



"Skills Strengthening for Industrial Value Enhancement" (STRIVE)

Environmental & Social Aspects

December 2021

ESSA Objective



The objectives of Environmental and Social Safeguard Aspects (ESSA) undertaken in the context of STRIVE:

- 1. Identify potential environmental and social benefits, risks and impacts applicable to the program interventions**
- 2. Review the policy and legal framework related to management of environmental and social impacts of the program interventions**
- 3. Assess the institutional capacity for environmental and social management system within the program system**
- 4. Assess the program system performance with respect to the core principles of the Program for Results instrument and identify gaps, if any**

ESSA- Program Action Plan



Action	Timeline	Responsibility	Completion measurement
Environmental Management systems in place and functioning in ITIs	Starting within 6 months of program start and continue through program duration	State Level Directorate, ITIs	<ul style="list-style-type: none"> • ITI Nodal E&S staff in place • Required environmental legislations followed • Waste management and safety systems functional • Required water supply, sanitation and drainage systems in place and functional • Water harvesting and conservation and water saving systems in place
Students aware of and practice good safety norms in ITI	Awareness programme on safety practices to be held every 6 months	State Level Directorate, ITIs	Students use safety gear in workshop, and have been clearly articulate OHS measures and use required measures in their day to day working
Apprenticeship enforce good OHS and waste management standards	Beginning of apprenticeship and repeat every 6 months	Industry cluster	Apprentices are aware of and practice good OHS measures. Proper waste management systems in place and functional in small industries, in case not already there.

Key points of Environmental Action Plans submitted by ITIs



Proposed activities and their impact	Few mitigation measures
Minor Civil Works: Waste Generation	<ol style="list-style-type: none"> 1. Segregation of construction and demolition waste and handover to authorized processing facilities 2. Minimization of waste by reusing and recycling of materials
Minor Civil Works: Noise generation due to demolition / construction activities	<ol style="list-style-type: none"> 1. Use of silent generators 2. Avoid any activity in nighttime
Minor Civil Works: Emission of dust	<ol style="list-style-type: none"> 1. Water sprinkling 2. Use of dust collector
Minor Civil Works: Land & water contamination	<ol style="list-style-type: none"> 1. Proper maintenance of vehicles and other machinery 2. Segregation of hazardous and nonhazardous waste 3. Disposing off the waste to authorized vendors only
Minor Civil Works: Injuries due to non-use of personal protective equipment or due to fall from height	<ol style="list-style-type: none"> 1. Provision and enforcement of PPE relevant to work 2. Ensuring safety precautions during construction/ use and dismantling of temporary structure etc. 3. Providing first aid kit to all trades
Equipment, furniture, and goods: Inadequacy or faulty design of furniture leading to consequences on health and learning process	<ol style="list-style-type: none"> 1. Ensuring adequate and well-designed furniture 2. Procurement of energy efficient and sustainable equipments
Training of Teaching and Management Staff: - Unsafe work conditions may lead to accidents/ injuries - Adverse impact on health of staff/ students due to unsafe conditions	<ol style="list-style-type: none"> 1. Training of Staff and students on HSE aspects 2. Hygiene (personal, domestic, and institutional sanitation) 3. Trade specific OHS training
ICT Infrastructure: High energy consumption and maintenance cost due to inefficient energy goods	<ol style="list-style-type: none"> 1. Procurement of energy efficient and environmentally sustainable goods 2. Reduction in greenhouse gases

Key points of Social Action Plans submitted by ITIs



1. Identify and launch specialised and market driven courses for vulnerable sections
2. Rural camps/ awareness camps etc. to increase outreach in rural areas
3. Placement cell for industry- institute partnership and facilitate placements
4. Implementation of non-discrimination policy and policy against harassment
5. Installation of ramps, accessible toilets, toilets for women, CCTV and campus lights etc.
6. Transport facility for women candidates and other weaker sections
7. Deputing Grievance redressal officer and information dissemination regarding grievance redressal mechanism
8. Setting up gender committee, counselling facility for vulnerable section candidates
9. Awareness about apprenticeship opportunities, promote apprenticeship among vulnerable section candidates

Best Practices in Environmental and Social Aspects

Reported by ITIs as part of ESSA report

Best Practices during Civil Work



Best practices proposed for environmental and social risk mitigation during civil work in ITIs & ICs

- Appropriate construction debris disposal
- Cleaning of drainage system along the ITI campus
- Hazardous waste disposal following all safety norms
- Occupational Health and Safety (OHS) of the workers students, teachers, and other staff in the ITI
- Sanitation and water supply
- Proper training and awareness given to construction workers
- Training programmes conducted on OHS, Fire Safety, mock drills etc.

