

## District Development Indicators

—Rajeev Parmar

### 1. Introduction

Decentralisation of administrative and planning machinery, devolution of power and formation of district governments are priority areas of the present government. Meeting the needs of good governance and bringing in district government data at the district level have assumed a great deal of importance. The basic strategy behind devolution of power and decentralisation of administrative units in the state is people-centered, responsibility-based and service-oriented. In Andhra Pradesh (AP) increase of 1347 sq. kms. in forest cover from 1997 till date, fall in percentage of people below poverty line to 15.77% in 1999-2000, total number of Self-Help groups (at least one in all villages and 75% of villages have 15-20 groups) rising to 457526 as on August 2003 are some of the outstanding results of the strategies followed in the state. According to the Employment Market Information statistics available, a total of 20,422 establishments exist in the state giving employment to 20,53,544 persons as on December 2002. Presently there are 33 e-Seva centres (with over 250 service counters spread over the twin cities of Hyderabad and Secunderabad in the state of Andhra Pradesh) serving over 30,000 citizens on an average per day. All service counters are facilitated with an electronic queuing system. It is a one-stop-shop for over 51 G2C and B2C services.

The proposed change in the system and the process warrants availability of data and information at district level to facilitate job of district functionaries and elected representatives. District Development Indicators (DDIs) should contain important statistical data for all twenty three districts in AP. This working paper provides a framework for selecting and formulating DDIs. Keeping in view this objective, the data for all the districts in AP has been analysed for this exercise. It is hoped this working paper would be useful for district administrators, planners, elected representatives and researchers at every level.

### Transition in Economic Development

As an economy develops, so do its structural bases of national /district competitiveness. At low levels of development, economic growth is determined by the mobilisation of primary factors of production: land, primary commodities, and unskilled labour.

Year	Primary Sector	Secondary Sector	Tertiary Sector
1993-94	36	22	42
1994-95	33	24	43
1995-96	33	24	43
1996-97	33	23	44
1997-98	29	25	46
1998-99	32	24	45
1999-00	30	23	47
2000-01	31	22	46
2001-02	30	22	47

Source : Directorate of Economics & Statistics

Real economic growth also facilitates the fight against inequality and poverty, because people are always more ready to share part of an increasing income than to absorb an absolute reduction in a stagnant income. Growth is clearly not sufficient for all these things to happen, but it is certainly a necessary precondition (Fortin, 1999).

The transition is quite visible for AP, as primary sector contribution has gone down, secondary sector shows no variation, and as per the fast development in services sector, figures have shown a rise. According to NASSCOM (National Association of

Software and Service Companies) Hyderabad has achieved highest growth rate of 323% in IT enabled services in 2001-2002.

### **What are indicators?**

Indicators are measurements that tell us whether progress is being made in achieving our goals. They essentially describe the performance dimension key in measuring performance.

### **Why have Indicators?**

There is already a package of internationally accepted key economic indicators which are widely understood, and used to monitor how the economy is performing. These include growth in the economy, rate of inflation, level of interest rates, balance of payments, public sector borrowing and debt. The Government uses them in making its economic policy decisions. They are also widely reported in the media and are recognised by the public, who understand what levels of, or trends in, these indicators mean in terms of the performance of the economy.

### **Selection of the indicators**

A good indicator should satisfy a number of criteria. It should be scientifically sound and technically robust, easily understood, sensitive to the change that it is intended to represent, measurable and capable of being updated regularly. Ideally, we also need indicators which we can use now to report on progress, which means information must be available already, or can readily be collected. The selected indicators should give a broad overview of whether we are achieving a 'better quality of life for everyone, now and for future generations to come'. They should also cover the three pillars of sustainable development, namely social progress, economic growth and environmental protection, including people's everyday concerns like health, jobs, crime, air quality, traffic, housing, educational achievement, wildlife and economic prosperity.

### **Why Development Indicators System?**

An indicator system understands the linkages between economic strength and better quality of life. By deconstructing the components of district growth into discrete measurements, we can articulate the main drivers of economic progress, which in turn, reveal the necessary preconditions for a rising standard of living. The indicator system also serves as a tool for decision makers in government and sectors like industry, agriculture, etc. It identifies both problems and opportunities for policymakers and business leaders, and indicates possible initiatives for improvement. Used consistently over time, indicators can help track changes and trends in economic performance, thereby revealing where policy might best be employed to spur ongoing improvements in districts' quality of life.

Some sample based data (for example, employment data from ASI) is less reliable for small districts, especially when it is further disaggregated by sector of employment or ethnicity of employees. Other data, such as GDP, is simply not available below the sub-regional level. In these circumstances, smaller areas may still find regional or sub-regional data useful to provide contextual information. The indicators themselves also vary in reliability because of the way in which some of the data is estimated (for example, GDP at subregional level) and so require careful interpretation.

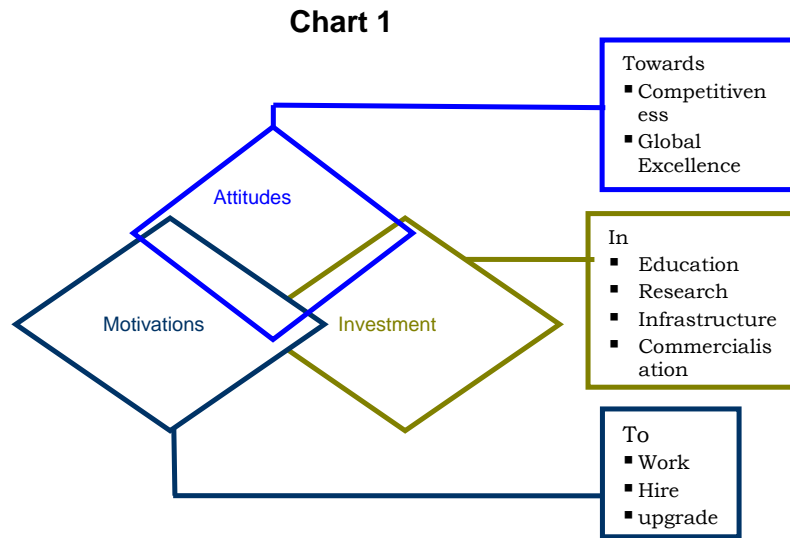
### **District Development Indicators (DDIs)**

A district's ability to increase its prosperity is the function of many factors including its macroeconomic environment, its microeconomic foundations for business and individual

success and its social and environmental health. The capacity for innovation and upgrading should be the core component of our indicator system. It should represent an *integrated* system of the following three elements:

- **Attitudes** towards competitiveness, growth and relative global excellence;
- **Investments** in education, research and development and commercialisation;
- **Motivations** for hiring, working and upgrading.

