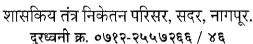


## महाराष्ट्र शासन

## सहसंचालक,तंत्रशिक्षण विभागीय कार्यालय,नागपूर



E-mail: ronagpur@dtemaharashtra.gov.in

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क्रमांक :- तंशिस/विकाना/शैवि-२/2022/ 1466

दिनांक:- 0 7 MAY ? 922

प्रति, प्राचार्य, सर्व शासकीय,अशासकीय अनुदानित व विना अनुदानित पदवी/पदविका संस्था, नागपुर विभाग,नागपुर

विषय:- Green Campus बाबत मार्गदर्शक सूचना...

संदर्भ:- मा. सहा. संचालक (तां) तंशिसंचालनालय महाराष्ट्र राज्य मुंबई यांचे पत्र क्र. १०/एनजीपी//२०२२/३४८ दिनांक २१/०४/२०२२

उपरोक्त संदर्भीय विषयाच्या अनुषंगाने आपणांस कळविण्यात येते की, पर्यावरण संरक्षणाच्या दृष्टीने महाराष्ट्र राज्यात प्रत्येक महाविद्यालय/विद्यापीठे यांनी त्यांचा Campus "Green" बनवण्याचे प्रयत्न करणे अपेक्षित आहे. यामध्ये पाणी, सांडपाणी, घनकचरा, ई- वेस्ट, प्रयोगशाळा कचरा, वायु प्रदुषण, प्रासंगिक प्रदुषणे, वृक्षरोपण, वनस्पती व जीवजंतूंचे संरक्षण इ. गोष्टींचा अंतिभाव राहिल या सर्व बाबींबद्दल टप्प्यानिहाय पहिला टप्पा ०९ महिना व दुस-या टप्प्या ०९ ते ११ महिने) हे उपक्रम हाती घेता येतील.

या कार्यक्रमाच्या अंमलबजावणीसाठी उपयोगी पडेल अशा कार्यपध्दती बाबतची मार्गदर्शक तत्त्वे सोबत पाठविण्यात येत आहे. तरी सदर मार्गदर्शक तत्त्वांची अंमलबजावणी करण्यात यावी. या संदर्भांत अधिक माहितीसाठी डॉ. प्रमोद पाब्रेकर, विरुट सल्लागार, राष्ट्रीय उच्चतर शिक्षा अभियान (रुसा), मुंबई यांना (ईमेल आयडी- tsgrusamah4@gmail.com) संपर्क करता येईल.

सोबत- Green Campus — मार्गदर्शक तत्त्वे

(डा.मनोज भा.डायगव्हाणे) प्र.सहसंचालक तंत्रशिक्षण विभागीय कार्यालय, नागपूर सोबत मा. प्रधान सचिव, उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य, मुंबई यांचे "Green Campus बाबत मार्गदर्शक सूचना" या विषयाचे पत्र जोडले आहे.

क्रमांक:१०/एनजीपी/२०२२/ ३४८ तंत्रशिक्षण संचालनालय, महाराष्ट्र राज्य ३, महापालिका मार्ग, पत्र पेटी क्र. १९६७, मुंबई-४००००१.

दिनांक : 2 1 APR 2022

प्रति,

- 9. मा.सहस्रंचालक, तंत्रशिक्षण विभागीय कार्यालय, अमरावती/ औरंगाबाद/ मुंबई/ नागपूर/ नाशिक/ पुणे, त्यांना कळविण्यात येते की, सदर पत्राच्या अनुषंगाने आपल्या अधिनस्त सर्व तंत्रशिक्षण पदवी व पदविका अभियांत्रिकी/तंत्रज्ञान/ औषधनिर्माणशास्त्र/ वास्तुशास्त्र व हॉटेल मॅनेजमेंट अँड केटरींग टेक्नॉलॉजी या अभ्यासक्रमाच्या संस्थांच्या पत्रासोबतच्या मार्गदर्शक तत्वांची अंमलबजावणी करण्याबाबत कळवावे आणि विभागनिहाय बैठक घेऊंन त्यांना ह्याची माहिती द्यावी, ही विनंती.
- २. मा.संचालक, महाराष्ट्र राज्य तंत्रशिक्षण मंडळ, मुंबई,यांना माहिती व कार्यवाहीसाठी.

