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# Rethinking rural development in Myanmar's Ayeyarwady Delta through a historical food regimes frame

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Recent strategies to address rural poverty and food insecurity in Myanmar's Ayeyarwady Delta emphasize the scope for market-based and smallholder-led agricultural development to catalyze broader positive change for rural populations. This paper challenges the appropriateness of this development model for the Ayeyarwady Delta. Assumptions of latent growth potential among an emerging smallholder capitalist agricultural class fundamentally misinterpret how farming is embedded within the Delta's regional economy. Using a long historical perspective informed by the food regimes approach, as well as household-level data from a recently completed livelihoods survey in two townships, we reveal a contemporary situation in which medium-sized and large landholders control most agricultural production. We argue that this is a path-dependent legacy from how the Delta has been successively incorporated into the politics of food production and trade at global and national scales. These arrangements have left the Delta without a broad smallholder base, meaning that policies that prioritize smallholder-led market development will not generate the type of pro-poor outcomes required to address the Delta's pervasive rates of food insecurity and poverty. Instead, a rural development agenda for the Delta should focus on its actually existing social and economic dynamics that are a legacy of its history.

**Keywords:** agrarian transition, rural development, food regimes, Ayeyarwady Delta, Myanmar, livelihoods

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## Introduction

The Ayeyarwady Delta is a site of contradiction. Although it possesses a biophysical environment rich in the nutrients and resources for intensive agriculture, it is wracked by poverty. Some 32 per cent of Ayeyarwady's population live below the poverty line, compared to 26 per cent nationwide (Government of Myanmar *et al.*, 2011: 5).<sup>1</sup> The 2017 Myanmar Living Conditions Survey (CSO *et al.*, 2018) found that ownership of household assets in Ayeyarwady is significantly lower than for other rural states/divisions (2018: 52–3); housing quality is the second worst of any state/division in the country (2018: 55); just 15 per cent of Ayeyarwady households are connected to grid electricity (2018: 44—only Rakhine and Tanintharyi fare worse), and lack of access to safe drinking water in Ayeyarwady is second only to Rakhine among all Myanmar's States/Divisions (2018: 66). Ayeyarwady has the third worst incidence of chronic malnutrition of any Myanmar State/Division, with 32 per cent of children under five years of age affected by stunting (Ministry of Health and Sports and ICF International, 2016: 22).<sup>2</sup>

This is a grim portrait for an area once considered the 'rice bowl of Asia', and highlights the need for policy actions that promote pro-poor regional development. Given that Ayeyarwady's population is 86 per cent rural (Department of Population, 2015),

this is a rural policy question. At the current time, the centrepiece of rural policy in Myanmar is the *Agriculture Development Strategy and Investment Plan* ('the ADS') (MOALI, 2018). The line of thinking that dominates the ADS emphasizes the capacity for entrepreneurial smallholder-led development via the promotion of what is known as 'value-chain development'. This narrative of rural development was crystallized in the World Bank's *World Development Report 2008*. The assumption is that the inclusion of smallholder<sup>3</sup> agriculturists in modern agri-food value chains will promote increases in efficiency, production and incomes, which trickle through into other sectors of the rural economy. In this paper, we argue that the historical evolution of agriculture and livelihoods in the Ayeyarwady Delta since British colonial times challenge the contemporary appropriateness of this development model for this region. We don't engage here in a general critique of the premise that rural poverty is best addressed by smallholder inclusion in modern value chains (for that argument, see Akram-Lodhi, 2008; Oya, 2009). Rather we focus on the Delta from the British colonial era to argue that its specific history has created a contemporary socio-economic situation ill-suited to the merits of value chain development as a pro-poor intervention.

Our focus on the Ayeyarwady Delta reflects its unique political ecology: primarily its development into not only a nationally but also globally significant rice producing and exporting region. To a greater extent than other regions of Myanmar, the fortunes of the Delta and its population have been deeply tied to its entanglement in not only the domestic politics of food and agriculture in Myanmar, but also the world-historical evolution of global circuits of food production and trade over the last two centuries. Given this, the *food regimes* approach (Friedmann & McMichael, 1989) provides a useful organizing framework through which to trace the evolution of the Delta from almost a century of colonialism, to decades of isolated autocratic rule, and finally the Delta's (and Myanmar's) reintegration into the world economy in the last decade. The food regimes approach seeks to make explicit the political logics for the organization of food systems in different ways at different moments in history, enabling the identification of 'stable periods of capital accumulation associated with particular configurations of geo-political power, conditioned by forms of agricultural production and consumption relations within and across national spaces' (McMichael, 2009: 139). The approach does not claim to provide a deterministic understanding of all agricultures across the world; as McMichael (2009) argues, the concept rather has a comparative macro-status. Yet, 'over time, as world-historical conditions change, the strategies and scope for states to insert/insulate their national agro-food systems into global markets alter correspondingly' (Pritchard *et al.*, 2016: 694). In short, the food regimes approach suggests that the structure, politics and logic of different eras of global agriculture in part shape national and local agricultures. A food regime lens therefore allows explicit recognition of the evolution of the Delta from a colonial-era food bowl, to its post-WWII construction by the Myanmar state as a highly regulated and tightly controlled space of national food production, and to its more recent uneven reinsertion within globalized market-led agriculture.

By tracing its historical evolution through a food regimes lens, we argue that the Delta's unique entanglement in national and global politics of food and agriculture over the last two centuries has contributed to a contemporary agrarian structure ill-suited to the kind of smallholder-led value chain development strategies currently being promoted by the Myanmar state. This is outlined by the results of a livelihoods survey of 1051 rural households in 40 villages in the townships of Maubin and Kyaiklet (see Figure 1) conducted in 2016 and 2017,<sup>4</sup> which revealed an agrarian structure