This gives the following AIM Model (Chart 1).



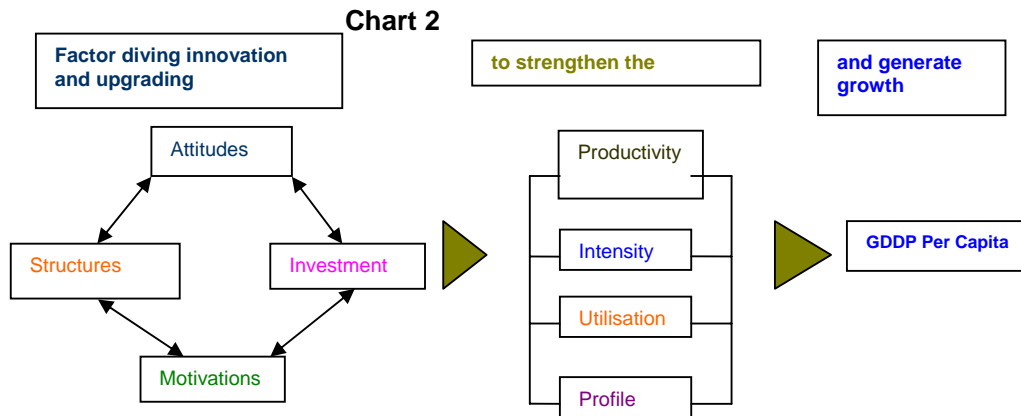
Although the presence of each one of these elements in a region is essential for building a district's capacity for innovation and upgrading, it is their ongoing interaction that ensures the district's ability to sustain economic prosperity. The key to close or narrow down the prosperity gap is to improve productivity. Four elements to drive the district growth or productivity are:

**Profile** – the proportion of total population who are contributing to its economic performance;

**Utilisation** – the proportion of working population who is actually employed;

**Intensity** – the amount of time those who do work are actually working;

**Productivity** – the success in translating working hours into products and services of value to people in district and around the state/country. The high correlation of productivity with urbanisation, wages around the world shows that it matters a lot in promoting growth in a region. Only productivity can grow indefinitely. Through continuous innovation and upgrading we can generate more output from the available resources. Raising productivity to reduce the prosperity gap – the ability of the people, firms and government to create value from our labour, intellectual, physical and natural resources. Increasing productivity does not mean we should all work longer hours for less money. In fact, it means the opposite. We should be creating higher value in our economy than ever before finding smarter ways for individuals to work. The following Chart 2 defines this more clearly:



Gross Value Added (GVA) is used in the estimation of Gross State Domestic Product (GSDP). GSDP is a key indicator of the state of the whole economy; similarly, Gross District Domestic Product (GDDP) indicates the overall health of the district, districts contribution to GSDP can also be used as a proxy to measure district growth.

### Goals to be considered while formulating DDIs

#### A. Sustainable Development

The Government intends that a set of DDIs in tune with sustainable development framework can help policymakers and people to understand what sustainable development means. They should also help businesses and individuals to understand how their own actions might contribute to a more sustainable future.

#### What is Sustainable Development?

Opportunities for change set out four broad objectives on which the Government's vision of sustainable development is based. These are:

- Maintenance of high and stable levels of economic growth and employment;
- Social progress which recognises the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources.

Achieving sustainable development means addressing all of these objectives equally, both for present and future generations.

#### What is a Sustainable Economy?

To deliver a more sustainable economy we need:

- to do more with less: making better use of resources(improving resource efficiency);
- a stable and competitive economy;
- to develop skills and reward work;
- goods and services which meet consumers' needs and are produced, and can be used, ever more efficiently;
- the Government, producers and consumers working together to achieve long term change.

### **Building Sustainable Communities**

We need to build sustainable communities in our cities, towns and rural areas by:

- strengthening regional and local economies;
- meeting people's social needs: promoting better health, housing and access to services and recreation;
- improving local surroundings: revitalising town centres, tackling degraded urban environments, and ensuring that development respects the character of our countryside;
- reducing crime and the fear of crime;
- addressing problems of poverty and social exclusion in the most deprived communities;
- making it easier for people to get involved in their communities; and
- coordinating policies to bring these objectives together.

### **Why measure Sustainable Development?**

Societies measure what they care about. Measurement helps decision-makers and the public define social goals, link them to clear objectives and targets, and assess progress toward meeting those targets. It provides an empirical and numerical basis for evaluating performance, for calculating the impact of our activities on the environment and society, and for connecting past and present activities to attain future goals. Measuring sustainable development—just as we currently measure economic production—makes it possible for social and environmental goals to become part of mainstream political and economic discourse.

The principles of sustainable development underpin all Government policies and in particular those on the economy, health, education, welfare, employment, social exclusion, transport, agriculture and the environment. Key indicators are used or being developed in each of these specific areas. The purpose of the DDIs as a set of sustainable development indicators is to complement those more specific indicators by presenting a balanced set of measures which will allow sustainable development to be assessed.

Some of the indicators proposed here are already among the key measures to be used in these other areas, but different indicators may be more appropriate for different purposes. For example, the sustainable development indicator covering health will illustrate the highest level objectives of health policy, i.e., promoting better health and longer life for all the population. But additional, more detailed, indicators on reducing specific causes of ill health or premature death, etc., will figure in the health strategy.

### **B. Millennium Development Goals**

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria, and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

### C. Vision 2020

As per the vision, the Government is pursuing specific strategies to remove disparities between different categories of its people and between different regions of the State. The government, therefore, looks to the people to become its partners in progress, striving together to achieve the level of development that Vision 2020 stands for.

