–16
Agriculture, forestry and fisheries	23570	23264	-1	100	100
Manufacturing	5813	4859	-16	121	125
Construction	1415	2236	58	106	120
Wholesale and retail trade, repair of motor vehicles	4364	4687	7	130	126
Transportation and storage	2316	2881	24	121	116
Accommodation and food services activities	504	602	19	121	122
Public administration and defence	340	473	39	151	176
Education	982	1204	23	155	200
Human health and social work activities	287	215	-25	144	162
Activities of households as employers	532	387	-27	78	92

Source: Author's compilation from various issues of Labour Force Survey (LFS) reports.

As noted earlier, there are very few studies on the productivity growth of the various sub-sectors of the RNF economy in Bangladesh. Of these, Hossain (2004), based on the BIDS survey of rural industries, observed that RNA productivity was substantially larger than agricultural wages for almost all industries. This, and various other related indicators, indicate the necessary conditions for labour mobility from farm to non-farm sectors, which in turn is likely to boost earnings and productivity in the latter.

Wages and earnings are expected to increase simultaneously when the RNF economy is growing as a result of increased demand and increasing labour productivity. While available wage data for Bangladesh tends to show that agricultural wages are supposed to increase (as observed in Figure 3), various studies point out that productivity and earnings in several non-farm sub-sectors (construction, professional and services sector jobs) in rural areas have increased faster.[42] (See Table 11, which refers to salaried employees in various sectors). This is consistent with a 'pull' scenario where a growth in non-farm productivity is able to induce and absorb workers out of agriculture.

According to the Hossain (2004), share of non-farm income in total income increased during the considered 12 year period of the study, for all income groups especially those in the middle and upper-income deciles (see Table 12). It is still premature to suggest whether such changing composition of

Table 12: The Pattern of Distribution of Income from Non-farm Sources (1987 and 2000)

(in Per cent)

Rank in Per Capita Income Scale	Share of Household Income		Share of Non-Farm Income		Non-Farm Income *(As Per cent of Household Income)*	
	1987	2000	1987	2000	1987	2000
Bottom 40	17.1	14.1	12.5	10.7	30.6	40.8
Middle 40	37.1	34.8	32.3	34.1	36.3	53.2
Ninth Decile	14.0	16.2	13.0	16.6	38.7	55.3
Top 10	31.8	35.0	42.2	38.5	55.5	59.2
Total	**100**	**100**	**100**	**100**	**41.6**	**54.2**

Source: Hossain (2004).

[42]For example, (Hossain, 2004; Osmani *et al.*, 2015).

household income truly reflects strong transition towards a structural change in output and labour markets. The trend needs to be further examined and closely monitored.

At the aggregate level, HIES data tends to show that agriculture has declined in importance in rural household income, from 35 per cent in 2000 to 30 per cent in 2010, partly supporting a period of transition. The study further corroborates that there has been an increase in household savings which have allowed the growth of various RNA activities. [43] It is interesting to note that while there has been a spurt in microcredit lending, the bulk of investments that the rural households make in RNA activities is met largely by household savings.

Income shares provide a more reasonable guide to the relative importance of different non-farm sectors, but this kind of data is hardly available on a representative scale. Among various other factors that have contributed to household incomes, a significant one is the spread of education. This is clearly observed from the increase in primary and secondary enrolment in rural areas. Education has enabled members of rural households to engage in outside farm activities and in several RNA activities such as in trade, transport and other services sector occupations.

7.3 Changing Structure of Household Income and Demand for RNF Goods and Services

Growth in agricultural productivity, as observed in various countries, has had a positive correlation with growth of employment and incomes in RNAs.[44] This appears to be the case in Bangladesh as well. These developments are registered in the increasing growth of rural household incomes. In Bangladesh too, rural per capita income has been increasing, incidentally accounting for a substantial decline in rural poverty. According to HIES 2010, rural per capita income in Bangladesh increased by around 58 per cent, nearly by as much as per capita urban income, during 2005 and 2010. This increase of income in the rural areas is further corroborated by various other studies, based on fairly large sample surveys. For instance, Hossain (2004) provides support to such a finding from a longitudinal survey of household income and expenditure patterns. According to this study, average per capita household income during the survey over two points in time (1987–2000) increased by nearly 2.8 per cent. A more recent study by Osmani et al. (2015), based on a large sample survey, estimated a growth of 3.7 per cent in rural income during the decade 2000–2010, which is encouragingly higher than the 2.8 per cent growth observed during the preceding decade.[45] This has also led to significant improvements in related indicators, such as consumption expenditures on non-food and non-farm products and services (such as on education). Consumption expenditure, in nominal terms, increased from Taka 5,165 in 2005 to Taka 9,436 in 2010 and Taka 13,868 in 2016. Non-food expenditure increased from about 41 per cent in 2005 to nearly 50 per cent in 2016 (Table 13).

The increasing share of household income originating from the non-farm activities has been observed earlier. Figure 4 shows the significant changes in the relative shares of household incomes from various sources from 1995–96 to 2010. While the relative income share from agriculture has fallen, those from wage earnings and business and commerce have increased significantly. It can also be observed that, over the past two decades, remittances have been playing a dominant role in raising rural regeneration in general, and in raising rural household incomes.

[43] Hossain (2004), based on HIES 2000, estimated income elasticities of demand by rural households, and states that a "ten per cent increase in household expenditures increases the demand for non-farm goods and services by 14.5 per cent in the backward villages and 15.8 per cent in the progressive villages where nearly 41 per cent of the Incremental expenditure is spent on non-farm goods and services."

[44] See (Rosegrant and Hazell, 2000).

[45] See (Osmani et al., 2015). The study is based on a survey of 6300 households.