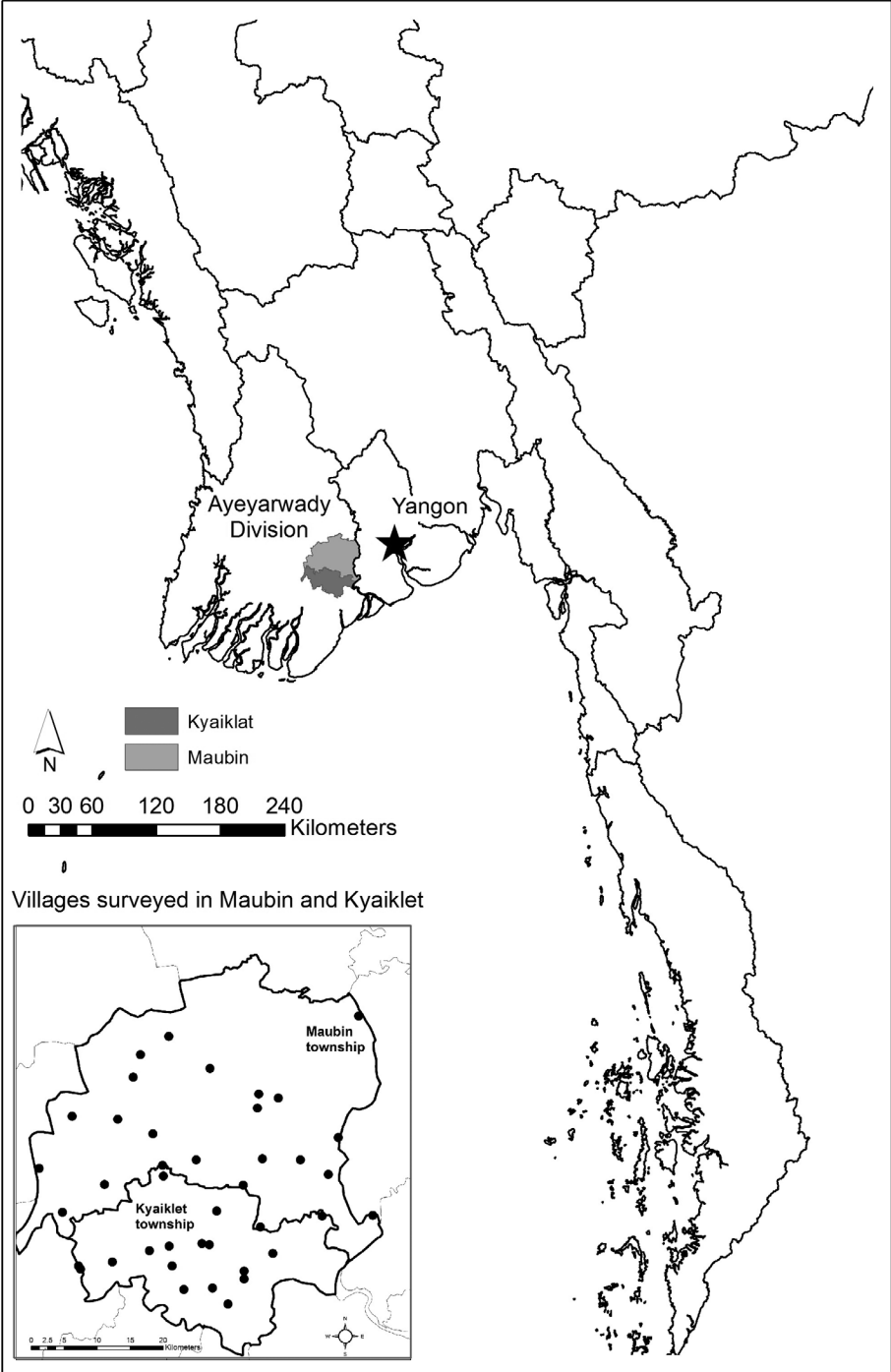


Figure 1. Map of field sites in Maubin and Kyaiklet.  
Source: Figure produced by author.

characterized by high (and in many villages extreme) rates of landlessness and a highly skewed landholding pattern towards larger farms. In short, the contemporary socio-economic landscape of the Delta, influenced by its historical evolution, signals the absence of a smallholder base equipped to respond to and benefit from any potential prospects for broad-based income-generation via value chain development.

The paper proceeds as follows. We first set the scene for our argument by introducing the line of thinking that places emphasis on the capacity for smallholder inclusion in modern agri-food value chains to drive rural development. Then, organized through a food regimes-inspired chronology, we trace the economic and social contours of the Delta's evolution that have led to its contemporary situation. Finally, we use these insights to argue that if the objective of development is to prioritize those most in need in the Delta, strategies need to be built on historically-informed, holistic knowledge about the ways in which regional patterns of inequality and disadvantage have emerged. To this end, issues of land redistribution and decent work in the non-agricultural economy deserve priority consideration.

### **Agri-entrepreneurism and rural development policy in Myanmar**

In its 2008 World Development Report *Agriculture for Development*, the World Bank argued:

...with the right policies and supportive investments at local, national, and global levels, today's agriculture offers new opportunities to hundreds of millions of rural poor to move out of poverty. Pathways out of poverty open to them by agriculture include smallholder farming and animal husbandry, employment in the 'new agriculture' of high-value products, and entrepreneurship and jobs in the emerging rural, nonfarm economy (The World Bank, 2007: 1).

The World Bank's line of thinking is premised on an understanding of structural transformation in the rural economy that sees virtuous cycles of rural development being inspired by an unleashing of 'animal spirits' (Keynes, 1936) within smallholder farming classes. As stated by Hazell and Rahman (2014: 3, emphasis added):

As per capita income rises, economies diversify and workers leave agriculture, rural wages go up, and capital becomes cheaper relative to land and labour. It then becomes more efficient to have progressively larger farms. Economies of scale in mechanized farming eventually kick in, accelerating this trend. The result is a *natural economic transition* towards larger farms over the development process, but one that depends critically on the rate of rural-urban migration, and hence on the growth of the non-agricultural sector.

This understanding of structural transformation and what is known as 'the farm size transition' model has been critiqued as a rather uncritical rehashing of modernization theory and its path-dependent and linear understanding of development (for example Akram-Lodhi, 2008; Oya, 2009; Rigg *et al.*, 2016). As Akram-Lodhi (2008: 1157) argues:

In its vision of agriculture, the (World Bank) sees behind every farmer either a budding entrepreneur waiting to be unleashed by the power of the market or a worker who would be better off working for the entrepreneur than working his or her own piece of land. It is a remarkably old-fashioned view of structural transformation, in the sense that it is, in essence, a restatement of the ideas of modernization theory.

These ideas similarly connect to what Oya (2009: 595) calls 'old agrarian political economy stories of rural class differentiation and the polarization of small farmers between viable market-oriented proto-capitalist producers and increasingly proletarianized poor agricultural workers'. This is based on a long intellectual legacy of the analysis of agrarian change and the development of capitalism in industrializing Europe and North America, where such a model of transition held empirical traction (for example Kautsky, 1988; see Bernstein, 2010). The World Bank's advocacy of the 'natural' emergence of an entrepreneurial farming class accumulating land as others exit agriculture rests upon what the contemporary agrarian political economy literature has referred to as 'accumulation from below' (Bernstein, 1996; Cousins, 2013). As Cousins (2013: 120) argues, accumulation from below is potentially more progressive 'because of its broad-based character and its greater dynamism in developing the productivity of farming, as well as its implication for democracy'. This is contrasted to 'accumulation from above', where already dominant landlord classes slowly transform themselves into classes of agrarian capitalists through extra-economic coercion, a process which Cousins (2013) argues is far less progressive.

