

## SUMMARY AND CONCLUSION

This report describes on commuting population counted being based on spatial unit of “District” which is a subdivision of Province, or the prime administrative area in Cambodia. In modern society people can move in a short time between multiple places by help of modes of transportation such as automobiles, motorcycles, bicycles, boats, buses and trains - sometimes by choice. As a result that the way of living of segregation between place of residence and place of work became popular and common, most people commute between their place of residence and their place of work or schooling within a day. In 2008 Population Census NIS employed the question on place of work and schooling for the first time and analyzed the results derived from the census question.

**In the Chapter 1**, usefulness of commuting data and problems caused from the census question and reform of administrative areas of the kingdom are described. The first problem exists in that the spatial unit of “district” which is the administrative area under a province was used for collection and presentation of the statistics. In Cambodia a district is not so small for statistical presentation on commuting not only in population size but also in spatial size. The second problem is due to the reform of administrative areas by sub-decree immediate after the census enumeration. As most of the census results are used for administrative purpose, NIS decided that the statistical presentation of all census results was based on new boundaries of administrative areas after the reform. Accordingly, commuting tables were excluded from the tabulation because of difficulty of boundary adjustment between old and new administrative areas. In order to avoid loss of valuable data without any usage the supplementary tables on commuting were prepared. The tables focused mainly on commuting in the provinces of Battambang, Kampong Cham, Kandal, Phnom Penh and Siem Reap being based on the old boundaries of districts.

According to the tables prepared, among 10,232,713 persons aged 10 years old and over in this country, 9,698,973 persons, or 94.6 percent directed to place of work or schooling within a same district, where they reside, and returned back to their homes daily at the time of the census. Also, number of the persons directed to place of work or schooling within another district presents 310,218 persons, or 3.0 percent, and those to place of work or schooling across the national border does 20 thousand persons, or 0.2 percent. While, 203,055 persons, or 2.0 percent stayed at home.

Classifying the population aged 10 and over into the employed persons and the persons attending school, the share of the former shows 67.7 percent against 32.3 percent for the latter. In the population forming the commuting flows between districts the share shows 80.6 percent for the employed persons and 19.4 percent for the persons attending school. Therefore, it is inferred that the commuting flows are formed mostly by economically active persons.

Among 24 provinces, the commuting flows between districts are significant in Phnom Penh and Kandal, as the proportion of the persons direct to and returned from another district shows the highest (13.8%) in Phnom Penh, the second highest (5.6%) in Kandal, and as the provinces exceeding the national average 3.0 percent are Kampong Speu and Kep only beside the two provinces described above.

Finally, from the facts that as 95 percent of commuters between place of residence and place of work or schooling conclude within the “district” where they reside, commuting flows are forced to be disclosed by only 3 percent of commuters between districts, it can be concluded that a subdivision of “district”, or “commune” should be used as the spatial unit for collection of data and statistical presentation on commuting for the purpose of obtaining clearer picture of commuting for whole Cambodia..

**In Chapter 2**, commuting flows in Capital Region consisting of Municipality Phnom Penh and Province Kandal are disclosed. Most of districts in Kandal send more out-commuters to the districts in Phnom Penh than in-commuters from Phnom Penh, while most of districts in Phnom Penh receive more in-commuters from districts in Kandal than out-commuters to those in Kandal. Also, the provinces constituting Capital Region receives a certain amount of in-commuters from the districts outside the Region. Most of in-commuters in Phnom Penh direct to four districts: Doun Penh, Chamkar Mon, Prampir Meeakkakra and Tuol Kouk, forming the city core.

The city core of Phnom Penh with the population of 571,649 persons receives 68,825 persons of in-commuters from surrounding districts and sends 23,645 persons to surrounding districts. As a result net commuters, or the balance between in-commuters and out-commuters are counted as 45,180 persons. Among 46 districts constituting the commuting hinterland of the city core, only 7 districts indicated minus net balance. Other 39 districts indicated plus net balance between in-commuters and out-commuters, while 30 districts sent more than 100 in-commuters respectively to the core, while 12 districts received more than 100 out-commuters respectively from the core. This means that the area where in-commuters reside, or in-commuters’ zone is remarkably

wider than the area to where the city core residents direct, or out-commuters' zone.

From other findings, together with those described above, it can be concluded that the centripetal movement to the city core is remarkably stronger than the centrifugal movement from the city core and both movements are constituted of mostly male employed commuters.

**In Chapter 3**, commuting flows in local provinces of Battambang, Siem Reap and Kampong Cham are disclosed. Comparing with the districts in Capital Region, the commuting rate is distinguishably low for inflow as well for outflow in each district in Provinces, Battambang, Siem Reap and Kampong Cham.

In spite of that, it is recognized that in each province there is a central district, or a core of commuting, where in-commuters are more than out-commuters and presents higher in-commuting rate, although its commuting hinterland does not extend across the provincial boundary. The central districts are Bat Dambang for Province Battambang, Siem Reap for Province Siem Reap, and Kampong Cham for Province Kampong Cham.

**In Chapter 4**, the daytime population estimated by aggregating residential population, or nighttime population, with net commuters is introduced for each districts of Capital Region and local provinces of Battambang, Siem Reap and Kampong Cham.

In Province Kandal, the daytime population (1,242,961 persons) is smaller than the nighttime population (1,265,280 persons), while in Municipality Phnom Penh the daytime population (1,376,965 persons) is larger than the nighttime population (1,327,615 Persons). The daytime population in the city core of Phnom Penh, or the four districts located in central part, is counted as 624,909 persons against 571,649 persons of the nighttime population. The ratio of daytime population against nighttime population in the city core is 109.

Among the districts within Capital Region, Doun Penh showed the highest ratio of daytime population (135), Dungkao did the second (109) and Chamkra Mon did the third (108). While, it is 104 for Municipality Phnom Penh against 98 for Province Kandal.

In local provinces of Battambang, Siem Reap and Kampong Cham., most districts showed lower ratio of daytime population than 105. It can be said that the difference between daytime and nighttime populations is smaller than in Capital Region. However, three central districts or core of commuting described above presented the highest (104 to 105) in each province.