



# Shobhit

Institute of Engineering & Technology  
**Deemed to-be-University**

EDUCATION EMPOWERS

## BEST PRACTICES

### **Shobhit Institute of Engineering & Technology, Meerut**

[ Deemed to-be University established u/s 3 of UGC Act]

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## PRACTICE I

**Title of the Practice: International Skill Development Centre: “Education through Skill Development and Skill Development through Education” - e-Governance in Farming Sector for African Countries**

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

- a. **Objective / Intended Outcome:** Education through Skill Development and Skill development through Education. The need of the hour is the creation of a globally competent generation that thinks globally but acts locally and impacts the nation’s growth directly.
- b. **Underlying Principles / Concepts:** “All Solutions under one Roof” is the principle on which the ISDC works. Organizations all over the world are looking for training and development solutions of all kinds. The major problem that they face is that each solution is available with different organization.

### **Contextual Features:**

India emerges as an Investment Destination for Agri Business and Food Processing Sector, in view of the sound factors viz., Supply-Side Advantages, Supply Demand Growth, Conducive Policy Environment, Increasing Investments, and Strategic Location. Mckinsey Global Research Institute (MGI)’s Research Report titled “**12 Technologies to empower India**” (2014) identifies 12 technologies in six sectors (Health care, Education, Financial services, Agriculture, Infrastructure and Government Services) can create \$550 Billion to \$ 1 Trillion of additional impact per year in 2025 and for the Agriculture Sector, the estimated collective impact of technology interventions in Agriculture is \$45 Billion to 80 Billion in 2025”.

Globally, Agricultural Informatics, as an area, has been focusing on creating new breed of human resources to take up the renewed challenges in conceptualizing, developing, deploying and managing farmer-centric intelligent supply chains, proactive environmental impact oriented interventions, while ensuring sustainable agricultural systems. India has all potentials to lead “**South-South Cooperation in ICT for Agriculture**”, as highlighted by our Hon’ble President of India in the Asia-Africa Agribusiness Forum held in February 2014 at New Delhi. Africa’s Farm sector is growing to the tune of \$1 Trillion by 2030.

In view of this context, the Centre for Agricultural Informatics and e-Governance Research Studies of the Shobhit Institute of Engineering Technology has launched, after much deliberations and discussions, “**e-Governance in Farming Sector for African Countries: a 2-week and 4-week Competency Development programmes**”, in collaboration with the ISC, exclusively for the Agricultural sector Stakeholders of **50 Countries of the African Continent** ([www.shobhituniversity.ac.in](http://www.shobhituniversity.ac.in)).

To facilitate this programme, the Shobhit Institute of Engineering Technology has written to the Hon’ble Minister of External Affairs to recognize this centre as “**Centre for Excellence**” in the area of

Education and Training of Agricultural Informatics e-Governance, of the Ministry of External Affairs so as to get nominations of candidates from African Countries through the Capacity Building Programme of the Ministry.

During the AFITA-2014 Conference held at PERTH, Australia, the Shobhit Institute of Engineering Technology has intended to have a workshop titled “**Competency Building in Agricultural Informatics for Sustainable Development: Strategies for Roadmap for Developing Countries**”.

The African Asian Rural development Organization (AARDO) has also shown their interest in this programme for their member countries.

#### **The Practice:**

- ⊗ **Practice and its Uniqueness:** The Competency Development Training Schedule for 2-Week (for Senior Officers of the Agricultural Ministry) and 4-Week (for Agricultural development Stakeholders) has been well researched both for local needs and global needs. Training needs in various sub-sectors of the Agricultural Sector have been identified and included, based on the expertise and experience from Indian Agricultural Informatics Scientists / Technocrats.
- ⊗ **Constraints / Limitations:** As this development programme is based on “Course Fee”, there is no constraint / limitation surfaced.