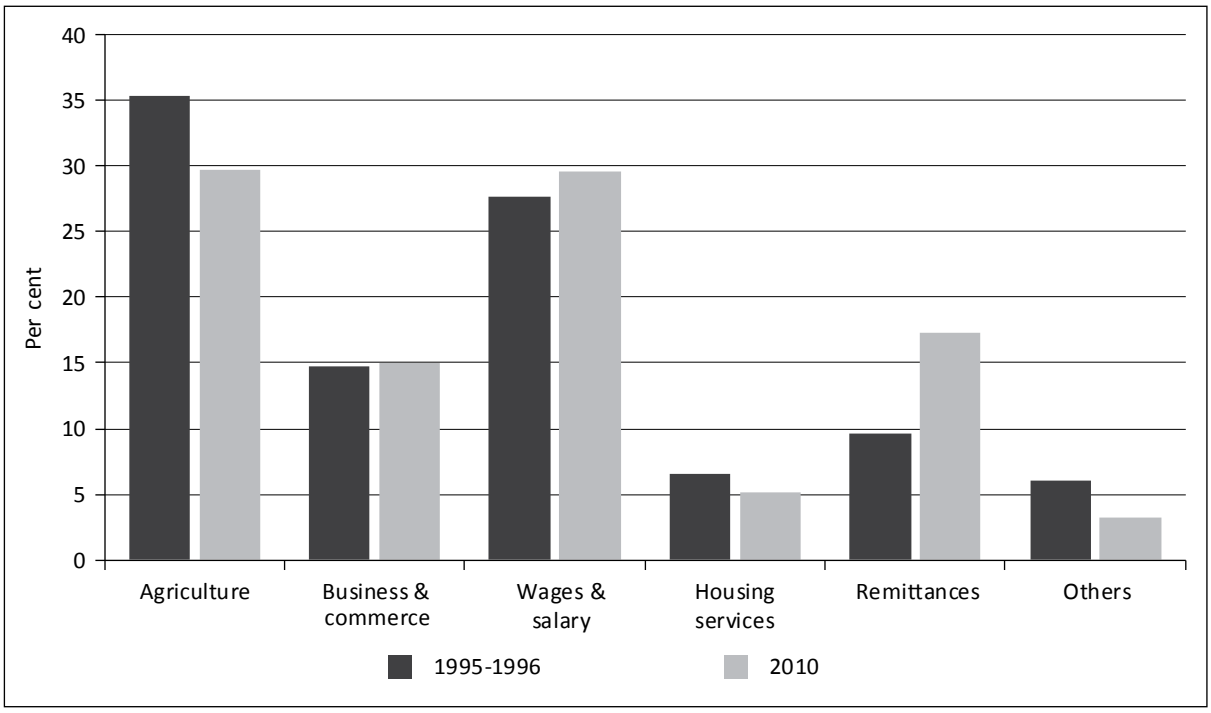
Table 13: Household Income and Expenditure in Bangladesh

(in Taka)

Income and Expenditure	2005			2010			2016		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Income	7,203	9,095	10,463	11,479	9,648	16,475	15,945	13,353	22,565
Total expenditure	6,134	5,319	8,533	11,200	9,612	15,531	15,715	14,156	19,697
Consumption expenditure	5,964	5,165	8,315	11,003	9,436	15,276	15,420	13,868	19,383
Food expenditure	3,209	3,023	3,756	6,031	5,543	7,362	7,355	7,002	8,255
Non-food expenditure (per cent of consumption expenditure)	46.2	41.5	54.8	45.2	41.3	51.8	52.3	49.5	57.4

Source: Author's compilation from various issues of Household Income and Expenditure Survey (HIES) 2010 and 2016 reports.

Figure 4: Sources of Rural Household Income (1995–96–2010)



Source: Household Income and Expenditure Survey (HIES) 1995–96 and 2010, Bangladesh Bureau of Statistics (BBS).

From the above discussions and available evidences, it can be noted that labour has been steadily flowing to RNF activities with earnings/salaries from most such activities being relatively higher than in agriculture, during a phase when wages in the latter itself are on an upward trend. The general rise in household incomes, as well as the changing structure of income and expenditure is further reflected in the rising demand for non-farm goods and services. This lends support to the 'pull' dimension of labour mobility. The relative dynamism in the RNF sector is further underlined by the relatively high elasticity of demand for non-farm non-agricultural products, as shown in Table 14.

Table 14 has been constructed using the HIES 2010 unit-level data, following methodology from Hazell and Roell (1983).[46] One may note, as seen in Table 14, that the share of average rural household

[46]We have estimated the expenditure pattern by fitting the following log-log, double-log, or log-linear models : $\ln E_i = \alpha + \beta \ln Y + u_i$, where, E_i is the household expenditure on the i^{th} consumption item, Y is the total household income, u_i is the disturbance term and α *and* β are the parameters of the function. This model is linear in the parameters α *and* β, linear in the logarithms of the variables E_i *and* Y, and can be estimated by simple OLS regression. In this exercise, the main target is to estimate the slope coefficient β which measures the elasticity of E_i with respect to Y, that is, the percentage change in E_i for one percentage change in Y. Following Hazell and Roell (1983), this exercise used total expenditure for each household as a proxy for income.

Table 14: Share of Income and Income Elasticity of Demand

Item	National		Rural		Urban	
	Average Share of Income (Per cent)	Income Elasticity	Average Share of Income (Per cent)	Income Elasticity	Average Share of Income (Per cent)	Income Elasticity
Food	53.33	0.78	57.23	0.83	46.75	0.72
Cereal	19.23	0.51	22.71	0.64	13.34	0.41
Non-cereal crops and fruits	14.96	0.77	16.03	0.81	13.16	0.71
Fish and livestock product	14.39	1.29	13.75	1.31	15.48	1.16
Other food product	4.76	0.84	4.75	0.86	4.77	0.71
Manufacture	10.29	0.98	10.82	1.04	9.40	0.91
Clothing	4.95	0.92	5.11	0.95	4.68	0.86
Other industrial product	5.34	1.02	5.71	1.10	4.72	0.94
Services	36.37	1.31	31.95	1.25	43.85	1.34
Housing and energy	15.53	0.97	13.27	0.82	19.35	1.05
Education and health	9.46	1.62	8.21	1.57	11.58	2.04
Transport, recreation and others	11.38	1.91	10.46	1.96	12.93	1.82

Source: Authors' estimation using HIES (2010) unit level data.

expenditure on food has declined even further to less than 50 per cent. The Table clearly shows that for most RNA (rural manufacturing and services) elasticities are greater than unity. It is 1.57 for education and health service sectors, and 1.96 for transport, recreation and others sectors. Previously, we have noted that Hossain (2004), based on 2000 HIES, had found strong evidence for high-income elasticities for most of the non-farm goods and services. The above underscores that the demand for non-food and non-farm products has been encouragingly high, over an extended period.