The World Bank's assumptions of the incipient potential for agri-entrepreneurism and smallholder-led development provided the intellectual template for contemporary rural development policy in Myanmar, at a crucial moment when the nation was transitioning from military rule to democracy. Upon the election of the National League for Democracy (NLD) government in 2015, one of the priority tasks was to establish an agriculture policy framework. Formative documents produced by influential consulting-research institutions around this time chorused the importance of market-led value chain development in rural and agricultural policy. The scene was set by conducting a series of 'rapid value chain appraisal' studies in key sectors including pulses (Haggblade *et al.*, 2014) and rice (Wong & Wai, 2013), and then bringing these (and other) studies together in an agriculture policy summary brief (Than *et al.*, 2015). The NLD government then announced a consultation process for the establishment of the Agriculture Development Strategy (ADS), which was finally released in 2018 (MOALI, 2018).

'Smallholder value chain development' is the first-listed 'key issue' in the ADS, followed by 'agricultural diversification', 'institutional development' and 'infrastructure development'. The Strategy argues:

Smallholder farmers are the backbone of Myanmar agriculture; linking associated smallholder farmers to agri-food enterprises within organized value chains will enhance their capacity to meet the more demanding requirements of growing urban population in Myanmar and abroad (MOALI, 2018: 12), and

Accelerated agricultural growth represents the best way out of poverty for the millions in Myanmar still living below the poverty line... Experience from Asian economies has demonstrated that one of the most successful ways to stimulate growth in agriculture is by creating an enabling investment climate for agricultural entrepreneurs and by creating increased access to the critical knowledge and inputs needed to achieve higher levels of productivity (MOALI, 2018: 35).

The remainder of this paper assesses this line of thinking against the Delta's *actually-existing* agrarian structure. Utilizing historiographical material, we first trace the historical evolution of the Delta since British colonial times through a food regimes-inspired chronology. We then use data from a recently completed livelihoods and food security-focused household survey to outline the consequences of the history for the agrarian

structure of the Delta. Using this approach, we contend that the Delta's current situation poses challenges for the smallholder-led development model of agri-entrepreneurism advocated by the ADS to resolve the serious problems of the region.

### **The making of the Delta during the colonial food regime**

The first (or colonial) food regime refers to the period circa 1870s to the 1930s. At a global scale, this era was characterized by British-led colonial hegemony that regulated the flow of cheap grains and other raw commodities from the colonial periphery to the European core in order to reduce labour costs and fuel capital accumulation in the rapidly industrializing cities of Britain (González-Esteban, 2018; Pritchard, 2009). The logic and politics of the colonial food regime left an indelible mark on the Delta, more so than any other region of Myanmar. The realization of British interests in the Delta depended on the creation of a set of class relations involving a volatile mix of British capital-holders, immigrant (from India) money-lenders, and Burmese agriculturists. Successive tensions and a shifting balance of class forces between these groups over the period of the colonial food regime culminated eventually (in the context of the Great Depression) with rebellion, the collapse of the Burmese owner-cultivator as a viable class and the acquisition of large tracts of paddy land by absentee landlords, of which many were immigrant Indian moneylenders acquiring foreclosed assets (Brown, 2005; Scott, 1976). These conditions provided vital legacy conditions that set the stage for landlessness and land-grabbing upon Burmese independence in 1948.

The British took control of the Ayeyarwady Delta following the second Anglo-Burman war in late 1852. Beforehand, much of the Delta region was a sparsely populated wilderness of forest, malarial mangroves and grass plains, interspersed with Mon, Karen and Burman settlements and limited rice cultivation on frequently flooded land (Adas, 1974a; Brown, 2005). The hostile natural environment and technological limitations curtailed any further extensive settlement by the Burman (Konbaung) Kingdom<sup>5</sup> after their defeat of the Mon Kingdom in the 1750's (Adas, 1974a). Scattered hamlets cleared land as needed for paddy production, however Adas (1974a) argues that there was no identifiable land tenure system and little incentive to expand production. After 1852, however, the British began an extensive project to clear the frontier and develop the Delta as major rice producing area. Within decades, the Delta was transformed into the world's leading rice exporting zone.<sup>6</sup> The export capacity of the Delta was critical to satisfying British and European domestic demand for cheap food. Rebellion in India in 1857, and the dramatic decline of US rice exports after the outbreak of the Civil War cemented the Delta's position as the most important rice production zone in the colonial food regime. From 1852, the Delta therefore underwent a period of transformation from subsistence-orientation to market-orientation, as Burmese agriculturalists were drawn into a rapidly expanding capitalist economy (Adas, 1974a).

Adas (1974a), in his seminal historical account of the colonial-era Delta, identified an 'early phase of growth' in the Delta from 1852 to 1907 that was characterized by a seemingly limitless frontier, and massive internal migration from north to south to rapidly expand rice cultivation into this frontier.<sup>7</sup> To govern this expansion, the British introduced a land revenue system based on the *Ryotwari* system developed in the Madras and Bombay Presidencies where revenue was collected directly from the cultivator. This gave cultivators the freedom to sell and acquire land and was designed to incentivize the expansion of production. A formal land rights system was also introduced that either granted tenure rights to cultivators before they had cleared the land

(*Patta* system) or granted rights to those who had cleared the land, cultivated it and paid revenue on it for a period of 12 years (Adas, 1974a; Mark, 2016). As Adas argues, during this period there was a high degree of social mobility in the Delta. Through the sheer effort of clearing the frontier, thousands of initially landless or tenant in-migrants from Upper Burma were able to become owner-cultivators, often expanding their holdings over time, leading to a rapid improvement in living standards.<sup>8</sup> Land tenure patterns during this period were dominated by smallholding owner-cultivators. For example, in 1905-06, only 18 per cent of agricultural land in the Delta was owned by non-agriculturalists (i.e., landlords) (Adas, 1974a; Mizuno, 2011).

