JSS ACADEMY OF HIGHER EDUCATION & RESEARCH
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SUSTAINABLE DEVELOPMENT GOALS

Education for Sustainable Development Goals

Education 2030

Teaching & Learning Objective Handbook

Education for Sustainable Development Goals

Teaching & Learning Objective Handbook

By 2030, ensure that all learners acquire knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non- violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.

Source: United Nations, 2015

PREFACE/ FOREWORD

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INTRODUCTION

The Sustainable Development Goals – an ambitious and universal agenda to transform our world
On 25 September 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development (UN, 2015). This new global framework to redirect humanity towards a sustainable path was developed following the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro, Brazil in June 2012, in a three-year process involving UN Member States, national surveys engaging millions of people and thousands of actors from all over the world.

At the core of the 2030 Agenda are 17 Sustainable Development Goals (SDGs). The universal, transformational, and inclusive SDGs describe major development challenges for humanity. The aim of the 17 SDGs is to secure a sustainable, peaceful, prosperous, and equitable life on earth for everyone now and in the future. The goals cover global challenges that are crucial for the survival of humanity. They set environmental limits and set critical thresholds for the use of natural resources. The goals recognize that ending poverty must go together with strategies that build economic development. They address a range of social needs including education, health, social protection, and job opportunities while tackling climate change and environmental protection. The SDGs address key systemic barriers to sustainable development such as inequality, unsustainable consumption patterns, weak institutional capacity, and environmental degradation.

For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and every human being across the world. Governments are expected to take ownership and establish national frameworks, policies, and measures for the implementation of the 2030 Agenda.

A key feature of the 2030 Agenda for Sustainable Development is its universality and indivisibility. It addresses all countries – from the Global South and the Global North – as target countries. All countries subscribing to the 2030 Agenda are to align their own development efforts with the aim of promoting prosperity while protecting the planet to achieve sustainable development. Thus, with respect to the SDGs, all countries can be considered as developing and all countries need to take urgent action.

The 17 Sustainable Development Goals (SDGs)

No Poverty – End poverty in all its forms everywhere

Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Good Health and Well-Being – Ensure healthy lives and promote well-being for all at all ages

Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Gender Equality – Achieve gender equality and empower all women and girls

Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all

Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable, and clean energy for all

Decent Work and Economic Growth – Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

Industry, Innovation, and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Reduced Inequalities – Reduce inequality within and among countries

Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable

Responsible Consumption and Production – Ensure sustainable consumption and production patterns

Climate Action – Take urgent action to combat climate change and its impacts

Life below Water – Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development

Source: http://www.un.org/sustainabledevelopment/sustainable- development-goals


1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
6 CLEAN WATER AND SANITATION
13 CLIMATE ACTION
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
15 LIFE ON LAND
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
8 DECENT WORK AND ECONOMIC GROWTH
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
5 GENDER EQUALITY
14 LIFE BELOW WATER
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
7 AFFORDABLE AND CLEAN ENERGY
17 PARTNERSHIPS FOR THE GOALS

SDG 1 – NO POVERTY

End poverty in all its forms everywhere

Teaching & Learning objectives for SDG 1 "No Poverty"

Subject/ topic/ course in regular curriculum relating to SDG 1	Statistical Epidemiology
Cognitive Teaching & learning objectives	• The learner understands the disease burden patterns that are related to economic development. • The learner knows about the local, national, and global distribution of extreme poverty and extreme wealth. • The learner understands meaningful metrics to measure how different diseases are related to poverty which are neglected in the current Research & Development system. • The Learner understands incidence of poverty is which is measured by measured by the poverty ratio also known as head-count ratio
Socio-emotional Teaching & learning objectives	• The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. • The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. • The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioural Teaching & learning objectives	• The Learners can use Mixed effects linear model simple slopes, standard errors, *t*, and *p*-values, for the relationship between poverty index and the number of cases. • The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction. • The Learners can know disease burden attributable to risk factors associated with unimproved water and sanitation, as well as child and maternal undernutrition by using different Statistical Methods. • The learner can evaluate, participate in and influence decision-making

	concerning poverty generation and eradication. • The learner can include poverty reduction, social justice, and anti-corruption considerations in their consumption activities. • The learner can propose solutions to address systemic problems related to poverty.

Examples of learning approaches and methods for SDG 1 "No Poverty"

- ✓ Develop partnerships between schools and universities in different regions of the country/ world.
- ✓ Diseases are related to economic development with the income relation factor (IRF), defined by the ratio of disability-adjusted life-years (DALYs) per 100,000 inhabitants in LMIC versus that in high-income countries.
- ✓ The disease burden varies considerably with the level of economic development, which can be shown by the IRF by calculating median and interquartile range (IQR).
- ✓ Conduct a case study on poverty and wealth in selected countries (through desktop research) or at the local level (through excursions, doing interviews, etc.
- ✓ Develop an enquiry-based project around: "Is poverty increasing or decreasing?"

Suggested topics for SDG 1 "No Poverty" for students workshop

- ✓ The poverty index which can be calculated by using principal components analysis (PCA)
- ✓ The percent of individuals living below poverty, the percent of residents in deep poverty, social mobility, the percent of residents with less than a high school diploma, whether a county was classified as urban, life expectancy, and the percent of low birth weights-Case Study
- ✓ Reason for Global, national, and local distribution of extreme poverty and extreme wealth Case study
- ✓ The interrelation of poverty, natural hazards, climate change and other economic, social, and environmental shocks and stresses – Group exercise, debate.

