72% of the total consumption expenditure of an average family in Myanmar. Of this total food expenditure, about one fifth is needed to buy rice. In the countryside and villages, the share of food (especially rice) in total consumption is higher. This is particularly so in the rural areas of Chin State where food accounts for 76% of total household consumption expenditure, with the share of rice in total food expenditure coming to roughly a quarter.

REGIONAL DIFFERENCES

The wide range of very disparate natural conditions and socio-culturally determined, mostly ‘traditional’ agricultural forms creates a highly differentiated regional picture. Diverse historical influences must also be taken into account. The structural patterns of agriculture that evolved in the pre-colonial period were first radically altered during the British colonial period (1824-1948), when agriculture was expanded across the country and thitherto untouched natural landscapes were systematically developed, in particular in the Ayeyarwady Delta and the mountain regions (Cheng 1968, Kan Zaw et al. 2011, Keck 2015, Kraas 2016b). Furthermore, soon after what was then Burma gained independence, there followed almost three decades of the ‘Burmese Way to Socialism’, the fundamental character of which continues to show through in planning and policy even after the introduction of a market-oriented economy in 1988.

For the Myanmar governments since then, the improvement of agriculture has been one of the most important economic goals: area expansion, the expansion of irrigation, mechanisation, technical modernisation and improvement of crop yields are to provide food security for the population, expand Myanmar’s export capacity and further the development of agroindustry (Mi Mi Kyi 2005: 79; FAO 2005: 5). Special measures to encourage ‘model villages’ are intended to promote integrated rural development (Mi Mi Kyi 2005: 94) while improving rural infrastructure, education and health care, thereby also creating a better general foundation for agriculture.

MODERNISATION AND DEVELOPMENT POTENTIAL IN AGRICULTURE

With the introduction of market-oriented production after 1988 and more so since 2010/11 the government gradually initiated other modernisation processes in agriculture (Tin Soe 2004). While achieving production targets has hitherto been a priority in agricul-
ture, the focus has not yet been explicitly on self-sufficiency, the diversification of agricultural products and crop sequences or income security for farmers.

More recent reform strategies have recommended a (holistic) broadening of focus to embrace the situation in agriculture as a whole, and follow a development path from a household-oriented subsistence economy to a regionally and internationally competitive market economy (Aung Kyi 2006).

The priorities of such strategies are as follows. Firstly, ecological aims are to be pursued, e.g. the establishment of soil protection and erosion prevention policies, measures against soil salination, and the creation of systematic wind barriers. Secondly, from an economic point of view the diversification of the crops cultivated, the consolidation of secondary crops, the reduction of post-harvest losses as well as improved access to loans, the stabilisation of the finance sector and a broadening of farmers and agricultural labourers income basis in agriculture, in association with agriculture and outside of agriculture, are necessary. From a structural point of view, improved land policies and resource development, the provision of transparent market information, a systematic development of human resources and the encouragement of agro-technology are called for. Finally, regionally differentiated improvements are perceived as necessary, rather than (too) general strategies. The main long- and medium-term goal is to achieve significantly improved integration and networking of the eight agricultural zones as well as further development of the endogenous socio-economic potential of the individual regions.

**SUMMER AND RAIN PADDY: PRODUCTION AND YIELDS**

Yields of rain and summer paddy vary considerably depending on natural conditions in and around the individual townships and in particular on soil quality and monthly rainfall.

Nationally, average yields of rain paddy are between 3.5 and 4.5 tons/ha; they are lower in coastal areas and in middle Shan State and significantly lower in the mountainous regions of Chin State, northern Kachin State and Kayah State. Higher yields of up to 8.7 tons/ha are achieved in the Sagaing and Magway Regions and in northern Shan State. Overall, yields are average by comparison with other ASEAN nations (USDA 2015) and stable over the country as a whole.

Yields vary in different parts of the country: yields of rain paddy in the delta areas of the Ayeyarwady and Sittaung rivers and in Rakhine State are high by comparison with the rest of the country and have been rising in recent years (2012-2014) in the core area, while on the coasts they are stable and in some townships of the central dry zone they are falling. Yields have fallen sharply in recent years in Kayin State and Mon State, largely on account of the shortage of labour as a result of the migration of workers to Thailand, lack of access to loans for modernisation and increasing cultivation of other agricultural commodities that command higher prices (all data: MoAI 2015).

Although the volume of summer paddy that is produced is significantly lower than that of rain paddy, the second rice harvest that summer paddy provides is nevertheless important for the national rice supply. Geographically the production of summer paddy is concentrated mainly in the southern Ayeyarwady Delta. Substantial harvests are also achieved in parts of the Magway and Mandalay Regions; productivity is high at between 5.0 and 7.0 tons/ha. Little summer paddy is harvested in other parts of the country, chiefly because of insufficient rainfall and limited capacities for artificial irrigation (all data: MoAI 2015).

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