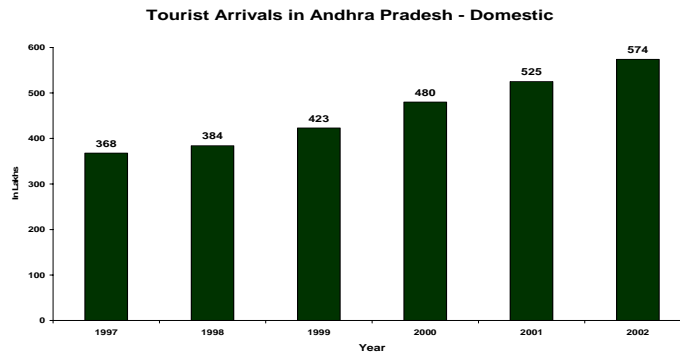
Drivers of Growth for each sectors discussed in earlier stages of this paper are very clearly defined in the vision.

Few drivers of growth/lead sector for districts in industrial sector are given below. The lead sector of a district economy is the sector which provides the large part of output and employment and contributes more than other sectors.

**Cement:** Adilabad, Cuddapah, Krishna, Karimnagar, Nalgonda, Kurnool, Guntur, Vishakapatnam.

**Sugar:** Vijayanagaram, West Godavari, Nizamabad, Visakhapatnam, East Godavari, Chittoor, Krishna, Srikakulam and Medak.

**Textile:** Chittoor, Anantapur, Kurnool, Ranga Reddy, Adilabad, Warangal, East and West Godavari.



**Tourism:** Hyderabad, Vishakapatnam, Vijayawada, Ananthapur, Nellore, Warangal, Chittoor

**Jute:** Vijayanagaram, Vishakapatnam, Srikakulam, Guntur and West Godavari.

**Major and medium scale industries:** Hyderabad, Vishakapatnam.

**Handicrafts Industries:** Karimnagar, Warangal, Srikakulam, Chittoor, Krishna.

The various measures taken by the Government are reflected in the rise in investment from Rs.4.35 crores in 1990-94 to Rs.1048 crores in 2000-02 in this sector. Similarly, drivers of growth in other sectors can be identified for each district.

**D. Agenda 21** is a statement of willingness by countries to strive for a form of development that recognises the essential links between economic growth, social equity and environmental protection.

### Classification of DDIs and position of Andhra Pradesh

DDIs can be classified into the following categories:

### **Economic growth**

Economic growth leads to higher living standards and greater prosperity for individuals, generally improving the quality of life. The measure for district overall growth is GDDP, and further showing the improvement in quality of life is GDDP per capita.

### **Social investment**

Social investment constitutes investment in public assets like transport, hospitals, schools, water supply, sewerage and waste disposal services, etc. Sustainable development means living off our income, not eroding our capital base, so that we are not storing up problems for future generations. Especially important is investment in "public" assets which benefits everyone. This indicator measures investment in public assets which means investment which benefits everyone. Net investment (after taking account of worn or obsolete assets) and capital stock is equally important, and the indicator will be developed to include these measures if reliable estimates can be made.

When assessing sustainability issues, this indicator should be considered alongside other indicators; for example, investment in education should be assessed together with changes in education standards; investment in health should be assessed with changes in people's health; investment in rail and roads needs to be considered together with changes in traffic volumes, and investment in sewage treatment needs to be considered with changes in river quality.

### **Employment: People of working age who are in work**

Giving people opportunities for work is a key objective underlying sustainable development. Employment provides income for individuals enabling them to improve living standards and meet their social needs, and makes the best use of human resources. Levels of employment are closely related to economic activity which is covered by the GSDP/GDDP indicator. To minimise unemployment in the longer term, people need the right skills to do the jobs available and this requires investment in education and training.

### **Human Development Indicators**

The Human Development Index is formulated for 15 principal states. HDI Ranking of 15 Principal States developed by me at Centre for Good Governance is shown in the table below. The methodology followed is same as followed in the United Nations Development Programme (UNDP), Human Development Report 2003. The index details will be provided in next assignment. This is based on the three following core indicators:

- i. **Per capita income of the states**
- ii. **Education:** Comprising of adult literacy rate and gross enrolment rate
- iii. **Health:** Comprises of life expectancy at birth indicator

Ensuring a better quality of life for everyone is central to sustainable development. A priority for most people is enjoying a long and healthy life. The indicator shows how life expectancy has been changing as a result of improvements in overall health and in health care systems. Socio-economic factors have a strong influence on people's health and expectation of long life. Expected years of healthy life are also influenced by factors such as a good diet, non-smoking and regular exercise and improvements in health will depend to some degree on people adopting healthier lifestyles.

Kerala tops the index and Bihar is at the lowest rank among the 15 major states. The low rank of Andhra Pradesh shows that we need to monitor and improve our position with respect to adult literacy rate, gross enrollment in school going age group and life expectancy at birth.

### Housing quality

Housing is another key component of a decent quality of life. 'Housing for all' strategy should focus on providing housing to poor and socially backward people in the district.

State	Extent of Land Acquired (Acres)	Number of Beneficiaries
Andhra Pradesh	34,289.59	10,36,969

The table gives overall number of house sites distributed to scheduled castes, scheduled tribes, backward classes and economically backward classes in the state (as on 31.3.2001). Further, the quality of housing do needs serious consideration as it causes harm to health, and is often linked with other social problems.

### Climate change: Emissions of greenhouse gases

Climate change is recognised as one of the greatest environmental threats facing the world today. All countries have acknowledged the need to reduce greenhouse gases like carbon dioxide, which are causing global temperatures to rise.

Carbon dioxide emissions are mainly driven by energy consumption. For business and the public sector, which account for most of the total emissions, there is considerable scope to improve energy efficiency cost effectively, which will also cut their costs. Households can help to reduce emissions and save money by being more energy efficient, by insulating their homes and using more energy efficient appliances.

### Air pollution: Days of air pollution

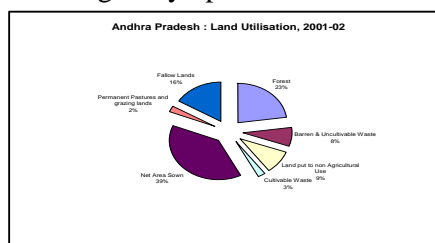
A key sustainable development objective is to control air pollution in order to reduce the risks of harm to human health, and to the natural environment.