SDG 2 - Zero Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Teaching & Learning objectives for SDG 2 "Zero Hunger"

Subject/ topic/ course in regular curriculum relating to SDG 2	• Population and Health Data Management
Cognitive Teaching & learning objectives	• The learner knows about malnutrition by knowing the body mass index (BMI), which is defined as the weight in kilograms divided by the square of the height in meters. • The learner knows agricultural factor income measures the income generated by farming, which is used to remunerate borrowed or rented factors of production (capital, wages, and land rents) as well as own production factors (own labor, capital, and land). • The learner knows the demographic features and measures of population. • The learner understands the need for sustainable agriculture to combat hunger and malnutrition worldwide and knows about other strategies to combat hunger, malnutrition, and poor diets. • The learners understand the concept of vital statistics which includes birth and death rate, mortality, and morbidity and so on. • The learners understand the importance of family planning programs.
Socio-emotional Teaching & learning objectives	• The learner can communicate on the issues and connections between combating hunger and promoting sustainable agriculture and improved nutrition by knowing demographic features of population at local and global level. • The learners Learn basic measures of Mortality, Fertility and Population Growth. • The learner Understand the different population growth models. • The learner can feel empathy, responsibility, and solidarity for and with people suffering from hunger and malnutrition.
Behavioural Teaching & learning objectives	• The learner can Gain of theoretical and analytical Concept of Life Tables, their construction and uses. • The learner can evaluate, participate in and influence decision-making related to hunger and malnutrition and the promotion of sustainable agriculture.

	• To Learners can construct Life tables and estimate the National Income using different approaches.

Suggested topics for SDG 2 "Zero Hunger"

- ✓ Introduction to demographic data: Census, vital events, registration, survey
- ✓ Application of Demography, Static Demography, Dynamic Demography, Collection of Demographic Data,
- ✓ Measures of population, Growth of population, Population Density, population distribution by age and Sex in India.
- ✓ Models for population growth: exponential, logistic, Gompertz models, Deterministic models,
- ✓ Birth and death processes, logistic growth, Competition between populations, growth rate, stable population analysis, population projection by component method and using Leslie matrix.
- ✓ Basic concept of Vital Statistics, Uses and Advantages of Vital Statistics, Application, Measures of Vital Statistics, Measures of fertility, Fertility rates, Reproduction rate, Measures of Martial Status, Measures of Morbidity, Measures of Mortality, Crude Death rate, Standardized death rates, Specific Death rates,
- ✓ Monitoring of Family Planning Program.
- ✓ Population projection using logistic curve.
- ✓ Basic concept of National income – GNP, GDP.
- ✓ Methods of estimating National income, CSO, NSSO and Its activities, National accounts statistics of CSO, Measuring inequality of incomes, Gini coefficient.

Examples of learning approaches and methods for SDG 2 "Zero Hunger"

- ✓ To carry out seminars related to impact zero hunger.
- ✓ Gain of theoretical and analytical Concept of Life Tables, their construction and uses.
- ✓ Learn basic measures of Mortality, Fertility and Population Growth.
- ✓ The learner Understand the different population growth models.
- ✓ Case studies related to Zero hunger.

SDG 3 - Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages

Teaching & Learning objectives for SDG 3 "Good Health & Well being"

Subject/ topic/ course in regular curriculum relating to SDG 3	• Statistical Epidemiology • Population and Health Data Management • Survival Data Analysis
Cognitive Teaching & learning objectives	• The learner Gain Knowledge on different public health programmes and health services available at local and global level. • The learner knows facts and figures about the most severe communicable and non- communicable diseases, and the most vulnerable groups and regions concerning illness, disease, and premature death. • The learner understands Understand the different regression models pertaining to exposure of diseases. • The learner understands the concept of censoring, life distributions and ageing classes. • The learner learns the Natural history of disease.
Socio-emotional Teaching & learning objectives	. • The learner can communicate about issues of health, including reproductive health, and well-being • The learner can encourage others to decide and act in favor of promoting health and well-being for all. • The learner understands different models from Survival Analysis and different types of censoring, learn to estimate and interpret survival characteristics. • The learner can construct of parametric and non-parametric estimators of survival distributions, and probability density functions based on incomplete data • To learners can construct different population growth models.
Behavioural Teaching & learning objectives	• The learner can include health promoting behaviors in their daily routines. • The learner can plan, implement, evaluate, and replicate strategies that promote health, including reproductive health, and well-being for themselves, their families, and others. • The learner has the capacity to perceive when others need help and to seek help for themselves and others.

Suggested topics for SDG 3 "Good Health and Well-being"

- ✓ Infectious disease Epidemiology and Chronic disease Epidemiology.
- ✓ Epidemiology of policy, public health program, Health services etc.
- ✓ Roles of Genetic and Environmental Factors in Disease Causation
- ✓ Regression models and cox models related to survival analysis.
- ✓ Measures of diseases- odds ratio, relative risks, and so on

Examples of learning approaches and methods for SDG 3 "Good Healthand Well-Being"

- ✓ To Participate in ethical, reflective essay writing and/or discussions about health-related issues.
- ✓ To do seminars and presentation related to Natural history of diseases.
- ✓ To Organize training on health promotion and illness prevention strategies (e.g., participating in physical activities, preparing healthy food, installing a mosquito net, detecting, and managing sources of waterborne diseases)
- ✓ Conduct projects epidemic and endemic disease – success vs. challenges (Corona, Malaria, Zika, Ebola, etc.)
- ✓ Develop an enquiry-based project or dissertation, 'Is living longer a good thing?'

SDG 4 - Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Teaching & Learning objectives for SDG 4 "Quality Education"

Subject/ topic/ course in regular curriculum relating to SDG 4	• BSc NEP 2020 implemented syllabus • MSc LOCF pattern syllabus
Cognitive Teaching & learning objectives	• The learner gain knowledge of critical thinking for data driven solution with advanced methodologies, applicable statistical software packages like R, SPSS, MATLAB etc translating into sharp and extensive analytics, pertinent to various domains, aiding students, and organization for scientific decision-making. • The learners understand the theory and practice of statistics with special reference to clinical trials, epidemiology, and Geo Spatial statistics. • The learners use modern statistical theory and methods to provide a good foundation for research in Medical Statistics.
Socio-emotional Teaching & learning objectives	• It helps in preparing the next generation statistician ready for scientific decision-making, aided with advanced statistical software translating into sharp and extensive analytics, pertinent to various domains. • The learner is able through participatory methods to motivate and empower others to demand and use educational opportunities. • The learner can recognize the intrinsic value to develop skills for data analysis and the individual project work
Behavioural Teaching & learning objectives	• The learner can contribute varied domains such as Government, Pharma, Insurance, Banking, Finance, Information Technology, and many other sectors that will entail market research, forecasting and predictive analysis. • The learners can be professional in understanding and use of statistical software packages including SPSS, R, MATLAB and Excel. • The learner can publicly demand and support the development of policies promoting free, equitable and quality education for all, ESD and related approaches as well as aiming at safe, accessible, and inclusive educational facilities. • The learner can promote the empowerment of young people. • The learner can use all opportunities for their own education throughout their life, and to apply the acquired knowledge in everyday situations to promote sustainable development.

