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SOME ASPECTS OF UNEMPLOYMENT, MIGRATION AND INCOME IN THE BANGLADESH RURAL LABOUR MARKET

M.A. Jabbar¹

ABSTRACT

Two questions are raised about the accuracy of the rates of disguised unemployment in rural Bangladesh estimated on the basis of farm surveys using 'labour utilization' or 'gainful work' approach. One is the possible exclusion of migratory labour use from labour utilization data. The other is the adequacy of 'work duration' as the sole basis for measuring employment. Results of a large survey throughout the country show that seasonal migration of rural labour is a more common phenomena than is ordinarily recognized and it needs to be explicitly considered in labour utilization/unemployment estimation. Another survey in eight villages show that work duration has little relationship with income, so on its own, it may not be an adequate criteria for measuring unemployment.

I. INTRODUCTION

Like many less developed countries, open unemployment is very small in rural Bangladesh but there is a high degree of disguised unemployment. Census and national labour force surveys conducted during the 1970s and 1980s reported open unemployment of 1.26 to 2.31 percent (see GOB 1977; GOB 1980; GOB 1981; GOB 1984; GOB 1986) but studies using 'gainful work' or 'labour utilization' or 'labour requirement' approach reported disguised unemployment of 21 to over 50 percent (see for example, Muqtada 1975; Masum 1979; Clay and Khan 1977; Ahmed 1978; Chowdhury 1981; Mujeri and Alauddin 1984; Rahman 1984; Murshed et al. 1984; World Bank 1983; Rahman and Islam 1986). The estimated rates of disguised unemployment vary so widely because of a number of reasons including the size and location of the samples, whether rural or agricultural unemployment has been measured, assumptions with respect to participation rates for civilian and agricultural labour force, labour coefficient for various activities and full employment norms. Even if the relevant assumptions were standardized, the difference between open and disguised unemployment rates would remain very high to cause concern among researchers and planners alike. This is reflected in the fact that

¹ The Author is an Associate Professor Department of Agricultural Economics, Bangladesh Agricultural University, Mymensingh. The author is grateful to The Winrock International and the Ford Foundation for financial assistance to conduct surveys reported in the article. Usual disclaimer applies.

along with GDP growth, creation of employment and provision of basic needs, particularly in the rural areas, have been accepted as explicit planning goals in the successive development plans of Bangladesh (see GOB 1973; GOB 1978; GOB 1980; GOB 1985).

Without underestimating the seriousness of the problem, two issues are raised in this article about unemployment in rural Bangladesh. First, in the labour utilization approach, unemployment is defined as the difference between available labour and actual gainful work during a period of time. For any rural household, gainful work may be structurally shown as:

On farm work

- Agricultural
 - Own labour
 - Hired labour
 - Local
 - Outside (in-migration)
- Non-agricultural
 - Own labour
 - Hired labour
 - Local
 - Outside (in-migration)

Off-farm work

- Agricultural
 - Within locality
 - Outside locality (migration)
- Non-agricultural
 - Within locality
 - Outside locality (migration)

The empirical studies mentioned earlier have shown gainful work in the aggregate or have divided it into farm and non-farm work or into agricultural and non-agricultural work (sometimes using these two types of classification inter-changeably thereby adding to confusion). None of these studies made it clear whether, and how, labour use outside one's own locality i.e., migratory labour, has been treated in the labour availability and utilization equations. Rahman and Islam (1986) mentioned the importance of labour mobility and creation of non-farm employment to overcome seasonal labour bottlenecks but in the empirical part of their work they sidetracked and subsumed the issue under oversimplified assumptions. Since off-farm, non-farm and non-agriculture do not mean the something, it is highly doubtful whether migratory labour use (and corresponding earnings) has been properly and adequately included in any of the empirical studies. There is, therefore, a possibility that the disguised unemployment rates have been over-estimated. The degree of over estimation may be substantial because the results of a recent survey to be discussed in section II, show that rural-rural migration of seasonal labour is a much more common phenomena than is ordinarily recognized. Explicit consideration of seasonal migration in labour demand-supply equations or in employment-unemployment measurement is required both for obtaining accurate estimates of these categories and for devising appropriate strategies for solving unemployment related problems.

