Migration

movement from one place to another.

Place of Origin: A geographic unit from where a person shifted (his/her residence)

Place of destination: where he/she settled.

Migration

- **International/ external migration** (Migration across the international boundaries of a country)
  - **Emigration/ Expatriation** (Migration out of the country (exist))
  - **Immigration/ Repatriation** (Migration from outside toward a country (Inter))
- **Internal migration** (Migration from one unite to another within the country)
  - **In-migration** (Migration toward a geographic unit (coming to homeland))
  - **Out-migration** (Migration from that unit to other units (leaving homeland))

Measures of Migration

1- International migration measures:-

Crude immigration rate, Crude emigration rate, Crude gross international migration rate and crude net international migration rate.

1.1- Crude immigration rate (CIR):

Determined by dividing the number of immigrants (I) in a year with mid year population (Pmid) of the same year.

$$CIR = \frac{I}{Pmid} \times 100$$

Example:

The population of Pakistan in 1981 was 84253644 which increased to 132352279 in 1998. In the absence of statistics on vital events let us suppose that 5479256 children were born during the inter-censal period of 17 years, 1054186 persons died, 4764570 persons immigrated to pakistan and 916679 persons emigrated from Pakistan.

⇒ Calculation of CIR

Immigrants coming to pakistan in 17 years = 4764570

Immigrants per year = $I = \frac{4764570}{17} = 280268.82$

Now we have to find mid year population.

Formulas for calculating mid year population:

⇒ Mid year population between two years:

$$P_{mid} = \frac{P_t + P_o}{2}$$

P_t = Current years population
P_o = Base years population.

⇒ Mid years population of single year:

$$P_{mid} = \frac{P_t}{\left(1 + \frac{r}{100}\right)}$$

P_t = current years population
r = Growth rate. ⇒ which can be calculated by simple arithmetic (percentage), compound method, Exponential method.

Here we use 1st formula: because here are two year population is given.

$$P_{mid} = \frac{P_t + P_o}{2} = \frac{132852279 + 84253644}{2}$$

$$P_{mid} = 108302962$$

Now CIR per year is:

$$CIR = \frac{I}{P_{mid}} \times 100$$

$$= \frac{2802680.22}{108302962} \times 100$$

$$CIR = 0.26\ \%\ \text{per year}$$

CIR for 17 years will be:

$$CIR = 0.26 \times 17$$

$$= 4.42\ \%\ \text{in 17 years.}$$

1.2: Crude Emigration Rate (CER)

Determined by dividing the number of emigrants (E) in a year with mid year population (Pmid) of the same year.

$$CER = \frac{E}{Pmid} \times 100$$

⇒ Calculation:

From the previous example.

Emigrants going out from pakistan in 17 years = 916679

Emigrants per year = $E = \frac{916679}{17} = 53922.294$

$Pmid = 10830296 2$

$$CER = \frac{E}{Pmid} \times 100 = \frac{53922.294}{10830296 2} \times 100$$

$CER = 0.05\%$ per year.

For 17 years ⇒ $CER = 0.05 \times 17$

$CER = 0.85\%$ in 17 years

1.3: Crude Gross International Migration Rate (CGIMR):

Determined by dividing the sum of number of immigrants and emigrants (I+E) in a year with mid year population (Pmid) of the same year.

$$CGIMR = \frac{I + E}{P_{mid}} \times 100$$

From previous example.

Immigrants per year = $I = 2802680.82$

Emigrants per year = $E = 53922.294$

$P_{mid} = 10830.2962$

$$CGIMR = \frac{I+E}{P_{mid}} \times 100 = \frac{2802680.82 + 53922.294}{10830.2962} \times 100$$

$CGIMR = 0.31\%$ per year.

For 17 years $\Rightarrow$ $CGIMR = 0.31 \times 17$

$CGIMR = 5.27\%$ in 17 years

1.4: Crude Net International Migration Rate (CNIMR):

Determined by dividing the difference of number of immigrants and emigrants (I - E) in a year with mid year population (P_{mid}) of the same year.

$$CNIMR = \frac{I - E}{P_{mid}} \times 100$$

From previous example

$I = 2802680.82$

$E = 53922.294$

$P_{mid} = 10830.2962$

$$CNIMR = \frac{I-E}{P_{mid}} \times 100 = \frac{2802680.82 - 53922.294}{10830.2962} \times 100$$

$CNIMR = 0.21\%$ per year

For 17 years $\Rightarrow$ $CNIMR = 0.21 \times 17$

$CNIMR = 3.57\%$ in 17 years

2- Internal migration measures:

Crude In-migration rate (CInR), Crude out-migration rate (COR), Crude gross migration rate (CGMR) & crude net migration rate (CNMR).