Suggested topics for SDG 4 "Quality Education"

- ✓ The Education 2030 agenda, and innovative and successful case studies from across the globe
- ✓ The relevance of inclusive and equitable quality education and lifelong learning opportunities for all (formal, non-formal and informal learning, including the use of ICT) and at all levels for improving people's lives and sustainable development
- ✓ Reasons for a lack of access to education (e.g., poverty, conflicts, disasters, gender inequality, lack of public financing of education, growing privatization)
- ✓ Global attainment of literacy, numeracy, and

  basic skills

Examples of learning approaches and methods for SDG 4 "Quality Education"

- ✓ Conducting a case study on the education system and access to education (e.g., enrolment in primary education) in selected communities or countries
- ✓ To conduct Seminars, workshops, projects related to SDG component.

SDG - 5 Gender Equality

Achieve gender equality and empower all women and girls

Teaching & Learning objectives for SDG 5 "Gender Equality"

Subject/ topic/ course in regular curriculum relating to SDG 5	• Basic Medical Statistics
Cognitive Teaching & learning objectives	• The learner understands the different ways in which Statistics is used in medical discipline. • The learner understands the importance of statistics in research and career in health care. • The learner understands to apply different statistical methods such as Chi-Square Test of Association, which is a nonparametric test of significance for categorical variables. • The learner knows the descriptive and inferential statistics where and when to apply it. • The learners learn Gender-specific statistics which is presented in a form of graphs and tables that allows easy access to a wide range of users
Socio-emotional Teaching & learning objectives	• The learner can recognize, how labor is divided to express gender difference symbolically, and how diverse social structures, rather than families – incorporate gender values and convey gender advantages.. • The learner can identify and speak up against all forms of gender discrimination and debate the benefits of full empowerment of all genders. • The learner can connect with others who work to end gender discrimination and violence, empower those who may still be disempowered and promote respect and full equality on all levels.
Behavioural Teaching & learning objectives	• The learner can take the measure of their surroundings to empower themselves or others who are discriminated against because of their gender. • The learner can evaluate, participate in and influence decision-making about gender equality and participation. • The learner can support others in developing empathy across genders and breaking down gender discrimination and violence. • The learner can observe and identify gender discrimination. • The learner can plan, implement, support, and evaluate strategies for gender equality.

Suggested topics for SDG 5 "Gender Equality"

- ✓ The national statistical bureau responsible for the production and dissemination of official data considers gender-specific data collection, compilation, analysis, and presentation as an integral part of their work, not a separate task.
- ✓ Gender equality and participation in decision-making
- ✓ Gender statistics and indicators are an integral part of gender mainstreaming throughout the entire policy cycle.
- ✓ Statistics obtained from the sources inform the policymaking process and ensure that interventions respond to the different needs and priorities of women and men.

Examples of learning approaches and methods for SDG 5 "Gender Equality"

- ✓ Celebrate the International Day for the Elimination of Violence Against Women
- ✓ Invite speakers who have experienced violence based on gender identity or orientation
- ✓ Perform role-play games that explore inclusion and identity based on gender roles
- ✓ Explore how natural hazards and disasters affect women, girls, men and boys differently
- ✓ Develop an enquiry-based project: "What is the difference between equality and equity and how does it apply to the world of work?"

SDG 6 - Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all

Teaching & Learning objectives for SDG 6 "Clean Water and Sanitation"

Subject/ topic/ course in regular curriculum relating to SDG 6	• Time Series Analysis
Cognitive Teaching & learning objectives	• The learner understands time-series predictions which have been widely used in public health surveillance • The learner understands the waterborne disease risk and climate patterns, risk management approaches which is consider potential hazards posed by climate change by using time series analysis. • The learners understand the Longer-term impacts of Water safety plans (WSP) implementation, such as water quality and health improvements by taking different lag period through the study of different time series models. • The learner understands the concept of spectral analysis that can be applied to public health.
Socio-emotional Teaching & learning objectives	• The learner can participate in activities of improving water and sanitation management in local communities. • The learner can communicate about water pollution, water access and water saving measures and to create visibility about success stories. • The learner can feel responsible for their water use. • The learner can see the value in good sanitation and hygiene standards. • The learner can question socio-economic differences as well as gender disparities in the access to safe drinking water and sanitation facilities.
Behavioural Teaching & learning objectives	• The learner can cooperate with local authorities in the improvement of local capacity for self-sufficiency. • The learner can contribute to wastewater treatment plans at the local level. • The learner can reduce their individual water footprint and to save water practicing their daily habits. • The learner can predict and forecast water related and vector related diseases with respect to meteorological variables by adopting different time series models. • The learner can evaluate, participate in and influence decision-making on management strategies of local, national, and international enterprises related to water pollution.

Suggested topics for SDG 6 "Clean Water and Sanitation"

- ✓ Time series analysis helps organizations understand the underlying causes of trends or systemic patterns over time.
- ✓ Using data visualizations, one can see seasonal trends and dig deeper into why these trends occur.
- ✓ With modern analytics platforms, these visualizations can go far beyond line graphs.
- ✓ Time series allows you to analyze major patterns such as trends, seasonality, cyclicity, and irregularity.

Examples of learning approaches and methods for SDG 6 "Clean Waterand Sanitation"

- ✓ Webinar on the application of time series analysis with respect to public health.
- ✓ Seminar on water related diseases and the application of different ARIMA model can be discussed.
- ✓ Project or dissertation related the important time series analysis with respect to public health.