The second question is whether, with or without adjustment of seasonal migration, work duration as such should be considered an adequate indicator of the dimension of the

unemployment problem in Bangladesh. This question is raised because according to Myrdal (1968), labour utilization consists of three elements; participation rate, actual work in hours or days and efficiency or productivity of the work done. Using these elements Edwards (1974) distinguished five forms of underutilization of labour: open unemployment, underemployment, the visibly active but underutilized (which includes disguised unemployment, hidden unemployment, prematurely retired), the impaired and the unproductive. The first three forms of underutilization are generally covered in the labour utilization approach to measure unemployment but in the Bangladesh context the question of efficiency and productivity are equally important because many people may work full-time but their intensity of work may be poor due to malnutrition or poor health while others, malnourished or not, may struggle long hours with inadequate complementary resources to produce, and earn very little. Thus, maximum work duration may not ensure adequate income and welfare which are the ultimate objectives of human activity. Some evidence in this regard will be presented in section III.

II. ASPECTS OF SEASONAL MIGRATION

During 1985-86, a countrywide survey was conducted to understand the characteristics of seasonal migration of rural labour. First, 600 randomly selected students of Bangladesh Agricultural University were requested to fill in a questionnaire which included questions about the migration characteristics of the students' own villages. A total of 549 students representing 59 out of 64 districts and 255 out of 495 Upzilas returned answers; the remaining students either did not respond or did not have a village home, so had nothing to say. Secondly, 10 percent (55) of the 549 villages were selected at random in order to interview migrant labourers for in-depth information¹. In all 420 labourers from 52 villages responded, 4-16 labourers from each village. The results of this survey are summarized below.

Out of the 549 villages, 23.5 percent had only in-migration in the survey year, 10.4 percent had only out-migration of some labour, 64.6 percent had both in and out migration and 1.5 percent had neither in nor out-migration. Thus 88.1 percent of the villages had in-migration but 75.0 percent had out-migration². Looking at the history of seasonal migration in these villages, it appears that most of the villages reporting in migration has a long history of using migratory labour but villages reporting out-migration show a pattern which indicates that more and more villages have recently started sending labour elsewhere for work (Table 1). Migration history of the migrant labourers also indicate that seasonal migration has a long tradition. However, the regularity/irregularity of migration by the migrants and the villages receiving/sending such labour could not be explained by availability of irrigation, population density, proximity to urban centers etc. It possibly indicates that the labour demand-supply

¹ This part of the survey was conducted with financial assistance from the Ford Foundation

² The unemployment studies reviewed earlier covered no more than 20 villages in total. If these villages had no migration or had only in-migration, migration would remain out of consideration of the researchers inadvertently.

balance of a particular village/locality may fluctuate from year to year due to a variety of reasons which needs to be clearly established. In a normal year, one of the main factors influencing migration would be differences in wage rate (see below). In an abnormal year, lack of local work may induce migration.

Table 1. Distribution of villages and migrant labourers according to the history of migration

History of migration	% villages reporting in-migration N=430	% villages reporting out-migration N=375	% migrants N=420
Regular, longtime	59.8	33.6	52.4
Irregular, longtime	17.2	24.5	22.3
Regula, 5-10 yrs.	15.6	11.5	13.2
Irregular, 5-10 yrs.	4.2	16.8	8.7
Rcent,<5yrs.	3.3	13.6	3.4
All	100.0	100.0	100.0

Source: Field survey.

An attempt for mapping the migration path of the migrants turned out to be difficult to implement because migration took place within and between upazilas and also within and between districts. Both short and long distance migrations were reported and migrants went to rural and/or urban areas. In general, labourers appeared to travel long distances in search of work and development in transportation facilities have increased the mobility of labourers both in terms of the number of labourers and the frequency of their movement. The survey revealed that about 80 percent of the villages reporting in-migration received more than 10 migrants at a particular time in the survey year while 70 percent of the villages reporting out-migration sent over 10 labourers at a particular time. It was found that during the year, 29 percent of the migrant labourers had gone away for work once, 45 percent had gone twice and 26 percent had gone thrice or more. On average, each labourer had gone 1.94 times and stayed away 51 days during the reference year.

The timing of in/out migration indicates that a particular village may receive or send labour one or more times in a year depending on its cropping pattern and labour demand-supply balance but, taken the country as a whole, migration is a year-round phenomenon (Table 2). This is also a reflection of the fact that although agricultural operations in Bangladesh are seasonal with peaks and troughs in labour demand, the peaks do not occur quite at the same time everywhere. Rather, the peak times vary across regions, so as to allow adequate labour mobility to overcome local labour bottlenecks³. This is evidenced by the findings of a number of studies which show that HYV-irrigation technology not only flattens the traditional peaks in labour demand but it also creates new peaks at other-wise slack periods and these slack periods have some degree of location specificity (see, for example Clay, 1977; Mandal, 1979; Rahman and Islam, 1986).

