

INDICATORS OF RURAL DEVELOPMENT

Large set of indicators are available for explaining the socio-economic phenomena-

Policy issues under consideration

Which definition of rural is actually chosen

Data availability

APPROACHES IN SELECTING INDICATORS

Sectoral Approach

Rural households are defined according to their main economic activity (agriculture, forestry, mining etc.)

Terroitorial Approach

Rurality refers to the **distance** of the household with respect to accessing markets or services and it refers to the **density** of the settlement in which the household is located

RURAL INDICATORS

All indicators are classified by themes under two scheme proposed by World Bank, FAO etc

SCHEME-I

- **A. Components of rural development**
 - 1. Natural environment;
 - 2. Social well-being;
 - 3. Conditions for economic well-being.
- **B. Potential of rural development**
 - 1. Territory with respect to population;
 - 2. Economic structure;
 - 3. Communications.
- **C. Special focuses on developing countries**

SCHEME-II

1. Natural capital;
2. Financial capital;
3. Human capital;
4. Physical capital;
5. Social capital
6. The capacity of the community
7. Desired outcomes

A.1 Natural environment

Character: Quality of the countryside and the condition of the natural environment (natural resources and wildlife), as necessary requirements to reach a good quality of life and as an opportunity to enhance the economic conditions of the rural population

·
Suggested proxy indicators:

Per capita drinking water: cubic metres of drinkable water at time t / population at time t

Per capita CO² emission: tonnes of CO² emission at time t / population at time t

Per capita energy consumption: KWh of energy consumption at time t / population at time t

Biodiversity index: number of animals (farmland birds, wild beasts, farm animals) at time t / square kilometres of the surface at time t

Landscape index: square kilometres of land lost from agriculture and forestry to industrial, housing, road and other uses at time t / square kilometres of the surface at time t

Waste recycling index: per cent of waste that is recycled at time t

A.2 Social well-being

Quality of social life and welfare. Good quality means good education and health; reduced risks and vulnerability of people.

Suggested proxy indicators:

Literacy rate: per cent of population, aged 15 – 24, who have completed a given level of formal schooling at time t

Infant mortality rate: number of deaths of infants (under one year of age) per 1,000 live births at time t

Newspapers per capita: number of newspapers sold at time t / population at time t

Political rights: per cent of the eligible voters who voted in the last election

Green areas rate: green area as a per cent of total area at time t

A.3 Conditions for economic well-being

Income and wealth of people.

Suggested proxy indicators:

1. State

Real per capita income: real income at time t / population at time t

2. Tendency

Real per capita income growth: real per capita income at time t / real per capita income at time $t-1$

3. Dispersion and concentration

Real per capita income inequality: normalized squared error from the mean at time t , Gini Index of Inequality at time t

B. Potential of rural development

B.1 Territory with respect to population

Territory available to the rural population to live, to cultivate (usable agricultural land) and to perform other economic activities.

Suggested proxy indicators:

1. State

Per capita territory: square kilometres of the surface at time t / population at time t (which is the inverse of the population density)

Per capita AAU: Agricultural Area Utilised (AAU) (square kilometres) by rural population at time t / rural population at time t

Rural youth: Rural population under 14 at time t / rural population at time t

2. Dispersion

Per capita territory: Number of rural territorial units within each size class of square kilometres of surface area per inhabitant at time t

Per capita AAU: Number of rural territorial units within each size class of AAU at time t

3. Tendency over time

Rural pop. growth: Rural population at time t / rural population at time $t-1$

B.2 Economic Structure

Health of the economic environment of the rural population.

Suggested proxy indicators:

1. State

Employment rate: Population employed at time t / population at time t

Local government debt rate: Local government debt in region r at time t / population in region r at time t

2. Tendency over time

Migration rate: Per cent net flow of population at time t

Employment growth rate: Population employed at time t / population employed at time $t-1$

Local government debt reduction: Local government debt in region r at time t / local government debt in region r at time $t-1$

B.3 Communications

Ability of rural population to communicate and interact with the rest of the world.