2 7 APR 2022

(गोविंद संगवई) सहा.संचालक (तां.), तंत्र शिक्षण, महाराष्ट्र राज्य, मुंबई.

प्रतः कार्यासन क्रमांक : २अ, मुख्य कार्यालय मुंबई यांना माहितीसाठी.

## महाराष्ट्र शासन



विकास चंद्र रस्तोगी, भा.प्र.से.

प्रधात संचित

क्र. राप्रसं/रुसा/२०२२-२३/०१०७ उच्च व तंत्रशिक्षण विभाग ४०९, मंत्रालय, विस्तार भवन, हुतात्मा राजगुरु चौक, मादाम काम मार्ग, मुंबई ४०० ०३२.

Tel: 22025301 Email:psec.higheredu@maharashtra.gov.in

दिनांक ५ एप्रिल, २०२२

प्रति.

१. संचालक, उच्च शिक्षण, पुणे,

रांचालक. तंत्र शिक्षण, मुंबई.

विषय: Green Campus बाबत मार्गदर्शक सूचना

पर्यावरण संरक्षणाच्या दृष्टीने महाराष्ट्र राज्यात प्रत्येक महाविद्यालय / विद्यापीठे यांनी त्यांचा Campus "Green" बनवण्याचे प्रयत्न करणे अपेक्षित आहे. यामध्ये पाणी, सांडपाणी, घनकचरा, ई-वेस्ट, प्रयोगशाळा कचरा, वायु प्रदुषण, प्रासंगिक प्रदुषणे, वृक्षरोपण, वनस्पती व जीवजंतूंचे संरक्षण इ. गोष्टींचा अंर्तभाव राहिल. या सर्व बाबींबद्दल टप्प्यानिहाय (पहिला टप्पा ०९ महिना व दुसऱ्या टप्प्या ०९ ते ११ महिने) हे उपक्रम हाती घेता येतील.

- या कार्यक्रमाच्या अंमलबजावणीसाठी उपयोगी पडेल अशा कार्यपद्धती बाबतची मार्गदर्शक तत्त्वे सोबत पाठविण्यात येत आहे.
- आपल्या अधिनस्त महाविद्यालय/ विद्यापीठे यांना या मार्गदर्शक तत्त्वांची अंमलबजावणी करण्यासाठी कृपया कळवावे आणि विभागनिहाय बैठक घेऊन त्यांना ह्याची माहिती द्यावी. या संदर्भात अधिक माहितीसाठी डॉ. प्रमोद पाब्रेकर, वरिष्ठ सल्लागार, राष्ट्रीय उच्चतर शिक्षा अभियान (रुसा), मुंबई यांना (ईमेल आयडी-(sgrusamah4@gmail:com) संपर्क करता येईल.

सोबतु :- Green Campus- मार्गदर्शक तत्त्वे.

आपला विश्वास्

(विकासचंद्र रस्तोगी)