³ Jabbar et al (1982) found in Munshiganj area that power tiller owners completed preparation of potato fields in the north and gradually moved south for selling tiller power where flood water recedes later, thus maximizing tiller use.

Table 2. Distribution of villages and migrants according to time of migration

Month of migration	% villages reporting in-migration N=470	% villages reporting out-migration N=366	% migrants N=420
April-May (Baishakh)*	26.6	25.1	22.6
May-June (Jaistha)	22.3	13.9	31.5
June-July	37.4	22.7	22.4
July-August	31.9	16.1	30.2
August-September	20.2	13.1	13.6
September-October	10.4	12.3	15.4
October-November	22.6	19.1	25.2
November-December	49.6	23.8	54.8
December-January	24.6	19.7	32.7
January-February	11.5	15.0	9.4
February-March	10.9	16.1	8.1
March-April	11.9	26.8	19.3

Percentages do not add up to 100 because a particular village/migrant may enter in more than one month.

Source: Field survey.

*April-May corresponds to Bengali month, Baishakh and May-June corresponds to 'Jaistha'

Both village level and migrant labourers' response show that most migrations take place at the time of Aman paddy harvest and Boro paddy transplanting and harvest (Table 3). These activities correspond to the months in which most migrations were reported. Among non-agricultural activities food for works projects in the rural areas appear to attract more migrant labourers than construction related jobs in the urban areas. Such a phenomenon seems realistic because migrant labourers reported that quite often they were recruited by agents for working in specific food for works project and living cost was lower in the rural areas. On the other hand, nominal wages in the urban areas were generally higher but the net expected benefits would be lower due to higher transportation and living costs and lower probability of getting a job in the urban areas⁴. Higher transportation and living costs in the urban areas imply that migrants to urban areas have to stay away longer in order to minimize cost, but long absence appear to cause suffering for the family members left behind because adequate money or provisions could not be arranged beforehand.

The survey of migrants revealed that the average duration of migration was 66 days for those who migrated to only urban or both urban and rural areas compared to 44 days for those who migrated to only rural areas.

⁴ These reported migration behaviour fits Todaro (1971) type model of rural-urban migration. However, we did not have adequate quantitative information to estimate the coefficients of such a model.

Table 3. Distribution of villages and migrant labourers according to the type of work done

Type of work	% village reporting in-migration N=345	% village reporting out-migration N=271	% migrants N=312
Agricultural			
Aman paddy harvesting	60.3	47.2	63.4
Aman paddy transplanting	38.0	21.4	29.4
Aus paddy harvesting	29.0	16.2	21.6
Aus paddy/Jute weeding	16.5	5.2	10.1
Jute harvest/stripping	26.1	10.3	9.3
Boro paddy harvesting	22.9	42.4	41.7
Boro paddy transplanting	20.9	11.8	22.8
Others	18.8	12.5	23.5
Non-agriculture			
Food for works	-	55.3	51.8
Construction helper	-	29.1	31.4
Carpenter	2.3	27.7	3.2

Source: Field survey.

Thirteen percent of the total migrants went away without leaving any money or food provision for the members of their families, other 87 percent left an average of Tk. 330 per family which was equivalent to Tk. 3.05 per adult man-unit of absence per day. Sixty one percent had no other male earning member in the family. Others had one or more earning members. Thus, the members of most migrant labour families lived almost in a starving situation unless the female members begged, borrowed or found some work in the village. In fact forty one percent of the migrants left money/provisions out of their own earnings but 59 percent had to partly or fully borrow at high interest rates. They had to repay the loan on return from work and were left with little or nothing to maintain the family, so had to borrow again before migrating. Cumulative debt compelled some of them to disinvest assets. For example, the migrant families owned only 0.20 acres of cultivable land at the time of the survey (31 percent owned nothing at all) but they owned 0.32 acres five years earlier, i.e., they lost one-third of their meager holdings within five years.