7.4 Remittances as a Game Changer

The biggest change, however, has come from remittances. Its share in rural household income has increased from less than 1 per cent in 1995 to more than 17 per cent in 2010. The contribution of personal remittances to GDP has increased from 11.8 per cent in 2009 to 12.2 per cent in 2014. The large inflow of remittance into the country during the past decades, besides contributing significantly to maintaining current account surplus, has significantly changed the shape of the rural economy. Remittances have become a significant impetus in the overall rural development in Bangladesh, with nearly 94 per cent (of 13.8 billion USD in 2013) of remittances flowing to the rural areas each year. This is a massive 'injection' of resources to the rural economy, and a significant boost to the income, consumption and savings of the remittance-receiving households (Table 15).[47]

Table 15: Remittance Use as Means of Expenditure Investment and Savings

(in Taka)

Area	Year	As Per cent of Remittance Flow	As Per cent Share of Total Remittance Flow			
			Food Expenditure	Non-food Expenditure	Investment	Savings
Rural	2013	93.83	27.03	17.65	27.41	13.04
Urban		6.17	1.45	0.98	2.12	1.04
Total		**100.00**	**28.48**	**18.63**	**29.54**	**14.08**
Total	2016		**41.80**		**25.30**	**8.40**

Source: Author's estimation based on Use of Remittance Survey (2013, 2016).

[47] See (World Bank, 2013). According to HIES 2010, average annual per household remittances received was Taka 152 thousand.

The bulk of remittances sent by migrant workers are mostly used by their families for varied consumption and investment-related purposes which are likely to impact employment and wages positively. At the household level, remittance has been contributing to raise household level income, consumption, savings and investment, sustain graduation from poverty, improvement of health and education entitlements and supporting asset and human capital accumulation. Substantial remittance inflow is another driving force behind shifting employment from agriculture to other non-farm productive sectors, and holds a significant potential for investments and capital accumulation in the RNA sector.

8. CONCLUSION

8.1 Making the Case for RNF Employment: A Summary

The above discussions and empirical findings, reviewed from various secondary and survey-based studies, underscore consensus on the growing importance of RNA and RNF employment. Despite the dearth of systematic trend data on RNA, there appears to be irrefutable evidence that RNA has been establishing an unmistakably growing presence in the rural economy of Bangladesh and that RNF employment has been rising quite rapidly. The evidence, however, on the speed and volume of mobility and the precise determinants of such labour movements is rather short. The data on labour force participation (including that of women workers) and occupational structure provide us perspectives on the sub-sectors that are growing (e.g. construction, transport, services, administration etc.). However, the database on RNA is still inconsistent and further systematic trend analysis would be required, both with regard to the relative pace of the growth of RNA sub-sectors, and the pace and determinants of labour mobility.

The evidence that is gathered from the above can be summarised as below:

- The employment share of RNF in total rural employment has increased.
- Productivity in most RNA enterprises (goods and services) appears to be higher than in agriculture, implying a 'pull' in labour mobility.
- Similarly, income elasticity of demand for RNA goods and services are largely higher than unity; labour productivity level has grown, (although still not as high as some of the East and Southeast Asian neighbours), which has boosted growth of RNA and employment. Such labour productivity has been brought about by intensification of food-agriculture.
- Agricultural productivity (and diversification), together with non-farm employment, has helped raise wages and rural household incomes.
- Remittances are now a significant source of average household incomes in the rural areas, though there are enormous variations in the amounts received across the households and the regions.

Given the above findings, how dynamic is the RNA sector in Bangladesh? Does it contain all the characteristics of 'favourable archetype' of Z-goods which, according to Ranis and Stewart (1993) could potentially wipe out unemployment and underemployment (and achieve rural full-employment?). Lessons from East Asian experiences warn us that much will depend on whether "higher levels of rural productivity and employment achieved may be said to be secular."[48] The relative success of the RNA in Bangladesh needs to be assessed in the backdrop of the substantial slack in the rural labour market, which is often not captured by the official statistics on unemployment and underemployment. As noted earlier, the low female participation rates, among other indicators, is often neglected in the characterisation of such a slack in Bangladesh rural labour market.

[48]While withdrawing surplus labour from agriculture would release some amount of wage-goods that could enhance wage employment in the RNA sub-sectors, it is unclear how far this will be sufficient to provide employment to all the potentially available labour force (Oshima, 1986).

Since the modern manufacturing appears unable to absorb labour adequately and productively, i.e. at the pace required to absorb surplus labour in agriculture, it appears that RNF has taken a crucial complementary job creation role. The policy attention to the growth of the modern manufacturing sector, especially through incentives to greater private sector investment, would certainly remain crucial. The rapid growth of RNA would underscore that such incentives to investment and capital accumulation need not carry an 'urban bias'. The caution that needs to be exercised is that policy and resource allocation need to be calibrated to (i) encourage further agricultural productivity growth, which provides the most significant boost to RNA; (ii) to provide specific support to the growth of RNA through addressing various supply and demand-side constraints.

A strategy encompassing the above policies is likely to provide a longer-term boost to the growth of RNA in Bangladesh. RNA will, of course, need to diversify and encourage the growth of entrepreneurs with higher reproducible capital and greater supply of skills to enhance productivity in the sector. The recent push, both from public and private banking, to rural lending and major FI initiatives are likely to support higher-scale enterprises. Large flows of remittances to the rural sector, together with the aforementioned dynamics, are bringing resources and greater 'financial freedom' and prospects of RNA growth in Bangladesh.

Here, one must note that unlike the East and Southeast Asian economies (which have higher disposition of land and technology to enhance productivity) limits to increases in agriculture productivity in Bangladesh are likely to be drawn by the severe land scarcity. Methodical introduction of technology and diversification would be needed to sustain higher intensification of agricultural growth.