SDG 7 - Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and clean energy for all

Teaching & Learning objectives for SDG 7 "Affordable and Clean Energy"

Subject/ topic/ course in regular curriculum relating to SDG 7	• Multivariate Analysis
Cognitive Teaching & learning objectives	• The learner identifies and apply the multivariate statistical techniques in health research. • The learner knows the impact of independent variables which represents that Renewable energy consumption per capita; Energy usage per capita; renewable energy consumption; and fossil fuel energy consumption plays significant role in influencing Green Energy through multivariate regression analysis. • The learner understands the concept of Analysis of multivariate assessment methods for effective location of renewable energy facilities • The learner understands Multivariate Analysis used to access the Solar City Economics.
Socio-emotional Teaching & learning objectives	• The learner can access the principal component analysis, clustering, applications in test on mean vectors and MANOVA • The learner can assess multivariate techniques appropriately, undertake multivariate hypothesis tests, and draw appropriate conclusions. • The learner can know the assumptions underlying their use and appreciate the strengths and limitations of these methods.
Behavioural Teaching & learning objectives	• The learner can apply the principles and characteristics of the multivariate data analysis techniques • The learner can apply basic principles to determine the most appropriate renewable energy strategy in each situation. • The learner can influence public policies related to energy production, supply, and usage. • The learner can compare and assess the knowledge of multivariate methods is particularly helpful for gaining employment in statistical consulting.

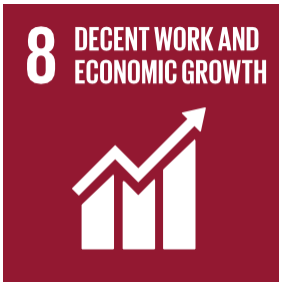
Suggested topics for SDG 7 "Affordable and Clean Energy"

- ✓ Multivariate Data in Biological Sciences.
- ✓ Applications of MANOVA to understand the renewable energy
- ✓ Structural Equation Modelling and Path Analysis.
- ✓ Applications, Canonical Correlations and Canonical Variable for public health
- ✓ Application of PCA of energy consumption and socio-economic factors

Examples of learning approaches and methods for SDG 7 "Affordableand Clean Energy"

- ✓ Seminars on the applications of multivariate analysis.
- ✓ To study the factors that could impact renewable energy consumption based on the national level as state levels. The results of the Forecast Error Variance Decomposition (FEVD)
- ✓ The integrated approach of Exploratory Factor Analysis (EFA) to explain renewable energy consumption in each state-Case study.

SDG 8 - Decent Work and Economic Growth



Promote sustained inclusive and sustainable economic growth, full and productive employment, and decent work for all

Teaching & Learning objectives for SDG 8 "Decent Work and Economic Growth"

Subject/ topic/ course in regular curriculum relating to SDG 8	• -Regression and Generalized Linear Models
Cognitive Teaching & learning objectives	• The learner understands the concepts of multi variable linear regression model to predict the GDP growth rate using inflation, price of crude oil, interest rates, services, and manufacturing PMI as predictors. • The learner has knowledge about the modeling of nonlinear regression, diagnostics and their plots, variable selection, and model selection. • The learner understands to apply logistic regression for categorical variables. • The learner understands how OLS Regression model for GDP Growth and economic growth analysis can be applied.
Socio-emotional Teaching & learning objectives	• The learner can discuss how the regression which is a statistical technique for summarizing the empirical relationship between a variable and one or more other variables. • The learner can develop the growth econometrics. • The learner can understand the analysis of regression to find whether the chosen factors impact GDP per capita. • The learner can develop a vision and plans for their own economic life based on an analysis of their competencies and contexts based on regression models.
Behavioural Teaching & learning objectives	• The learner can know the class of generalized linear models (GLM) as regression models with responses from the exponential family of distributions. • The learner can familiar with the exponential family of distributions and know that the normal, the binomial, the Poisson, and the gamma distributions belong to this family • The learner can develop the modeling of nonlinear regression, diagnostics and their plots, variable selection and model selection.

Suggested topics for SDG 8 "Decent Work and Economic Growth"

- ✓ The contributions of multi variable linear regression model to predict the GDP growth.
- ✓ Comparison between different types of polynomials
- ✓ regression, in the direction of the best determination, both in terms of least square
- ✓ and maximum absolute error between the actual and forecasted data.
- ✓ Polynomial Regression Model of Monetary Policy Rate

Examples of learning approaches and methods for SDG 8 "Decent Work andEconomic Growth"

- ✓ Discussion on the application of different regression models
- ✓ Seminars on the application of logistic regression for categorical variables.
- ✓ Engage with employers in classroom activities
- ✓ Develop an enquiry-based project: "What can my career contribute to sustainable development?"

SDG 9 - Industry, Innovation and Infrastructure

Build infrastructure, promote inclusive and sustainable industrialization and foster innovation

Teaching & Learning objectives for SDG 9 "Industry, Innovation and Infrastructure"

Subject/ topic/ course in regular curriculum relating to SDG 9	• Documentation & Research Methodology • Data Modelling tools and techniques
Cognitive Teaching & learning objectives	• The learner understands the concepts of sustainable infrastructure and industrialization and society's needs for a systemic approach to their development. • The learner understands the local, national and global challenges and conflicts in achieving sustainability in infrastructure and industrialization. • The learner knows the pitfalls of unsustainable industrialization and in contrast knows examples of resilient, inclusive, sustainable industrial development and the need for contingency planning. • The learner is aware of new opportunities and markets for sustainability innovation, resilient infrastructure and industrial development.
Socio-emotional Teaching & learning objectives	• The learner can argue for sustainable, resilient and inclusive infrastructure in their local area. • The learner can encourage their communities to shift their infrastructure and industrial development toward more resilient and sustainable forms. • The learner can find collaborators to develop sustainable and contextual industries that respond to our shifting challenges and to reach new markets. • The learner can recognize and reflect on their own personal demands on the local infrastructure such as their carbon and water footprints and food miles. • The learner can understand that with changing resource availability and other external shocks and stresses (e. g. natural hazards, conflicts) their own perspective and demands on infrastructure may need to shift radically regarding availability of renewable energy for ICT, transport options, sanitation options, etc.
Behavioural Teaching & learning objectives	• The learner can identify opportunities in their own culture and nation for greener and more resilient approaches to infrastructure, understanding their overall benefits for societies, especially with regard to disaster risk reduction. • The learner can evaluate various forms of industrialization and compare their resilience. • The learner is able to access financial services such as loans or microfinance to support their own enterprises. • The learner can work with decision-makers to improve the uptake of sustainable infrastructure (including internet access).