### Transport: Road traffic

The key sustainable development objective is to strike the right balance between the ability of transport to assist economic progress and to meet people's needs for access, while protecting the environment. In the past traffic growth has been highly associated with economic growth, but now the resulting volume of traffic and congestion is at the heart of many of the problems we face. The total number of transport vehicles on road in the state has recorded a growth rate of 11.42% during 2001-02 over 2000-01 as on 31.3.2002.

### Wildlife: Population of wild birds

We value wildlife for its own sake and because it is an integral part of our surroundings and our quality of life. Birds are regarded as good indicators of wildlife and the health of the wider environment. Birds are generally believed to be good indicators of the broad state of wildlife and the countryside, as they are wide-ranging in habitat distribution and tend to be at or near the top of the food chain. Birds are well studied and monitored and reasonably reliable estimates of their populations are available annually, so unlike many other species of animals and plants, a bird indicator can be regularly updated.



Source: Directorate of Economics & Statistics



### Land use: New homes built on previously developed land

Sustainable development means maximising the re-use of previously developed land in order to protect the countryside and also to encourage regeneration of towns and cities. Urban land use needs proper attention for the development of a district.

### Waste: Waste and waste disposal

Excessive production of waste may be a symptom of inefficient use of resources, and dealing with waste once it has been produced has an impact on the environment.

The level of waste can be used as a proxy for a measure of the efficient use of resources, but it does not give the full picture. The Government should consider ways of measuring the total resource consumption in the State and then in each district. Some of the links between DDIs is given in the adjoining Chart 3.

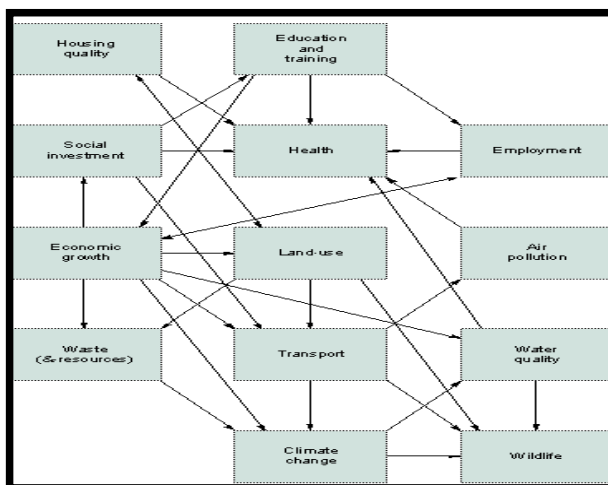


Chart 3

### Indicators of Good Governance

Indicators of good governance included in the Millennium Development Goals (MDGs) specify that the number of indicators should be small. As any single objective indicator tends to measure only a very small part of the institutional and governance environment, a large number of indicators is needed for a fair and accurate depiction. A Good Governance indicator incorporates Voice & Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. Regulation & Promotion of Entry (for example, Single Window System), Tax Revenue (Administrative Capacity), Budgetary Volatility- theory and evidence indicate that volatile and unpredictable government policy reduces private investment and Low Debt burden (Proper Planning, Volatile and unpredictable government revenue collection policy can discourage adequate long run planning).

The only way to attain reasonable accuracy, while maintaining objectivity and keeping the number of indicators low, is to aggregate indicators into smaller number of indices. For example, trade taxes as a share of all government revenues is sometimes used as a proxy for administrative capacity, but it also may be affected by trade policy<sup>1</sup>.

### Examples of DDIs with definition

Definitions of important DDIs are as follows:

**Density:** is pressure of population on land and is calculated by dividing number of people in a district by geographical area of the district.

<sup>1</sup> Higher import tariffs will increase trade tax revenues for a given level of imports, but may reduce revenues if they lower import volumes sufficiently.

**Land Use:**

- i. Total Area Reported means the total physical area of district. It includes cultivated area (net area sown+current fallow) culturable waste, unculturable land and forest area).
- ii. Forest Area means the area of any land or classed or administered as Forest under any legal encashment dealing with forests. Any cultivated area which may exist within such forest is excluded and shown under the heading cultivated area.
- iii. Total cropped area means the sum total of area sown during given year including Kharif and Rabi crop.
- iv. Cultivated Area means the land currently being used for agriculture purposes, included land under crops, orchard as well as current fallows. It is the area net sown plus current fallow.
- v. Current Fallow means the part of the cultivated area which has not been used for cropping during the year under reference but for which the total vacant period does not exceed three cropping seasons. The land remaining vacant to more than three successive seasons should be shown under the head "Cultivable Waste".
- vi. Net Area Sown means the area which has been sown at least once in a year. It will include area under crops, fruits and vegetables, etc.

Per capita cropped hectare- The cropped area of the district is divided by total population of the district.

Per capita cultivated hectare- The cultivated area of the district is divided by total population of the district.

**Fertiliser Use:** There are different types of fertilisers which have varying potencies. Application of fertiliser is measured in term of Nutrient Tons (N. Tons). Consumption of fertiliser measured in N. Tons is divided by the cropped area of the district.

**Agriculture Production:** Per capita agriculture production for major crops like Wheat, Rice, Cotton and Sugarcane has been computed on the basis of actual production by these crops in the district divided by the total population of the district.

**Literacy Rate:** The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement related to their everyday life. Literacy Ratio is defined as literate population of ten years and above divided by total population of ten years and above expressed in percentage.

**Education:** Enrollment Rate- Total enrollment (irrespective of age) in Government Primary School of the district (class I to V) is divided by population of children in age group 6-10 years;

Enrollment Rate- Total enrollment (irrespective of age) in Government Upper Primary School of the district (class VI to VII) is divided by population of children in age group 11-12 years;

Enrollment Rate- Total enrollment (irrespective of age) in Government Secondary School of the district (class VIII to X) is divided by population of children in age group 13-15 years.

Student per school - Total student population in the district is divided by number of schools in the district;

Student per teacher- Total student population in the district is divided by number of teachers in the district;

Teacher per school- Total number of teachers in the district is divided by number of schools.

**Health:** Few indicators are doctors for ten thousand, nurses per thousand, paramedics per thousand (paramedics comprise of LHVS, radiographers, health technicians, dispensers/persons dressers, x-ray technicians, x-ray assistants, O.T. technicians, O.T. assistants, laboratory technicians, laboratory assistants, midwives and *dai*-s), bed in hospital per ten thousand, etc.