#### **Evidence of Success:**

It may not be possible to show evidence of success now. However, this programme of the University has the indicated potential as follows:-

- Global perspectives on agro-informatics and benchmarks
- Agro-informatics and its role in augmenting livelihoods in developing countries
- Agro-informatics and sustainable development
- Agro-informatics and value chain management
- Education in agro-informatics – trends and opportunities for fostering research, development, incubation, deployment and scale up of interventions
- Advances in agro-informatics: academic-research-applications related convergence for sustainable development.

## PRACTICE II

### Title of the Practice: Industry Engagement Initiative – Young Engineers Internship Programme

#### Objectives of the Practice:

- a. **Objective/Intended Outcome:** To enrich budding engineers with the Industry exposure through one semester Internship programme for making them productive
- b. **Underlying Principles / Concepts:** The Shobhit Institute of Engineering Technology stands for going beyond the established standards and nurtures technocrats and managers so that they have a global vision and insight in their chosen fields and are globally employable in emerging areas with special focus on today's requirements.

#### Contextual Features:

A recent report published by the Confederation of Indian Industry and the Boston Consulting Group (BCG) has estimated that India would face talent gap- the lack of right skills for the job required. The report titled, India's Demographic Dilemma brings out the fact that the \$1.1-trillion economy will have a shortfall of 750,000 skilled workers over the next five years.

Recognizing skills needs in the context of changing scenario around the globe, the corporate sector needs to step up to the center-stage to ensure the success. Strong industry leadership and engagement with the academic institutions and Universities is essential.

Building workforce with higher order skills is an important part of improving the climate for investment. Lack of industry engagement in Higher Education Sector has been sighted as one of the key reasons for outdated curriculums, irrelevant research initiatives, inappropriate training and mentoring of students and faculty etc. There is a visible growing skill gap reflecting the galloping pace of the Country's service-driven economy. Given the current high-paced growth and dynamic investment climate in India, the demand for knowledge workers with the higher level of technical and soft-skills is increasing. What is required is a holistic approach to address the problem of skills shortage within the country.

Challenging issues needed to be addressed: Faculties and Students are mostly disconnected from the research needs of Industries. The Trinity of "Knowing", "being" and "Doing" has to be achieved to enrich their competency. Technology is changing and it is necessary to be dynamic to be relevant.

#### The Practice:

The serious issue in India has been that the higher education sector and the industrial sector have worked in isolation from each other. One of the reasons behind the talent crunch is the significant industry-academia divide. This has resulted in two extremes. On one hand, the industry needs talent and on the other hand there is an abundance of engineers who don't have industry oriented necessary skills. Today, when Indian higher education sector is poised on the verge of liberalization, role of industry would be crucial in taking the Indian education system to a higher trajectory.

- ⊗ **Practice and Its Uniqueness:** One semester Internship programme has been incorporated in the Curriculum of B.Tech. Engineering Disciplines. The Final Semester Students are made available for internship with the Industry for a semester of 6 months starting from January onwards. Disciplines includes for Internship are: Electronics Communication, Computer Science, Mechanical, Mechatronics, Bio-Technology, Bio-Informatics and Bio-medical engineering. Industry Internship has Credits. This internship is not like summer training or training during semester vacation. The University encourages “student internship” to narrow down the Industry-Academia gap.
- ⊗ **Constraints / Limitations:** Industry feels that “Students” are raw talent and training them to be productive is a Challenge to them. As Meerut is the emerging “Hub of Higher Education”, there is a challenge to have Industry Internship in the Industries available in the Meerut City. There is a “demand-side” constraint witnessed by the Educational Institutions.

The University has addressed this issue through its National Conference CICON-2015 titled “**Emerging Trends in Science, Engineering, Technology and Management**” with the Theme on “**Bridging the development Gaps in Human Resources for Digital India and Make in India programmes**” on 12<sup>th</sup> September 2015.

**Evidence of Success:**

In view of the fact that Indian industry is investing about INR 6450 Crores on training their employees and about 45 of the total amount spent on training towards skill development of new recruits. This expenditure can be reduced by adopting the “Shobhit Institute of Engineering Technology Model of Internship” and there will be Win-Win situation. Hence the Mission is “**Encourage Student internships**” and if they are good during the Internship, let the Industry pick up them for employment subsequently.