			Guldelines for Green Campuses	
Focus	Task	Work Components	Phase 1: Short Term (9 - 18 months)	Phase 2: Long Term (9 -48 months)
1 :		Water & Wastewater Municipal Drinking Water Supply	(especially in water intensive activities such as gardening, cleanliness & hygiene, domestic	Developing long term goals and increasing awareness towards minimal water usage, Xeriscaping of Gardens to reduce water consumption
	1.2	Borewell, Dugweli & Tanker Water	Metering of water consumption at activity level (especially in water intensive activities such as gardening, cleanliness & hygiene, domestic	Developing long term goals and increasing awareness towards minimal water usage, Xeriscaping of Gardens to reduce water
			usage, cooling systems (HVAC), laboratories, etc), Periodic inspection of plumbing units,	consumption
	1.3	Rainwater Harvesting	Development of storage structures and redirecting the storm water tracks to collect rainwater	Development of rooftop rainwater structures at buildings
	1,4	Domestic Wastewater (Sewage)	Treatment of wastewater before discharge Reuse of treated wastewater	Tertlary treatment of wastewater to reduce discharge and reuse it for more water related activities such as non-potable water activities such as tollet flushing
	1.5	Overhead Tank Cleanliness & Maintenance	Setting up of cleaning routine of all overhead tanks and implementing it	Interconnecting, replacing and reorganising water supply within each building as well as implementing master plan for modernisation of water supply and wastewater collection, treatment and reuse
	1,6	Sanitation & Hyglene	- Tollets and Bathrooms - Sinks and Handwash Basins - Kitchens and Cafeterias - Water Coolers and Water Fountains - Water collection trays below Air Conditioners and Air Coolers - Odour Control (Indoor & Outdoor)	Water saving showers and flushes, Modernisation of sewage pipes and leakproofing     Automated taps, Modernisation of plumbing to avoid leakages in concealed plumbing
	1.7	Water Audit	Phase 1 Audit: Conducting a detailed water audit to understand the quantities of various uses of water across the campus, Also, collect drinking water samples from overhead tanks and wastewater samples from final discharge well (once a month from each location)	Phase 2 Audit: Based on the findings of Phase 1 Water Audit, identify the key improvement areas where minimisation can be done. Also, collect drinking water samples from overhead tanks and wastewater samples from final discharge well (once a month from each location)
2	a	Solid Waste	- SAGMA 07/2	
100	2.1	Wet Blodegradable Solid Waste	Minimization of food waste through improving preparation and storage practices (taking prior orders before preparation, limiting things on the menu per day, maintaining a grocery management system to avoid reordering/ extra groceries which can lead to spoilt vegetables, maintaining a cold storage to avoid spoillage, donation of extra food / meals to charity, providing multiple portion sizes)	Promoting on-campus composting of waste to avoid waste disposal
	2.2	Dry Recyclable Paper Waste	Proper segregation of paper waste from other types of waste (waste bins around the campus dedicated for paper), disposal of paper through a common compost facility Adequate storage space for recyclable waste should be maintained	Student committee dedicated to recyclable waste management can be formed
	2,3	Dry Recyclable Plastic Waste	Avoiding usage of plastic like eco friendly bags reusable/ biodegradable glasses and plates, proper segregation of platic waste at source, (waste bins around the campus dedicated for plastic) Adequate storage space for recyclable waste should be maintained	waste management can be formed
	2.4	Dry Recyclable Glass Waste	Increase usage of reusable glasses around the campus, Proper seggregation and disposal of glass waste at source (waste bins around the campus dedicated for glass) Adequate storage space for recyclable waste should be maintained	Student committee dedicated to recyclable waste management can be formed