The expansion of paddy cultivation into the frontier was fuelled by the increasing availability of credit in the Delta (Cheng, 1968; Adas, 1974a). In the last decades of the 1800's, Burmese moneylenders dominated the credit market. Towards the end of this early phase, however, Indian Chettiar moneylenders, who had migrated first to Yangon from Bengal after 1852, began to play an expanding role in supplying credit to cultivators in the Delta, often on a larger scale and at cheaper interest rates, while also acting as a source of capital for Burmese moneylenders (Adas, 1974b; Turnell & Vicary, 2008). This period was the start of an influx of immigration by Indians into the Delta, who by 1901 made up 7 per cent of the population. An estimated 2 600 000 Indians migrated to Burma between 1852 and 1937, with most settling in Yangon and the Delta area (Adas, 1974a). The coming together of what Furnivall (1948) called a 'plural society' in the Delta during the colonial food regime, and its inevitable dissolution at the end of British colonial rule, had important implications for its contemporary agrarian structure. As Adas (1974a: 109) argues, 'the migration of Europeans, Indians, Chinese, and Burmese into Lower Burma in the last half of the 19<sup>th</sup> century can be viewed as a reallocation of the factors of production within the British Empire'. A clear division of labour began to emerge. Europeans came to dominate export trade and processing, owning all of the large rice mills and in effect monopolizing the rice trade with European markets. The Burmese took up roles as cultivators, tenants and labourers, with some Burmese also participating in moneylending and marketing (at least in the early phase).

It was the integral role of the Chettiar moneylending caste, however, that had major implications for the evolution of the agrarian structure in the Delta. Their experience in credit provision, their extensive contacts with European banks, and the proximity of Madras (now Chennai) to the Delta meant that Chettiar moneylenders were 'well prepared to assume the middleman's role in the Delta economy' (Adas, 1974a: 113; see also Turnell & Vicary, 2008). Adas (1974a: 114) argues that 'the nature of the pre-British economy in Burma proved a serious handicap for Burmese who became involved in marketing of credit provision after 1852', including a largely subsistence economy with little role for merchants, a lack of a developed monetary system, fleeting contact with foreigners and little knowledge of European business techniques, and an overall lack of impetus to accumulate capital to invest in productive enterprises. Chettiar moneylenders quickly filled this vacuum.

The contradictions at the heart of the emerging agrarian structure in the Delta became increasingly apparent after 1907, in what Adas refers to as the 'decades of transition' phase to 1930. During this period, the conditions of the Burmese agriculturalist class deteriorated rapidly. The most important factor driving rapid economic development and the social mobility of the Burmese cultivator was the presence of a frontier. Given the slow pace of technological change in the Delta, the growth of its economy and therefore the well-being of the cultivating classes was dependent on the continuing



availability of cultivable land. By the late 1920's however, further growth in the area under paddy production had stalled as 'there were few significant cultivable tracts in the Delta still to be cleared and brought into production' (Brown, 2005: 44). In other words, the frontier had essentially closed, as it became too difficult or uneconomic to open up new land for paddy cultivation (Brown, 2005; Adas, 1974a). This put in motion several processes that would eventually lead to a deep agrarian crisis. First, the price of land skyrocketed. For example, in the district of Prome the price of land had increased from 29 rupees/acre in 1900, to 103 rupees/acre in 1915 (Adas, 1974a). This meant that the average owner-cultivator could no longer easily expand their holdings and production. Second, population growth and the decreasing availability of land required a change in cultivation patterns towards riskier and capital-intensive production practices on increasingly marginal land. Third, as a culmination of these factors, the level of indebtedness among Burmese cultivators and tenants began to rise sharply. Fourth, because of chronic indebtedness, there began a process of the increasing alienation of land to *non-agriculturalists*.

The agrarian crisis in the Delta, and the increasingly untenable position of Burmese cultivators and tenants, was brutally revealed by the onset of the Great Depression. The weakening of the British economy after WWI had led to the deterioration of the export market upon which the Delta depended, and the market share of Burmese rice in European markets declined with the rise of new exporters such as the US. From 1930 onwards, indebtedness among Burmese cultivators rose to epidemic levels. At the same time, given the general credit squeeze in the global economy, Chettiar moneylenders began to seek to recover their loans. Those cultivators who were unable to repay their debts were forced to cede their land in larger and larger numbers. By 1929/30, non-agriculturalists held 31 per cent of land in the Delta; this rose sharply to around 50 per cent by 1935 (Adas, 1974a; Cheng, 1968). According to Adas (1974a: 188), the clear majority of non-agriculturalist landowners were absentee landlords, a signal of the critical role of foreclosure in land alienation. From 1931 until the Japanese invaded Lower Burma in late 1941, the Delta was increasingly characterized by a growing class of dispossessed landless and unemployed Burmese, eventually leading to violence directed at Indian immigrants (particularly Chettiars), rioting in Yangon and the failed Saya San rebellion (Adas, 1979). Upon Japanese invasion, up to 400 000 Indians fled back to India, leaving a Delta rice economy that was in disarray, and an agrarian structure that was defined by a lack of any identifiable or dynamic local (indigenous) capitalist/entrepreneurial class to drive development.

### **The Delta during the second food regime**

The collapse of British colonial rule and the unravelling of the colonial food regime drastically altered the politics of food and agriculture in the Ayeyarwady Delta in a way that broadly reflects the nationalist and protectionist logics of the period of the Second Food Regime. The collapse of the world grain market in the 1920's, the ecological catastrophe of the US dust bowl and the economic and social catastrophe of the Depression in the 1930's mark the end of the first food regime and the beginning of a period of uncertainty characterized by increasing state regulation in agriculture, including the 1933 Agricultural Adjustment Act in the US. After 1945, with the end of WWII, the global politics of food took a sharp turn. The exclusion of agriculture from the General Agreement on Tariffs and Trade (GATT) in 1947 sanctioned national governments to exercise enhanced trade and production controls over agricultural production for

national food security and geo-political purposes, signalling the beginning of the second food regime (Pritchard *et al.*, 2016).

Burma gained independence from Britain in 1948. In its first decade of independence, the country was folded into the US sphere of food geo-politics through its acceptance of food aid provided by the US under PL 480.<sup>9</sup> However, the socialist regime that took power through a coup d'état in 1962 actively sought to wean Burma off food aid and import reliance (Clymer, 2015; Suarez & Beeler, 1994). The Delta, as the major rice producing region of the country, therefore became intimately entangled in the internal politics of Burmese nationalism. In the period of the second food regime, the Delta was constructed by the Myanmar state as a highly regulated and tightly controlled space of national food production to feed the needs of an increasingly inwards-focused Burmese state, and performing a vital role for Burma's socialist military rulers in securing political stability (Kurosaki, 2008).