Best Practices



Clean and Green environment:

- Plantation drive in the ITI campus
- Landscaping, cleaning, trimming of bushes
- Committee including students and instructors for environmental activities
- Collaboration with external experts e.g., forest department / Lions Club, NSS Volunteers etc. to promote environmental activities

Waste Management:

- Minimize waste generation by reuse and recycle of material
- Categorization of waste in hazardous / non-hazardous; Paper / Metal/ Green waste etc.
- Disposal of hazardous waste through proper process
- Plant and other green waste used for compost for gardening purpose
- Paper, plastic, and other recyclable waste sent for recycling

Water Harvesting:

- Rainwater harvesting system to conserve the rainwater in the institute
- Wastewater used to maintain garden and lawns
- Prevention of leakage of water by periodic check and proper maintenance and repair of taps, pipes, and joints
- Water tanks cleaned regularly for clean water
- Installation of RO and water coolers for clean drinking water

Best Practices



Activities to promote enrolment of vulnerable students (SC/ST, Women, Students with Disability):

- Information dissemination through advertisement/ Social media/ radio ads for encouraging enrolment of female and other vulnerable students
- Seminars in schools, villages to promote enrollment of women, SC/ST and PWDs
Benefits including Stipend, Free Tool kits, Free bus Pass etc.
- Help desk and career counselling for new students
- Separate toilets for women with Sanitary napkin vending machine and incinerators
- Construction of ramps, special Seating facility, accessible toilets for Students with Disability
- Grievance Redressal Committee for females
- Learn and earn program through dual system of training

Grievance redressal:

- Grievances committee including senior staff members and students for addressing the complaints

COVID Safety:

- Awareness generation using Posters and photographs on Covid safety
- Thermal screening of all staff and students daily
- Touchless sanitization machine, sanitization of classrooms and workshop
- Mask mandatory, social distancing promoted
- All SOP by Govt. of India and State Government
- RTPCR test of all staff and trainees
- Vaccination camp for COVID – 19 arranged in ITI campus for staff and other workers

Highlights from E&S reports from ITIs

Rain Water Harvesting System installed at Govt. ITI, Chandigarh



Highlights from E&S reports from ITIs



40 K.W Solar Power Plant Installed at Govt. ITI, Chandigarh



Ramp for Divyangs under construction at Govt. ITI, Chandigarh



Garbage/ waste collected in portable dustbins at Govt. ITI, Chandigarh and disposed off at MC, Chandigarh disposal centres

Highlights from E&S reports from ITIs



E-Waste

Waste generated in the ITI like Batteries, Printers, CPU, and monitors etc. are stored in the designated store for a period of not more than 180 days and auctioned to legitimate vendors by online auction through MSTC



Fire Fighting Provision

ITI Narela, Delhi



Highlights from E&S reports from ITIs

Mostly, the Waste generated in the ITI are non-Hazardous waste,

In H.J. Bhabha ITI, Bins are provided at different locations to segregate the waste as paper, plastic, organic and mixed.

Paper waste and organic waste are recycled and used as manure/organic fertilizers.



Recycled Organics waste are used to prepare natural fertilizers at site.

Waste management and Energy Conservation at H.J. Bhabha ITI, Mayur Vihar, New Delhi

Energy Conservation

H.J. Bhabha ITI, has taken a no. of good initiatives to conserve energy and help in reducing the load on natural resources.

- LED lights are used in place of Incandescent and CFL to save electrical energy.
- Natural daylight is utilized in the classrooms and workshops to reduce the artificial lighting.



LED lights are used to save electrical energy.



Daylight harvesting in indoor spaces to save artificial lighting.



Trainees working comfortably without artificial lighting.

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Highlights from E&S reports from ITIs



Sanitary Napkin Vending Machine and Incinerator installed at ITI (W) Hisar



Highlights from E&S reports from ITIs



Waste water utilization system and rain-water harvesting system at ITI Gohana, Haryana

Highlights from E&S reports from ITIs



Solid Waste Management and Rain-water harvesting at ITI Barara, Haryana



Highlights from E&S reports from ITIs



Government of India
Ministry of Skill Development
and Entrepreneurship



Skill India
केहन सीखें-कहन बनें



Special Toilet for Students with Disability,
Formation of Internal Complaint Committee,
Installation of Solar panels at ITI Hassangarh,
Haryana



Highlights from OHS reports from ICs



Mitigation of COVID -19 risks:

- Wearing mask all the time at the training premises
- Checking temperature at entrance every day
- Automatic sanitation dispensers at entrance
- Maintaining distance during training class & also in practical classes for all the ITIs



Highlights from OHS reports from ICs



Government of India
Ministry of Skill Development
and Entrepreneurship



Skill India
संसाधन विकास विभाग



Directorate General of Training



Industrial Training Institute



Ankleshwar Industry Association, Gujarat along with Ankleshwar Environmental Preservation Society with help of Notified Area Authority, GIDC and Industrial Safety & Health Dept. is promoting Disaster Prevention & Management Centre (DPMC) to combat effectively all the Industrial & Chemical Emergencies & Disasters like Fires, Explosions, Gas leakages, Chemical spillages, Road & Rail emergencies etc. occurring in the Ankleshwar and surrounding industrial estates. Till date more than 2700 emergency calls mitigated effectively by DPMC.

Hazardous Waste Land Fill Site (Common TSDF) - A facility of 19-acre land is setup within the cluster with support from German experts. It has been designed to safely dispose off wide variety of chemical solid waste.

Highlights from OHS reports from ICs



Fire and safety training for trainees and staff



Distribution of PPE Kit to Trainees