June 20, 2001

Path Length Variables

Household-Level

For each household these variables count the number of other households in the village reachable through paths of exactly the specified length but not one shorter (for lengths 1, 2, up to 10), reachable in a path of length greater than 10, and not reachable in a path of any length. There are also variables for the number of households reachable in a path of a specified length or one shorter. A path is a sequence of points (households) and lines (ties) beginning and ending with points (households) and not retracing any steps. The length of a path is the number of lines in it (Wasserman and Faust, 1994 Chapter 4). To find the paths between households, each relation was treated as dichotomous and symmetric (that is, the direction of the tie was ignored and ties were treated as either present or absent between each pair of households). The distance between two households is the length of the shortest path between them. For each household the numbers of other households reachable in paths of exactly length 1, 2, up to 10+ were found based on distance between each pair of households.

Village-Level

For each village these variables count the number of other villages in Nang Rong district reachable through paths of exactly the specified length but not one shorter (for lengths 1, 2, up to 10), reachable in a path of length greater than 10, and not reachable in a path of any length. There are also variables for the number of villages reachable in a path of a specified length or one shorter. A path is a sequence of points (villages) and lines (ties) beginning and ending with points (villages) and not retracing any steps. The length of a path is the number of lines in it (Wasserman and Faust, 1994 Chapter 4). To find the paths between villages, each relation was treated as dichotomous and symmetric (that is, the direction of the tie was ignored and ties were treated as either present or absent between each pair of villages). The distance between two villages is the length of the shortest path between them. For each village the numbers of other villages reachable in paths of exactly length 1, 2, up to 10+ were found based on distance between each pair of villages.