Although the secondary sector has been growing in recent years, prior to the post-2011 reforms its role in the country’s economic development was relatively minor by comparison with the primary and tertiary sectors: its contribution to GDP was 9.7% in 2000/01 and 17.5% in 2005/06. Since 2010/11 its share has risen steadily from 26.5% to 34.4% (2014/15), with processing and manufacturing accounting for nearly 20% of this (MNPED 2015: 203).

HISTORIC DEVELOPMENTS

Some moves towards industrialisation were made in pre-colonial times under King Mindon, who sought to expand traditional crafts such as sawmills, pottery, shipbuilding and lacquerware production (Aung Tun Thet 1989: 43). During the colonial era the British established large sugar mills (in the 1840s) and rice mills (in the 1860s) as well as textile, rubber and beverage factories, thereby laying the foundations for a food and consumer goods industry (Spate 1941, Andrus 1947). From the 1870s onwards, a colonial export economy based on profits from the ‘rice rush’ that followed the opening up of the Ayeyarwady Delta (Adas 1974, Aung Tun Thet 1989: 126) developed alongside the traditional subsistence economy that then predominated. In 1940 there were 1,027 factories in operation, including 673 rice mills and 116 sawmills; two-thirds of them were in foreign hands (Walinsky 1962: 46; Aung Tun Thet 1989: 3, Chit So 1999: 127). The opening of the Suez Canal in 1869 boosted the colonial policy of industrialisation of agriculture (Furnivall 1948: 85-90). This was “agriculturisation” rather than industrialisation (Kudo 1999: 215) and at the same time ‘growth without development’ (Aung Tun Thet 1989: 33), because there was no structural reform and domestic entrepreneurship and human resources remained underdeveloped. The industrial sector, which was based almost entirely on resource extraction, led to the statement that ‘Burma is a land of isolated outposts of industry’ (Grant 1942: 47).
After independence there were four periods of economic liberalisation during which deliberate attempts were made to promote industrialisation (Myat Thein 2004, Kudo/Odaka 2016: 156-160): (1) The aims of the brief liberalisation that followed the Eight-Year Economic Plan (the Pyidawtha Plan of 1952) included the transfer of foreign-owned companies to Myanmar nationals and a state-driven boosting of industrial production (Government of Burma 1952, KTAM 1953, Myat Thein 2004: 16-21). This period ended with the coup d’état of 1962. The nationalisation that took place as part of the ‘Burmese Way to Socialism’ saw private companies converted into state-owned ones. (2) After 1974 the country became eligible to receive official development assistance (ODA). These payments did little to revive the industrial sector, instead leading only to an accumulation of foreign debt and, as the country began to slide into recession and political opposition mounted, resulting (3) from 1988 onwards in the introduction of a market-oriented economy (von Hauff 2007). Despite a restructuring of foreign direct investment and abolition of the nationalisation policy, twelve key sectors remained under government control after 1989. They included forestry, oil and gas, gemstones, energy, post and telecommunications, transport, the media and arms production (Kudo/Odaka 2016: 158). Moreover, in the wake of the Asian financial crisis of 1997 and the imposition of sanctions by western nations, industrialisation struggled to get under way. (4) It was only as part of the latest post-2011 transformation processes, which gathered pace after the 2015 elections, that significant economic liberalisation, internationalisation and growing industrialisation occurred.

**CURRENT SITUATION**

Nationalised businesses currently suffer from inadequate modernisation, low labour efficiency, undercapitalisation, renovation backlogs, poor horizontal networking and weak sales markets, while private-sector companies are hampered by bureaucratic obstacles, poor basic infrastructure, inadequate access to electricity and financial loans and insufficient pre-
paredness for international competition. Privatisation is also hindered by the institutional environment, a poorly trained workforce, limited market-economy thinking and a shortage of managers. Furthermore, there is a lack of standards for waste disposal, hygiene, environmental protection and sustainability awareness (Tin Maung Maung Than 2007, Kudo/Odaka 2016: 170-183).

Geographically, enterprises in the secondary sector that contribute to the gross domestic product (GDP) are concentrated on the one hand in some centres of mining and energy generation and on the other in industrial manufacturing sites, the majority of which are located in the central lowlands and the regional cities. In the peripheral parts of the country, GDP is generated mainly by the construction sector. Privately owned factories are concentrated in two separate areas: the Mandalay Region (2009: 17.7% of all companies in Myanmar) and the Yangon Region (14.0%). With the addition of the Bago, Sagaing and Ayeyarwady Regions, almost 70% of all private-sector industrial companies are located in these five areas (Kudo/Odaka 2016: 173). The food and beverage industry is distributed evenly between the regions. Textile manufacture, metal processing and machinery production are concentrated in the area in and around Mandalay, while Yangon is the centre of chemical, paper, plastic, rubber and non-metallic production (Kudo/Odaka 2016: 173). The creation of special industrial zones is intended to foster industrialisation throughout the country. However, many of these zones – especially those located in or near the big cities, notably Yangon and Mandalay – are not altogether successful. Development is hindered by bureaucratic obstacles, the time-consuming process of obtaining licences, blocked development as a result of land speculation, inadequate access to electricity and in some cases water, poor waste and sewage disposal facilities, limited technological modernisation, lack of access to loans, and environmental problems (Zin Nwe Myint 2006b, Moe Kyaw 2009, San Thein 2012, von Hauff 2016).

In the medium term it is likely that if industrialisation continues it will result in an economic dualism in which a small technologically modernised industrial sector with an increasingly international outlook contrasts with a large number of small and medium enterprises that continue to employ traditional production methods and are not internationally competitive (Kudo/Odaka 2016: 171). In addition, regional and social disparities within the country may well increase.

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Bridge over Manipur River