#### Title of the Practice: Green Practices and Sustainable Development

• Creating an Eco-Friendly Campus with clear cut goals and priorities in the management of water & energy sources, preservation of flora, management of solid waste and conservation of National aquatic animal Gangetic Dolphin'

#### The Context

- Accessibility: A campus covering 100 acres with a lot of open spaces. The campus is located in the heart of the city and is easily accessible from other localities.
- Conservation of National Aquatic animal "Gangetic Dolphin": Gangetic Dolphin is a critically endangered species. To conserve Gangetic Dolphin, Patna University has been conducting continuous survey of rivers of Ganga Basin in India and Nepal to known the distribution range, status and threats the Ganges Dolphin was facing with the support of Ministry of Environment, Government of India.
- Rain Water Management: The University has many large buildings which are utilized for rain water harvesting.
- **Roof top solar photo voltaic power projects:** Most of the buildings are in the process of installation of solar photo voltaic system. Patna University has signed an MOU with "Beltron Telecom Green Energy System Limited" for 1000kW of solar energy installation.,
- **Plastic free and tobacco free:** The entire campus has been declared as plastic, drug and tobacco free.

### **The Practice**

The uniqueness of Patna University Campus (situated at the bank of River Ganga) is that it demonstrates respect for environment and natural resources while ensuring the quality of life in the campus.

### The University has undertaken various initiatives to set up an Eco-Friendly campus:

- Conservation of National Aquatic animal "Gangetic Dolphin: The researchers of Patna University have created awareness through education and interaction among fishermen, school students, college students, policy makers and administrators besides general public through different modules. Biology, population dynamics, behavior and ecological needs of gangetic Dolphin were also documented. Due to significant work in this area one of our faculty member Prof. R.K.Sinha got many honour including Padm Shri, On the initiative of PU, Gangetic Dolphin was declared as National Aquatic Animal". On the basis of work done by PU State Govt. is going to establish a "Dolphin Research Centre" in the PU Campus adjacent to River Ganga.
- **Green Campus and conservation of biodiversity:** In its endeavour for conservation of healthy ecosystems, the University has embarked on a plantation drive spread over 100 acres of its campus including its second campus the Saidpur Campus. The campus has green landscaping of plants which covers around 25% of the area, having varieties of plants. The variegated cropping of more than 2000 plants has also been established as eco-friendly campus.
- Solar photo voltaic power projects: The University is committed for roof-top solar installations at different buildings with an installed capacity of 1000 Kilowatts. An MOU has also been signed with Beltron Telecom Green Energy System Limited to set up a solar farm in the campus to generate 1000 kW of electricity for domestic consumption and to feed the surplus to the national grid. Solar powered street lights have installed many places. Solar Water Heater has also been installed in GDS Girl's hostel and University Guest House.

- Rain Water Management: The University has invested resources to ensure rain water management.
- Solid Waste management: Waste disposal has emerged into an industry and is more than just removing waste. With this in view the University initially established four solid waste disposal facilities (Composting) in different parts of the campus for disposal of organic wastes including plant debris. The organic waste is segregated from non-recyclable and inorganic waste. This has allowed University to make use of organic waste to create compost. The composts are being utilized for our plantations, and in future the University will package and sell the surplus compost to generate revenue.
- The University has introduced a compulsory course of 5 credits on **Environment**
- sustainability and Swacch Bharat Abhiyan in semester I all post graduate programs. University offers a Master degree programme (M.Sc.) in Environmental Science & Management. Besides these University also offer Skill enhancing courses in semester II in the area of Solid waste management, Environmental Law and Mushroom cultivation.
- Specialized programme: University offers a Master degree programme (M.Sc.) in Environmental Science & Management.
- Researcher of Patna University is also working on green energy production. A research project was granted by Bhabha Atomic Research Centre on "Bio-ethanol production from agro-wastes".

### Title of the Practice: Population Research

• Population Studies is about our lives, and about how we make sense of our lives. The life course approach is central to the research of the any Population Research Centre. At the Department of Statistics, Patna University, Government of India had established a Population Research Centre (formerly known as Demographic Research Centre) in 1966 to carry out population research in India.

#### **Objectives of the Practice**

- To carry out research on demography, social and economic aspects of population and health status of Bihar and Jharkhand.
- To carry specific studies on population research
- To contribute to the understanding of No Poverty, Zero Hunger, Good Health and Well-being, Gender equality and Reduced Inequality.

#### **The Context**

- Making scientific progress in the disciplines of demography and population studies Answering socially relevant questions
- Population Studies is about our lives in all its phases and places, contributing to a sustainable future for all people.

### **The Practice**

- Patna University is conducting studies in the area of population research particularly in Bihar and Jharkhand since the inception of this centre way back in 1966.
- The centre is also working with other National and International Organizations.
- The centre also share their findings with stakeholders, research participants and society at large. The centre invites persons doing research in this area and interacts with them.

#### **Evidence of Success**

- Success of this centre evidence in following:
- Apart from the works sponsored by the Ministry of Health and Family Welfare, Government of India, the centre has completed many studies sponsored by USAID, UNFPA, UNICEF, Population Council (New York), Care-India etc.
- The centre has produced more than 400 research papers/reports/articles on different aspects of population.
- Organized World Population Day (WPD) in collaboration with Indian Association for study of Population (IASP).
- In the Centenary year of Patna University, the Population Research Centre of Patna University organized an extramural lecture on the theme "Population and Development in Bihar on August 22nd, 2017. Two well known demographers Prof. Balram Paswan and Prof. R.B. Bhagat of International Institute of Population Sciences (IIPS), Mumbai, delivered lecture on "Population, Health and Development in Bihar: Issues and Challenges in achieving sustainable development goals" and Urbanization and Public Policy in India with reference to Bihar", respectively.