

## Introduction

This study identifies the urban and rural regional profiles of the socio-economic indices at a township level in Myanmar. It aims to describe and rank the urban and rural areas according to their relative socio-economic advantage and disadvantage based on the level of education, literacy, employment, type of occupation, housing and living standard variables. Furthermore, it aims to examine whether the level of education attained and literacy factors explain the likelihood of employment in urban and rural areas in Myanmar. It also explores how the level of education, literacy, employment, type of occupation, housing and living standard contribute to inequality at the geographical township level. Land use characteristics, such as transport infrastructures (inland transport routes and trade routes), airports, seaports, main tourist attractions and geographical features are examined and related to these socio-economic profiles.

## Method

This study identifies the classification of the socio-economic profiles in each township in Myanmar by using factor (principal component) analysis. The choice of variables has a significant influence on measuring socio-economic indices. In this case, the variable selection and data processing methodology, developed by the Australian Bureau of Statistics<sup>1</sup> (ABS) and used for calculating the Socio-Economic Indices for Areas (SEIFA) in Australia, are applied because of their potential to inform development. The correlation matrix is calculated first to identify and remove any highly correlated pairs of socio-economic variables to avoid over-representing specific socio-economic characteristics. Then, the index of relative socio-economic advantage/disadvantage and index of education and occupation are calculated. Myanmar's 2014 population and housing census data are used to conduct the above analysis for identifying the classification of socio-economic indices for the country's townships. As income variables were not collected in Myanmar's 2014 census data, living standards, such as household ownership of durable assets, accessibility to communication technology, infrastructure and housing characteristics are used as wealth indicators (usually represented by income variables). A geospatial analysis is conducted for better visualization and better interpretation of the findings from this study.

## Findings

In the above two figures, the education and occupation index and the relative advantage index for each township are over-layered with trade route, seaports, airports and main tourist attractions. It is found that:

- Townships in Shan, Karen and Mon states have low education and skilled occupation index but are high in their relative advantage index. It reflects the importance of border trade in Shan state and the remittance that migrant workers from Karen and Mon regions in neighbouring countries, send back home. The Karen and Mon states have the highest percentage of households with emigrants, 41% and 38% respectively, and "*the evidence implies that international migrants either come from economically better-off households or that the remittances that they may be sending back do make a positive contribution to the economy of households*", Department of Population (Ministry of Labour Immigration and Population, December 2016).
- Some townships in Kachin state and Myanmar's central regions have moderate education and skilled occupation index, but are relatively disadvantaged indicating the need to create job opportunities.
- The townships in northern Kachin state, Sagaing divisions and southern Chin state are relatively disadvantaged with low density in transport infrastructure, indicating the need to expand infrastructure for regional development.
- A relatively low education and occupation index reflects relative disadvantage in Sagaing, southern Chin state, Magway, Bago and Ayeyarwaddy regions.
- The townships in the Ayeyarwaddy delta region are not performing well in both, the index of education and occupation and index of relative advantage/disadvantage. This area was hit by the deadly Nagis cyclone in 2008 with estimated US\$10 billion damage.
- Only townships in three major cities, namely Naypyidaw, Yangon and Mandalay, have favourable performance according to both of these indices.