RESEARCH ARTICLE

Rentiers and Contractors: The Future of Agrarian Bangladesh Part 2: The Disappearance of the Bangladeshi Farm?

Geof Wood* and M. A. Sattar Mandal†

Abstract: Part 1 of this two-part paper was subtitled "The Agrarian Transition Since Liberation" and focused upon the agrarian legacy of the region, the post-liberation engagement with the overwhelming issue of food security, and the contrast between land reform measures in neighbouring India and market driven processes of agrarian change in Bangladesh. It drew attention to heterogeneity in land holding and class relations in contrast to the liberation narrative of a homogenous nation of small independent farmers. The purpose in Part 2 is to advance a hypothesis about the disarticulation of the Bangladeshi farm in all its forms, and the re-articulation of the agrarian system via services and capital investment (entailing both rurbanisation and new forms of class relations). The hypothesis occurs within three possible agrarian trajectories for Bangladesh. One possible trajectory envisages a continuation of the family farm as petty commodity producers bringing inputs into their self-cultivated scattered plots, selling a net marketable surplus, if and after family consumption needs are met. A second possible trajectory is of large-scale commercial farms using large-scale equipment oriented entirely to producing for a national and even global market. But thirdly, we suggest that there is a specifically Bangladeshi hybrid, combining ongoing attachment to land but with owners and tenants becoming rentiers, *de facto* leasing out their scattered plots for consolidated operation and efficiency gains to commercially provided agricultural services, led by irrigation technologies. Given heterogeneity of land tenure, including a new class of small tenants using remittances and income from other sources to access land, such services are provided at two levels of significance: larger more commercialised contractors; and local service providers-cum-cultivators renting out surplus capacity (e.g. hand held power tillers, four-wheel tractors, and irrigation pump sets) to neighbours. The paper then considers the wider context contributing to these

* Emeritus Professor of International Development, University of Bath, UK, hssgdw@bath.ac.uk
† Emeritus Professor of Agricultural Economics, and former Vice-Chancellor, Bangladesh Agricultural University, Mymensingh; and former Member, Agriculture & General Economic Division, Bangladesh Planning Commission, asmandal11@gmail.com

processes of disarticulation, identifying key accelerations in rural infrastructure and decentralised administration, new input supply chains, expansion of urban employment, and urbanisation itself, growth of overseas labour opportunities and remittances, and the blurring of rural and urban habitat through rurbanisation. It concludes by noting the social, rent-seeking aspect of the relationships associated with this steady intrusion of capital into agriculture, retaining clientelism, and local monopolies in the creation and management of supply chains (for inputs and produce), alongside the partial commodification of agricultural labour as family labour recedes. It speculates on the structural implications of incorporating these new agrarian and rurban elites into the body politic.

Keywords: agrarian rentiers, disarticulation of the Bangladeshi farm, new renters of land, contractors, local service providers, partial commodification of agricultural labour, redistribution of returns from cultivation, rurbanisation.

https://doi.org/10.25003/RAS.12.02.0019

Introduction

In December 2021, Bangladesh celebrated 50 years of its liberation from its post-colonial status as East Pakistan. Part 1 of this paper, sub-titled "The Agrarian Transition Since Liberation," focussed upon the agrarian legacy of the region, the post-liberation engagement with the overwhelming issue of food security, and the contrast between land reform measures in neighbouring India, and market driven processes of agrarian change in Bangladesh. It drew attention to heterogeneity in land holding and class relations in contrast to the liberation movement narrative of a nation of small independent farmers as victims of neo-colonial exploitation at the hands of West Pakistan in the period 1947-71. The more diverse and nuanced legacy, entailing a high incidence of rural landlessness (GoB 1977), meant that a cooperative based, small farmer development strategy based upon the Cumilla model could not comprehensively address post-liberation agendas of improving productivity as well as inclusive fairness in the context of widespread mass rural poverty.

Continuing these arguments, the purpose in Part 2 is to advance an extended, grounded hypothesis about the disarticulation of the Bangladeshi farm alongside its inherited class relations and the re-articulation of the agrarian system via services and capital investment (entailing both rurbanisation and new forms of class relations and participation). We see this hypothesis as the basis of further detailed research, entailing a combination of ethnographic and survey evidence to build on the secondary evidence offered below.

As indicated in Part 1, the pursuit of this thesis proceeds with reference to three possible agrarian trajectories: the continuation of the family farm as petty commodity producers bringing inputs into their self-cultivated scattered plots, selling a net marketable surplus if and after family consumption needs are met; large-scale commercial farms using large-scale equipment oriented entirely to producing for a national or even global market; or, a specifically Bangladeshi hybrid combining ongoing attachment to land but with cultivators as rentiers *de facto* leasing out their scattered plots for consolidated operation and efficiency gains to commercial agricultural services, led by irrigation technologies. This third scenario is our hypothesis, which has been tracked since the 1990s (Palmer-Jones and Mandal 1987; Mandal 1987, 1993, 2000; Mandal *et al.* 1996; Wood 1991, 1999a) in papers on agrarian entrepreneurialism and agricultural re-formation.

The context for this third scenario argument is a steady expansion of agricultural services connected to technical innovations in cultivation alongside diversification away from arable cropping towards horticultural crops and other land-based activities (livestock, fish farming, post-harvest operations, and industrial sites). The initial green revolution innovations in the late 1960s into the 1970s were largely confined to the Dhaka-Cumilla belt and the Cumilla-Bangladesh Academy for Rural Development (BARD) small cooperative model under minifundist conditions of small family farms. But, as observed in Part 1, this cooperative model could not easily be applied to other parts of the country emerging from more quasi-feudal agrarian relations, especially from the 1980s onwards. Outside the Dhaka-Cumilla belt, the supply of inputs (variable and fixed),[1] and services had to interact with larger holdings which were nevertheless spread over scattered plots. The managerial difficulty of larger holdings with scattered fragmented plots forced family owners to rent out land in excess of their own direct cultivation capacity (involving use of own family labour and employment of landless labour) to other small farmers and sharecroppers. But with these early Green Revolution opportunities, such tenants still initially depended upon larger farmers for access to inputs as well as land, starting off the process of contractor-provided services.

In agricultural "system" terms, the farm was losing its pre-eminence to services and other activities, that were increasingly moving away from reliance upon public subsidies to private ownership.[2] The returns to agriculture were therefore shifting within the overall system from actual farmers to other players who were more associated with input supply and services. These trends also heralded new external flows of liquidity: initially through public subsidies,[3] but then through rising private credit (including micro-credit for smaller operators in minor livestock and

[1] These comprised new supply chains and rural interventions via dealerships for high-yield variety seeds, machinery (irrigation pump sets, power tillers, and post-harvest equipment), chemical fertilizers and pesticides, repair and maintenance services, as well as increased on-field labour operations.
[2] Stimulated by trade liberalisation as a function of structural adjustment leverage from the World Bank and IMF (World Bank 1982) which reduced the prices of mechanised fixed capital inputs.
[3] Increased availability of financing from state banks could be classified as subsidised, due to low interest rates and tolerated defaults.

handicrafts), and more strongly in the form of remittances, both internal and overseas.[4] Lewis, Biggs, and Justice (2022) revisit the spread of mechanisation and rural capital goods over the last two decades in various countries with rural economies, arguing that the significance of this spread has been neglected in research, especially in terms of "disarray, disruption, and disjuncture." For Bangladesh, this neglect is not strictly true, given previous published work by us and others cited below, including Biggs and Justice themselves. However, we agree with their argument about the disruptive impact upon rural class relations and offer here a further exploration of the third scenario for this evolving agrarian structure in Bangladesh.

Disarticulation/Re-articulation

In Part 2 of this two-part paper, we therefore argue that capital intrusion, described in broad terms above, functions to disarticulate the family farm as the primary production unit, with its close internally bounded relationship between land and labour (including inter-generational), and to re-articulate agriculture as a system of more impersonal exchange between rentier landholders and local service providers or contractors[5] — i.e., the third trajectory above. We are not alone in tracking this semi-commercialisation of agriculture. To quote Razzaque,

> In Bangladesh, agriculture has been transformed slowly from subsistence mode in the past to semi-commercial level at the current stage. Agricultural exports from Bangladesh — a proxy for commercialisation — have increased in recent years.[6] (2021, p.15)

Mandal (2021) maintains that Bangladesh has not followed the "Punjabi" green revolution model of large-scale farms being able to absorb large-scale equipment like combine harvesters, supported by heavy subsidies. Instead, its home-grown model retains, by comparison, smaller farm sizes with high plot fragmentation and tenancy arrangements, while cultivators transact with local service providers and contractors to achieve economies of scale in farm machine operation. Thus, we consider that the consolidation problem is solved through operation and management, and not by the means of redistribution of ownership.