An early priority of the Burmese nationalist elite was to eliminate all traces of Burma's colonial institutions. The 1947 Constitution established the state as the ultimate owner of all land, and in 1953, landlordism was abolished through the Land Nationalization Act (Mark, 2016). While rights were ostensibly conferred to Burmese cultivators, in effect land was not distributed equally to all villagers but rather favoured those who already owned means of production such as bullocks. Those farmers that were granted tillage rights were prohibited from selling, transferring or mortgaging their allotted land. This resulted in what Kurosaki *et al.* (2004: 5) argue was an 'institutionalized unequal land distribution', with the continuing existence of a large pool of landless households. The Agricultural Lands Act (1953) placed further restrictions on land use, including banning leasing and stipulating that agricultural land could not be left fallow or unworked. The Tenancy Act (1963) effectively defined farmers as tenants on state-owned land, with farmers only given tillage rights (Fenichel & Khan, 1981; McCarthy, 2018).

These changes represented a new institutional architecture through which Burmese agriculturists in the Delta were either denied land or, if they did possess tillage rights, forced to comply with oppressive production and sale conditions authored by the Burmese State. In 1963, the Enterprise Nationalization Law nationalized the rice sector, giving the government total control over prices and payments to farmers (Kurosaki *et al.*, 2004). Controls were extended further in 1974 with the enforcement of a paddy procurement policy that required farmers to sell a specified number of baskets of rice to the state at below market price. Farmers that could not meet this quota were liable to have their land confiscated by the state and reallocated to 'more productive' farmers, increasing the problem of land concentration and landlessness in the Delta (Mark, 2016). Crop planning was also implemented in this era. Delta farmers were effectively restricted from growing anything apart from paddy on their land, at the threat of having their tillage rights revoked (Kurosaki *et al.*, 2004). The domestic marketing of any surplus rice was severely restricted, and private export of rice was banned. Any surplus production intended to be sold outside the country was managed by state-owned enterprises, which provided a lucrative and critical source of foreign exchange for the socialist military regime (Fujita & Okamoto, 2006; Mark, 2016). This heavy-handed state intervention created disincentives for farmers that adversely impacted the productivity and expansion of paddy production in the Delta,<sup>10</sup> while the lack of crop diversity adversely impacted food security and dietary quality of rural households (Hudson-Rodd & Nyunt, 2001).

At a global scale, McMichael (2009) argues that the second food regime began to fall apart in the 1980s due to neoliberal pressures to reduce agricultural subsidies in the Global North, the emergence of high-value food exports from 'New Agricultural Countries' such as Brazil and Thailand, and the increased capacities of multinational agri-food corporations to coordinate international food production and trade via their enhanced global reach (Bernstein, 2016). In Myanmar (the country was renamed in 1989), the period from 1988 onwards marked the beginning of its re-engagement with global markets via a slow and painful twenty year transition to what Jones (2014) labels 'state mediated capitalism'. In 1988, pro-democracy protests known as the 1988 Uprising were violently repressed by the military, which then orchestrated a coup and re-established control of the country under the auspices of the State Law and Order Restoration Council (SLORC).<sup>11</sup> The SLORC officially abandoned the Burmese Way to Socialism, however the (re)emergence of capitalism in the Delta and elsewhere was fostered by the state on its own terms, with no fundamental change in the underlying power relations of Burmese society. While state assets were ostensibly privatized, and some markets liberalized, this was done under the control of the military elite, and hence reproduced already-existing patronage systems. The liberalization process was tempered by the retention of state monopolies in many sectors, and when specific sectors were liberalized, assets tended to come under control of business conglomerates established by the military, or a small number of so-called 'national entrepreneurs': elites and cronies with close ties to the military who were deemed as trustworthy and capable of taking responsibility for major industries, and who would support the goals of the regime (Mark, 2016; Jones, 2014). This occurred because of 'an important legacy of Burma Socialist Program Party [1962-88] rule: the historic weakness of Myanmar's bourgeoisie...[A] fluent, responsible middle class was entirely absent' (Jones, 2014: 148). The nationalization of trade after 1962 prompted the exodus of the remaining South Asian merchant classes and forced the Burmese bourgeoisie into the black market. Hence, growth of the private sector after 1988 was concentrated at the top among a very specific elite subset of the population, while 'the rest of the business class remain[ed] predominantly small scale' (Jones, 2014: 150).

In the Delta, land alienation and forced acquisition by the military government continued unabated in the post-1988 period. Rice remained a controlled commodity, with the SLORC maintaining the agrarian policies implemented by the former regime. Although the volume of paddy forcibly procured by the government decreased (thus reducing the quantities of rice farmers had to supply to the government at below-market prices) and some restrictions on domestic trade were eased, the forced procurement policy was maintained, and the state retained its monopoly on rice exports until 2003 (Okamoto, 2009; Kubo, 2013a). The SLORC continued the heavy intervention into crop planning in the Delta, not allowing farmers any freedom in crop choice on land designated as paddy land (Kurosaki *et al.*, 2004). Farmers in the Delta therefore remained under strict government control, having to grow paddy to retain their tillage rights or face land confiscation.

Accordingly, when the Government of Myanmar announced a transition to democracy in 2010, the Ayeyarwady Delta was a poor cousin to the other great rice-producing deltas of Asia. Decades of heavy-handed policies designed primarily with the insular interests of the military elite in mind had left the Delta with a legacy of low-yielding paddy production. Forced procurement policies enshrined low incomes for paddy producers, and an ensuing inability to invest in the technologies to improve yields. The yield-enhancing effects of the Green Revolution had lesser purchase in the

Ayeyarwady Delta than elsewhere in Asia (Kyi, 1982), and these problems were aggravated by public infrastructure shortfalls. The absence of roads and bridges meant that rice was traditionally transported to markets by small boats. The Delta's vulnerability to tropical cyclones (in 2008, Cyclone Nargis killed an estimated 135 000 people; UNDP, 2014: 4) further intensified its infrastructure and production challenges. Whereas the average yield of paddy in Vietnam increased from around 3 t/ha in 1990 to over 5 t/ha in 2010, in Myanmar, it remained at below 3 t/ha (Kubo, 2013b).

