



Environmental Sustainability Plan (ESP)

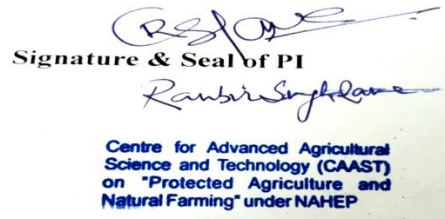
**Centre for Protected Agriculture and Natural Farming under
ICAR Centre for Advanced Agricultural Science and Technology (CAAST) –
National Agricultural Higher Education Project (NAHEP)**

F.No./NAHEP/CAAST/2019-20

Name of the AU: CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur, Himachal Pradesh-176062
Date of project implementation: October 2019
Name of Nodal Officer: Dr. S. K. UPADHYAY, Professor and Head (Horticulture & Agroforestry)
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S. No	Proposed Interventions / Activities	Compliances applicable	Possible Environmental Impacts	Mitigation Measures	Scope for the integration of best practices under environmental Sustainability concerns	Resources Required (budget, technical support etc.)
	Laboratory renovation	National Building Code of India 2005	<ol style="list-style-type: none"> 1. Use of illegally mined or low quality materials will affect the environment and the infrastructure quality. 2. Existing lighting and aeration arrangements is energy intensive 3. Power supply is erratic 4. Lack of fire safety measures and awareness 	<ol style="list-style-type: none"> 1. All raw materials should be sourced from authentic and approved vendors, possessing valid permits. 2. Integrate solar passive as part of renovation is considered. And the following parameters viz., sufficient space, ventilation, lighting, etc are taken care 3. Regular and stabilized electricity supply should be ensured. Provision of standby source for power supply to sensitive and costly equipment is ensured. Proper earthing is done for human and equipment safety. 4. Laboratories were equipped with fire fighting facilities. Fire safety instruction displayed in the form of poster and orientation to all students, staff and non-teaching staff 	<ol style="list-style-type: none"> 5. Class I Contractors and reputed farms are allotted for such works. It is strictly followed in CSKHPKV. All construction materials are continuously checked by the Engineers of the University. 	<ol style="list-style-type: none"> 1. For standby source for power supply Rs. 20000/- per lab Fire extinguishers (@ Rs.3000 per unit)

		The Noise Pollution (Regulation and Control) Rules 2000)	Laboratory renovation works will create noise pollution.	1. Civil contract should provide for only usage of equipment within the allowed threshold of noise standards prescribed for residential/institutional/hospital complexes.		
	UG practical and experiments	Hazardous Wastes Management and Handling Rules (1989 and Amendment Rules, 2000 & 2003)	Disposal of laboratory waste (chemicals) in to open gutter may contaminate the soil, ground water ,etc	<ul style="list-style-type: none"> Chemicals used in laboratory will be collected separately in containers and sending to common effluent treatment Plant for which permission will be taken from PCB 		Budget support from CAAST & State share
	Research themes of the center Organic natural Farming /	Insecticide Act 1968	<ul style="list-style-type: none"> Use of pesticide that fall in the category of Class Ia, Ib, and II as per WHO classification will pollute the environment and affect biodiversity. 	<ul style="list-style-type: none"> Pesticides banned by WHO will not be used. Use of permitted pesticides/fungicides in the research trials as per the WHO classification. WHO Laboratory Safety Manual. 	<ul style="list-style-type: none"> Use of bio-control agents viz., <i>Trichogerma</i> sp., <i>Trichoderma</i> sp, <i>Verticillium likyani</i> <i>Zygomamma</i> Use of drip system reduces the water wastage and improves soil conservation. Recycling of plastic waste by remolding back into use. 	<ul style="list-style-type: none"> Budget support from CAAST & State share



Signature of Principal Investigator

Date:



Signature of Nodal Officer

Date: