in the southern Ayeyarwady Delta and near Thongwa (Belton 2015: 37, 61).

To date fish farms account for about 20% of inland fish production; about 38% of the total volume of farmed fish sold domestically is bought in cities, 62% in rural areas (Belton et al. 2015: 4). Contrary to the common perception that the majority of aquaculture products are used for export, apparently only about 20% of products are actually exported, particularly to Kuwait, Saudi Arabia, Bangladesh, UAE and Singapore (Khin Kin Soe 2008, Belton et al. 2015: 18-20).

To date, indigenous carp (rohu, nga myit chin, Labeo rohita) dominate the fish farms, accounting for about 70% of catches (Belton et al. 2015: 15/16, FAO 2016). Integrated poultry-fish production is increasingly practised; the poultry – usually ducks, chicken or geese – are kept in elongated houses over the fishponds (especially in Hlegu or Kayan; Belton et al. 2015: 33, 35).

More than double the amount of labour is invested in fish-farming than in rice farming. A significant proportion is recruited on a temporary basis and used for the labour-intensive fish harvest or pond construction and repair. The produce is usually transported by bus and private cars, sometimes by boat to Yangon to Hlaing Thayar or one of the two leading fish markets, San Pya wholesale market in the south-west of Yangon or Shwe Padauk, where the goods are mostly traded and sold through brokers. Dried fish is mostly sent through Bayint Naung Market to Mandalay and Myingyan; salted fish and Nga Si Baung (swim bladder) is sent through Bayint Naung Market to China (Khin Kin Soe 2008).

The sector could be significantly strengthened by the promotion of sustainable forms of production, combined with improved environmental awareness, better advisory services, capacity enhancement, specialised higher education and the development of microcredit-systems for small and medium-sized enterprises (Steins et al. 2015, Nang Mya Han 2016).

Frauke Kraas, Nilar Aung and Khin Kin Soe
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).