[4] From the mid-90s, the flow of external remittances increased enormously. The Economist (2012) estimated remittances at $1.2 billion in 1995, rising to $13 billion in 2012. More recently, the Financial Express in Dhaka reported a leap to $20 billion in 2020.

[5] Although at various points in this paper we are using these terms interchangeably for the purposes of brevity and generalisations, we should note that "local service providers" tend to be smaller farmers themselves earning returns in addition to cultivating their own plots through renting out spare capacity (machines or labour) to neighbouring landholders. Contractors tend to be larger operators offering similar services, but with larger scale equipment, extending also to post-harvest operations, and investing to do so — i.e. making a deliberate rather than casual business. Such contractors may themselves have personal origins as larger farmers, while others are more recent agrarian entrants bringing capital to the land and connected to larger scale corporate services and agribusiness.

[6] The current Minister of Agriculture, Government of Bangladesh (at the time of writing in October 2022), originally from Bangladesh Agricultural University, Mymensingh.

In this process, the returns to agriculture are significantly diverted from the primary producing landholder (owner or tenant) towards other sets of actors supplying services, extracting profits and rents. In this hybrid, home-grown model, these services are not fully capital intensive since labour still has to be significantly employed across small, scattered plots as a result of squared fragmentation (explained in Part 1).[7] Under such conditions, ploughing, for example, cannot yet be done by a tractor operator over large fields at a stretch if the tractor has to move between fragmented plots involving loss of time efficiency in order to meet the specific tillage requirements of different plots under different cultivators at different times.[8] But we can also see the evolution of tractor "command areas," similar in principle to irrigation command areas, where differentially owned plots are tractor-ploughed together by contractors, before subsequently being irrigated together. However, the widespread use of power-tillers on small, scattered plots entails disaggregated operation, more through local service providers than larger scale contractors (Mandal, Biggs, and Justice 2017). The same applies to transplanting and weeding, and also harvesting where the lumpy combine harvester cannot be calibrated to the family plot patterns.[9] Yet, the employment of labour is increasingly, though not yet fully, commodified through the formation of mobile gangs, not by the landholding rentiers but by service contractors (Mandal *et al.* 2020) (the term commodified suggests that the relationships involved are more impersonal, single transactional, and less socially embedded and interlocked).

It is our contention that these conditions led to the disappearance of the family farm that self-cultivated its scattered plots as an independent business interacting with the markets for inputs and sale of produce. Rather, the family farm is being replaced by a hybrid, Bangladeshi model of landholders as renters enabling a *de facto* consolidation of fragmented plots to be cultivated through externally provided services.

Two modes of external service provision

The modes of external service provision have to be understood carefully however, and can be divided into two main categories. First, approximately 50 per cent of cultivable land is owned by medium and large landowners (the rural "middle class" with holdings above one hectare) representing about 10 per cent of rural landholders (BBS 2018).[10] This land is increasingly cultivated through external agricultural

[7] The division of inherited holdings among sons is not just by area, but also by quality (soil type, even minor differences in elevation affecting seasonality and timing of labour inputs, proximity to irrigation sources, and homesteads) — so plots themselves are divided, not just distributed.

[8] Tractor here means the four-wheel tractor which is different from the two-wheel tractor, locally known as power tiller, in terms of tillage capacity, while both can be attached to trollies for carrying goods.

[9] In a recent study of the *Haorboro* season (Mandal *et al.* 2020) the team estimated that six to nine per cent of land area was harvested by combine harvesters and reapers.

[10] These data remain unreliable, hence the approximations. This unreliability reinforces the case for serious investment in research on these issues.

service "contractors" who, using large equipment like combine harvesters and labour gangs, take on land preparation and tillage, irrigation, transplanting, weeding, and harvesting. They also control post-harvest operations (threshing and milling). In land management terms, this is clearly significant. Secondly, in addition to the remaining traditional smaller landholders who own small-scale, self-cultivating family farms, and buy marginal services from local service providers, we now see other, more recent, entrants into landholding. They cultivate holdings taken on lease from other owners. These are "new renters" who receive remittances and other non-agricultural based incomes. They too buy in services mainly from local service providers (LSPs) since their own direct access to capital and finance remains limited. This is also a rentier model in so far as there is a separation between the ownership and operation of fragmented plots that involves transacting stakeholders.

The social and economic advantage of this second mode of external service provision is that land belonging to larger and/or absentee owners can now be cultivated more intensively by the new renters due to the employment of their family labour and closer supervision. Among small farmers (whether the remaining family owners or the new entrant rentiers) marginal opportunities are created for intensive use of inputs, use of family labour, and better crop care, which in turn results in improving the productivity of smaller holding. It also contributes to household food security rather than creating a net marketable surplus. Of course family labour may be earning cash in other off-farm employment. This could be seen as coincidentally consistent with the nationally declared policy of "inclusive growth" involving landless wage labourers and marginal landholders.[11]

Affinity with Land

The small farmer/new renter-local service provider (i.e. the second category above) variant of the renter-contractor model affects the pace of the Bangladeshi farm's "disappearance" process. Anyone spending time among rural Bangladeshis will quickly learn about the affinity with land – the ongoing attachment to land despite the urban and other non-agrarian developments taking place in the country. Rural households are generally reluctant to dispense with land, to give it up or sell it. This is certainly a strong socio-cultural barrier to a large-scale corporate farming model, which is driven by direct – often distress – sale of plots to large holders to finance debt, labour migration or other non-farm activities. Land markets are complex. Land is not seen simply as a commodity to be bought and sold in an open market. Control over land shifts slowly, usually prompted by debt and creditors calling in unpaid mortgages, or due to the lack of regular supervision. Actual sale and

[11] The notion of sustainable inclusive growth is emphasised in the country's Eighth Five-Year Plan (2020-2025) (Bangladesh Planning Commission 2020).

re-registration is the last resort, possibly after decades of incremental loss of control owing to the factors cited above. Other corroborating evidence comes from the preferences of the "beneficiaries" of poverty-targeted programmes. If because of grants and loans, or indeed from remittances sent by family members working overseas, poor landless families have been able to secure improved incomes, their first preference is to obtain land, to rent it, to sharecrop it, to gain temporary rights over *khas* land,[12] and, where possible, to purchase it.[13] These are becoming the small "renters" according to Mandal (2022).[14]

How is this attachment to be explained? No doubt sentiment plays a part. This goes back to the liberation theology indicated earlier. It is a part of identity. But also, it is a rational hedge against uncertainty. It can be seen like livestock in pastoral societies or gold in other richer, more capitalised societies as commodities available for exchange in times of adversity. In societies where the elites are unaccountable, and state structures–courts and banks included – are fragile and distrusted with remote, unreachable, and unaccountable elites, land is a hedge if all else fails. With rapid urbanisation causing land prices to rise, its ownership is seen as future investment.

However, while these incentives for the acquisition or retention of land may be seen as reinforcing the existence of the family farm, it is also perfectly consistent, as implied above, with the emerging renter system. This widely observed phenomenon (Mandal 2022) prompts the question of whether this new category of small-scale renter, reflecting other changes in a growing economy, is acting as a cultivating farmer directly managing labour, inputs, and services with all the attendant risks (especially on land leased-in for fixed rent) or whether it is an example of the hybrid model wherein these renters combine their own labour with the purchase of external services from local service providers (LSPs)? In other words, are "renters" also "rentiers"? Within our overall "rentier-contractor" hypothesis, we predict the latter scenario becoming the more significant.

At this point, a further refinement to the disarticulation thesis must be added. Local service providers, unlike large-scale contractors, are themselves most likely to be landholding "farmers" within local communities, rather than solely impersonal service traders. These LSPs-cum-smaller landholders constitute around 10 per cent

[12] *Khas* land refers to untitled land in government possession which can be allocated to the control of landless families (temporarily registered or complete ownership). Many non-governmental organisations (NGOs) in Bangladesh have programmes to support the poor in these attempts to acquire *khas* land.

[13] See Wood *et al.* (2018) and several chapters therein to this effect, especially Marsden and Wood discussing the challenge of protecting newly acquired gains.