8.2 From Relative Neglect to Coordinated Support

During the early decades since independence, there was hardly any coordinated approach to envision and embrace the potential of the RNF sector in the 'growth' strategy, one that could provide a platform for invigorated employment and income generation.[49]

In Bangladesh, as we observe from the policy stance of the Seventh Five Year Plan (7FYP), the RNA as a sector has hardly received much focus or coordinated attention and was largely overlooked by the resource planning of the more dominant sectors such as agriculture and industry. Whether and how far RNA trends could provide a third sector approach to full-employment would depend on a number of factors. As we have reviewed above, the policy framework towards RNA would be crucial to ensure that RNA does not degenerate into an inefficient 'unfavourable archetype', but rather, unleashes its full potential to productively pull labour from the slack sectors.[50]

Given the characteristics and issues raised above, policies with respect to the RNA sector would need to be carefully perceived, and designed at three levels (i) macroeconomic policies, which would provide the basic environment conducive to the performance of the RNA, and which do not contain discriminatory urban biases; (ii) sectoral policies, which are likely to affect favourably the operation of the various sub-sectors of the RNA; (iii) RNA specific programmes, that would come from various government and non-government interventions, including institutional.

[49]Most of these problems were identified in late 1950s when the First Five Year Plan of Pakistan (1955–60) was formulated, which were repeated almost religiously in successive development plans (Hossain et al., 1994).

[50]The utter neglect of the non-farm sector has been noted in various studies. Rosegrant and Hazell (2000), laments that "policies tend to be piecemeal or the offshoot of policies targeted at other parts of the national economy; there is little understanding on the part of policymakers of the RNF economy as a sector with its own internal consistencies and interests."

8.2.1 Macroeconomic policies

Several Asian countries through prudent macroeconomic policies managed to sustain high growth and investment rates. Markets were kept buoyant and this in particular appears to have been the most significant impetus to the overall performance of the RNA. They provide a prime lesson that what the RNA requires most is an enabling environment. Further economic policies need to be geared towards attaining greater productivity and efficiency, further diversity and flexibility, mobilisation of resources to sustain investment, and market drives through export penetration as well as domestic demand management. Adjustment policies would also require greater shifts towards production of tradable commodities, both for exports and local markets. Such shifts are likely to foster linkages between formal and informal sector enterprises to diversify and expand production.

8.2.2 Sectoral policies

The growth of non-farm enterprises is often contingent on a robust agriculture sector. Sustaining agricultural growth and its diversification could provide significant support to the RNA, both through its inputs as well as through increased income and demand for non-farm products. Integrated rural and development policies would also bolster RNA by linking sectors and markets, and would also help disperse rural activities and incomes in the rural areas. Although industrial policies are usually oriented towards the organised sector, this could be designed to foster loser linkages between organised and unorganised units. The policies of the education sector and training will have far reaching implications, especially in adjusting to changing technology and skills needs, and in fostering greater mobility of the work force across markets and enterprises.

8.2.3 Specific programmes

The critical needs of the RNA may be addressed both through promotional as well as welfare and protection measures: (i) credit assistance: financial constraint is often cited as a prime factor adversely affecting RNA, in terms of new entry, technology upgradation and investment. It is not so much the unavailability of credit but the access to credit that has to be ensured. (ii) productivity enhancement: it is certainly required by most RNA enterprises for increased income and upgrading. Various policies to support technology upgradation, skill development and quality control are necessary to enhance productivity; (iii) linkages: a formidable support to the small sector could be imparted through encouraging and fostering linkages with various markets and with formal sector firms and industrial subsectors. This would also allow product diversification to take place, as rural industries continue to restructure and diversify along new product lines, and seek higher domestic and export demand.

REFERENCES

ADB and ILO. (2016). *Bangladesh: Looking beyond garments*. Mandaluyong City, Philippines: Asian Development Bank (ADB) and International Labour Organization (ILO).

Adelman, I. (1984). Beyond export-led growth. *World development, 12*(9), 937–949.

Ahmed, S. (2015). *Growth with equity: Contemporary development challenges of Bangladesh.*, Dhaka: Bangladesh Institute of Bank Management (BIBM). Bangladesh Institute of Bank Management, Dhaka.

Alam, M.S., and Islam, M.A. (2012). Long-term assessment of rice production scenario in Bangladesh. *Bangladesh Journal of Agriculture Research, 38*(2), 257–269.

Amin, A.T.M.N. (1987). The role of informal sector in economic development: Some evidence from Dhaka, Bangladesh. *International Labour Review,* Sept-Oct, 1987, Geneva 126(5), 611–623.

Asian Development Bank. (2012). *The informal sector and informal employment in Bangladesh: Country report 2010*. Manila: Asian Development Bank (ADB), Manila.

Bannerji, L. (2007). Flood disasters and agricultural wages in Bangladesh. *Development and Change*, 38(4), 641–664.

Bangladesh Planning Commission. (2015). *Seventh Five Year Plan FY2016 – FY2020*. Dhaka: Government of the People's Republic of Bangladesh.

BBS. (2015). *Report on Economic Census 2013*. Dhaka: Bangladesh Bureau of Statistics (BBS).

BBS. (2018). *Report* on Labour Force Survey (LFS) 2016-17. Dhaka: Bangladesh Bureau of Statistics (BBS).

Briones, R., and Felipe, J. (2013). *Agriculture and structural transformation in developing Asia: review and outlook* (ADB Economic Working Paper Series No 363). Manila: Asian Development Bank (ADB).

Chen, M. (2003, November). Rethinking the informal economy in an era of global integration and labour market flexibility. *Footloose Labour: A Symposium on Livelihood Struggles of the Informal Workforce*, Seminar Issue 531. Retrieved from: http://www.wiego.org/resources/footloose-labour-symposium-livelihood-struggles-informal-workforce

Chenery, H. B. (1953). The application of investment criteria. *The Quarterly Journal of Economics*, 67(1), 76–96.

Clark, C. (1940). *The Conditions of Economic Progress*. London: McMillan.