**Transport and Communication:** The indicators are *pucca* road per 100 Sq. Kms. *katcha* road per 100 Sq. Kms, total motor vehicles (Car, Jeep, Station Wagons) registered per thousand households, total two wheelers registered in the district, etc.

Presently DDIs in AP cover the following listed areas/sectors given below.

**Table 1**

<b>DDIs in AP</b>	
<b>Sl. No</b>	<b>Name of the Indicator</b>
<b>Population</b>	
1	Area, Population and Density of Population
2	Rural and Urban Population
3	Villages classified according to size of Population
4	Male and Female Population
5	Distribution of Population by Workers, Marginal Workers and Non-Workers
6	Distribution of Population of workers engaged in Agricultural Sectors
7	Distribution of Population of workers engaged in Non-Agricultural Sectors
8	No. of Houses occupied and Households
9	Literate Population
10	Houseless and Institutional Population
11	Scheduled Caste and Scheduled Tribe Population
12	Distribution of Scheduled Caste Population by Workers, Marginal Workers and Non-Workers
13	Distribution of Scheduled Tribe Population by Workers, Marginal Workers and Non-Workers
14	Religion-wise population
15	Scheduled Caste Literate Population
16	Scheduled Tribe Literate Population
<b>Vital Statistics and Public Health</b>	
17	Government Medical Facilities (Allopathic)
18	Medical Facilities – Ayurveda
19	Medical Facilities – Unani
20	Medical Facilities – Homoeopathy
<b>Climate</b>	
21	Rainfall, Season-wise
22	Area under Food and Non-Food Crops
23	Average Annual Rainfall
24	Maximum and Minimum Temperature at Different Stations
<b>Agriculture</b>	
25	Land Utilisation

26	Area under Food and Non-Food Crops
27	Cereals: Area and Out-Turn
28	Pulses: Area and Out-Turn
29	Oil Seeds: Area and Out-Turn
30	Other Crops: Area and Out-Turn
31	Percentage of Area under Principal Crops to Total Area Sown
32	Yield per Hectare of Principal Crops
33	Average Wholesale prices of Certain Commodities during Peak Marketing Period
34	Agricultural Machinery and Implements
35	Number of Operational Holdings and Size Class
36	Percentage Distribution of Number of Holdings and Area Operated according to Size Class
<b>Irrigation</b>	
37	Area Irrigated by Sources
38	Area of Crops Irrigated
<b>Livestock and Veterinary Services</b>	
39	Livestock Development Services
40	Livestock and Poultry Population
41	Marine Fish Production
42	Inland Fish Production
<b>Industries</b>	
43	Working of Factories registered under sections 2m (i) and 2m(ii)
<b>Mining</b>	
44	Production of Principal Minerals
<b>Fuel and Power</b>	
45	Power Consumption, Category-wise
46	No. of Services and Connected Load, Category-wise
<b>Transport and Communications</b>	
47	National Highways, P.W.D. (R&B) and Panchayati Roads
48	Number of Post Offices, Telegraph Offices, Telephone Exchanges, Public Telephones and Telephone Connections
<b>Public Finance</b>	
49	Excise: Demand, Collection and Balance
50	Land Revenue: Demand, Collection and Balance
<b>Banks</b>	
51	Distribution of Commercial Banks and average population per Bank
52	Classification of Outstanding Credits and Deposits of all Scheduled Commercial Banks
<b>Education</b>	
53	Pre-primary Schools
54	Primary Schools
55	Upper Primary Schools
56	High Schools
57	Higher Secondary Schools
58	Special Schools
59	Oriental Schools (Hindi Vidyalayas and Sanskrit Pathasalas)
60	Reformatory Schools
61	Junior Colleges
62	Government Hostels for Scheduled Caste Students
63	Government Hostels for Scheduled Tribes and Ashram Schools
<b>Cooperation</b>	
64	Working of Primary Agricultural Credit Societies including Farmer Service Societies

65	Long Term Loans Disbursed by Andhra Pradesh State Co-operative Bank
<b>Judicial</b>	
66	Number and Description of Registered Documents and Value of Property transferred
<b>Police and Crime</b>	
67	General Management of Police Force
68	Incidence of Major Cognisable Crimes (IPC) under different heads
<b>Miscellaneous</b>	
69	Number of Printing Presses at work, Newspapers, Periodicals and Books Registered
70	Incidents of Fire Accidents
71	Backward Classes and Economically Backward Classes
72	Number of Public Libraries
73	Public Distribution System

Source: Statistical Abstract 2002, DES, Government of Andhra Pradesh

### **DDIs in tune with Vision 2020, WDR, MDGs for the Districts**

Though all the areas are covered by the list given above, the focus needs to be on increasing efficiency (for example, energy efficiency) and productivity and to make the growth sustainable in the districts. In AP, productivity growth during 1990s seems to be lower in all sectors, and not limited to particular growth engines or certain products. In West Bengal and Punjab, the two states with good agricultural performance, labor productivity growth is 2.3% compared to only 1% in AP. Similarly, total factor productivity (TFP) growth in industry is only 0.3% in AP compared to 2.0% average growth rate in Gujarat, Karnataka, Maharashtra, and Tamil Nadu. In services, AP's labour productivity growth is same or marginally higher than the corresponding number for the four states (World Bank Study).

Few areas of concern and where reporting is not appropriate are:

- Environmental and sustainable development concerns – CO<sub>2</sub> emissions per capita, GDDP per unit of energy use, population with sustainable access to an improved water source (Rural & Urban), urban population with access to sanitation;
- Land use for urban areas needs proper attention;
- People living with HIV/AIDS (adults 15-49, women 15-49 and children 0-14), malaria and other diseases;
- Commitment to Education and health: public expenditure on education (pre-primary, secondary and tertiary), health;
- For measuring good governance at state or district level (if data is available) we should capture the debt burden, tax revenue and the level of corruption.

### **Road Ahead**

All Districts should try to enhance and monitor progress on the basis of the following economic development objectives from now onwards. Strategic Economic Development Objectives to be fulfilled from the DDIs in each of the district are as below:

#### **Objective 1 - Image of the District**

To enhance the image of the District by building on existing unique assets, strengths, opportunities in technology, manufacturing, commerce, independent retailing, tourism, arts, agriculture, environment, etc.