[14] Mandal (2022) draws attention to the increasing numbers of erstwhile landless families expressing this affinity to land when either remittances or inclusion in targeted beneficiary programmes have enabled sufficient income increases to rent in land, or even in some cases purchase it. He refers to such families as "renters."

of the total of 17.5 million farm households. They offer small-scale services[15] in addition to cultivating their own and/or leased-in lands. The new renters use such LSP services alongside their own family labour including women and children, adding to household food security with some diversification of crops and livestock.[16] However, we wonder if this is a transitional phenomenon owing to two main factors, namely, inflationary pressures on input costs (e.g. fossil fuel-driven technologies and costs of fertilizers, especially if fertilizer-yield coefficients decline over time), and secondly, the reluctance of young members of the family to engage in the drudgery of farm work (Ifaz 2021).

A feature slowing the pace of the disappearance of the family farm could be because of income contributions to the household from other labouring sources, including the cultivation of mortgaged/sharecropped land alongside one's own holdings, rickshaw-driving, petty trading or local service provisioning. Hence, the "family farm" may be prolonged as a feature of agrarian structure precisely because it is only one part of a household's livelihood portfolio. Indeed, it is easy to witness non-viable family farms being temporarily or "artificially" sustained due to other sources of income, especially remittances from outside. But again, while these complications may postpone or delay the disappearance of the family farm, they remain consistent with the overall thesis of disarticulation and rentier status. Furthermore, the vulnerability of the family farm itself prompts the household to diversify its income streams in order to maintain the household's attachment to land.

Simplifying Complexity: A Proposed Typology of Contracts

As noted above, large and medium landowners (with land above one ha) comprise about 10 per cent of families with land interests, and account for about 50 per cent of cultivable land. These large and medium landowners (erstwhile self-cultivating farmers or landlords with sharecroppers under earlier technological conditions) thus control a significant area under cultivation. They constitute the bulk of rentier landholders as we are defining them and, as family farms, their number is declining fast (Mandal 2022). They can be understood as part of a declining rural middle class struggling to sustain their level of livelihood and local status from agriculture alone, either as self-cultivators or as landlords over sharecroppers or fixed cash-based tenancies. It is this class which strongly represents the thesis of the disappearance of the Bangladeshi farm via the rentier route, while they themselves seek to diversify into non-agricultural and urban activities. Some of them are now fully absentee,

[15] Presently LSPs include water sellers of about 1.5 million private shallow tube wells, 0.3 million low-lift pumps and 38,000 deep tube wells for irrigation, 0.7 million power tillers and 60,000 tractor service providers, about 0.4 million threshers and corn shelling service providers, and over 3000 combine harvester service providers (Alam 2022). According to the Department of Agricultural Extension (DAE), Bangladesh, the latest number of combine harvesters stands at 5000, including about 2000 harvesters distributed through the ongoing government subsidised mechanisation programme.

[16] Renting in land for pond fishing is not yet that common for small farmers because it involves long-term leasing of land for digging ponds and risks failure in calamities like floods.

living in the cities, and leasing out their village land to other operators. We see such operators – contractors with control over more lumpy technology and engaged in consolidating fragmented plots into "command areas" for operational purposes and economies of scale – also deploying more mobile labour gangs.

Smaller and marginal landholders (those with land below one ha), on the other hand, make up about 90 per cent of farm families either with land interests as small owners-cum-tenants (BBS 2018) or as new entrants to the class of renters. Together, these 90 per cent of farm families presently control the remaining 50 per cent of cultivable land. These small farmers who are generally owners-cum-tenants, are significantly part-time farmers due to labour hybridity and reliance upon non-farm incomes. It is this category which increasingly relies upon the local service providers described above, while continuing to contribute their own family labour. The central research question is whether these part-time, small family farms will also disappear despite their present numerical level. Their sustainability currently relies upon purchase of services from LSPs and their own labour. But without consolidation of their plots within larger operational command areas, they are losing productivity potential and often deploying income from outside agriculture to access inputs and services. Thus, we expect them to become more "complete" rentiers in the future.

The crucial "class" question here is how returns from these various social forms of agriculture (i.e. "rural middle class" rentiers, remaining small landowners/farmers, and more recent small-scale entrants to farming, motivated by an affinity to land) are being re-distributed away from the holders of land and towards the operators of it, deploying new technologies and partially commodified "gang" labour. And the crucial "system" question is whether we are thereby witnessing the processes of disarticulation of the Bangladeshi family farm and the re-articulation of the agrarian system via the rentier-contractor/LSP relationship.

A somewhat over-simplified typology of our model can be viewed in terms of a number of contractual forms as follows. First, land leasing and tenancy contracts e.g. *sonkorali*, *daishodhi*, *khaikhalashi*, which enables better productivity and diversification (Jabbar *et al.* 1980; Mandal 1980). Secondly, irrigation service provisions by pump owners under a variety of payment systems. Thirdly, technology services such as custom hiring by LSPs of tractors for land preparation, of combine harvesters for harvesting of crops, and of paddle or power threshing of crops that ensures timeliness of crop operations and reductions in costs of production. Fourthly, even though a good deal of manual farm works are replaced by machines, peak season operations still need human labour, hired individually or in groups/gangs.

The rentier-contractor model clearly has different variants and contractual practices. There are differences between regions of the country depending on soil and topography, cropping patterns, crop growing cycles, and the remoteness of locations. Furthermore, we accept that the analysis offered here is mainly with respect to cereals, especially rice, owing to its importance in the nation's food security and dietary preferences. In the disarticulation/rearticulation process, medium and larger "middle class" landholders are leasing out plots to contractors (single or several, as indicated in the typology above) as a function of squared fragmentation of plots. This involves high transaction costs for self-cultivation with productivity gains from use of mechanised ploughing.[17] It involves groundwater irrigation and the use of more lumpy technologies for harvesting and post-harvest operations on consolidated "command areas." Labour shortages are increasing especially at peak seasons.

This re-articulation process applies very obviously to absentee land holders. Gone are the days when absentee owners retained sharecroppers who delivered, annually, the owner's family rice needs after conversion to paddy.

Turning to the second category of small scale new "renters" as described above, these very small leaseholder farmers are at best only producing a part of the family consumption needs and sell out the harvested paddy (if self-harvesting with family labour using old *khurpi*[18] methods) straight away and buy back processed milled rice from the market. This functions in two ways. First, this enables the purchase of better-quality rice than the coarse higher yielding grain that they produce. And secondly, by avoiding the "paddy to rice" costs entailed in parboiling, drying, husking, bagging, and storage, they are making considerable savings in direct costs and family labour (significantly women are involved at this stage in the production cycle).

As the Bangladesh socio-economy has evolved, however, alongside the demographic re-distribution of its population between rural and urban locations, we note the further diversification in food commodities, thus impacting the land use and contractual relationships under which these changes in crops occur. The main examples of this diversification are:

1. A new class of young rural entrepreneurs who are leasing in land on longer term contracts to establish orchards of new fruits such as dragon fruit, citrus, guava, and dwarf varieties of mango in the northwest regions of Bangladesh.
2. Another example of emerging contract farming includes clustering of newly dug fishponds on leased-in lands (a huge number of earth-cutting machines, known as *Becu* machines, helps the process of converting rice lands into fishponds/*ghers*). Across the country there has been an increase in cultured fish (carp,

[17] The less lumpy power tiller is in widespread use and is capable of being moved from plot to plot, but again they typically operate via local service providers external to the family landholder (Mandal, Biggs, and Justice 2017). Tractors operate on more consolidated areas, though consolidation may be realised through the mediation of commission agents (brokers); in this case intervening *bunds* (small dividing embankments) need not pose any serious problem.

[18] *Khurpi* is a cutting blade (sickle) with a handle for cutting grain stalks at base by hand, locally known as *kachi.*

pangas, tilapia, and catfish) reaching urban markets. The other model is long-term seasonal leasing-in of low-lying *beels* for commercial culture of fish by outside companies.

3. A variant of fish farming is the registered limited company model, based upon a community level clustering of single crop lowlands leased-in from farmers by a group of entrepreneurs (local and outsiders) on a profit-sharing basis during the inundation season. One such example is the Daudkandi model on the verge of the river Meghna. Elsewhere in the Southwest, in Satkhira District, these arrangements include clustered shrimp farming in the salinity-prone waterlogged areas of Kaligonj, Satkhira.
4. Cluster contract farming of vegetables and fruits is also expanding in greater Jashore and Chuadanga on yearly leased-in lands. We expect this to become more common across the micro-hinterlands of an increasingly rurban Bangladesh (see discussion of rurbanisation, below).
5. Contract farming with potato is becoming common in the northern regions of Bangladesh, in Bogra and Natore districts. One model involves the Bangladesh Agricultural Development Corporation (BADC), which continues to supply seeds to contract growers of improved varieties of rice, wheat, and potato, and then buys back seeds for storage and distribution to farmers at large. The other system includes private sector potato companies which support contracted farmers in local blocks for growing potato for export as well as the domestic market.[19]

Agrarian Change in the Wider Context

So far, the analysis has essentially focussed upon endogenous variables within the agrarian economy linking the quasi-feudal "depressor" legacy (outlined in Part 1), with the overall post-liberation national imperative for food security (whatever the political regime). This had led to a rise in the organic composition of capital via the application of new technologies to raise the productivity of both land and agricultural labour.