Suggested topics for SDG 9 "Industry, Innovation and Infrastructure"

- Data mining, statistical machine leaning and Artificial intelligence algorithms
- Data Modeling using R
- Python Programming using AI
- Data Analysis Using machine leaning tools

Examples of learning approaches and methods for SDG 9 "Industry, Innovationand Infrastructure"

- to analyse the facts and figures gotten through secondary information's to determine the resultant effect of research in the purs
- to establish a reliable research methodology for assessing goals
- classification and detection system in critical industrial internet of things infrastructure using machine learning algorithms
- Enhancing Cyber Infrastructure: A Multiple Regression Analysis Approach
- Industrial Infrastructure Downtime Pre-emption using Hybrid Machine Learning and NLP

SDG 10 - Reduced Inequalities

Reduce inequality within and among countries

Teaching & Learning objectives for SDG 10 "Reduced Inequalities"

Subject/ topic/ course in regular curriculum relating to SDG 10	• Big Data Analytics • Spatial statistics
Cognitive Teaching & learning objectives	• The learner knows different dimensions of inequality, their interrelations and applicable statistics. • The learner knows indicators that measure and describe inequalities and understands their relevance for decision-making. • The learner understands that inequality is a major driver for societal problems and individual dissatisfaction. • The learner understands local, national and global processes that both promote and hinder equality (fiscal, wage, and social protection policies, corporate activities, etc.). • The learner understands ethical principles concerning equality and is aware of psychological processes that foster discriminative behaviour and decision making.
Socio-emotional Teaching & learning objectives	• The learner can raise awareness about inequalities. • The learner can feel empathy for and to show solidarity with people who are discriminated against. • The learner can negotiate the rights of different groups based on shared values and ethical principles. • The learner becomes aware of inequalities in their surroundings as well as in the wider world and can recognize the problematic consequences. • The learner can maintain a vision of a just and equal world.
Behavioural Teaching & learning objectives	• The learner can evaluate inequalities in their local environment in terms of quality (different dimensions, qualitative impact on individuals) and quantity (indicators, quantitative impact on individuals). • The learner can identify or develop an objective indicator to compare different groups, nations, etc. with respect to inequalities. • The learner can identify and analyse different types of causes and reasons for inequalities. • The learner can plan, implement and evaluate strategies to reduce inequalities. • The learner can engage in the development of public policies and corporate activities that reduce inequalities

Suggested topics for SDG 10 "Reduced Inequalities"

- AI ML Models have sufficient and diverse data sets to train from, that offers a more representative dataset of society, with diverse ethnicity, and gender.
- The Applications of Machine Learning for Mapping Inequality in Cities of the Global
- Applies ML to generate useful insights on spatial inequality within and among countries

Examples of learning approaches and methods for SDG 10 "ReducedInequalities"

- Bridge the economic inequality using big data analytics and spatial statistics
- The Standardized World Income Inequality Database
- Data analytics will exacerbate inequality also within nations.
- Algorithms and tools can help identify sources of inequality and conflict

SDG 11 - Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

Teaching & Learning objectives for SDG 11 "Sustainable Cities and Communities"

Subject/ topic/ course in regular curriculum relating to SDG 11	• Mathematical Statistics • Data analytics
Cognitive Teaching & learning objectives	• The learner understands basic physical, social and psychological human needs and is able to identify how these needs are currently addressed in their own physical urban, peri-urban and rural settlements. • The learner can evaluate and compare the sustainability of their and other settlements' systems in meeting their needs particularly in the areas of food, energy, transport, water, safety, waste treatment, inclusion and accessibility, education, integration of green spaces and disaster risk reduction. • The learner understands the historical reasons for settlement patterns and while respecting cultural heritage, understands the need to find compromises to develop improved sustainable systems. • The learner knows the basic principles of sustainable planning and building, and can identify opportunities for making their own area more sustainable and inclusive. • The learner understands the role of local decision-makers and participatory governance and the importance of representing a sustainable voice in planning and policy for their area.
Socio-emotional Teaching & learning objectives	• The learner can connect with and help community groups locally and online in developing a sustainable future vision of their community. • The learner can reflect on their region in the development of their own identity, understanding the roles that the natural, social and technical environments have had in building their identity and culture. • The learner can contextualize their needs within the needs of the greater surrounding ecosystems, both locally and globally, for more sustainable human settlements. • The learner can feel responsible for the environmental and social impacts of their own individual lifestyle.
Behavioural Teaching & learning objectives	• The learner can plan & participate in community-based sustainability projects. • The learner can participate in decision processes about their community. • The learner can co-create an inclusive, safe, resilient and sustainable community. • The learner can promote low carbon approaches at the local level.

. Suggested topics for SDG 11 "Sustainable Cities and Communities"

- ✓ Big data and sustainable cities: applications of statistics
- ✓ Remote Sensing and Spatial Statistical Tool
- ✓ **D**ata Under Geostatistical Methods
- ✓ Statistical distribution and interaction

Examples of learning approaches and methods for SDG 11 "Sustainable Citiesand Communities"

- ✓ To analyse intra-urban inequalities and public intervention
- ✓ Examining the association between socio demographic composition using spatial regression approach
- ✓ Sustainable and smart city planning using spatial data
- ✓ Geospatial Technology in Sustainable Cities and Communities using ML models

SDG 12 - Responsible Consumption and Production

Ensure sustainable consumption and production patterns

Teaching & Learning objectives for SDG 12 "Responsible Consumption and Production"

