

ACKNOWLEDGEMENTS

Since Myanmar gained its independence on 4 January 1948, it has passed through several highly distinct phases of development: decades of isolation, at first self-imposed and later the result of sanctions, then the introduction of a market economy in the late 1980s, with various watershed moments in the country's politics, ushering in a period of transition which has recently gathered pace. This has been accompanied by radical political and economic changes, mainly at the national level but also in the international context as the country has opened up to the outside world. In Myanmar itself, at the level of the Union Territory of Nay Pyi Taw, the 14 states and regions and the 330 townships, dramatic changes are taking place: the massive expansion of infrastructure, the intensive development of formerly peripheral areas of the country, much of which has been driven by resource extraction, and stronger links with neighbouring countries, all of which are focusing interest on the nature and pace of, and potential for, development in individual regions. In this setting, the purpose of this 'Socio-Economic Atlas of Myanmar' is to provide, for the first time, a geographical overview and analysis of the country's development progress and the spatial characteristics and disparities in its socio-economic transition using maps and texts.

The idea for the Atlas evolved over the last 21 years, since February 1996, as a result of the increasingly intensive cooperation between the Departments of Geography at the University of Yangon, Myanmar, and the University of Cologne, Germany. The signing of the Memorandum of Understanding between the Universities on 23 August 2003 – highly unusual at the time – led to even more intensive cooperation in the fields of research and teaching. In 2011, the Centre of Excellence (CoE) for Urban and Regional Development was established as a partnership between the University of Yangon and the University of Cologne. Following various joint workshops between Germany and Myanmar, a partnership was also established with the then Department of Human Settlement and Housing Development (DHSHD), now the Department for Urban and Housing Development (DUHD) at the Ministry of Construction. Here too, many years of positive and increasingly intensive cooperation culminated in the signing of a Memorandum of Understanding on 13 June 2012 and the founding of the Myanmar German Research Centre for Urban and Regional Development (MGRC). The results of a joint research project – 'The 81+ urban network system of Myanmar' – were also incorporated into the Socio-Economic Atlas.

Since 2011, an intensive partnership has also developed with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, which is a German federal enterprise and supports the German Government in international cooperation for sustainable development via technical advice and capacity building. GIZ operates in more than 130 countries and employs approximately 17,000 staff worldwide. On behalf of the Federal German Ministry for Economic Cooperation and Development (BMZ), GIZ resumed its activities in Myanmar in 2012 in the area of sustainable economic development. The GIZ Private Sector Development Project (PSD) in Myanmar aims to strengthen capacities for sustainable private sector development with the focus on improved framework conditions for small and medium enterprises (SMEs) in Myanmar.

All parts of this atlas, from the single maps to the texts, have been created and written with the utmost diligence and care. However, the maps in particular are based on information and statistical data which sometimes may contain errors and uncertainties. They reflect and visualise the current state of knowledge. Any errors and shortcomings in data other than that provided to us by other

institutions remain our own. In order to contribute to the further improvement of knowledge about the country and the current socio-economic transformation processes, we encourage the readers of the Atlas to notify and discuss with us any errors which may come to their attention.

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CONCEPT OF THE ATLAS

DEVELOPING THE SOCIO-ECONOMIC ATLAS

The Socio-Economic Atlas of Myanmar emerged through many years of trusted cooperation between German and Myanmar colleagues. The work involved experts from academics, government and planning practice from the natural and social sciences including diverse disciplines such as physical and human geography, architecture and landscape planning, civil engineering and zoology.

The Atlas aims to present and evaluate key spatial developments in the current transformation process of Myanmar. The focus is on socio-economic developments and their uneven manifestation in the states and regions of the country. These development processes are observed in relationship to administrative structures and their dependence on the characteristics of the landscape, natural resources and existing infrastructure. The meticulous spatial analyses aim to increase the state of knowledge about Myanmar both within the country and abroad, and to support decision-making on spatial development policy. In order to ensure wide accessibility the Socio-Economic Atlas is published in print and as an open-access document.