This rise in productivity can be tracked in different ways. Over the decade up to 2018, per capita arable land declined from 13.1 to 11.9 decimals and the share of agricultural labour in the national labour force has declined from 47 to 39 per cent, while cereal food production nearly quadrupled over the longer period from 1971 (Razzaque 2021, p. 12). Milk and meat production have similar trajectories (Mandal 2021). Market penetration of technologies occurred early on, first with irrigation – especially the development of the groundwater and shallow tube wells (Wood and Palmer-Jones 1991) – followed by

[19] Prominent agribusiness include Supreme seed, Bangladesh Rural Advancement Committee (BRAC), Ispahani, Himadri, Agroconcern, and Global Expo. These five examples of diversification are identified through personal observation arising from Mandal's extensive fieldwork for other recent papers over the last half decade (see references), alongside conversations between Wood and beneficiary informants during poverty research for the EEP-Shiree programme 2008-2016, plus revisits for resilience analysis up to 2018 (see Wood 2018, Ali *et al.* 2021, and Maitrot *et al.* 2021).

machinery for land tillage, harvesting, and threshing (Mandal 2017; Rahman *et al.* 2021). Some of this penetration, supported by the privatisation of inputs since the 1980s, occurred through the increased availability of small engines for irrigation, tillage, and threshing (Justice and Biggs 2020), which in turn enabled some customised hiring of these fixed inputs from LSPs, thereby slowing the process of disarticulation of the farm, as noted above.

These commercialised agricultural service developments received strong policy support in successive National Five Year Plans, encouraging expansion of bank lending to these sectors. Mechanisation in particular has strong backward and forward linkages in supply, maintenance, and repair activities. Corporate agribusinesses and seed companies have matched such grassroots activities. The expansion of the private sector into the raising of agricultural productivity has been supported by successive governments that have created appropriate tariff and regulatory conditions for imports (machinery, chemical inputs), and to enable the spread of competitive dealerships (Murshid 2022).

Increasingly then, we can see the need to consider variables in the wider socio-economic context (nationally and internationally) as contributing to or facilitating agrarian change. Exogenous conditions and policy support for market liberalisation (Mahmood 2021; Murshid 2022) matter in addition to endogenous variables. These impinge upon rural actors by introducing many other types of stakeholders into the agrarian political economy, and by reorganising the returns from high-productivity agriculture. They stimulate urban linkages and change the culture and perceptions of the rural landscape. Indeed, they are changing the idea of rurality itself.

Therefore, in addition to considering the commercialisation of agriculture and effects of private market penetration of productivity-enhancing technologies, we have to consider other socio-economic processes affecting agrarian change. These include rural infrastructure and communications, garment-manufacturing, urban infrastructure expansion, international migration with its resulting remittances and backward rural linkages, the flight from agriculture (especially among youth), and the rise of absentee landholders with positive effects upon real agricultural wages, microcredit, and other targeted interventions. Confusingly, some of these variables pull in different directions in terms of agrarian transition, both enabling but also holding back structural change. Of course, all these variables have had a huge impact upon the labour market and the pattern of demand for labour, altering the distribution of returns to different labour activities.

Here we are dealing with system complexity. Even a chronological account can be problematic, as different variables have kicked in at different times and have had their distinct paces. But any understanding of agrarian change in the country would be incomplete without including some account of these exogenous issues. With these caveats, we present some key moments in the process.

We are helped in the summary below by introducing the notion of "synergies and tipping points" suggested by Mahmood (2021). Extracting from a longer paper, Mahmood presents a diagram summarising market liberalisation of agricultural inputs across the 1980s and 1990s. This was framed by the political aim of tackling food insecurity head on, after the 1974-5 famine, and showing iteration between policy and market responses. Mahmood sees growth in rice production from the mid-1970s as having been held back by public sector restrictions on private players.[20] From the early 1980s there were moderate reforms that liberalised input markets, especially for fertilizer and irrigation (we may add that the Government of Bangladesh (GoB) was under huge conditionality pressure from the World Bank to follow structural adjustment policies). The removal of restrictions on fertilizer and equipment dealerships triggered a strong market response, especially in irrigation and fertilizer uptake, in turn leading to demands for more de-regulation, especially following the dip in growth in the later 1980s. This was partly the result of two consecutive flood years in 1988 and 1989 (Wood 1999c). By the early 1990s, further restrictions were lifted on imports of irrigation pump sets, power tillers, pesticides, and fertilizers. To demonstrate this narrative, Mahmood presents a graph of "great accelerations," noting dramatic rises in private sector credit from mid-1970s, feeder roads from late 1980s to late 1990s, agricultural machinery imports from mid-1990s to mid-2000s, and remittances from the end of the 1990s to the 2010s. He positively correlates total irrigated area, remittances, and crop production increases from the late 1990s, while indicating the lag effect of feeder roads from the late 1980s. This useful analysis frames some of the story below.

Irrigation Reform

By the early 1980s, there was a growing awareness of institutional failures in surface water irrigation and in the operation of deep tube wells, which stimulated advocacy (for example, from the World Bank) for shallow tube wells as suiting the Bangladesh agrarian system much better (Wood 1999c), as long as they were introduced under the terms of structural adjustment through open market dealing. Japanese equipment was especially popular — notably Kubota and Yanmar. Company representatives were trying to push their way into the public distribution system just as the GoB was moving to open dealerships with no allocation restrictions. With all these institutional reforms, such as innovations in seeds, expansion of fertilizer supply and a more market-friendly disaggregated irrigation strategy, the scene was set for change — mainly via *irri-boro*, with some developments in wheat and maize as well.[21]

[20] We have offered other more endogenous accounts of the depressor effect in Part 1.

[21] According to Razzaque (2021) food grain production has now quadrupled since 1971.

Rural Infrastructure and Decentralisation

Through the 1980s, the potential of these technical and institutional innovations in agriculture was significantly reinforced by two further developments in rural infrastructure and administrative decentralisation, which had a profound effect upon social relationships across the country. Up until then rural Bangladesh had a few national highways in constant need of maintenance, with embanked dirt roads leading off to *thana* headquarters (HQs). In this sense much of the country was remote. Travel was hard even over short distances. Market integration was weak, reliant upon larger landholders producing net marketable surpluses for the small urban population, alongside subsistence and petty commodity production from small family farms. The investment in hard top feeder roads branching off from National Highways (themselves upgraded) to *thana* HQs created a denser network of road communications[22] with varied knock-on effects, predictable input supply, proliferation of dealerships closer to the fields (including repair and maintenance services), a rise in the net marketable surplus that could reach non-local consumption, and easier migration, both rural-rural as well as rural-urban. In brief, a shift occurred from a more closed to a more open agrarian economy and society, accompanied by a proliferation of actors in the agricultural service sectors as a function of crop innovations. This made labour itself more mobile and less monopolised by local patrons. All these trends were reinforced by the upgrading of the *thana* into the *upazila*[23] with enhanced administrative significance in relation to district HQs and to Dhaka. This decentralisation was a deliberate political project for a military regime seeking to penetrate the countryside more deeply and indeed to create vote banks to give it electoral legitimacy. Thus, the 1980s laid the foundations for change to the present set-up. Quasi-feudalism was under attack, even if the "meta" norms of patronage and rent-seeking in other spheres of life were not.

Urbanisation and Readymade Garments (RMG)

These initial phases of quantum agrarian change helped to stimulate other conditions, which then fed back into further change. Let us first consider urbanisation and the growth of the RMG industry. From the early 1980s, construction around the original boundaries of Dhaka expanded with brickfields encircling city outskirts.[24] The continuing scale and pace of construction was and is a wonder — including in other

[22] The Local Government Engineering Division (LGED) of the Ministry of Local Government, Rural Development, and Cooperatives (LGRDC) grew out of the Intensive Rural Works Programme (IRWP) (aid supported by the Swedish International Development Authority), becoming larger in its reach and more institutionalised (additionally supported by the United States Agency for International Development (USAID)) as the 1980s advanced. Thus, LGED led this rural infrastructural investment process, which steadily included more rural roads and the development of 2000 rural growth centres and markets (GoB 2007). It now claims that over 83 per cent of villagers live within two kilometres of a made-up road.