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	2.5	Waste Biomass (from Gardens)	Promoting on-campus composting of waste to	Installation of biogas plant for electricity or fuel
		No. J. J. A. D. D.	avoid waste disposal,	gas (Fuel for Campus Vehicles)
	2.6	Water Audit		Phase 2 Audit: Based on the findings of Phase
				1 Water Audit, identify the key improvement
	1		uses of water across the campus	areas where minimisation can be done
	<u> </u>			
. ≼3∵ ⊹	5-1103	F-Waste & Laboratory Waste	Control of the contro	
<b>, 10</b>	3,1	Electronic Waste (E-Waste)		Reducing computer replacements through
	0,	Libertoffic Waste (L-Waste)	seggregated and disposed to designated E-	hardware upgrades in old computers to support
			waste disposing vendors,	updated softwares
1	1		Introduction of a computer re-use program	updated contraines
	[		(donation to community groups)	
İ	Ì		(deficient to definitioning groups)	
		*	· · · · · · · · · · · · · · · · · · ·	
	3.2	Discarded Chemicals	Substitution of hazardous chemicals and	Integration of an chemical management
	ļ.		materials used in research work with less	system to avoid re-orders of chemicals
	1		hazardous or non-toxic materials,	
			Reducing usage of hazardous chemicals	
	1		Secure storage of hazardous discarded	
			chemicals for disposal	
	3.3	Discarded Glassware	Proper segregation in secure storage spaces	Developing a lab equipment exchange
	1		and disposal of glassware used in laboratories	program to avoid wastage
			for chemical storage (to be kept in a safe spot	
			and tagged as hazardous)	· .
<u></u>	<del> </del>			
	135 300	Air Pollution & Air Quality	t de la companya del companya de la companya del companya de la co	
44.		Transportation	Encouraging pooling of vehicles (shuttle bus	Increasing upons of bloggs for internal
	4.1	Transportation		Increasing usage of biogas for internal vehicles.
	1		services),  Avallability of bicycles/ e-bikes for internal	Converting intra campus buses/ vehicles to
	ŀ .	j	commutation	electronic/ battery operated buses/ vehicles
		1	Phasing out old inefficient vehicles	Total State of Section Assess Assessed
		İ	Restriction on number of public transport	
	[		entering the premises	
	4.2	Construction	Environmental Audits and EIA to be performed	Devise an Energy Management Policy
	~-		before any construction projects,	including guidelines towards construction
		'	Avoiding any construction activities during	activities
	1		night time,	Promoting usage of machinery consuming low
	1		Disposal of debris, sediment, etc through	lemission fuels
	.		construction activities to be monitored for	· ·
	1		emissions 45	
	4.3	Noise Pollution	No Noise at night	Distributed sound system during any public
			(banned during 10:00 pm to 6:00 am)	festivals
	'	1	Ban use of horns inside the premises and have	Setting up noise limit during day nours
			dedicated pathway for vehicular transportation	<u>'</u>
. 5	294.23	Episodic Pollution		
r prog <b>a</b> nistik	5.1	College Elections	Distributed sound systems, usage of digital	The selection process should include extra
	] "	GOLOGO ELOGISTIS	methods instead of physical leaflets, etc. for	points for green campaigning
	1		campaigning,	Francis along combanding
			minimal usage of posters to avoid wastage	
	1.	1.	Ban on usage of fire crackers	<b>!</b>
	5.2	Religious Festivals	Ban on usage of fire crackers (which harm the	Promotion of eco-friendly methods towards
	1	1 '	environment such as rockets, bombs, etc)	Ganesh and Durga idol immersion, Nirmaiya
		· ·	Ban on use of single use plastic	immersion, etc.(using ecofriendly idols, artificia
		1	Usage of decorations made from eco-friendly /	ponds to avoid immersion in natural
			recyclable/ recycled materials	waterbodies,etc)
		· ·	Replacing plastic glasses, plates, etc with	
	1 .		recyclable material	
	5.3	Cultural Events & Gatherings	Ban on use of single use plastic	Organising events towards environmental
	1	1	Usage of decorations made from eco-friendly /	benefits/ promoting sustainable culture such a
1			recyclable/ recycled materials:	tree plantation drives
		1	Pro-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
1			Replacing plastic glasses, plates, etc with	` :
			recyclable material	[ ]
	5.4	Holi	recyclable material Promoting Dry Holi across the campus,	Promoting natural colours instead of artificial
	5.4	Holi	recyclable material Promoting Dry Holi across the campus, Restriction on any water intensive activities on	colours to avoid any harsh chemicals mixing
	5.4	Holi	recyclable material Promoting Dry Holi across the campus,	
			recyclable material Promoting Dry Holi across the campus, Restriction on any water intensive activities on account of the festival	colours to avoid any harsh chemicals mixing with the water/ soit
· 6		Ecology and Green Cover	recyclable material Promoting Dry Holi across the campus, Restriction on any water intensive activities on account of the festival	colours to avoid any harsh chemicals mixing with the water/ soil
6			recyclable material Promoting Dry Holi across the campus, Restriction on any water intensive activities on account of the festival	colours to avoid any harsh chemicals mixing with the water/ soil  Conducting periodic Environmental Impact
6		Ecology and Green Cover	recyclable material Promoting Dry Holi across the campus, Restriction on any water intensive activities on account of the festival	colours to avoid any harsh chemicals mixing with the water/ soil