In terms of social dynamics and agrarian structure in the Delta, the era of 'Burmese socialism' and the long transition to 'state mediated capitalism' reinforced the dominant tendencies of land alienation and endemic landlessness apparent at the demise of the colonial food regime period. The Delta has continued to be a site of extreme landlessness, and among the landholding population, a highly skewed distribution of land towards larger holdings. The results of a household livelihoods survey we conducted of 1051 households across 40 villages in the townships of Maubin and Kyaiklet from 2016-2017 make plain the legacies of the Delta's social and economic history. At the township level, in Maubin in 2016 we recorded a landlessness rate of 74 per cent, while in Kyaiklet 62 per cent of households were landless. Moreover, when broken down by village, the problem of extreme landlessness is apparent. Figure 2 shows the breakdown of landlessness rates across the 20 villages sampled in Maubin. In eight villages, we recorded a landlessness rate of 80 per cent or higher. These results concur with previous estimates of landlessness in the Delta, where 'available evidence unambiguously suggests that the highest rates of landlessness [across all of rural Myanmar] occur in the Delta region, where field estimates of rural landlessness range from 50 per cent to 80 per cent of rural households' (MSU & MDRI/CSED, 2013: 23). The Livelihoods and Food Security Trust Fund (LIFT) survey in 2013 found that 66 per cent of households in the 'Delta/Coastal' region (admittedly including areas in both Ayeyarwady and Rakhine) were landless (LIFT, 2013: 81). Moreover, 'The landless are more likely to be poorer in the delta region than elsewhere. Forty-four per cent of the landless lives below the government poverty line, as compared with 33 per cent nationally' (FAO, 2009: 7).

The second component of the landholding story is that most of the land is held by a minority of large landholders. Figure 3 represents the spread of landholdings we recorded in Maubin and Kyaiklet, along with two townships from the central Dry Zone area of Myanmar (Pakokku and Yesagy) included for comparison.<sup>12</sup> In the Delta,

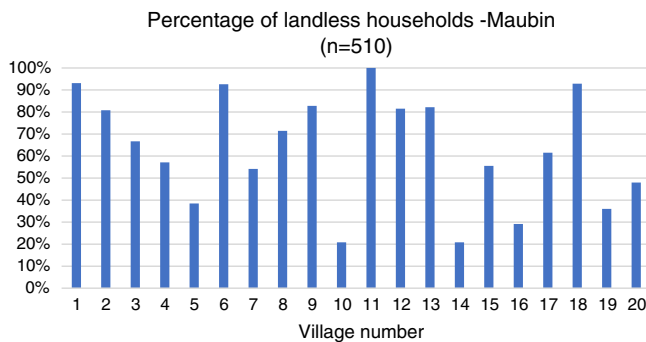
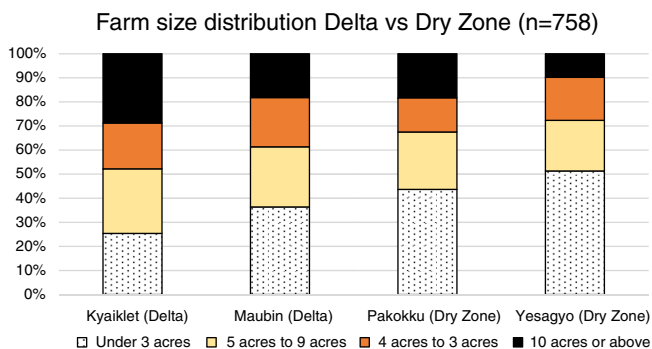


Figure 2. Landless households per village in Maubin sample.

Source: Figure produced by author.



**Figure 3.** *Farm size distribution in the Delta and Dry Zone.*

*Source:* Figure produced by author.

landholdings are far more skewed toward larger farms. In other words, more land is owned by fewer landholders in the Delta. In Maubin, farms of less than 3 acres (the state's official definition of a smallholding) made up only 36 per cent of landholdings; in Kyaiklet this figure was only 25 per cent. The survey also found that across both Delta townships approximately 30 per cent of landholders with holdings greater than 10 acres controlled more than 75 per cent of farmland. The average farm size in the Delta is also higher than other parts of the country. We recorded an average farm size of 7.19 acres in Kyaiklet, compared to 3.94 acres in the Dry Zone township of Yesagyo. A process of 'rampant and unchecked land confiscation' (Mark, 2016: 448) and concessions during the SLORC/SPDC era was an important contributor to these outcomes. This included state acquisition of paddy land in the Delta for corporate rice farming and other investments (Belton *et al.*, 2018; Boutry *et al.*, 2017). For example, Thein *et al.* (2018) record that by 1999, around 200 000 acres of paddy land in the Delta had been granted to various business groups. Land transfers were typically justified as either land that was vacant, fallow or virgin, or land that had been confiscated from farmers who had failed to fulfil their quota obligations or to grow rice (Mark, 2016). These processes also played out at the village scale, with households with better political connections or better access to credit able to accumulate land at the expense of their alienated neighbours (Boutry *et al.*, 2017). Furthermore, the lack of access to land for the majority of households does not appear to be offset by tenant farming. Our survey found that only 4 per cent of households with access to land in Maubin and Kyaiklet were doing so through tenancy arrangements. This finding is broadly consistent with the results from the LIFT survey, which calculated that leased land represented only approximately 6 per cent of total cultivated land across the whole rural Myanmar (LIFT, 2013: 80–1).

This period of Myanmar's history (from independence in 1948 to the transition from military rule starting in 2010) therefore served to reinforce inequality and marginalization in the Delta that characterized its entanglement with the colonial food regime. Despite its central importance to the Myanmar economy as the dominant rice producing region, the Ayeyarwady Delta entered the post-military period of Myanmar dominated by low-productivity paddy production undertaken within the context of highly unequal landholding arrangements, high levels of rural landlessness and a persistent crisis of poverty and food insecurity among the wider regional population.

### Looking forward: The Delta during the post-military period

In the past decade, the political and economic landscape of Myanmar has changed at a pace that few would have predicted during the SLORC/SPDC era. A general election was called in 2010, signalling a transition to a formally democratic system. The NLD contested the 2015 general election, won a supermajority of seats in the national parliament and took office. This period has witnessed major changes in agriculture policy with important implications for the Delta. The compulsory paddy procurement system has been completely abolished, the domestic rice market liberalized, and restrictions on the export of rice eliminated (Raitzer *et al.*, 2015). Nationally, two new pieces of legislation governing agricultural land were introduced in 2012: the *Farmland Law*, and the *Vacant, Virgin and Fallow (VVF) Lands Management Law* that maintain the state as the ultimate owner of land, but legalize transfers, leasing and mortgages (creating a regulated, private property system through the issuance of land use certificates known as Form Seven). The formalization of titles has provided a legal avenue for farmers to contest land confiscations, but has also facilitated large-scale corporate (foreign and domestic) land investment (Mark, 2016; Raitzer *et al.*, 2015). Crop choice restrictions on farmers were lifted throughout much of the country, however crop planning continued to be enforced for land designated as paddy land (known as *le* land). This policy continued to impact the livelihood choices of Delta farmers until 2016, when the NLD government issued an instruction to lift restrictions on crop choice for *le* land (NESAC, 2016).