[23] *Thana* were essentially colonial policing areas, morphing into local administrative units, while the replacement *upazila* (lit. sub-district) represented a stronger investment in decentralisation.

[24] It is estimated that the metropolitan area of Greater Dhaka now has a population of 21 million.

cities such as Chattogram (formerly Chittagong), Khulna, Sylhet, and Rangpur. The country shifted its population from being 90 per cent rural in the mid-1970s to about 70 per cent or even less as the overall population rose — though that simple notion of "urban" will be qualified below. It is not as if urbanisation preceded the rise of RMG manufacturing given the initial emergence of small factories scattered through urban residential areas. Rather, the two processes iterated and were mutually reinforcing. The start and expansion of the RMG sector are usually attributed to global shifts in comparative advantage partially reflected in favoured less-developed countries' access to rich country markets while other countries, South Korea especially, were losing similar access and thus were keen to re-locate their investment. It is now estimated that RMG currently comprises 80 per cent of exports from Bangladesh and employs some four million people.[25] These RMG-sourced incomes are significantly earned by women but not necessarily retained by them. Certainly, they support individual and family subsistence in the city areas, but they also comprise part of the remittance flow to the countryside. Rural remittances acted in shoring up precarious livelihoods as well as enabling investment in other activities, including modest levels of land acquisition (the new phenomenon of poor, small-scale renters described above), and reducing sole reliance upon cultivation income (kind or cash). In some cases, these remittances support the purchase of inputs and labour to maintain the integrity of a farm otherwise under pressure to move to rentier status. Such cross-subsidisation may only postpone the inevitable disarticulation of the farm for a short while, given labour flight especially by youth and ageing cultivating adults.

Mobility and Gender

No doubt comparative advantage stimulated the development of RMG in Bangladesh, but both the start and expansion were facilitated by improved rural infrastructure enabling easier mobility. The development of RMGs was also aided by the socio-cultural relaxation of gender restrictions to external employment outside the village. Large numbers of rural young women, usually before marriage, steadily moved to the city (often, in the early years, under male supervision), reducing their availability either for unvalourised work in the rural family, or as exploited labour in the rural households of others as domestics, or in feminised agricultural work (transplanting, weeding, and post-harvest processing). The partial removal of women from the agrarian labour market increased the relative demand for agricultural labour, and therefore contributed to its commodification as well as to rising real wages (World Bank 2013). Of course, female RMG labour was only partially commodified in the sense that *sardars* and *dalals* controlled the

[25] Pre-Covid-19, the preparations for the Eighth Five-Year Plan envisaged expanding the sector to eight million employees, though that may now be an aspiration too far.

recruitment process, and *mastaans*[26] roamed the newly expanding urban slums, where the new labour resided, acting as enforcers on both recruitment and shop floor compliance.

The Flight from Agriculture and Remittances

In the decade 2010-20, Bangladesh Bureau of Statistics (BBS) estimates reveal that 17 million people left the agricultural sector for other forms of employment.[27] However, that exodus had been growing steadily in the two previous decades. Depressed wages for rural unskilled men had stimulated their outmigration, especially for younger and unattached males, who sought work in urban construction, and then further afield overseas, often also in construction. While this implied detaching themselves from multi-stranded dependencies on rural patrons, they could not yet be considered freed labour — whether due to local unpaid debt obligations, or because they were, in practice, transferred to the *sardars* and *mastaans* controlling participation in urban opportunities, as they had previously been in rural work programmes. In the urban labour market, they commonly remained bonded and tied to new forms of patronage and clientelism that had emerged. These social practices were seen in overseas labour migration as well, with labour contractors supplying indentured male labour to Middle East construction. Women were placed in services, often effectively into servitude. In a sense erstwhile agrarian patron-clientelism, associated with rural quasi-feudalism (Wood 2022), has morphed into these *mastaanised* urban contexts at home and abroad, where access for labour and profits from labour in the labour-intensive sectors of transforming societies are now controlled via debt and employment access.[28] In other words, labour markets have not yet reached the stage of generalised commodity production, and are not yet really subsumed under capital (Brenner 1977).

Apart from this extension of agrarian social practices into urban settings, whether at home or abroad, the reverse impact has been via remittances.[29] While there is now considerable data on remittances,[30] there has not been much coverage of their significance for agrarian transition, apart from their role in inflating land prices in places of labour origin. This crucial supplement to rural family income has aided a loosening of local clientelist dependency, with erstwhile rural patrons losing their

[26] *Sardars* are typically labour contractors, recruiting labour into gangs, earlier for rural works, but now for mobile agricultural labour; *dalals* are brokers, in this example, in supplying labour to garment factories; *mastaans* are local patrons with followers controlling local activity and space, often backed up by threats of or actual violence. Initially associated with informal control of urban opportunities, slum areas and markets, they have spread to the countryside, with increasing political linkages (Jackman 2017).

[27] Ifaz (2021) goes so far as to speculate that by 2050 Bangladesh "may lose all its farm labourers."

[28] Later, as skills improved, such labour was exported to urban locations of industrial production in Southeast Asia through the veneer of more formalised arrangements, even including uniforms.

[29] Wood recalls from his research in Pakistan that most families in Khyber-Pashtun Kha (ex-North-West Frontier Province (NWFP)) from the 1990s had a family member in the Middle East somewhere.

[30] Some of it from the early days of Sylheti outmigration to the United Kingdom from the 1950s and 1960s, and their contribution to livelihoods at home as well as to foreign exchange reserves.

monopoly of control over tenants and landless families. The reduction in the availability of male agricultural labour (Ifaz 2021) has pushed up the wages of remaining labour — whether personally recruited or operating via contractor gangs. Indeed, the World Bank Poverty Assessment (2013) found from the Household Income and Expenditure Survey (HIES) panel data, that in the period 2000-2010, agricultural wages made the largest contribution to poverty reduction.[31] Seasonal scarcities of labour, long acknowledged, had previously prompted the interlocking of labour with debt in seasonally lean periods to secure its availability in peak periods. However, as the rising demand for labour, especially in peak seasons, surpassed supply even further, the continuing opportunity to enforce clientship has consequently been weakened. This process is now reinforced by the reluctance of male youth to remain tied into agricultural work in the village when other options are available. According to Ifaz (2021, p.13), "A large segment of Bangladesh's youth perceives agricultural work as low-wage, back-breaking manual labour that is tantamount to poverty and illiteracy." We suggest that these processes, too, are leading towards contractor-supplied agricultural services as the dominant mode of rural production. The logical presumption of these trends is a further increase in the technological substitution for labour,[32] though the centrality of rice production still requires intensive labour for transplanting and weeding. The agricultural labour shortage under traditional terms of employment is reinforced by comparing direct or net[33] rural and urban low-skilled earnings (Ifaz 2021). The comparison shows that rural earnings are a fraction of urban ones.

Hybridity of Labour

In Part 1, the hybridity of labour was discussed with regard to endogenous agrarian opportunities for rural labour. Wood (2022) observed that most labour market analysis is flawed because of attributing single occupations and sources of income to each "worker." Within Bangladesh, hybrid labour is significantly aided by more fluid migration patterns. We are long familiar with rural-rural migration as variations in the topography and resultant cropping patterns across the delta and seasons shift labour and indeed tenants between rural locations. The *haor* tracts in the northeastern regions, for example, attract returning winter sharecroppers as the floods and *beels* recede, while labour from those regions must re-locate elsewhere for the long monsoon period. And such rural-to-rural mobile labour is easily "contractable" into agricultural service gangs (see also Mandal *et al.* 2020). But additionally, migration is no longer a static, irreversible movement, due to improved road communications reinforced by the spread of mobile phones (offering up to date labour market information) and the digital money transfer system. Fluidity of migration is additionally aided by the Jamuna Bridge[34] for access to North Bengal as

[31] Razzaque (2021) claims a 2.5-fold increase in the rice equivalent of wages over the two decades up to 2018-19.
[32] A feature of the 4th Industrial Revolution, see Mandal (2021) as well as Bhattacharya (2019).
[33] Discounting remittance sources.
[34] Crossing the Jamuna River (i.e. the Brahmaputra after it enters Bangladesh), linking east and west bank districts to the north of Dhaka.

well as the new Padma Bridge linking the southwest to the rest of the country.[35] Returning to villages for festivals or for other crises like Covid-19 is familiar,[36] but of course the origin of many festivals in agrarian Bengal can be attributed to moments in the annual agricultural cycle. Any survival of a family farm is now dependent upon returning family labour during these periods of higher demand, though not possible if that labour is overseas. Thus, labour can be multi-purposed, especially for those in the urban "informal" service sectors outside the organised sector (i.e. RMG, government, or other nascent industries). Such hybrid labour can therefore postpone the demise of the family farm by its availability at critical times.