Clay (1976) reported that for a variety of reasons direct cash payments were replacing traditional mode of wage payment in the rural areas, particularly the provision of meals with cash and crop-share as harvest wage. In the present study we found that although most migratory labourers negotiated work on a daily basis, a substantial amount of works were done on a contract basis which included agricultural works for cash and harvesting paddy for a share of crop as wage and FFW for wheat (Table 4). Crop share as wage may be actually practiced in a lot more villages where only labour is used. The wage for harvesting reportedly varied from $\frac{1}{2}$ th to $\frac{1}{14}$ th of paddy depending on the type of paddy,

condition of the crop and the distance between the field and the threshing floor. Generally smaller shares were paid for Boro paddy and larger shares for Aus. No clear regional pattern could be identified.

Table 4. Distribution of villages and migrant labourers according to the type of wage negotiation

Basis of Wage	% villages reporting in-migration N=417	% villages reporting out-migration N=340	% migrants N=346
Daily	46.8	38.8	58.2
Weekly	1.0	3.3	-
Monthly	1.6	3.3	0.6
Contract volume of work	11.5	21.1	18.6
Combination	39.1	33.5	22.6
Harvest paddy on crop share wage	13.7	17.3	18.6

Source: Field survey

Over 70 percent of cash wage negotiations included three meals (Table 5). A high proportion of villages reporting out-migration had wage negotiations without meals because labourers from these villages went for non-agricultural activities including food for works for which wages do not include meals.

Table 5. Distribution of villages and migrant labourers according to the number of meals provided with daily cash wage

Nature/number of meals	% villages reporting in-migration N=368	% villages reporting out-migration N=267	% migrants N=282
No meals	8.1	39.4	3.5
Sometimes	1.9	2.7	6.1
One meal or equivalent rice	8.1	3.4	4.3
Two meals or equivalent rice	8.1	8.8	12.7
Three meals or equivalent rice	73.8	45.7	73.4

Note: Altogether about 5% provided rice.

Source: Field survey

The migrant labourers were asked to report the rate of wage they earned during their latest trip and the corresponding wage rate prevailing in their own villages at the time. The responses had to be screened carefully because wage rates varied according to the time of trip, location, type and intensity of work etc. The modal values of the responses with respect to cash wage payments with/without meals are shown in Table 6. The wage rates for contractual works including harvest wage in paddy were not calculated because of the inadequacy of data to make complex valuations. Figures in Table 6 show that in general labourers migrated to take advantages of higher wage rates away from home.

Table 6. Wage rates in migrant labourers' own and destination villages

Meals with Wage	Modal value of daily wage (Tk.)	
	Own village	Village where migrated
None	28	39
One	22	36
Two	16	27
Three	12	22

The findings of the survey clearly indicate that the role of migratory labour in the rural labour market is important and complex. Explicit consideration of this phenomenon is required not only for accurate measurement of employment/unemployment in rural areas, but also for devising appropriate strategies for solving unemployment related problems.

III. DURATION OF WORK AND INCOME

Husain et al. (1985) reported the findings of a detailed survey conducted in eight villages in Tangail district representing diverse agro-ecological conditions and resource endowments. This study show wide variation in productive employment of male family labour between the villages but such variation has no consistent relationship with gross income per caput. An important feature of the relationship is that farmers in the poor village (in terms of per caput income) worked for longer durations compared to those in the rich villages indicating that labour productivity in the poor villages was very low (Table 7). Variation in work duration and income between sizes of farms within each sample village show similar pattern of results.

Hossain (1989) studied the impact of green revolution by comparing the socio-economic situations in eight developed and eight underdeveloped villages selected from different agro-ecological zones of Bangladesh. The level of development was distinguished in terms of infrastructure and agricultural technology. One of the finding of this study was that average effective employment per family worker was 13.2 percent lower in the developed villages but per capita household income was 22.4 percent higher in those villages. Further, it was found that employment of poorer household in both the type of villages were higher but their incomes were lower (p. 94 and 120).

Thus, maximum work duration may not automatically produce higher income. Therefore, rural unemployment measured only on the basis of productive labour utilization (work duration) may provide a misleading picture about the nature and dimension of rural unemployment. A combination of work duration and income may provide a more realistic approach for measuring unemployment in rural Bangladesh

Table 7. Annual work duration and gross income per caput in eight villages in Tangail district. 1984/85.

Village	Annual gross income per caput, Tk	Annual work per man-unit, man-days
Inat Kha Chala	2003	265
Fulmali Chala	2260	255
Egarokshonia	2323	308
Habla Bilpara	2343	237
Bara Chowna	2566	193
Pirojpur	2890	261
Baramedhar	3088	179
Shapiachala	4435	219

Source: Husain, et al. (1985)

Note: Annual work refers to only male family members including annual hired labour.

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