Edgren, G. and Muqtada, M. (1990). Strategies for growth and employment in Asia: Learning from within. In G. Edgren (Ed.), *Employment Challenges for the 1990s*. Geneva: ILO-ARTEP.

Ghose, A.K. (2017). Informality and development. *The Indian Journal of Labour Economics, Springer*, 60(1), 1–16.

Gimenez, L., Jolliffe, D., and Sharif, I. (2014). *Bangladesh, a Middle Income Country by 2021: What Will it Take in Terms of Poverty Reduction?* Washington, DC: World Bank.

Grilli, E. and Zanalda, G. (1999). Growth and Employment in Developing Countries: Where do We Stand? *Labor Markets, Poverty and Development*. UK: Clarendon Press.

Haggblade, S., Hazell, P. and Reardon, T. (2006). *Transforming the Rural Non-farm Economy*. Baltimore: Johns Hopkins Press.

Hazell, P., and Roell, A. (1983). *Rural Growth Linkages: Household expenditure patters in Malaysia and Nigeria*. IFPRI Research Report No.41. Washington DC: International Food Policy Research Institute (IFPRI).

Hirschman, A. O., and Rothschild, M. (1973). The changing tolerance for income inequality in the course of economic development: With a mathematical appendix. *The Quarterly Journal of Economics*, 87(4), 544–566.

Hossain, M. (2004). *Rural non-farm economy in Bangladesh: A view from household surveys* (Occasional Paper Series 40). Dhaka: Centre for Policy Dialogue, (CPD).

Hossain, M., Rahman, M. and Bayes, A. (1994). *Rural non-farm economy in Bangladesh: A dynamic sector or a sponge of absorbing surplus labour*. New Delhi: ILO/SAAT.

Hossain, M., Sen, B., and Sawada, Y. (2012). *Jobs, Growth and Development: Making of the 'Other' Bangladesh (Background Paper for the World Development Report 2013)*. Retrieved from: http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1320950747192/8260293-1320956712276/8261091-1348683883703/WDR2013_bp_Jobs_Growth_and_Development.pdf

Hymer, S. and Resnick, P. (1969). A model of an agrarian economy with non-agricultural activities. *American Economic Review*, 59(4), 493–506.

ILO and IILS. (2013). *Bangladesh: Seeking Better Employment Conditions for Better Socioeconomic Outcomes*. Geneva: International Labour Organization (ILO) and International Institute for Labour Studies (IILS).

Islam, R. (2014). The Employment Challenge Faced by Bangladesh: How Far is the Lewis Turning Point? *The Indian Journal of Labour Economics*, 57(2), 201–225.

Kaldor, N. (1967). *Strategic factors in economic development*. Ithaca, NY: Cornell University.

Khan, A.R. (2015). *The Economy of Bangladesh: A Quarter Century of Development*. UK: Palgrave Macmillan.

Krishnamurthy, J. (2008). Indian Antecedents of Disguised Unemployment and Surplus Labour. *Indian Journal of Labour Economics*, 51(1), 53–62.

Kuznets, S. (1955). Economic growth and income inequality. *American Economic Review*, 45 (1), 1–28.

Leibenstein, H. (1957). *Economic Backwardness and Economic Growth: Studies in the Theory of Economic Development*. New York: John Wiley and Sons.

Lewis, A. (1954) Economic development with unlimited supplies of labor. *Manchester School*, 22, 139–91.

Mahmud, W. (1996). Employment patterns and income formation in rural Bangladesh: The role of rural non-farm sector. *The Bangladesh Development Studies*, 24(3/4), 1–27.

McKenzie, D. (2010). *Dimensions of informality in Bangladesh*. Washington, DC: World Bank.

Mazumdar, D. (1999). *Constraints to achieving full-employment in Asia* (Working Paper). Geneva: International Labour Organization (ILO).

Oshima, H. T. (1986). The transition from an agricultural to an industrial economy in East Asia. *Economic Development and Cultural Change*, 34 (4).

Oshima, H. T. (1988). Full-employment growth in Japan and Taiwan. *Philippine Review of Economics and Business*, XXV(1–2).

Osmani, S.R., Ahmed, M., Latif, M.A., & Sen, B. (2015). *Poverty and Vulnerability in Rural Bangladesh*. Dhaka: The University Press (UPL).

Pramanik, S., Deb, U. and Bantilan, C. (2014). *Rural non-farm economy in Bangladesh: Nature, extent*, trends, and determinants. India: ICRISAT.

Rahman, M., and Al-Hasan, M. (2018). *The role of the informal sector in inclusive growth: A state of knowledge study from policy perspectives*. Unpublished manuscript.

Raihan, S. (Ed.). (2016). *Structural Change and Dynamics of Labor Markets in Bangladesh: Studies on Labor and Employment*. Dhaka: SANEM Publications.

Ranis, G. and Stewart, F. (1990). *The dynamics of rural development: Theorian application* (Discussion Paper 608). Connecticut: Economic Growth Centre, Yale University.

Ranis, G., and Stewart, F. (1993). Rural nonagricultural activities in development: Theory and application. *Journal of Development Economics*, 40(1), 75–101.

Rodrik, D. (1997). *Has Globalization Gone Too Far?* Washington, DC: Institute for International Economics.

Rodrik, D. (2006). Goodbye Washington consensus, hello Washington confusion? A review of the World Bank's economic growth in the 1990s: learning from a decade of reform. *Journal of Economic literature*, 44(4), 973–987.

Rosegrant, M.W., and Hazell, P.B.R. (2000). T*ransforming the rural Asian economy: The unfinished revolution*. New York: Oxford University Press.

Rosenstein-Rodan, P. N. (1943). Problems of industrialisation of Eastern and South-Eastern Europe. *The Economic Journal*, 53(210/211), 202–211.

Saith, A. (1987). Contrasting Experiences in Rural Industrialisation: Are the East Asian Successes Transferable? In R. Islam (Ed.), *Rural Industrialisation and Employment in Asia*, 241–303. New Delhi: ILO-ARTEP.