But in this context, let us return to the point above, about the reluctance of youth to remain in full time agriculture requiring rural residence. This implies that we are looking at the "ageing family farm," where fathers are not replaced by their sons as full-time managers of land and inputs. The sons opt for the rentier "insurance"[37]– holding onto land but not directly cultivating it. Under these conditions, we would expect to witness a duality of absenteeism emerging. On the one hand, there are abandoned family farms rented out to tenants (the small-scale renters noted above) whose productivity will rely upon local service providers, and on the other, a more obviously observed category of the absentee "landlord" whose family has abandoned direct cultivation of land for opportunities elsewhere, leaving it to agricultural service companies to contract manage — our main rentier-contractor proposition. There is much complexity here, and we can only be tentative at this stage in our knowledge.

We have discussed above how the affinity to land complicates the process of family farm disarticulation, while nevertheless being consistent with outsourcing much of the cultivation to local service providers or contractors. The other complication is the phenomenon of rurbanisation.

The significance of rurbanisation

The 1980s period of dual investment in rural infrastructure and the upgrading of *upazila*, the appearance of stronger district and sub-district towns networked and integrated into larger towns and cities, and especially Dhaka itself,[38] heralded new sets of opportunities, transactions, relationships, and asymmetric actors — a new political economy, transforming earlier patron-client structures into new forms. This

[35] The Padma bridge (crossing further south after the Jamuna has been joined by the Ganges to form the wider Padma) was recently commissioned. It will have a large impact (having four lanes as well as rail) on the west and southwest of the country.

[36] During the early period of Covid-19 pandemic, studies conducted jointly by BRAC Institute for Governance and Development (BIGD) and the Power and Participation Research Centre (PPRC) estimated that 16 per cent of the urban population in Dhaka migrated back to home villages (Zoom presentations during 2020-21).

[37] At present, buying and selling of rice seedlings in market places is another example of dependence on family farms with the added implication that the choice of variety (some time unknown) goes beyond the cultivator.

[38] Recall the LGED role in creating 2000 rural growth centres and markets (GoB 2007).

process of urbanising the countryside has not been confined to *upazila*, but these initial dual drivers of infrastructure and decentralisation helped to stimulate the rise of other, more economically derived growth poles at road intersections, river *ghats*, ferry ports, bridge ends, rail stations, *haats*, and large villages morphed into towns modestly enjoying the benefits of agglomeration and economies of scale. This represents the geography and spatial demographics of the agrarian transition.

The process and pattern of growth of these rurban entities is by no means identical across the country with the east moving faster than the west,[39] though the completion of the Padma bridge should stimulate more convergence with easier connections for the west and north of the country to the present major centres of growth more on the eastern side of the river complex.[40]

There are several aspects to the significance of this process of rurbanisation for any concept of agrarian transition. First, let us consider the micro-hinterlands of these distributed growth poles. Through the 1980s and early 1990s, before the effects of the two drivers (infrastructure and decentralisation) had been fully realised (Mahmood 2021), the cropping choices across the country were becoming increasingly homogenised around the major cereals, notably through the steady domination of *irri-boro*. It also reflected the decline of jute as a cash crop due to replacement by plastics. *Rabi* crops (winter vegetables) and *aus* rice (early summer, precariously dependent on early rains and often written off) were also being squeezed, with some threat to pulses as well. However, as the effects of the two drivers (rural infrastructure and decentralisation) kicked in, we could see a diversification of crop choice, as more perishable horticultural crops (vegetables and fruit), as well as meat and cultured fish could now find their way more quickly to meet the rising demand in the new urban markets. Razzaque (2021) presents evidence for the declining share of rice production in the agricultural gross domestic product (GDP), despite the productivity-led expansion of the crop. Indeed, he associates a rise in rice productivity with a release of land to other crops.[41] This has especially been the case for the micro-hinterlands of these growth poles, supplying not only to the new local markets but also more distant city ones. The rise in commercially grown vegetable and fruit has been dramatic with a high net marketable surplus moving from rural to urban consumption (including through supermarkets), and even exports (especially to the Middle East). As Ifaz (2021, p.15) observes, "With rising urbanisation and increasing incomes, Bangladesh's population is transitioning from cereals to higher-value and more nutritious agricultural commodities."

[39] This assumption can be derived from HIES data and the Labour Market Survey — see World Bank Poverty Assessment Report (2019), as well "Extreme Poverty Study" (Ali *et al.* 2021) for further elaboration as well as refinement of this assumption through comparing local sensitivities or elasticities to overall economic growth.
[40] As already demonstrated by the Jamuna Bridge further north.
[41] Mandal (2021) also notes the decline in arable land.

Some of this micro-hinterland production is still sourced from family farms or through contracted services to rentier land, but there has also been the emergence of large "market gardens" where land has been consolidated for convenience of operation by a new class of rural entrepreneurs, backed up with new capital from banks, other investors, and remittances. The open question is how far this process is now extending beyond these micro-hinterlands, stimulated by the changing patterns of demand nationally, and incentivised through favourable shifts in relative "farm gate" prices. One parallel is the recent growth of farmers' hubs led by young rural entrepreneur farmers with advanced technical knowledge about high value crops, orchards, plant nurseries, mechanisation services, and group marketing of perishable products that they produce. They then aggregate at the hub level for bulk selling at higher prices.[42] This process is still in its early stages. For example, strong fertilizer-yield co-efficients may decline over time through over-intensive cropping, thus altering the social patterns of returns to capital away from cultivating operators and towards the suppliers of inputs, especially chemical ones, alongside the more familiar story of hybrid seed monopolies, such as Monsanto. Contemporary output data suggest that the peak has not been reached (Mandal 2021; Murshid 2022), but how long will it be before that point is reached?

If this interpretation of the context is accepted, then what does rurbanisation represent in terms of changing relations to the dominant means of production and exchange? The shift towards returns from agricultural services implies a deepening, though not completion, of commodification in both land and labour markets. But of course, the significance of product markets has risen sharply as a function of the shift from the subsistence-oriented family farm towards commercialisation, raising the question of who controls the means of exchange across the supply chain and how? Aggregation of output from the "new" farms, economies of scale in food processing, cold chain transportation, wholesaling *arotdars*, and distribution into retail urban markets[43] — all these developments are attracting new sets of intermediary actors, exercising localised monopolies, which are sometimes backed up by the threats of violence.

In other words, we are not witnessing some benign, invisible hand, in laissez-faire market expansion with open tendering and labour power recruitment (Murshid 1997). Instead, the rising significance of control over the means of exchange along the supply chain is producing a new generation of rurban non-farm actors (see Murshid 2022 on rice markets; Crow and Murshid 1994). The real political economy question is the extent to which these new, non-farm actors are themselves arranged into new forms of patron-clientelism — local *faria* and *bepari*, larger traders, truck

[42] Sygenta Foundation had provided technical and financial assistance to farmers hubs in Rajshahi and Natore regions for developing modern nursery businesses for Ultra High Density (UHD) mango cultivation. An early description of farmers' hub is given in Mandal (2019).

[43] See Jackman (2017) for an end chain political economy analysis. Also, note the rise of urban supermarkets.

owners, loaders, driver teams, urban unloading coolies, fighting for access to "their" newly arriving trucks (Jackman 2017), and *arotdar*[44] led auctions for retail distribution — all transacting in each 24 hours of the producer-consumer cycle, constantly struggling for their space and territory against predatory competition. Ifaz refers to the "middlemen trap,"

> Without access to a distribution chain, most farmers (*sic*) in Bangladesh rely on middlemen to market their crops. The middlemen buy from farmers in bulk at very low prices, many a (*sic*) times locking in orders long before the harvest — a futures trading practice which is locally known as '*dadon*.' (Ifaz 2021, p. 14, emphasis added)

He goes on to quote a 2020 study by the Asian Development Bank indicating that farmers get less than 40 per cent of the consumer retail price, while the middlemen get 45 per cent.[45]

We suggest that a new generation of patron-clients stretches across the supply chain. It can be a brutal form of merchant capitalism which not only blurs the distinction between the rural and urban through rapid communications and digitised information, but also increasingly requires wider-scale protection. This raises an important issue of interpretation and analysis around the concept of *mastaan*. Certainly, from the 1990s, the notion of the urban *mastaan* has been a familiar one, referring both to individuals and a system of informal relationships, patrolling slums, and controlling construction, sites for trading and begging, recruitment of workers to the RMG sector and so on (Khan 2000). But there are two further debates to be had, over the *mastaanisation* of the countryside, and the politicisation of the *mastaan*.[46] Rural-based studies undertaken by researchers from the University of Bath, United Kingdom, over the last decade or so have observed this shift in rural patronage, from the multi-stranded intimate dependency between landlord-cum-employer-cum-moneylender, and clients as tenants, labourers, and debtors, towards more impersonal inequalities as the rural economy has opened up with new agricultural services actors (contractors) engaging with more commodified labour — partially freeing it but making it more vulnerable and precarious at the same time. At the same time, if rural people can access the city more easily, then the reverse must also be true, with penetration of the countryside by new urban actors in agricultural services and other non-farm activities. (See Lewis and Hossain 2019 for a parallel analysis).