Priority 1 - Develop partnerships and initiatives to coordinate marketing and promotional activity across and between all sectors within the District.

Priority 2 – Promote the image of the district as a premier investment, business and tourist location.

Priority 3 - Develop the theme of excellence across all sectors in our products, activities and events.

Priority 4 - Develop activities on information gathering, lobbying and advocacy to ensure the District is well placed to maximise its profile and opportunities at local, regional and national levels.

### **Objective 2 – Infrastructure**

To encourage the sustainable development of the District’s infrastructure, meeting the communications, transport, land development, housing and environmental needs of the whole community.

Priority 1 – Ensure that there is sufficient supply of land, premises and housing, both rural and urban to meet the needs of inward investors, new and existing businesses, whilst safeguarding the environment.

Priority 2 – Promote the development of an integrated transport strategy for the District recognising the special needs of rural areas.

Priority 3 - Develop an information and communications technology strategy for the District and building of unique technological, industrial and educational strengths in the area.

Priority 4 – Continue to improve the quality of District facilities, centres and business areas to create a safe and attractive environment for those living, working and visiting the area.

Priority 5 – Develop the role of the District’s market towns and temple towns as hubs for service delivery to the rural hinterlands.

### **Objective 3 – Business Support**

To encourage innovation, growth, competitiveness and sustainability of all businesses within the District, to diversity and strengthen its economic base.

Priority 1 – Develop and use methodologies like ‘Regional Innovation Strategy’ and the technological strengths to promote research, development and knowledge transfer to support new and existing innovation led businesses and to aid the development of a high-tech cluster. (‘Regional Innovation Strategies’ are EU-supported programmes to enlarge the innovative capacity of regions, primarily through local networking, collaboration and action-oriented research. They develop a regional consensus and a strategy to improve business competitiveness through innovation.)

Priority 2 - Support identified growth sectors/engines and the diversification of business in the local economy.

Priority 3 – Work with partners to provide a single access point (like Single Window System) to business advice, support and information, and to encourage start up of new businesses. User friendly guide for Industrial clearances is in progress to help potential investors for the same.

Priority 4 – Encourage and support the development of education and business partnerships to encourage young people to stay, or return to the area.

Priority 5 – Recognise the special needs of rural businesses, particularly agriculture and work with these businesses to help them grow and diversify.

**Objective 4 – People**

To maximise the opportunities for all people in the districts to achieve their full academic, vocational, creative and personal potential.

Priority 1 – Seek to understand the current and future needs of local employers and communicate these to the local workforce to balance supply and demand of skills and support economic growth.

Priority 2 – Work with partners to promote a culture of lifelong learning and skills development within the districts.

Priority 3 – Encourage local employers to develop links with local communities and schools and recruit locally.

Priority 4 – Identify areas of disadvantage, or where barriers to access to employment exist, and develop initiatives to meet the special needs of these areas.

Priority 5 – Support community development initiatives to increase the capacity of stakeholders, the voluntary and community sectors and local residents to deliver activities as per the needs of the communities.

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## Appendix 1

### Selected Variables from World Development Indicators

#### Index of indicators

##### General

Population, Density, Commodity prices and price indexes, Per Capita Income, per PPP dollar GDP. Consumption of Fixed Capital, Annual growth of household consumption,

As share of GDP, as % of GDP, Distribution of income or consumption, household, annual growth of, as share of GDP, per capita, annual growth of, total, of fixed capital, Purchasing power parity, Gini index, Income, distribution.

Gross capital formation, annual growth of, as share of GDP, fixed, annual growth of Gross domestic investment—Gross capital formation, Gross domestic product (GDP) annual growth of, implicit deflator, Prices, per capita growth, total, Gross domestic savings as share of GDP, Gross foreign direct investment, Investment, Gross national income (GNI), per capita, in 1999 PPP dollars, in 1999 U.S. dollars, rank, in 1999 PPP dollars, in 1999 U.S. dollars, total, in 1999 PPP dollars, in 1999 U.S. dollars, Gross national product (GNP), Gross national income (GNI), Credit, domestic from banking sector -to private sector.

Government, central debt - As share of GDP, interest as share of current revenue, interest payments as share of total expenditure, expenditures, As share of GDP, by economic type, military financing, domestic, from abroad, overall deficit, revenues, as share of GDP revenues, current, non tax, by source.

Taxes and tax policies - Duties, on exports ,on imports ,goods and service taxes, domestic , highest marginal tax rate, corporate , individual , income, profit, and capital gains taxes ,as share of total revenue ,as share of total taxes ,international trade taxes ,other taxes ,social security taxes ,tax revenue as share of GDP ,Tariffs.

Tourism, international -expenditures, in bound tourists, by country, outbound tourists, by country receipts.

##### Agriculture

Cereal area under production, exports, as share of total exports.

Imports, as share of total imports, yield, employment, fertiliser consumption, freshwater withdrawals as share of total land, arable, as share of land area, arable, per capita, irrigated, as share of cropland, permanent cropland as share of land area, machinery- tractors per 100 hectares of arable land, tractors per 1,000 agricultural workers, producer prices, production indexes, livestock-value added, annual growth of as share of GDP per worker.

##### Trade, Aid

Aid dependency ratios, per capita, total, net concessional flows -from international financial institutions, from United Nations agencies, total. Net official development assistance and official aid by DAC members, as share of GNI of donor country, average annual change in volume, by type, from major donors, by recipient, per capita of donor country, total, untied aid.

Balance of payments- Current account balance, Exports and imports of goods and services, Gross international reserves, Net current transfers, Net income.

Current account balance -Balance of payments, DAC (Development Assistance Committee)—See Aid, Debt, external debt service, total long term, present value of, private non guaranteed, public and publicly guaranteed, debt service, IBRD loans and IDA credits, IMF credit use of total short term total Exchange rates -Arrangements official, local currency units to U.S. dollar ratio of official to parallel real effective, Purchasing power parity.