Subject/ topic/ course in regular curriculum relating to SDG 12	• Operational Research and Quality Control. • Multivariate analysis
Cognitive Teaching & learning objectives	• The learner understands how individual lifestyle choices influence social, economic and environmental development. • The learner understands production and consumption patterns and value chains and the interrelatedness of production and consumption (supply and demand, toxics, CO2 emissions, waste generation, health, working conditions, poverty, etc.). • The learner knows roles, rights and duties of different actors in production and consumption (media and advertising, enterprises, municipalities, legislation, consumers, etc.). • The learner knows about strategies and practices of sustainable production and consumption. • The learner understands dilemmas/trade-offs related to and system changes necessary for achieving sustainable consumption and production.
Socio-emotional Teaching & learning objectives	• The learner can communicate the need for sustainable practices in production and consumption. • The learner can encourage others to engage in sustainable practices in consumption and production. • The learner can differentiate between needs and wants and to reflect on their own individual consumer behaviour considering the needs of the natural world, other people, cultures and countries, and future generations. • The learner can envision sustainable lifestyles. • The learner can feel responsible for the environmental and social impacts of their own individual behaviour as a producer or consumer.
Behavioural Teaching & learning objectives	• The learner can plan, implement and evaluate consumption-related activities using existing sustainability criteria. • The learner can evaluate, participate in and influence decision-making processes about acquisitions in the public sector. • The learner can promote sustainable production patterns. • The learner is able take on critically on their role as an active stakeholder in the market. • The learner can challenge cultural and societal orientations in consumption and production.

Suggested topics for SDG 12 "Responsible Consumption and Production"

- ✓ Concept Analysis in Responsible Production for Sustainability
- ✓ A comparative analysis
- ✓ Data Science Methods
- ✓ Consumption and Production: an operational approach

Examples of learning approaches and methods for SDG 12 "ResponsibleConsumption and Production"

- ✓ Sustainable consumption and production patterns: A time series analysis
- ✓ To analyse sustainable consumption and production trends in supply chains using fuzzy Analytical Hierarchy
- ✓ Predictive analytics on collaborative performance in context to sustainable consumption and production behaviour
- ✓ To Address Challenges in Sustainable Consumption and Production at Multiple Scales

SDG 13 - Climate Action

Take urgent action to combat climate change and its impacts

Teaching & Learning objectives for SDG 13 "Climate Action"

Subject/ topic/ course in regular curriculum relating to SDG 13	• Time Series Analysis
Cognitive Teaching & learning objectives	• The learner understands the greenhouse effect as a natural phenomenon caused by an insulating layer of greenhouse gases. • The learner understands the current climate change as an anthropogenic phenomenon resulting from the increased greenhouse gas emissions. • The learner knows which human activities – on a global, national, local and individual level – contribute most to climate change. • The learner knows about the main ecological, social, cultural and economic consequences of climate change locally, nationally and globally and understands how these can themselves become catalysing, reinforcing factors for climate change. • The learner knows about prevention, mitigation and adaptation strategies at different levels (global to individual) and for different contexts and their connections with disaster response and disaster risk reduction.
Socio-emotional Teaching & learning objectives	• The learner can explain ecosystem dynamics and the environmental, social, economic and ethical impact of climate change. • The learner can encourage others to protect the climate. • The learner can collaborate with others and to develop commonly agreed-upon strategies to deal with climate change. • The learner can understand their personal impact on the world's climate, from a local to a global perspective. • The learner can recognize that the protection of the global climate is an essential task for everyone and that we need to completely re-evaluate our worldview and everyday behaviours in light of this.
Behavioural Teaching & learning objectives	• The learner can evaluate whether their private and job activities are climate friendly and – where not – to revise them. • The learner can act in favour of people threatened by climate change. • The learner can anticipate, estimate and assess the impact of personal, local and national decisions or activities on other people and world regions. • The learner can promote climate-protecting public policies. • The learner can support climate-friendly economic activities.

Suggested topics for SDG 13 “Climate Action”

- ✓ Time Series Forecasting – Analyze Time Series Data
- ✓ ARIMA approach
- ✓ Classical statistical and bootstrap methods
- ✓ Modelling of climate change

Examples of learning approaches and methods for SDG 13 “Climate Action”

- ✓ Time series analysis of climate variables using seasonal ARIMA approach
- ✓ Prediction of Global Monthly Absolute Temperature for Environmental Decision Making
- ✓ forecasting of temperature
- ✓ Trend analysis of climate time series

SDG 14 - Life below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Teaching & Learning objectives for SDG 14 "Life below Water"

Subject/ topic/ course in regular curriculum relating to SDG 14	• Multivariate Analysis • Design and Analysis of Experiment •
Cognitive Teaching & learning objectives	• The learner understands basic marine ecology, ecosystems, predator-prey relationships, etc. • The learner understands the connection of many people to the sea and the life it holds, including the sea's role as a provider of food, jobs and exciting opportunities. • The learner knows the basic premise of climate change and the role of the oceans in moderating our climate. • The learner understands threats to ocean systems such as pollution and overfishing and recognizes and can explain the relative fragility of many ocean ecosystems including coral reefs and hypoxic dead zones. • The learner knows about opportunities for the sustainable use of living marine resources.
Socio-emotional Teaching & learning objectives	• The learner can speak for for sustainable fishing practices. • The learner can show people the impact humanity is having on the oceans (biomass loss, acidification, pollution, etc.) and the value of clean healthy oceans. • The learner can influence groups that engage in unsustainable production and consumption of ocean products. • The learner can reflect on their own dietary needs and question whether their dietary habits make sustainable use of limited resources of seafood. • The learner can empathize with people whose livelihoods are affected by changing fishing practices.
Behavioural Teaching & learning objectives	• The learner can research their country's dependence on the sea. • The learner can debate sustainable methods such as strict fishing quotas and moratoriums on species in danger of extinction. • The learner is able to identify, access and buy sustainably harvested marine life, e.g. ecolabel certified products. • The learner can contact their representatives to discuss overfishing as a threat to local livelihoods. • The learner can campaign for expanding no-fish zones and marine reserves and for their protection on a scientific basis.