[44] These terms (*faria*, *bepari*, and *arotdar*) refer to different levels of trading, with *arotdar* being the better financed wholesalers relying upon the smaller *bepari* and *faria* roles to purchase from farmers or contractors, and transport produce to local collection depots for uploading to cities. For an earlier more ethnographic study of *bepari* and *arotdar* in fish culture markets (seed and fingerlings, as well as food fish), see Lewis, Wood, and Gregory (1996).
[45] While this confirms the theme of captured markets, the formulation of "farmers" oversimplifies the micro-level production arrangements where agricultural service contractors will have superior interaction in this *dadon* system rather than being passive victims of it. Clearly there is a strong case for further investigation of these arrangements. See also Murshid (2022) on these evolving markets, especially grain staples.
[46] See Jackman's PhD thesis (2017).

In the context of wider political developments in the country, there has been a political party imperative to secure vote banks across the countryside as well as to control or manage localised protests and disruptions through a stick-and-carrot policy. District, *upazila*, and union[47] level party activists all play a role in this penetration process, but of course they also multi-task — they are *sardars* and contractors controlling local infrastructure projects (roads, embankments, canals, and drains), rent-seeking from them and recruiting labour for them; licensing land for construction and market use; licensing *haats* and transportation; and allocating and licensing dealerships, factory locations, brick kilns, shops, tea stalls, *madrassas*, other schools, and offices. We need to know more about how they participate in the expansion of agricultural services — especially through trading, dealerships, and transportation. The opportunities are endless. In effect the *mastaanised* new patrons seek to operate in support of the political hierarchy and seek to climb it, while meanwhile getting protection from the same hierarchy (Devine 2007).

When we come to the politicisation of the *mastaan*, Jackman (2017) concludes from his work that while the urban supply chain controllers operate as *mastaan*, they do so as part of the political management of the city, feeding resources into the party in exchange for the "license" to conduct extractive business, with violence if need be. In this sense there are parallels with mafia organisations both in Italy and North America. Certainly in Bangladesh this locus of informal power intersects with more formal, uniformed, organs of the state which provide protection and security often through their own informal and arbitrary behaviour as they intervene to regulate territory and mediate conflict in return for rent and loyalty to themselves and the ruling party. In the city, these arrangements are well understood and considered by many as the price for relative peace. Less understood is how this works beyond the city in terms of the politicisation of agrarian relations. In the past, state level leaders (civilian politicians or martial law administrators seeking legitimation) managed their rural vote banks through quasi-feudal mechanisms in return for permitting rent-seeking behaviour by extractive classes. Somehow, now, a "tax" on the new forms of income arising from improvements in agricultural productivity and rural businesses (and thereby from the increased trading activity in inputs, services, and produce in rural areas) has to be extracted, using new forms of clientelism doubling up as the means to secure votes. The stuffing of ballot boxes, the cruder form of manoeuvring elections, is a sign that with the fading of quasi-feudal control, replacement mechanisms for securing votes are yet to be institutionalised. The presently observed *mastaanisation* of the countryside seems to mean evidence of a society in transition, leaving open the question of how we conceive of the state and processes of political reproduction in the future.

[47] "Union" in this context refers to the lowest administrative tier below the *upazila* — it might typically embrace 10 villages and has its own "elected" council and chairperson (predominantly a chairman) exercising considerable powers of patronage locally, for example over entitlements to public support from poverty-targeted programmes.

Across Parts 1 and 2 of this account of agrarian change in Bangladesh, from our vantage point between the last 50 years and the upcoming decades, we have reported on a process of dismantling of quasi-feudal management of land and labour, and depeasantisation (Araghi 1995; McMichael 2012) with the intrusion of capital and new technologies to overcome "depressor" constraints to agricultural productivity. Under the initial conditions of population density and high dependence on landholding for income and livelihoods, land has been continually divided between inheriting sons (with daughters exporting dowry entitlements, and daughters-in-law importing dowry equivalents), entailing a process of squared fragmentation and ever-decreasing per capita holdings. Such sub-division and fragmentation of holdings posed the challenge, both of refracting lumpy technologies into scattered plots and of managing labour in several places at once. The latter constraint was previously partially resolved through tenancy (i.e. sharecropping or fixed rents with different risk-sharing implications) at the societal price of retaining depressed incentives for cultivators to invest in productivity. As argued above, this is increasingly tackled by agricultural service contractors through the "operational consolidation" of plots. Given inter-generational transfers of ever decreasing landholdings, themselves scattered into different quality plots, the coherence of the family farm as a unit of production is steadily threatened. Under these conditions, land reform for either redistribution (ceilings) or consolidation between owners (for operational efficiency gains) cannot solve either equity or efficiency demands, since social processes of inheritance move faster than any policy intervention in taking holdings below ceilings, and any policy to this effect would be rationally resisted.

How is this conundrum being addressed in Bangladesh? The devastating conditions for Bangladesh, at its liberation, included the central problem of food security and the need to reduce dependency on imported food stuffs to protect sovereignty and overall livelihood security for the country. The initial post-liberation instinct was to deploy the state to support enhanced agricultural productivity and net marketable surpluses through input supply and subsidies to spread technological innovation. Increasingly, the state was replaced by the market as a response to widespread rent-seeking and corruption, reinforced by pressures for structural adjustment from major concessionary lenders, principally the World Bank, from the early 1980s. This process towards greater market penetration was reinforced by the dual drivers of infrastructure investment (especially national highways and feeder roads to sub-district headquarters) and administrative decentralisation to these sub-districts (*upazila*) as a political management strategy for the military regime during the 1980s, thus also proliferating growth poles and local multiplier effects. The coinciding rise of a garments industry (ready made garments or RMG) and rapid expansion of major cities, especially Dhaka, encouraged new patterns of migration, including international migration. This prompted an enlarged demand for food for urban consumers and the industrial workforce, and expanded remittance flows back to the countryside. All these contextual conditions combined to facilitate the intrusion of capital and new technologies into agriculture, while hitting the wall of ongoing socio-technical depressors in the form of family farms with scattered plots and inadequate savings.

We argue that these combined pressures produce a hybrid, home-grown version of agrarian change for Bangladesh — land consolidation via operational services rather than ownership. But this also entails a separation between ownership of land and the operation of it, with owners increasingly becoming rentiers on their own land rather than direct cultivators. In effect, they give out their plots for different operators (contractors) in different parts of the village to cultivate alongside the plots of others. These plot neighbours could be siblings or others perhaps more distantly related, who all shared the same problem of owning scattered plots grouped in different village locations to reflect quality variables. Total holdings over time became insufficient in size to warrant significant personal, family-level investment in fixed and variable inputs. Cooperative options for self-supply of inputs arising from the Cumilla model, set in minifundist conditions yet still captured by relatively richer local families,[48] had proven not to work well both in the Dhaka-Cumilla belt as well as elsewhere in the country where tenancy and landlessness was higher. We do not expect the more recent category of small-scale renters either to make cooperatives work for themselves or to fundamentally change the logic outlined above. The solution to increasing land productivity, and thereby labour productivity, therefore has to lie in the rentier-contractor equation.

The social implication of this logic is to redistribute the returns from cultivation away from the owner-rentier and towards the contractor operators (including local service providers) and the agro-industries and banks supporting their capital investment. At the same time, it shifts the appropriation of labour power from the absolute to relative surplus value relationship, commodifying labour in the process (at least partially), untying it from personalised, multi-stranded, interlocked, and multi-period transactions. This is not such a clean process as it might appear. The opportunities for labour are not just on the land itself, but in the expanded post-harvest and market supply chain activities. These commercialised activities are not necessarily occurring under open market conditions, but, are themselves likely to be interlocked within *mastaan* relationships along the supply chains, though presently there is little evidence of such relationships applying directly to the rentier-contractor transactions, the locus of primary production.