2.1: Crude In-migration Rate (CInR)

Determined by dividing the number of in-migrants (In) in a year with mid year population (Pmid) of the same year.

$$CInR = \frac{In}{Pmid} \times 100$$

Example: The population of Pakistan as on 5th March 1998 was 132352279; migrants during the last one year were 84120 persons (assuming out-migrants are equal to in-migrants at national level) and population average annual growth rate during that year was 2.06 percent.

Calculation of CInR:

In-migrants during the last year = In = 84120

Mid period population of last year = $P_{mid} = \frac{P_t}{\left(1 + \frac{r}{100}\right)}$

$$P_{mid} = \frac{132352279}{\left(1 + \frac{2.06}{100}\right)} = \frac{132352279}{1.0206}$$

$$P_{mid} = 12968053$$

So

$$CInR = \frac{In}{Pmid} = \frac{84120}{12968053} \times 100 = 0.65\ \%\ \text{per year.}$$

2.2: Crud out-migration Rate (COR)

Determined by dividing the number of out-migrants (O) in a year with mid year population (Pmid) of the same year.

$$COR = \frac{O}{Pmid} \times 100$$

Calculation

from the previous example

Out-migrants during the last year = O = 84220

Mid year population = Pmid = 129680853

So

$$COR = \frac{O}{Pmid} \times 100 = \frac{84220}{129680853} \times 100 = 0.65\% \text{ per year.}$$

2.3: Crude Gross Migration Rate (CGMR):

Determined by dividing the sum of number of in-migrants and out-migrants (In-O) in a year with mid year population (Pmid) of the same year.

$$CGMR = \frac{In + O}{Pmid} \times 100$$

Calculation:

By using the previous example:

In-migrants during the last year = In = 84220

Out-migrants during the last year = O = 84220

Mid period population of last year = Pmid = 129680853

So

$$CGMR = \frac{In + O}{Pmid} \times 100 = \frac{84220 + 84220}{129680853} \times 100$$

$$= 1.30\% \text{ per year.}$$

2.4: Crude Net Migration Rate (CNMR):

Determined by dividing the difference of number of in-migrants and out-migrants (In-O) in a year with mid year population (Pmid) of the same year.

$$CNMR = \frac{In - O}{Pmid} \times 100$$

Calculation:

From the previous example:

In-migrants (in) during the last year = 841220

Out-migrants (O) during the last year = 841220

Mid period population of last year = 12968053

So

$$CNMR = \frac{841220 - 841220}{12968053} \times 100 = 0\ \%\ \text{per year.}$$

Reasons of Migration:

A statistical exercise is carried out to establish a relationship between migration and socio-economic factors. Under normal circumstances mostly the migration takes place due to movement of head of the family accompany by family members regardless of area of residence. The next highest cause, as determined from the 1998 Census data, is marriage in rural areas and transfer or employment in urban areas. The other reasons could be business, acquiring education, retirement, divorce, health and medical treatment, returning home, etc. These seem to be valid reasons under normal conditions. The other reasons could be natural calamities: like earthquakes, excessive rainfall and floods, long persistent drought, weather severity, eruption of volcano, severe and repeated cyclones, epidemics etc; wars, and fear or threat of war, civil war and insecurity, racial discrimination, greater freedom, better standard of living, oppression, cultural/ religious rift, over crowding etc.

6.4.1 Push and Pull factors

Migration can occur as result of push and/ or pull factors. Push factors are those, which force a person to migrate out of the area. Pull factors are those, which encourage a person to migrate in that area.

A) The push factors are:

Valid under normal conditions

Head of the family move

Transfer of job

Marriage (in case of females)

Business and economic deprivations

Absence of or poor educational facilities

Retirement and no re-employment

No own housing shelter

Divorce

Fragmentation of agricultural land

Poor relationship with other members of the same community where one is living

Valid under abnormal conditions

Wars, and fear or threat of war

Civil war and insecurity

Racial discrimination

Oppression

Cultural/ religious

Over crowding etc

Natural calamities

Earthquakes

Excessive rainfall and floods

Long persistent drought

Weather severity

Eruption of volcano

Severe and repeated cyclones

Epidemics etc

B) The pull factors are:

Employment

Economic benefits

Better educational facilities

Availability of better health facilities and medical treatment

Returning home, etc

Peace, and no fear or threat of war

Security

Racial harmony

Greater freedom

Better standard of living

No oppression

No cultural/ religious biasness

No earthquakes

Favorable rainfall and no floods

Pleasant weather

No volcanic eruption

No cyclones

Hygienic resort etc

Fertile land

The decision to migrate depends upon the number and nature of push factors influencing a person to migrate viz a viz number and nature of pull factors offering benefits to him. If the aggregated quantum of forces of pull factors surpasses considerably the person would certainly migrate but marginally edging out would make him perhaps double minded in taking decision.