Exports & Imports -Arms commercial services structure of total travel duties goods and services annual growth of as share of GDP total merchandise by high-income OECD countries, by product by regional trade blocs, direction of trade high technology structure of total value, Imports

Financial flows, net -From DAC members, from multilateral institutions, official development assistance and official aid grants from NGOs, other official flows, private total, Foreign direct investment, net—Investment

### **Infrastructure**

Air transport - Aircraft departures, Air freight, Passengers carried, Telephone mainlines in largest city Energy -Commercial use, annual growth of GDP per unit of per capita, total depletion, as share of GDP emissions, imports, net, investment in infrastructure, production, commercial traditional fuel use as share of total energy use.

### **Environment**

Sulfur dioxide emissions—Pollution Surface area, Land area, Suspended particulate matter—Pollution.

Biological diversity – Species, Threatened/endangered species, Birds –species, threatened species. Carbon dioxide – Damage, Emissions - per capita, Per PPP dollar of GDP. Cities - Air pollution, Deforestation.

### **Human Development**

Crude Birth rate, Births attended by skilled health staff, Low Birth weight. Contraceptive prevalence rate Crude Death rate, Mortality rate

Education - Attainment, Expected years of schooling, male and female Share of cohort reaching grade 5, male and female, Coefficient of efficiency, Enrollment ratio –gross, net, Net primary, male and female, Net intake rate, grade, Public spending on Education, As share of GDP, As share of GNI, Per student, as share of per capita GNI, Per student, by level, Teachers' compensation, Pupil-teacher ratio, primary level, Repeaters, by level Teachers, primary, with required academic qualifications, Unemployment by level of educational attainment.

Access to essential drugs, average length of hospital stay, hospital beds per 1,000 people, immunisation, child, inpatient admission rate, outpatient visits per capita, physicians per 1,000 people, pregnant women, receiving prenatal care, reproductive, births attended by skilled health staff, contraceptive prevalence rate, fertility rate, adolescent, total, low-birth weight babies, maternal mortality ratio, women at risk of unwanted pregnancy, tetanus vaccinations, tuberculosis, DOTS detection rate, treatment success rate.

Health expenditure - Local, per capita, in current U.S. dollars, in PPP dollars, private, as share of GDP, public, as share of GDP, total, as share of GDP.

Health risks - Anemia, prevalence of, HIV, prevalence of, iodized salt, consumption, malnutrition, child, smoking, prevalence of, tuberculosis, incidence of, years lived in poor health.

HIV prevalence -Adults, male and female, ages, Hospital beds—See Health, care, Housing, selected cities, price to income ratio,

Illiteracy rate - Adult, male and female, literacy gender parity index, total, for, other economies, youth, male and female.

Immunisation -Child, DPT, share of children under 12 months, measles, share, of children under 12 months.

### **Country risk ratings**

Composite ICRG risk ratings, Euro money country, creditworthiness ratings, Institutional Investor credit ratings, Moody's sovereign long-term debt ratings, Standard & Poor's sovereign long-term debt ratings.

### **Defence**

Armed forces personnel, as share of labor force, total arms trade, exports, imports, military expenditures, as share of central government expenditure, as share of GNI, Electricity, consumption per capita, production, sources of, total transmission and distribution losses.

### **Employment**

Agriculture, male and female, industry, male and female, informal sector, urban male and female, total services, male and female

Unemployment - Long term, as share of total, male and female, total, rate, by level of educational attainment, male and female, total.

### **Environment**

Forest area as share of total land area, total deforestation, annual average.

Net Depletion, Freshwater annual withdrawals as share of total resources for agriculture for domestic use for industry, total flows, internal, from other countries, resources per capita, Water, access to an improved source, Fuel prices , Threatened species—Biological diversity.

Pollution - Carbon dioxide damage as share of GDP, carbon dioxide emissions, total, nitrogen dioxide, selected cities, organic, water pollutants, emissions of, by industry, per day, per worker, sulphur dioxide, selected cities, suspended particulates, selected cities.

### **Urban environment**

Access to improved sanitation facilities, population, as share of total, in largest city, in urban agglomerations of more than one million, total, selected cities, households with access to services, electricity, potable water, sewage connections, telephone, income, average, household ratio to house price, population, travel time to work , wastewater treated, work trips by public transportation.

### **Industry, value added**

Annual growth of, as share of GDP,

Inflation, Institutional Investor credit ratings, Integration, global economic, indicators of, Interest payments, Manufacturing - Labour cost per worker, structure of, value added, annual, growth of, as share of GDP, per worker.

### **Population**

Age dependency ratio, annual growth of, by age, group, labor force, total, density, rural , total, female, as share of total, foreign, in OECD countries, projected, by 2015, rural, annual growth of, share of total, total, urban, as share of total, in largest city, in selected cities, in urban, agglomerations, total, working age (15–64), See also Migration.

**Poverty**

International poverty line, population below \$1 a day, population, below \$2 a day, poverty gap at \$1 a day, poverty gap at \$2 a day, national poverty line, population below, rural, urban, social indicators of, body mass, index.

**Prices**

Commodity prices and price indexes, consumer, annual growth of, food, annual growth of, fuel, GDP implicit deflator.

**Productivity**

Agriculture, value added per worker, wage per worker, minimum, average hours worked per week, labour cost per worker, manufacturing, value added per worker, manufacturing.

**Stock markets**

Listed domestic companies, market capitalisation, as share of GDP, total, S&P/IFC Investable index, turnover ratio, value traded.

**Information and communications**

Technology—Computers, personal; Exports, merchandise, high technology; Fax machines; Internet; Research and development; Science and engineering;

Telecommunications, Telecommunications, cost of call to U.S., investment in infrastructure, outgoing traffic, Telephones, cost of local call, mainlines, per employee, per 1,000 people, in largest city, national, revenue per line, waiting list, waiting time in years, mobile, television, cable subscribers per 1,000 people, sets per 1,000 people, Information and communications technology expenditures.

**International Trade**

Tariffs, all products, international peaks, share of lines with, simple mean tariff, specific tariffs, share of lines with, standard deviation, weighted mean tariff, manufactured goods, simple mean tariff, weighted mean tariff, primary products, simple mean tariff, weighted, mean tariff, taxes and tax policies, duties.