However, labour does appear to have increased bargaining power under these conditions, especially of seasonal scarcity amid a general flight of labour from

[48] "Over the first 10 years of the coop societies, the proportion of members getting loans was shrinking while the size of loans was increasing," notes Harry Blair (email communication 2022). He also notes that the unequal land distribution undermined the peasant homogeneity narrative (see Blair 1978).

agriculture. Real agricultural wages have increased, and indeed for the first decade of the 2000s, contributed the major element of poverty reduction in the country (World Bank 2013; Razzaque 2021). And this trend would be reinforced by the flight of labour from the agricultural sector (Ifaz 2021) with the idea that by 2050 "agricultural labour" might have disappeared — in our earlier "farmhand" sense of the term.

This analysis, predicting the disappearance of the farm in the later stages of de-peasantisation in Bangladesh, in favour of the rentier-contractor mode of production, includes the breakup of earlier relations of production and exchange, which tied landowning classes and peasant cultivators into patron-clientelist dependencies associated with the term quasi or semi-feudalism. This is also the process of disarticulation. In particular within those class relations, the internal logic of the family farm as a multiplex, integral unit of production for consumption and sale, bound together by an inter-generational bargain which trades future access to land for present labour services via patrilineal inheritance, is threatened by the separation between ownership and management of land. The family is broken up as the link between material interdependency of household members and the moral proximity of blood ties is weakened, with the material domain undermining the moral one through individuation and inter-generational fracture (Wood *et al.* 2000). This is clearly evidenced by the flight of male youth from agriculture, seeing it as demeaning (Ifaz 2021). However, physical absence of male labour has been partly replaced by increased participation of female labour[49] and use of machinery.

It is suggested here that the future of agrarian Bangladesh is being re-articulated, a process of re-formation, entailing a separation between rights to land and the management of it — at least as a stage of development perhaps eventually towards more corporate and commercialised agriculture in which the relationship between ownership and management is restored in new hands or classes via large-scale commercial acquisition. Re-articulation is still far from being complete and remains a research question. The socio-cultural attachment to land under uncertain societal conditions remains strong, though more likely as a rentier holding, rather than involving direct cultivation. Contract agricultural labour is not fully commodified, and labour is hybrid anyway, with labour markets in parallel sectors (e.g. post-harvest and supply chains) still being clientelist. With rurbanisation and tight labour market with time lags in crop operations between regions, there are organised labour gangs moving between different seasonally affected rural locations, as well as in cities and district towns.[50] This is a moving picture. Of the three trajectories or

[49] Participation of women on the roadside in jute retting and in vegetable and fruits fields is a common scene in the countryside.

[50] In Faridpur town the labour contractors have arrangements of accommodation with meals for migrant labour coming from different parts of the country, and they supply casual labour on demand. Also labour gangs with spades and carrying baskets are commonly seen walking in the morning to assemble at designated places in Dhaka city to offer themselves to be hired as casual labour.

scenarios outlined at the outset of Parts 1 and 2 of this paper (petty commodity producers, large-scale commercial farms, and the hybrid rentier-contractor model) the third option prevails, at least for now.

As indicated in the Introduction, this paper is designed as a basis for future research to refine answers to the many questions posed above and to produce a finer grained analysis for inclusive policy development. Any search for inclusivity and fairness must also be informed by an improved understanding of the political economy implications of agrarian change, as we are here predicting. Rural patron-clientelism in its earlier quasi-feudal sense, with land in the form of estates and rents, constituting the basis of national power in alliance with colonial forces, has been steadily conceding political space to other emerging classes embodying new forms of agricultural, urban, and trading capital. But for Bangladesh, this Northian[51] transformation significantly includes rents, not just profits. In other words this is not just a story of new opportunities, new stakeholders and economic actors, and a move towards commodification and open market capitalism, linking agricultural productivity and food security to expanding urban interests. And thus not yet a story of new political actors with the potential to change the social basis of wider power dynamics. The process of rurbanisation outlined above contains new forms of clientelism, local trading monopolies, territorial control over urban consumer markets, and only a partial commodification of the labour process. The subaltern classes may have been transformed from closed, personalised dependencies but they remain disorganised and fragmented in other ways, and subject to exploitation via intensifying absolute surplus value in the labour intensive parts of the sector, as well as remaining price takers for both inputs and farm gate output, where localised monopolies hover. These incrementally changing class relations continue to underpin inequalities across the country, horizontal as well as vertical, and regional too. And they continue to feed into political rents via the mechanics of regulating and licensing emerging market activities. De-peasantisation does not necessarily lead to proletarian mobilisation.

Acknowledgements: I would like to acknowledge very constructive advice and editorial support from John Harriss.

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[51] This is a reference to North, Wallis, and Weingast (2009) which outlines societal transformation in terms of power holding elites incrementally accommodating newly rising elites in ever enlarging coalitions of elites. See also Wood (2018) for a closer application of their schema to Bangladesh.

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Glossary

arotdar	wholesale traditional trader with storage facilities at market places
aus	early monsoon, mostly rain-fed high yielding varieties of rice crop — very unreliable due to droughts and early floods
becu	local popular name for caterpillar excavation machine, commonly being used for digging ponds and earth moving
bepari	small-scale petty trader

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beel	low-lying wetland that remains waterlogged in dry season to which fish retreat (i.e. small freshwater lakes), gradually drying up due to absence of regular floods
bund	mounds between plots demarcating boundaries
dadon	advancing credit during crop production or fish catch, enabling lender to secure the harvested crop at lower prices
daishodhi	type of land mortgaging for advancement of credit, enabling the mortgagee to cultivate the land until the mortagagor repays the debt
dalal	brokers and intermediaries
deshi	local, as in local traditional varieties of rice, poultry birds or cattle
faria	local, petty traders, buying and selling small amounts in village market
ghat	river port
ghers	ponds or enclosures in rivers and waterbodies for fishing
haat	local rural market
haor	low-lying, perennially deep-flooded areas during the monsoon, only available for cultivation when floods have receded in rabi up to pre-monsoon period. Especially associated with large tracts in north- east Bangladesh.
irri-boro	pre-monsoon, short stem HYV rice crop, irrigation and fertilizer dependent, replacing unreliable rain-fed Aus season, and the key to Post-liberation food security in Bangladesh
kachi	local name of sickle, used for cutting crops and grass
khaikhalashi	type of land mortgaging for advancement of credit, enabling the mortgagee to cultivate the land for a specified period of one or more years, after which the land gets back to the mortgager (*khai* = use or consume, *khalashi* = repaid or relieved)
khas	untitled land, controlled by government and available for long-term leasing out or donation to the poor
khurpi	harvesting blade with handle for harvesting paddy or wheat by hand, also used for weeding
madrassa	Islamic school, especially focussed upon learning the Quran and offering religious education
mastaan	muscle men, willing to resort to intimidation and violence, initially associated with urban gangs, but also increasingly replacing traditional rural patrons in patron-client relations
minifundist	small-scale landholding by peasants
pangas	catfish, scientific name is Pangasius, usually grown in rivers and ponds
rabi	Vegetable, oilseed, and pulses crops, grown in winter (dry season) in residual moisture after completion of monsoon
rurbanisation	urbanisation of the countryside.
sardar	labour gang leader

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sonkorali	type of land mortgaging for advancement of credit, enabling the mortgagee to cultivate the land for only one year, renewable year to year (*son* = year, *korali* = agreement)
thana	administrative/police authority below the district level during the colonial period
upazila	upgraded thana (from 1980s in Bangladesh) with more administrative and political functions (*upa* = sub, *zila* = district)

Abbreviations

Cumilla-BARD	Bangladesh Academy for Rural Development
BRAC	Now the brand name of a major development NGO in Bangladesh (name derived originally from Bangladesh Rural Advancement Committee)
BBS	Bangladesh Bureau of Statistics
BIGD	BRAC Institute for Governance and Development
DAE	Department of Agricultural Extension
EEP-Shiree	Economic Empowerment of the Poorest. Extreme Poverty programme funded by DFID-FCDO (2008-2016) (*shiree* is Bangla for ladder). Team from the University of Bath, UK with support from BIDS, Dhaka, which conducted fieldwork-based research throughout the duration of the programme.
GOB	Government of the People's Republic of Bangladesh
HIES	Household Income and Expenditure Survey
IRWP	Intensive Rural Works Programme (funded in 1980s by SIDA)
LDC	Least Developed Country (Bangladesh will upgrade its status to Developing Country by 2024
LGED	Local Government Engineering Department
LGRDC	Ministry of Local Government, Rural Development and Cooperatives
PPRC	Power and Participation Research Centre
RMG	Ready Made Garments
SIDA	Swedish International Development Agency
USAID	United States Agency for International Development

Date of submission of manuscript: November 11, 2022
Date of acceptance for publication: January 15, 2023