Suggested topics for SDG 14 “Life below Water”

- ✓ Application of machine learning in ocean data
- ✓ ML Algorithms
- ✓ Experimental design and statistical analysis

Examples of learning approaches and methods for SDG 14 “Life below Water”

- ✓ to Improve Marine Science for the Sustainability of Living Ocean Resources
- ✓ AI in the conservation of oceans and marine life
- ✓ machine learning applications in oceanography
- ✓ Artificial intelligence for marine monitoring
- ✓ Experimental design and statistical analysis in aquatic live animal radiotracking studies

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Teaching & Learning objectives for SDG 15 "Life on Land"

Subject/ topic/ course in regular curriculum relating to SDG 15	• Regression and Generalized Linear Models • Operational Research and Quality Control
Cognitive Teaching & learning objectives	• The learner understands basic ecology with reference to local and global ecosystems, identifying local species and understanding the measure of biodiversity. • The learner understands the manifold threats posed to biodiversity, including habitat loss, deforestation, fragmentation, overexploitation, and invasive species, and can relate these threats to their local biodiversity. • The learner understands the slow regeneration of soil and the multiple threats that are destroying and removing it much faster than it can replenish itself, such as poor farming or forestry practice. • The learner understands that realistic conservation strategies work outside pure nature reserves to also improve legislation, restore degraded habitats and soils, connect wildlife corridors, sustainable agriculture and forestry, and redress humanity's relationship to wildlife
Socio-emotional Teaching & learning objectives	• The learner can argue against destructive environmental practices that cause biodiversity loss. • The learner can connect with their local natural areas and feel empathy with non- human life on Earth. • The learner can question the dualism of human/nature and realizes that we are a part of nature and not apart from nature. • The learner can create a vision of a life in harmony with nature.
Behavioural Teaching & learning objectives	• The learner can connect with local groups working toward biodiversity conservation in their area. • The learner can effectively speak on topics related to permeable to wildlife through the establishment of wildlife corridors, agro-environmental schemes, restoration ecology and more. • The learner is able to highlight the importance of soil as our growing material for all food and the importance of remediating or stopping the erosion of our soils. • The learner can campaign and work for the implementation and development of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) regulations.

Suggested topics for SDG 15 "Life on Land"

- ✓ Machine Learning and Deep Learning
- ✓ Analyse forest ecology data
- ✓ ecosystem models
- ✓ Estimating and modelling
- ✓ Terrestrial Ecosystem Modelling

Examples of learning approaches and methods for SDG 15 "Life on Land"

- ✓ To Monitoring Terrestrial Ecosystems
- ✓ assist intelligent planning framework for environmental restoration of terrestrial ecosystems
- ✓ Estimating the Responses of Carbon Fluxes to Climatic Forces in Different Terrestrial Ecosystems

estimates of soil respiration and its components with those from terrestrial ecosystem models

SDG 16 - Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Teaching & Learning objectives for SDG 16 "Peace, Justice and Strong Institutions"

Subject/ topic/ course in regular curriculum relating to SDG 16	• Mathematical Statistics • Multivariate Analysis
Cognitive Teaching & learning objectives	• The learner understands concepts of justice, inclusion and peace and their relationship to law. • The learner understands their local and national legislative and governance systems, how they represent them and that they can be abused through corruption. • The learner is able to compare their system of justice with those of other countries. • The learner understands the importance of individuals and groups in upholding justice, inclusion and peace and supporting strong institutions in their country and globally. • The learner understands the importance of the international human rights framework.
Socio-emotional Teaching & learning objectives	• The learner can connect with others who can help them in facilitating peace, justice, inclusion and strong institutions in their country. • The learner can debate local and global issues of peace, justice, inclusion and strong institutions. • The learner can show empathy with and solidarity for those suffering from injustice in their own country as well as in other countries. • The learner can reflect on their role in issues of peace, justice, inclusion and strong institutions. • The learner can reflect on their own personal belonging to diverse groups (gender, social, economic, political, ethnical, national, ability, sexual orientation etc.) their access to justice and their shared sense of humanity.
Behavioural Teaching & learning objectives	• The learner can critically assess issues of peace, justice, inclusion and strong institutions in their region, nationally and globally. • The learner can publicly demand and support the development of policies promoting peace, justice, inclusion and strong institutions. • The learner can collaborate with groups that are currently experiencing injustice and/or conflicts. • The learner can become an agent of change in local decision-making, speaking up against injustice. • The learner can contribute to conflict resolution at the local and national level.

Suggested topics for SDG 16 “Peace, Justice and Strong Institutions”

- ✓ AI Applications
- ✓ Machine Learning

Examples of learning approaches and methods for SDG 16 “Peace, Justice and Strong Institutions”

- ✓ AI Applications for Security, Peace and Justice
- ✓ for Justice – bringing data into the courtroom
- ✓ AI and the Rule of Law: Capacity Building for Judicial Systems
- ✓ AI for Peacebuilding
- ✓ peace education and conflict resolution

SDG 17 - Partnerships for the Goals

Strengthen the implementation and revitalize the global partnership for sustainable development

Teaching & Learning objectives for SDG 17 "Partnerships for the Goals"

Subject/ topic/ course in regular curriculum relating to SDG 17	• Big Data Analytics • Spatial Statistics
Cognitive Teaching & learning objectives	• The learner understands global issues, including issues of financing for development, taxation, debt and trade policies, and the interconnectedness and interdependency of different countries and populations. • The learner understands the importance of global multi-stakeholder partnerships and the shared accountability for sustainable development and knows examples of networks, institutions, campaigns of global partnerships. • The learner knows the concepts of global governance and global citizenship. • The learner recognizes the importance of cooperation on and access to science, technology and innovation, and knowledge sharing. • The learner knows concepts for measuring progress on sustainable development.
Socio-emotional Teaching & learning objectives	• The learner can raise awareness about the importance of global partnerships for sustainable development. • The learner can work with others to promote global partnerships for sustainable development and demand governments' accountability for the SDGs. • The learner can take ownership of the SDGs. • The learner can create a vision for a sustainable global society. • The learner can experience a sense of belonging to a common humanity, sharing values and responsibilities, based on human rights.
Behavioural Teaching & learning objectives	• The learner can become a change agent to realize the SDGs and to take on their role as an active, critical and global and sustainability citizen. • The learner can contribute to facilitating and implementing local, national and global partnerships for sustainable development. • The learner can publicly demand and support the development of policies promoting global partnerships for sustainable development. • The learner can support development cooperation activities. • The learner can influence companies to become part of global partnerships for sustainable development.