In international publications and media reports it is often said that little is known about Myanmar. Although this may appear true from an outside perspective, it requires qualification if not revision when the situation within the country is considered. In Myanmar there is a significant body of scarcely tapped knowledge that has attracted very little international attention. In the universities and administrations, especially on the local and regional levels, there is a great deal of knowledge – historical, regional, ecological and social – about

Myanmar, its sub-regions and local, ethnic and religious communities. Numerous PhD and Master theses (albeit of varying quality, originality and depth of analysis) represent a notable body of knowledge, even if it is scattered over local libraries and hard to access, particularly as some of the work is written in the Myanmar language. Many unpublished investigations, reports and research papers have been bound by the institutes concerned and are not generally known of or catalogued. Furthermore, there is an enormous body of reflected, usually unwritten knowledge and experience. This large pool of different forms of knowledge is practically unknown or is not regarded as a serious resource, especially abroad but also domestically where it has not been systematically compiled and is not discussed among experts and decision-makers. Academic exchange with Myanmar colleagues makes clear that in the concrete social context of Myanmar apparently ‘objective’ knowledge is very differently assessed, weighted and judged from different ‘internal’ perspectives. The use of mixed teams of authors for the joint analyses and interpretations of the Atlas was a targeted attempt to take this into account.

THE CURRENT PROCESS OF TRANSFORMATION IN MYANMAR

References to the numerous basic publications in the academic literature on Myanmar are provided here with no further detailed discussion. The historical and political processes of the last two decades are the focus of the in-depth analyses by Carey (1997), Steinberg (2001), Thant Myint-U (2001, 2011), Kyaw Yin Hlaing/Taylor/Tin Maung Maung Than (2005), Charney (2009), Taylor (2009), Steinberg (2010), Than Tun (2010), Holliday (2011), Aung-

Thwin/Aung-Thwin (2012), Keck (2015), Rogers (2016) and Mullen (2016). More recent economic development processes are discussed in the work by Mya Than/Tan 1990, Myat Thein (2004), Mya Than (2005), Perry (2007), von Hauff (2007), Okamoto (2008), Fujita/Mieno/Okamoto (2009), Myint (2010), Findlay/Park/Verbiest (2015) and Odaka (2016). Social changes and ethnicity issues are at the heart of the work by Skidmore (2005), James (2006), Gravers (2007), Ganesan/Kyaw Yin Hlaing (2007) and Walaiporn/Pritchard (2016). The transformation processes currently affecting Myanmar are the focus of several edited volumes, in particular Cheesman/Skidmore/Wilson (2010 and 2012), Gravers/Ytzen (2014), Egreteau/Robinne (2016) and Lall (2016). They are also subject to comprehensive analysis in a series of international reports by global development organisations and consultants (ADB 2012a, Chhor et al. 2013, Nixon et al. 2013, Riffel/Fox 2013, OECD 2014a and 2014b, World Bank 2014).

The reports focus on the central challenges related to the transformation process and possible development approaches. They largely agree on the development characteristics and problems of the country but vary in their policy recommendations, development approaches and proposed solutions.

The major challenges for the country can be summarised as follows. To date the rich potential of the landscape and natural resources has only been partially tapped. Agriculture provides employment and thus the economic basis for a large proportion of the population. The many political and economic reforms passed after 1988 and particularly after 2010 aim to improve countrywide infrastructure, promote the private sector and attract direct foreign investment. They promote decentralisation of the administration and institutional transformation, the eradication of price controls and subsidies, the modernisation of the tax and customs system, the diversification of the export sector, the improvement of import and export procedures, and the restructuring of wages and prices. They also provide increased freedom of choice for farmers in terms of the

crops they cultivate and the processing, transport and trading of those products (MNPED 1995: 33, Mya Than/Tan 1990). However, these measures have not yet overcome state capitalism to a significant extent.

The greatest obstacles to the mobilisation of direct foreign investment are related to the ongoing problems of macro-economic stability, extensive bureaucracy, widespread infrastructural deficits, economic diversification, the ensuring of long-term guarantees, a lack of openness of the financial sector to foreign competition, and restrictions on the transfer of foreign capital and profits. However, the privatisation measures of recent years have led to the emergence of numerous manufacturing, trading and services companies that supplement the large, efficient, state-owned enterprises with their export trade. In addition to growing numbers of companies involved in textile, garment and food production there are more and more service enterprises (especially in the tourism sector). Foreign investment is particularly over-concentrated in the metropolitan areas of Yangon and Mandalay.

