

Annex

The steps involved in the calculation are given below.

- 1) Standardising the original data using formula:

$$X = \frac{X' - \bar{X}}{C}$$

In which X' is the original data, \bar{X} is the mean value of the original data, and C is the covariance of the original data.

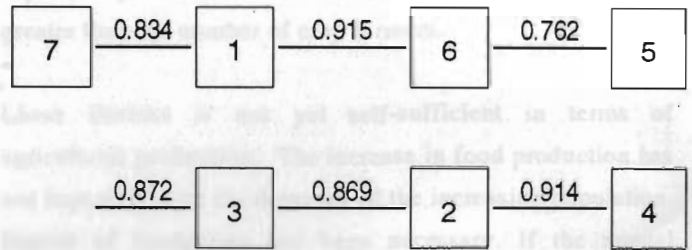
- 2) Demarcating the standardised data, using the formula:

$$r_{ij} = \begin{cases} 1 & \text{(When } i = j) \\ 1 - C \sum_{k=1}^m |X_{ij} - X_{jk}| & \text{(When } i \neq j) \end{cases}$$

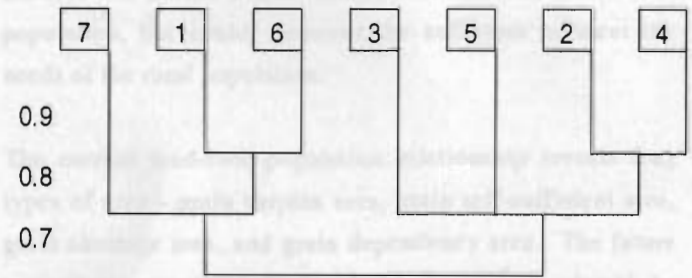
Selecting $C = 0.08$ $m = 3$, $i, j = 1, 2, 3 \dots 7$, the fuzzy matrix R is established as follows:

1	0.614	0.561	0.700	0.686	0.915	0.834
	1	0.869	0.914	0.864	0.688	0.449
		1	0.802	0.872	0.634	0.395
			1	0.868	0.744	0.534
				1	0.762	0.523
					1	0.761
						1

- 3) Using Krustal's Method, the "maximum branches" are transferred from the fuzzy matrix.



- 4) The dynamic classification chart is drawn.



- 5) If the value λ is chosen as 0.84, three categories can be classified. Including the special category - Damxung, there are four types of land - food - population relationship in Lhasa District.