Shilpi, F. and Emran, S. (2016). *Agricultural productivity and non-farm employment: Evidence from Bangladesh* (Policy Research Working Paper 7685). Washington DC: World Bank.

World Bank. (2012). *Bangladesh—Towards Accelerated, Inclusive and Sustainable Growth: Opportunities and Challenges*. Washington, DC: World Bank.

World Bank. (2013). *Bangladesh Poverty Assessment: Assessing a Decade of Progress in Reducing Poverty*, 2000–2010. Dhaka: World Bank.

ANNEX

Annex 1

The Question of 'Full-employment' in Bangladesh*?*

During the past two decades, the Bangladesh economy has been growing at a remarkably rapid rate, with the per capita GDP registering an annual growth rate of nearly 5 per cent. Barring one or two studies,[51] there has hardly been any systematic analysis of the impact and implications of such rapid growth on employment and labour market structures. A major reason for this is the lack of an updated, regular and comparable database. Without rigorous analysis and a continuous database it becomes difficult to have precise estimations, and to ascertain key movements in labour markets and productivity which historically accompany structural transformation and progress towards full-employment.

A full assessment of Bangladesh's progress towards full-employment is beyond the scope of this paper. Nevertheless, given the context, a few reflections are in order. Two traditional yardsticks that have been widely used are the rates of unemployment and underemployment. Annex Table 1 provides a summary of the trends in unemployment, underemployment and related labour market indicators for Bangladesh.

Annex Table 1: Labour Force Participation Rate, Unemployment and Underemployment for Bangladesh

Indicator	Year				
	2002-03	2005-06	2010	2013	2015-16
Labour force participation rate	57.3	58.47	59.27	57.1	58.5
Labour force participation rate (Female)	26.1	29.2	36	33.5	35.6
Female Labour (Per cent of Labour Force)	22.33	24.52	30.31	29.9	30.8
Unemployment (Per cent)	4.32	4.25	4.53	4.3	4.2
Underemployment (Per cent)	34.02	24.53	20.31	4.0	3.0

Source: Labour Force Survey (LFS), various years.

According to official statistics, the unemployment rate in Bangladesh is low (at 4.2 per cent, according to LFS 2015-16), and has remained remarkably constant across the LFS periods since 2002-03. Given the definition of unemployment in the LFS, (i.e. any person who has worked even for an hour over the reference period is considered employed), any additions to the labour force, are all counted as being employed. The vast majority of the rural workforce, given dearth of so-called formal or full-time paid jobs, are all 'engaged' in some economic activity at the informal and/or household level for some period of time. This implies the growth of employment is roughly equal to the growth of the labour force, irrespective of what the actual employment growth figures are. This further implies that unless all the additional labour force can find work that are full-time, remunerative and productive they are likely to raise the rates of underemployment. However, from the Annex Table 1 it appears that in Bangladesh underemployment too has declined. In fact, it has dramatically declined from 20.3 per cent in 2010 to 3 per cent in 2015–16.[52] Whether this is due to definitional or methodological discrepancies, such an observation would be a hard sell unless several other related labour market indicators lend support. In fact, ADB and ILO (2016) brings out some of these anomalies, and demonstrates that if previous LFS definition/criteria were used, underemployment in 2013 would be 17.8 per cent — close to what was found in the previous LFS in 2010 .

[51] See, for example, (Islam, 2014).

[52] This is all the more puzzling since 2013 LFS used time criterion of less than 40 hours of weekly work as cut-off for counting underemployment, compared to 35 hours used in previous LFS.

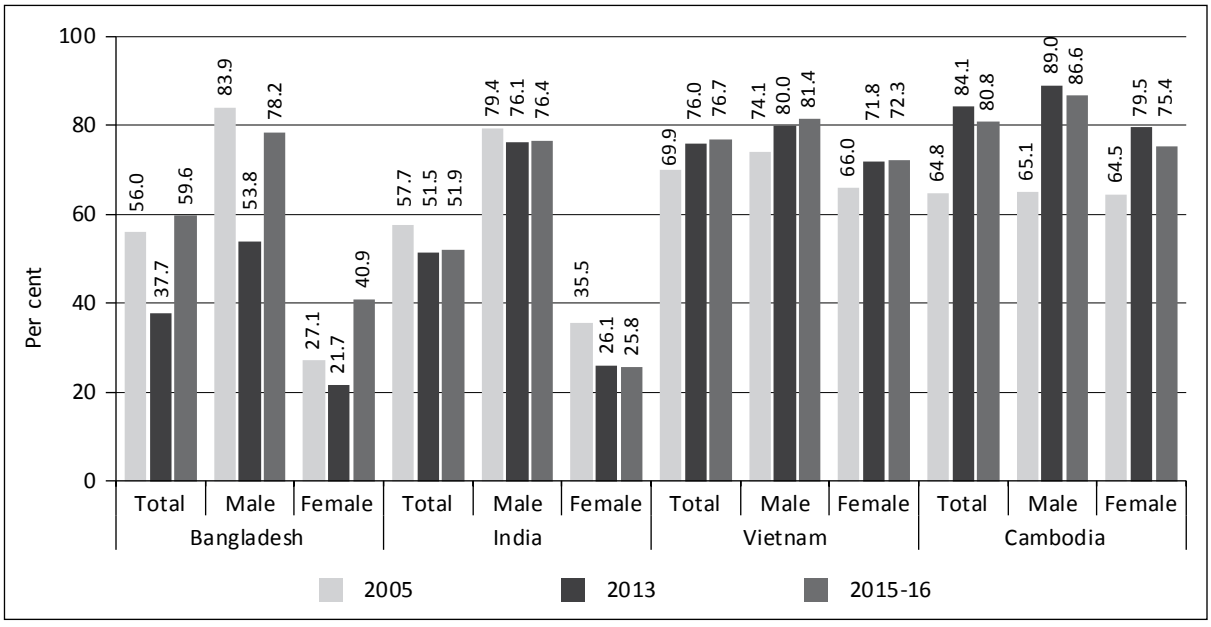
If both unemployment and underemployment were roughly around 3 to 4 per cent, then there would be a case for Bangladesh to be considered as a full-employment economy. However, the use of both the criteria stated above i.e. the unemployment rate and the underemployment rate appear to be anomalous. The long-term constancy of the unemployment rate and the definitionally-led decline in underemployment needs to be under very close scrutiny.

