## Measuring remoteness for the identification of LDCs Note by the CDP Secretariat, August 2015

## ntroduction

The Committee for Development Policy uses an indicator of remoteness as one of the components of the Economic Vulnerability Index (EVI), hich is one of three criteria to identify least developed countries (!DCs)" #or a br

Otep +\$ #or each country under consideration all countries are sorted by distance

Otep 8\$ The minimum avera&e distance is transformed into lo&arithms and converted into the <u>remoteness value</u> usin& the follo in& formula\$

$$r_{i} = 100 \times \frac{\ln(d_{i}) - \ln(d_{\min})}{\ln(d_{\min}) - \ln(d_{\min})}$$

*,* ,

here

i is the country index; r<sub>i</sub> is the remoteness value of country i; d<sub>i</sub> is the minimum avera&e distance of country i; d<sub>min</sub> is the smallest minimum avera&e distance(8,444 \*m); and d<sub>max</sub> is the lar&est minimum avera&e (+4,744 \*m)"

The values  $d_{min}$  and  $d_{max}$  are based on the smallest and lar&est minimum avera&e distance values of all <nited =ations >ember 0tates in developin& re&ions"

Otep 7\$ (n <u>ad,usted remoteness value</u> is computed to ta\*e into account the hei&htened transport costs of landloc\*ed countries discussed above" . elyin& on a number of empirical studies of the transport costs to or from landloc\*ed countries, an ad,ustment coefficient of +3 per cent as chosen" )ence, ad,usted remoteness of a country is computed as\$

$$\mathbf{r}_{i}^{s} = 0 \#! \times \mathbf{r}_{i} + 0 1! \times IId\mathbf{c}_{i}$$

here

 $r_i^{\,\prime}$  is the ad, usted remoteness value of country ";

 $\mathsf{IIdc}_\mathsf{i}$  is a dummy variable hose value is +44 for  $\mathsf{landloc}^*\mathsf{ed}$  countries and 4 for other countries"

#or a&&re&atin& the various indicators into the EVI index, the CDP first transforms individual indicator values into index values ran&in& bet een 4 and +44 and then a&&re&ates these index values" This transformation is done usin& the >ax1min procedure" The methodolo&y includes for all indicators the imposition of lo er and upper bounds in order to reduce the influence of outliers on the in

capitals or ma,or a&&lomerations, calculated follo in& the &reat circle formula hich uses information on latitudes and lon&itudes" Internal d