These changes to the regulatory landscape of agriculture in the Delta and Myanmar as a whole echo wider neo-liberal institutional reconfigurations elsewhere in the world that food regimes researchers have interpreted as paving the way for an emergent 'corporate food regime' (McMichael, 2005; 2009). The essence of the corporate food regime concept is an argument that the trend of liberalization of national agricultural sectors has encouraged an emergent global politics of food in which local agricultures are restructured to fit within profit-maximizing imperatives of private capital orchestrated at a global scale. According to McMichael (2016), the key signal of these transformations is the displacement of peasant agriculture in favour of farming systems that integrate local producers into commercialized, often long-distance value chains via processes of capital-intensive/mechanized forms of farming, expansion of high-value agri-products for export markets, and increasing corporate/extra-local control of land via processes of land grabbing.

There is evidence of these signals beginning to operate in the Ayeyarwady Delta. First, a range of new players have entered the Delta agricultural economy. Liberalization of the agricultural input sector has encouraged growing private sector investment in seed development and distribution, and fertilizer import, distribution and marketing, both from foreign and domestic interests (Findlay *et al.*, 2016; Soe *et al.*, 2016; van den Broek *et al.*, 2015). In parallel, farming in the Delta has been rapidly mechanized, including substantial increases in the number of Thai and Chinese-made tractors and other farm machinery, supplied by a proliferating number of dealerships (Win *et al.*, 2018; Win & Thinzar, 2016). Closely connected to the increasingly capital-intensive style of agriculture in the Delta is the growing availability of formal credit and the growing role of private financial institutions. The increasing availability of farm credit has in part been enabled by the ability of farmers to now use their Form Seven as collateral for borrowing (Win *et al.*, 2018). A recent study by Lwin and Htun (2016) suggests that larger landowners are more readily able to access formal credit.

Second, there is intensified demand and competition over land which is generating new agendas for rural land use. This includes a rapidly expanding aquaculture sector, including conversion of paddy land and previously publicly accessible floodplains and waterways to private fish farms, as well as increasing concentration in the aquaculture sector (Belton *et al.*, 2018; Campbell, 2019), along with the spread of corporate investment in agriculture in general in Myanmar (McCarthy, 2018; Raitzer *et al.*, 2015). Investors can now apply for up to 5000 acres on extendable leases of 30 years (Mark, 2016). The Myanmar state has also relaxed restrictions on foreign direct investment in agriculture, and there are signs that multinational corporate interests are beginning to enter the Delta economy (*Myanmar Times*, 2018). While this has led to growing capital investment in the Delta, it has also heightened concerns around land grabbing. For example, the ‘fuzzy’ definition of what is vacant, fallow or virgin land often works against the interests of existing Delta populations. Locals wishing to convert their existing informal usufructuary rights over these lands into formal, Form Seven certification may face a hostile bureaucracy more in favour of the transferral of these lands to outside investors for conversion to aquaculture or other high-value activities. Furthermore, even those landholders with legal tenure rights to *le* land can still be vulnerable to forced acquisition by State or corporate interests (Mark, 2016; Thein *et al.*, 2018).

Hence, the institutional processes that acted against the creation of a broad-based class of smallholder farmers during the periods corresponding to the colonial and second food regime are continuing today. As shown above, the Delta is an area where the majority of farmland is controlled by a minority of large landholders. Over 50 per cent of the population are landless, rising to over 80 per cent in some villages. This is the result of a legacy of artificial farm size transition (‘accumulation from above’), rather than any process of ‘accumulation from below’. In these contexts, the hallmarks of liberalization—readier access to credit, freeing up of investment rules, encouragement to mechanization, etc—find their most fertile ground in new investor entrants taking advantage of this environment, and favour the relatively wealthier class of existing landholders in the Delta. Flowing from this, a defining characteristic of livelihood transitions within the Delta’s landless populations is a shift away from agriculture, with rural-urban migration playing a key role. During the earlier military period, restrictions on domestic migration and the moribund status of the Myanmar national economy constrained the landless population of the Delta to a narrow band of livelihood options based around seasonal wage-labour from large landowners. In the current period, the livelihood arrangements of these populations have diversified away from agriculture. Migration represents the most visible manifestation of non-agricultural livelihood diversification among the landless population of the Delta, especially for young adults lured by job opportunities in nearby Yangon. In North Yangon, which is Myanmar’s largest manufacturing area, 48 per cent of factory employees were female migrants from other parts of the country (Government of Myanmar, 2016: 25). The outflow from Ayeyarwady to North Yangon was the single most important component of this population shift. The District of Maubin (which comprises the townships of Maubin and Kyaiklet, covered by our survey) is recorded as being the origin of 29 000 persons living in North Yangon in 2014 (Government of Myanmar, 2016: 25). Ayeyarwady is the state with the largest net negative out-migration incidence in the whole of Myanmar (Government of Myanmar, 2016: 34), with most of this movement of people destined for Yangon.

In these contexts, pro-poor policy aspirations to improve livelihoods in the Delta (and presumably stem the outflow of populations to Yangon) via the agenda of

smallholder-led development misreads the historical processes that have led to the region's social and economic realities. Given the historical processes which have left a legacy of widespread landlessness in villages, applying a rural development policy that prioritizes smallholder-led agricultural development in the Delta does not seem fit for purpose. The issue is that smallholder-led value chain development thinking within contemporary Myanmar's rural development policy assumes problematically that in the Delta, a broad-based agrarian class of smallholders is lying in wait to have their entrepreneurial 'animal spirits' unleashed, once the appropriate, pro-market institutional settings are in place. Given the Delta's historical evolution since the British colonial period we have outlined above, such a policy narrative appears a fundamental misreading of the Delta's contemporary agrarian structure.