Apart from the dubious estimations as above, there are several other indicators and characterisations that need to be considered to assess a country's progress towards full-employment. The United Nations (UN) and the International Labour Organization (ILO) have used the following to evaluate progress regarding the Millenium Development Goal (MDG) Target 1b, on full productive employment and decent work: (i) a rise in employment population ratio; (ii) a fall in the incidence of the working poor; (iii) decline in the incidence of vulnerable population; and (iv) an increase in labour productivity. In the context of Bangladesh, we observe that the vulnerable population (largely unpaid family workers and own account workers) has increased over the years and now accounts for nearly 87 per cent of the employed workforce (ILO and IILS, 2013). The incidence of working poor has declined but still remains high. The employment-population ratio, although has increased in the recent years is still relatively low compared to some of its Asian neighbours (see Annex Figure 1).

Similarly, labour productivity has increased in Bangladesh but is still considerably lower than India, Vietnam and several other Asian economies (Annex Figure 2).

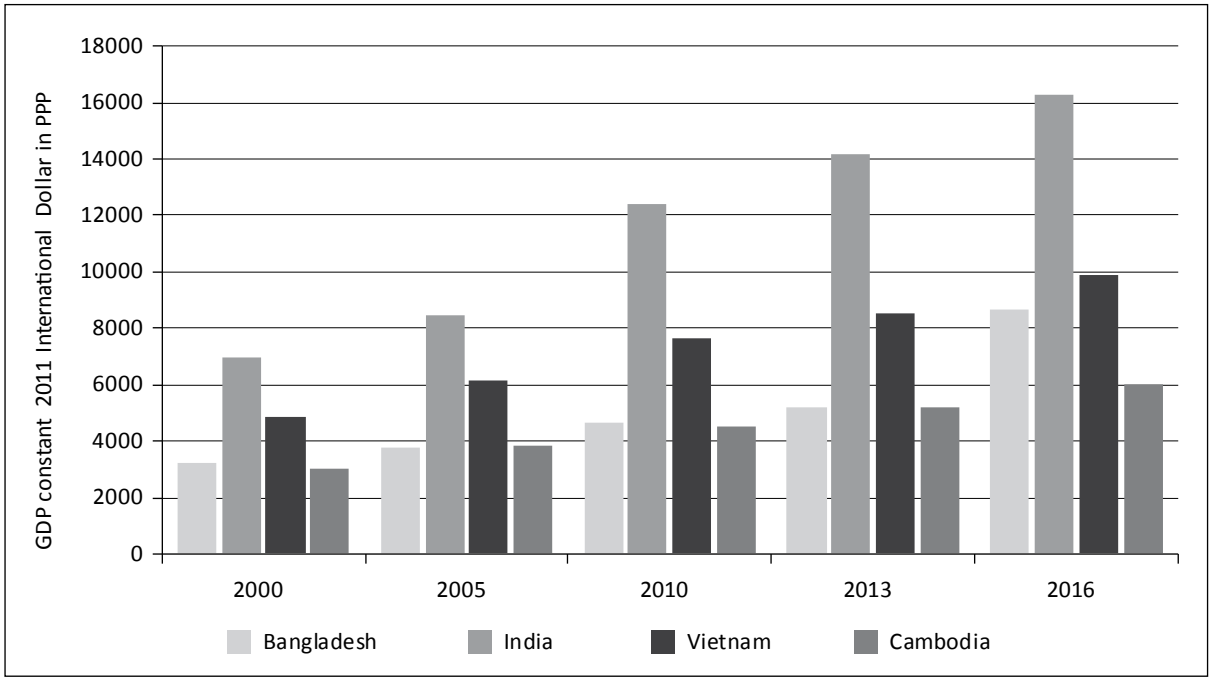
Thus, according to the MDG criteria and indicators Bangladesh has attained varying degrees of progress; however, a much improved performance would be required in each of the above indicators, in order to come closer to achieving a state of near-full-employment. One criteria in particular that strongly underscores the existence of substantial slack in the labour market is the rate of female labour force participation. As the Annex Table 1 shows female labour force participation rate is only around 35 per cent in 2015-16. This is also mirrored in Annex Figure 1 the comparative female employment-population ratio of Bangladesh (as low as 41 per cent in 2015-16) vis-à-vis selected Asian neighbours. Bangladesh economy cannot be considered a full-employment economy unless entry of women in the labour market is vastly stepped up.

Annex Figure 1: Employment–Population Ratio



Source: Millenium Development Goal (MDG) database, United Nations Development Programme (UNDP).

Annex Figure 2: Labour Productivity (Output per Worker)



Source: Authors' calculation from ILOSTAT.