Suggested proxy indicators:

1. State

Per capita stations: Number of stations (railway stations, ports and airports) at time t / rural population at time t

Per capita telephones: Number of telephones (home, mobile and public) available at time t / population at time t

2. Tendency over time

Per capita stations rate of growth: Number of stations at time t / number of stations at time $t-1$

Per capita telephones rate of growth: Number of telephones at time t / number of telephones at time $t-1$

C. Special focus on Developing Countries

This is a list of characters that are relevant from a developing country perspective. The construction of indicators is not suggested as the final choice will depend mainly on data availability in any country.

C.1 Market and institutions

- food price index
- membership in organizations of agricultural producers

C.2 Infrastructure

- rural population with access to electricity

C.3 Poverty

- rural population living on less than \$1 a day
 - rural child malnutrition

C.4 Agriculture

- agricultural productivity
- food production index

C.5 Natural resource

- forests and deforestation

C.6 Education

- rural female literacy with respect to rural male literacy
- net rural enrolment ratio in primary education

C.7 Health

- infection among rural population

SCHEME-II

Natural capital:

Potential drinkable water per capita, within a given time period

How much time per day is required to access and transport water for an average family?

Hectares of arable land per capita

Hectares of forested land per capita

Financial capital:

Share of population with savings over a given limit (say, with savings greater than one half of the individual's annual income)

What share of these "savings" is in fixed assets (e.g. land, buildings, machinery) and what share is in liquid assets (e.g. stocks, bonds, bank accounts)?

Availability of financial institutions (banks, lending circles, etc.) within the community / region (e.g. number of institutions or distance to the nearest institution)
Is the institution required to re-invest a certain share of its portfolio in the local community?

Physical Capital:

Per cent of population living in a household with electricity

For persons without electricity, what share has no access to electrical services?

Housing stock (number of persons per room in the dwelling)

Per cent of population within one kilometre of a paved road

Per cent of population within one hour of an international airport

Human Capital:

Infant mortality rate: number of deaths of children under one year of age as a per cent of all live births within a given the time period

For infants who die, what per cent die due to a lack of access to maternal care?

Per cent of population, for a given age group, who are literate (For some countries, the OECD Adult Literacy Survey is appropriate. Alternatively, one might tabulate the share of the population, within a given age group, who have completed a given number of years of formal schooling.)

Per cent of children, within a given age group, enrolled in formal schooling

For each age group, per cent of population living more than 30 minutes from a school.

Per cent of population living more than one hour (or one half hour) from a hospital

Social Capital

Number of newspapers sold per capita, within a given time period

Share of news that is local, national and international

Per cent of eligible electors who voted in a recent election

Per cent of individuals living in a residence with a telephone (land line or cell phone)

Per cent of individuals of a given age group who participate in a voluntary organization or community groups

Potential indicators of the CAPACITY to design and implement development strategies would include:

Per cent of the population, for a given age group, who have attained a secondary school diploma;

For population 20 to 24 years of age without a secondary school diploma, per cent who live more than 30 minutes from a secondary school

Per cent of population working in, or with experience in, each of the industrial sectors of the economy (such as agriculture, manufacturing, tourism, retail sales, etc.)

Per cent of population living within 15 minutes of public transport (bus, train, boat, etc.)

Number of new business starts in the past 12 months, calculated on a per capita basis

Per cent of new entrepreneurs who grew up on this locality

Potential indicators of the desired OUTCOMES of the sustainable livelihoods of individuals within urban or rural communities or regions:

Life expectancy at birth, for males and females

Population change, tabulated for specific age groups and by gender (some rural communities / regions wish to stop population decline while other communities / regions wish to stabilize their populations at new, but lower, sustainable population level, while there is another group of rural communities / regions who wish to restrict their population growth from in-migrants);

Employment rate (per cent of individuals in a given age and gender group, who are employed – in wage work or self-employed or as an unpaid family worker);

Earned income per worker (1) (by age and gender)

Per cent of population living in poverty (using the measure of poverty suitable for each country, to determine urban – rural differences)

Per cent of population, for a given age group, that dies from a preventable cause (e.g., accidents, communicable disease, AIDS, etc.)