THEMATIC FOCUSES OF THE ATLAS

Against the background of the far-reaching socio-economic changes of recent years and the frequently heard call for decision-making to correct inequalities in regional development, the Socio-Economic Atlas focuses on the analysis and evaluation of current regional differences in geographical conditions, infrastructure and socio-economic development. Neither historical developments nor Myanmar's international relationships – for instance within the ASEAN or with neighbouring countries – have been included so as to keep the subject manageable.

Considerable conceptual input was drawn from the existing thematic atlases of neighbouring countries. Thus the Atlas of Cambodia (SCW 2006) focuses on natural resources and issues of poverty, while the impressive thematic atlases of Vietnam (Vu/Taillard 1993), Laos (Bounthavy/Taillard 2000 and Messerli et

al. 2008) and Thailand (Kermel-Torrès 2004) concentrate particularly on socio-economic developments.

For Myanmar itself, the Ministry of Forestry in cooperation with the Department of Geography of the University of Yangon has produced topographic maps displaying the states and divisions of the country (MoF 2004). Insights into resources and agriculture are provided by the Atlas of the Mineral Regions of the ESCAP Region, which analyses the geology and mineral resources of Myanmar (UN 1996), and the Agricultural Atlas of the Union of Myanmar (FAO 2005). Numerous thematic maps of Myanmar are included in the KTAM Report (1953) and the comprehensive fundamental work produced by Hla Tun Aung (2003). Overviews of infrastructure and socio-economic developments are found in the maps included in the regional study by Storz (1967). However, none of these maps are georeferenced and many are either too generalised or not up-to-date.

A number of possible maps could not be produced because of a lack of reliable, consistent or plausible data:

- Thus despite the enormous relevance of questions of ethnicity, especially in the process of national reconciliation (for in-depth analysis see Skidmore 2005, James 2006, Gravers 2007, Ganesan/Kyaw Yin Hlaing 2007, Kipgen 2015), it was not possible to include a map of the regional distribution of ethnic or ethnolinguistic population groups. There are a number of spatial representations of the distribution of ethnic or ethnolinguistic groups, at least of the groups most dominant in the individual areas (e.g. Smith 1993, Smith/Allsebrook 1994: 51, Lintner 1994: 77, Steinberg 2001: xvii, Gravers 2007: xx, South 2008: xii, Gravers/Ytzen 2014: 156). However, there is a lack of detailed regional data and no spatially differentiated cartographical representation of the great ethnic/ethnolinguistic diversity of Myanmar. The most accurate mapping to date is the large-scale key map by Moseley/Asher (1994: Map 49), but even here, for example, only four of the many

ethnic and ethnolinguistic groups found in Chin State (Min Naing 2000) have been recorded. In the absence of more accurate data, cartographic representations are often copied from one another with minimal changes; several display the title 'main ethnic groups' but then inconsistently mix ethnic and religious groups in the actual maps (e.g. Smith/Allsebrook 1994: 51).

- On the controversial issue of regional concentrations of foreign population groups (particularly Chinese, Indian, Nepalese/Gurkha and 'western' foreigners) there are practically no detailed regional data and few studies (Cernea 2007, Chang 2014, Maung Aung Myoe 2014).
- Due to political sensitivity, detailed data from the 2014 census concerning the various religious and belief groups – Buddhists, Christians, Moslems, Hindus, Animists etc – have only been released on a national scale and the scale of the states and regions (MoLIP 2016c). Regional and local developments and the interfaith-networks of the religious groups have been subject to little investigation. Research has focused particularly on the development of individual religious groups (see e.g.: Chakravarti 1971, Yegar 1972, Berlie 2008), different perspectives on the religious problems (Gravers 2013, Charles Maung Bo 2015, David Thang Moe 2017) and current issues of reconciliation (Schissler/Walton/Phyu Phyu Thi 2017, Chit Win/Kean 2017).
- Interpretations and statistics on the highly charged and controversial so-called Rohingya issue vary greatly (Leider 2012 and 2014, Kipgen 2013, Gibson/James/Falvey 2016, Ibrahim 2016); it is impossible to produce reliable cartographic representations of this topic.
- Even for less controversial issues, cartographic representations of regional differences in distributions or developments are either impossible or unhelpful. Thus the mapping of numbers of tourists is presently inadvisable due to the unreliability and inconsistency of data – the published tourism