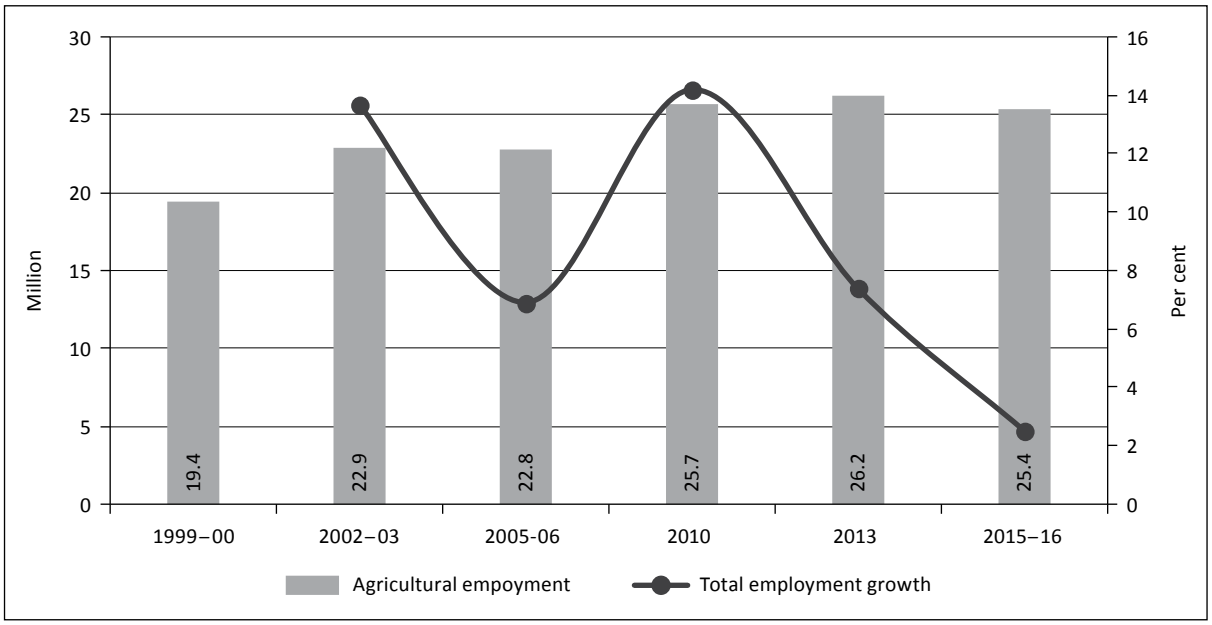
As mentioned above, there is very little analytical work on Bangladesh's progress towards full-employment. Neither is there an official position on this, i.e. apart from the LFS data, and periodic employment and labour force projections. Recently, the government has provided some broad estimates on job creation during the Sixth Five Year Plan (Bangladesh planning commission, 2015). Using employment elasticities and adjusted GDP figures, the study estimated that the number of jobs created (including overseas employment) during 2010-2015 period was approximately 9.5 million (of which nearly 23 per cent was from overseas employment). Thus, according to this official source, 'jobs available' was much higher than needed by the 7.7 million additional workers that came to the labour force during the same period. The evaluation, however, conceded that the above quantitative estimates concealed the nature of the jobs, a large proportion of which were likely to be in the form of underemployment or vulnerable employment. A more systematic study with attention to sectoral labour force and employment projections, with due considerations to stock and growth of underemployment, estimated that Bangladesh, in order to attain full-employment would require to grow at 8 per cent or more over the next 15 years (under the currently observed sectoral employment elasticities) (Islam, 2014).

However, there are a few other recent developments with respect to the labour market which some experts see as characteristic of labour market tightening: (i) agricultural real wages have been steadily rising over the past decade (although it tapered off in the recent couple of years) and somewhat faster than productivity in the sector; (ii) as the Annex Figure 3 shows, absolute number of employed in agriculture has declined, for the first time, since 2013.

Such developments are at an early stage and one has to wait for a robust trend in these as well as in other related indicators, before a claim can be established whether Bangladesh economy is close to turning the full-employment corner[53]. One needs to further assess whether the supply price of labour (wages) is rising simply due to productivity gains in the agriculture sector, or many other factors, e.g. rapid absorption of surplus labour in higher productivity non-agriculture sectors; significant inflow

[53]See among others, (Khan, 2015; Ahmed, 2015).

Annex Figure 3: Trends in Agricultural Employment



Source: Author's calculation from various issues of Bangladesh Labour Force Survey (LFS).
Note: Total employment growth is shown in the right vertical axis

of remittances to labour households who may withdraw from agriculture. Further, growth of labour productivity in agriculture has to be seen in the context of large initial base of surplus labour; moreover, it has been closely associated with rise in land productivity, which now faces severe constraint of arable space. Thus, while some of the above developments are promising and bode well for a progression towards a full-employment, higher job creation is needed in the more productive sectors of the economy, especially in manufacturing.

The Annex Figure 3 also shows that overall employment growth in the economy is declining. Thus, while we observe some tightening in specific areas of labour market, higher productivity jobs have not been growing adequately enough that would be commensurate with an efficient employment-GDP growth pattern that could absorb the surplus labour in the economy.[54] There are several other indicators as mentioned above that clearly underscore that there still exists substantial slack in the Bangladesh labour market.

[54]It may be noted that there is no predetermined level of national income at which a particular country will, or can, attain full-employment (defined as actual output equals potential output).

Recent CPD Working Papers

Paper 115 Macroeconomic Policy, Price Stability and Inclusive Growth in Bangladesh

Paper 114 Bangladesh's Formal and Informal Agricultural Trade with SAARC Countries: Emerging Trends and Policy Challenges

Paper 113 SAARC Food Bank (SFB): Institutional Architecture and Issues of Operationalisation

Paper 112 Advancing the Interests of Bangladesh's Migrant Workers: Issues of Financial Inclusion and Social Protection

Paper 111 Bali Ministerial of the WTO and the Way Forward: Safeguarding LDC Interests

Paper 110 Trade and Transport Facilitation in Bangladesh: An Audit of the State of Play

Paper 109 Recent Developments in Myanmar and New Opportunities for Sub-Regional Cooperation: A Bangladesh Perspective

Paper 108 Recent Developments in Myanmar: Opportunities for Sub-Regional Energy Cooperation

Paper 107 Bilateral Free Trade Agreements (FTAs): Opportunities and Challenges for Bangladesh – Framework Issues

Paper 106 Minimum Wage in the RMG Sector of Bangladesh: Definition, Determination Method and Levels

Paper 105 Revisiting the PRSP Experience in Bangladesh: Perspectives on Representation, Accountability and Inclusiveness

Paper 104 Least Developed Countries (LDCs) in the Global Value Chain (GVC): Trends, Determinants and Challenges

*Available on web only

cpd.org.bd cpd.org.bd cpdbd CPDBangladesh

CENTRE FOR POLICY DIALOGUE

House - 6/2 (7th & 8th floors), Block - F
Kazi Nazrul Islam Road, Lalmatia Housing Estate
Dhaka - 1207, Bangladesh
Telephone: (+88 02) 58152779, 9141703, 9141734, 9143326, 9126402
Fax: (+88 02) 48110414
E-mail: info@cpd.org.bd
Website: www.cpd.org.bd