Suggested topics for SDG 17 “Partnerships for the Goals”

- ✓ Earth Observation and Statistical Communities
- ✓ Spatial statistics and soil mapping
- ✓ Mapping Collaborations and Partnerships

Examples of learning approaches and methods for SDG 17 “Partnerships forthe Goals”

- ✓ To Cultivate Data-Driven Partnerships
- ✓ Global Partnership for Sustainable Development Data
- ✓ Evaluating the use of big Earth data
- ✓ A blossoming partnership under pressure

CONCLUSIONS

Institution & individual can contribute to achieving the SDGs by developing cross-cutting sustainability competencies that are needed to deal with many different sustainability challenges and to relate the different SDGs to each other. Institution can equip learners with the specific cognitive, socio-emotional, and behavioral learning outcomes that enable them to deal with the challenges of each SDG.
To make it possible for everyone around the world to act in favor of the SDGs, all educational institutions must consider it their responsibility to deal intensively with sustainable development issues, to foster the development of sustainability competencies and to develop the specific learning outcomes related to all SDGs. Therefore, it is vital not only to include SDG-related contents in the curricula, but also to use action-oriented transformative pedagogy.
Education officials, policymakers, educators, curriculum developers and others are called upon to rethink education in order to contribute to the achievement of the SDGs within their timeframe, between now and 2030. This guidance provides an orientation to the sustainability competencies and specific cognitive, socio-emotional, and behavioral learning outcomes that are relevant to this goal, and it outlines what is needed to implement learning for the SDGs through Educational Institutions.

Education for Sustainable Development Goals - Teaching & Learning Objectives

To create a more sustainable world and to engage with issues related to sustainability as described in the Sustainable Development Goals (SDGs), individuals must become sustainability change-makers. They require the knowledge, skills, values, and attitudes that empower them to contribute to sustainable development. Education is thus crucial for the achievement of sustainable development, and Education for Sustainable Development is particularly needed because it empowers learners to take informed decisions and act responsibly for environmental integrity, economic viability and a just society, for present and future generations.
This handbook guides readers on how to use education, especially to achieve the SDGs. It identifies teaching & learning objectives, suggests topics and learning activities for each SDG, and describes implementation at different levels from course design to national strategies. The document aims to support policymakers, curriculum developers and educators in designing strategies, curricula and courses to promote learning for the SDGs.

Learning objectives for teachers to promote SDG

Know about sustainable development, the different SDGsand the related topics and challenges

Understand the discourse on and the practice of in local, national and global context

Develop their own integrative view of the issues and challenges of sustainable development by considering the social, ecological, economic and cultural dimensions from the perspective of the principles andvalues of sustainable development, including that of intergenerational and global justice

Take disciplinary, interdisciplinary and transdisciplinary perspectives on issues of global change and their local manifestations

Reflect on the concept of sustainable development, the challenges in achieving the SGDs, the importance of their own field of expertise for achieving the SDGs and their ownrole in this process

Understand how cultural diversity, gender equality, social justice, environmental protection and personal development are integral elements of ESD and how to makethem a part of educational processes

Practice an action-oriented transformative pedagogy that engages learners in participative, systemic, creative and innovative thinking and acting processes in the context oflocal communities and learners' daily lives

Act as a change agent in a process of organizational learning that advances their school towards sustainabledevelopment

Identify local learning opportunities related to sustainable development and build cooperative relationships

Evaluate and assess the learners' development of cross-cutting sustainability competencies and specific sustainability-related learning outcomes

Key elements for whole-institutionapproaches

An institution-wide process that enables all stakeholders – leadership, teachers, learners, administration – to jointly develop a vision and plan to implement ESD in the whole institution.

Technical and financial support to the institution to support its reorientation, including for instance the provision of relevant good practice examples, training for leadership and administration, the development of guidelines and associated research.

Inter-institutional networks that facilitate mutual support such as peer-to-peer learning on a whole-institution approach, and increase the visibility of the approach to promote it as a model for adaptation.

. Key methods for learning for the SDGs

Collaborative real-world projects, such as service-learning projects and campaigns for different SDGs

Vision-building exercises such as future workshops, scenario analyses, utopian/dystopian story-telling, science-fiction thinking, and forecasting and back casting

Analyses of complex systems through community-based research projects, case studies, stakeholder analysis, actors' analysis, modelling, systems games, etc.

Critical and reflective thinking through fish-bowl discussions, reflective journals, etc.

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'Touching the lives of Millions'

Focusing on a purpose as expansive and yet as specific as improving quality of life through Human Development, the JSS Mahavidyapeetha has grown from strength to strength. A long and healthy life, Education for all and a decent standard of living, the indicators of Human development, have been the underlying philosophy of Jagadguru Sri Veerasimhasana Mahasamsthana Math, Suttur Srikshethra, for centuries. This is also the philosophy for which the Mahaidyapeetha today stands for.

Under the untiring efforts of Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the Mahavidyapeetha has witnessed enormous growth in the field of education and today has over 300 institutions under its fold, from kindergartens to postgraduate centres and postdoctoral research catering to the educational needs of more than 1,00,000 students.

The Mahavidyapeetha continues to play an important role in expanding the scope of its activities to several branches of knowledge, welfare, and culture. Its educational efforts span crèches for toddlers of working rural women, schools to impart primary and secondary education in both Kannada and English medium, Colleges, Polytechnics, Technical, Medicine, etc. For realizing its mission, it has equipped itself with an extensive infrastructure and an army of dedicated and highly qualified human resource. These institutions, located in strategic areas, serve a broad spectrum of society, from virtually remote tribal villages to metropolitan cities such as Bengaluru, Noida, New Delhi, Ooty, and Coimbatore, besides their presence in United States, Mauritius, and Dubai.

Apart from formal education, the initiatives stretch to integrated rural development through training and empowering of rural folk, reaching out healthcare to people through modern and traditional Indian systems of medicine, patronizing literary activities, visual arts, performing arts, restoration of temples and historical monuments.

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