## Conclusion

This paper has argued that the current conjuncture in the Ayeyarwady Delta cannot be understood in isolation from its long historical entanglement with global and national scale politics of food and agriculture. Periodizing the history of the Delta through the lens of the food regime approach reveals that the legacy of colonial rule, followed by decades of isolation under military dictatorship, and then re-engagement with the global economy have produced an agrarian structure that provides no clear path forward for transformation. The agrarian structure and socio-economic landscape of the Delta problematizes the current agricultural development policy narrative emerging in Myanmar. This policy view misinterprets agrarian change in the Delta through the failure to place the contemporary conditions there in the context of both Myanmar's social, economic and political history, and the critical role that the Delta has played in this history.

How might agrarian transformation proceed in the Delta, and how should Myanmar policy makers respond? To conclude, we offer three possible scenarios. There are no 'off-the-shelf' models of agrarian transformation (Cousins, 2013) and these three scenarios present stylized characterizations of possible agrarian futures in the Delta. Nonetheless, they provide policy makers with 'food for thought' regarding how policy might be reconciled with the actually-existing conditions on the ground in the Delta. The first is a business-as-usual scenario. Without fundamental reform to the landholding structure of the Delta, it seems unlikely that current policy settings will lead to the emergence of the dynamic class of entrepreneurial smallholders that rural development policy makers seemingly pin their hopes on. Instead, the business-as-usual scenario would see a continuation of the regressive forces that propel 'accumulation from above': large-scale land acquisitions in favour of cronies and elites; corporate agriculture fuelled by outside capital; slowly increasing or stagnating agricultural production; increasing inequality in landholdings; rising rates of landlessness; increasing rates of out-migration due to 'push' factors, and increasing rates of mechanization to fill the labour shortage; and a rural economy that places those at the bottom in intensified positions of food insecurity.

The second scenario is one of extensive and fundamental land reform in the Delta. Such reform may create an agrarian structure that more closely matches that envisioned by Myanmar policy makers—a landscape of smallholder farmers—and create the conditions to unleash a dynamic process of 'accumulation from below', potentially engendering more broad-based economic growth. As Tania Li (2014) points out, even a process of agrarian transition from below after land reform can imply the



emergence of capitalist relations *between* small farmers in the Delta that will introduce new processes and forms of class differentiation and inequality. Yet, as Borrás and Franco (2018) argue, the political moment that has emerged recently in rural Myanmar is centred around land issues and social justice, or what the authors call 'the land question'. This makes calls for redistributive land reform and restorative justice for those whose lands have been confiscated both compelling and urgent. The major obstacle facing this second scenario, however, is that transformative land reform in the Delta is dependent on processes happening beyond it and will require deep and system-wide social reforms that remain difficult at present in Myanmar, where political elites remain unwilling to pursue such reforms.

The third scenario is one where rural activists and social reformers continue to advocate for deep social reforms, while at the same time responding to the conditions of what Bernstein and Oya (2014) refer to as 'real markets'. That is, stakeholders with an interest in rural development and pro-poor livelihood outcomes in Myanmar need to address the complex and actually-existing social and economic dynamics of the Delta that are a legacy of its history. This issue is relevant both for policy makers directly, but also the wider advisory and practitioner ecosystem of civil society organizations, both grassroots and international. The situation we reveal in this paper would appear to prioritize the capacities of those rural households using vacant, fallow or virgin lands to claim formal title over them, and implementing land reform where feasible. In addition, however, policy makers and rural development practitioners should also recognize that at this time, for many rural households in the Delta, their livelihoods are increasingly disconnected from agriculture. Rural policy and development interventions focusing solely on agriculture in a context where more than 50 per cent of households do not have access to any farmland does not reflect a realistic understanding of the Delta. As others such as Rigg *et al.* (2016) and Bernstein (2010) have argued for Southeast Asia and the global south as a whole, we can no longer conceptualize rural economies through discreet occupational categories. Rather, rural livelihoods are increasingly characterized by hybridity, diversity and mobility, what Batterbury (2001) calls a 'productive bricolage'. This is nowhere as true as in the Delta, as rural households over more than a century, in a shifting but often repressive political context, have adapted, diversified and pieced together their livelihoods through a range of strategies including agriculture, but also migration and other non-farm activities. As the Delta emerges from isolation into a possible corporate food regime, pro-poor interventions cannot rest on conceptions of 'the rural problem' being one of 'a need for small-holder development'. Instead, there needs to be an understanding of how current injustices and inequities are rooted in the evolutionary trajectory of the Delta, and this implies broad-reaching assessments that ask how best to support a diversity of rural livelihood futures.

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### **Endnotes**

- 1 The poverty line is defined as not having sufficient consumption expenditure to meet basic calorific and essential non-food needs. These data come from the 2009/10 Integrated Household Living Conditions survey, which is the most recent authoritative poverty assessment in

Myanmar that publishes data for individual states/divisions. The more recent (2017) Myanmar Living Conditions Survey (MLCS) does not disaggregate data to individual states/divisions. Hence, the MLCS presents data for 'the Delta region' which is defined to include the major city of Yangon—an aggregation unhelpful to this paper.

- 2 Defined as the proportion of children under 5 who are 2 standard deviations below the reference norms for height-for-age.
- 3 Definitions of smallholder agriculture differ from context-to-context, because of agronomic circumstances. In Myanmar, the official definition of a smallholder is a farmer with less than 3 acres (1.2 hectares) of arable land (FAO and MOAL, 2016: 9).
- 4 This survey was part of a larger rural livelihoods and food security research project conducted over three regions of Myanmar (Delta, Dry Zone and Chin State). For full details of the methodology and descriptive data see (Pritchard *et al.*, 2018).
- 5 Konbaung power was centred around Ava, Amarapura and Mandalay until British conquest of what was known as Upper Burma (and the annexation of Burma as a whole) in 1885.
- 6 The area under rice cultivation in Lower Burma rose from 66 000 acres in 1830 to almost 10 million acres in 1940, with exports peaking at 3.4 million tons in 1934 (Cheng, 1968; Thawngmung, 2003).
- 7 According to Adas (1974a), the population of the Delta grew from 2.6 million in 1881 to 4.1 million in 1901.
- 8 Enabled by the in-flow of consumer goods from Britain and Europe that completed the cyclical logic of accumulation during the colonial food regime.
- 9 PL (Public Law) 480 is the Agricultural Trade Development and Assistance Act of 1954, also known as 'Food for Peace'.
- 10 Hudson-Rodd & Nyunt (2001) cite that rice exports declined from two million tons in 1962 to 35 000 tons by 1996.
- 11 The military changed SLORC's name to the State Peace and Development Council (SPDC) in 1997.
- 12 The townships of Pakokku and Yesagyo were included in the larger study from which this data is drawn, and households here were surveyed using the same methodology and sampling strategy.

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