## Appendix 2

### Millennium Development Goals (MDGs)

#### Measuring Development Progress: A Working Set of Core Outcomes

Millennium Development Goals (MDGs)	
GOALS AND TARGETS	INDICATORS
<b>GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER</b>	
<b>Target 1:</b> Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	<ul style="list-style-type: none"> <li>○ Proportion of population below \$1 per day</li> <li>○ Poverty gap ratio [incidence x depth of poverty]</li> <li>○ Share of poorest quintile in national consumption</li> </ul>
<b>Target 2:</b> Halve, between 1990 and 2015, the proportion of people who suffer from hunger	<ul style="list-style-type: none"> <li>○ Prevalence of underweight children (under-five years of age)</li> <li>○ Proportion of population below minimum level of dietary energy consumption</li> </ul>
<b>GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION</b>	
<b>Target 3:</b> Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	<ul style="list-style-type: none"> <li>○ Net enrolment ratio in primary education</li> <li>○ Proportion of pupils starting grade 1 who reach grade 5</li> <li>○ Literacy rate of 15-24 year olds</li> </ul>
<b>GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN</b>	
<b>Target 4:</b> Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015	<ul style="list-style-type: none"> <li>○ Ratio of girls to boys in primary, secondary and tertiary education</li> <li>○ Ratio of literate females to males of 15-24 year olds</li> <li>○ Share of women in wage employment in the non-agricultural sector</li> <li>○ Proportion of seats held by women in national parliament</li> </ul>
<b>Goal 4: REDUCE CHILD MORTALITY</b>	
<b>Target 5:</b> Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	<ul style="list-style-type: none"> <li>○ Under-five mortality rate</li> <li>○ Infant mortality rate</li> <li>○ Proportion of 1 year old children immunised against measles</li> </ul>
<b>Goal 5: IMPROVE MATERNAL HEALTH</b>	
<b>Target 6:</b> Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	<ul style="list-style-type: none"> <li>○ Maternal mortality ratio</li> <li>○ Proportion of births attended by skilled health personnel</li> </ul>
<b>GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES</b>	
<b>Target 7:</b> Have halted by 2015, and begun to reverse, the spread of HIV/AIDS	<ul style="list-style-type: none"> <li>○ HIV prevalence among 15-24 year old pregnant women</li> <li>○ Contraceptive prevalence rate</li> <li>○ Number of children orphaned by HIV/AIDS</li> </ul>
<b>Target 8:</b> Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases	<ul style="list-style-type: none"> <li>○ Prevalence and death rates associated with malaria</li> <li>○ Proportion of population in malaria risk areas using effective malaria prevention and treatment measures</li> <li>○ Prevalence and death rates associated with TB</li> <li>○ Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)</li> </ul>

<b>GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY</b>	
<p><b>Target 9:</b> Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</p>	<ul style="list-style-type: none"> <li>○ Proportion of land area covered by forest</li> <li>○ Land area protected to maintain biological diversity</li> <li>○ GDP per unit of energy use (as proxy for energy efficiency)</li> <li>○ Carbon dioxide emissions (per capita)</li> <li>○ [Plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases]</li> </ul>
<p><b>Target 10:</b> Halve, by 2015, the proportion of people without sustainable access to safe drinking water</p>	<ul style="list-style-type: none"> <li>○ Proportion of population with sustainable access to an improved water source</li> </ul>
<p><b>Target 11:</b> By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers</p>	<ul style="list-style-type: none"> <li>○ Proportion of people with access to improved sanitation</li> <li>○ Proportion of people with access to secure tenure [Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers]</li> </ul>
<b>GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT*</b>	
<p><b>Target 12:</b> Develop further an open, rule-based, predictable, non-discriminatory trading and financial system</p> <p><b>Includes</b> a commitment to good governance, development, and poverty reduction – both nationally and internationally</p> <p><b>Target 13:</b> Address the Special Needs of the Least Developed Countries</p> <p><b>Includes:</b> tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction</p> <p><b>Target 14:</b> Address the Special Needs of landlocked countries and small island developing states</p> <p>(through Barbados Programme and 22nd General Assembly provisions)</p> <p><b>Target 15:</b> Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term</p>	<p><b>Some of the indicators listed below will be monitored separately for the Least Developed Countries (LDCs), Africa, landlocked countries and small island developing states.</b></p> <p><b><u>Official Development Assistance</u></b></p> <ul style="list-style-type: none"> <li>○ Net ODA as percentage of DAC donors' GNI [targets of 0.7 % in total and 0.15% for LDCs]</li> <li>○ Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water and sanitation)</li> <li>○ <b>Proportion</b> of ODA that is untied</li> <li>○ <b>Proportion</b> of ODA for environment in small island developing states</li> <li>○ Proportion of ODA for transport sector in landlocked countries</li> </ul> <p><b><u>Market Access</u></b></p> <ul style="list-style-type: none"> <li>○ Proportion of exports (by value and excluding arms) admitted free of duties and quotas</li> <li>○ Average tariffs and quotas on agricultural products and textiles and clothing</li> <li>○ Domestic and export agricultural subsidies in OECD countries</li> <li>○ Proportion of ODA provided to help build trade capacity</li> </ul> <p><b><u>Debt Sustainability</u></b></p> <ul style="list-style-type: none"> <li>○ Proportion of official bilateral HIPC debt cancelled</li> <li>○ <b>Debt</b> service as a percentage of exports of goods and services</li> <li>○ <b>Proportion</b> of ODA provided as debt relief</li> <li>○ <b>Number</b> of countries reaching HIPC decision and completion points</li> </ul>

<p><b>Target 16:</b> In cooperation with developing countries, develop and implement strategies for decent and productive work for youth</p>	<ul style="list-style-type: none"> <li>○ Unemployment rate of 15-24 year olds</li> </ul>
<p><b>Target 17:</b> In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries</p>	<ul style="list-style-type: none"> <li>○ Proportion of population with access to affordable essential drugs on a sustainable basis</li> </ul>
<p><b>Target 18:</b> In cooperation with the private sector, make available the benefits of new technologies, especially information and communications</p>	<ul style="list-style-type: none"> <li>○ <b>Telephone</b> lines per 1000 people</li> <li>○ <b>Personal</b> computers per 1000 people</li> </ul>

**Source:** United Nations

Note that the selection of indicators for Goals 7 and 8 is subject to further refinement