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	6.2	Conservation of Flora and Fauna	Habitat preservation to be carried out to protecting the flora and fauna around the campus (ban on any new construction activities that may affect any rare species),	Setting up boards/ posters of the identified species to increase awareness and importance, Promoting horticulture across the campus
	6.3	Tree Plantation Drive	Conducting periodic tree maintenance and plantation drives, Maintaining equal distribution of green cover across the campus	Maintaining a minimum of 33% green cover across the used campus area Promoting plantation of local variety of trees and plants inside the campus
	6.4	Conservation of Water Bodies & Ecosystem on Banks	Ban any pollution / wastewater discharge to the waterbodies or at banks	Setting up boards / posters of the identified species to increase awareness and important
	6.5	Special & Flagship Projects		Undertaking beautification of campus by developing Butterfly Sanctuary, Snake Park, Japanese Gardens, Rock Garden, etc.
7		Awareness & Capacity Building for Sustainable Living		
	7.1	Sustainable initiatives	Developing initiatives / programmes on waste management, water management, recycling, ecology, etc. in the campus which require student participation	Develop a sustainability/ Green Campus committee to look after the students contribution in maintaining sustainable living
		Student Behaviour for Sustainable Livelihood	Conducting awarefiess workshops on waste management, water management, recycling, ecology, etc. In the campus for the students	Include Green campus Initiatives into the curriculum as a graded / credited subject
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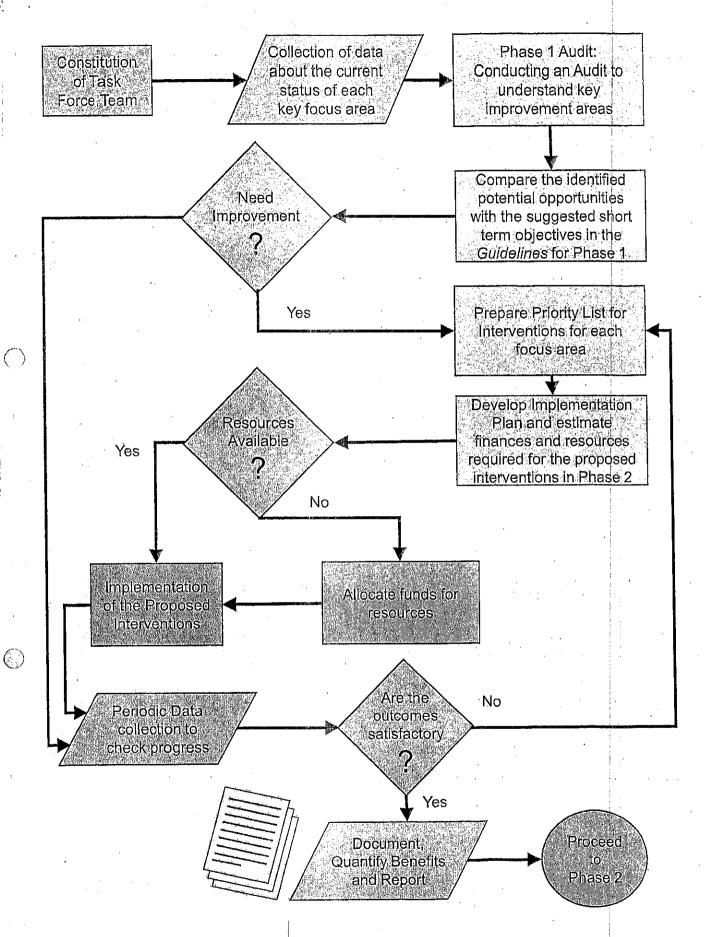


Figure 1: Work-Flow Diagram for Implementing Phase 1

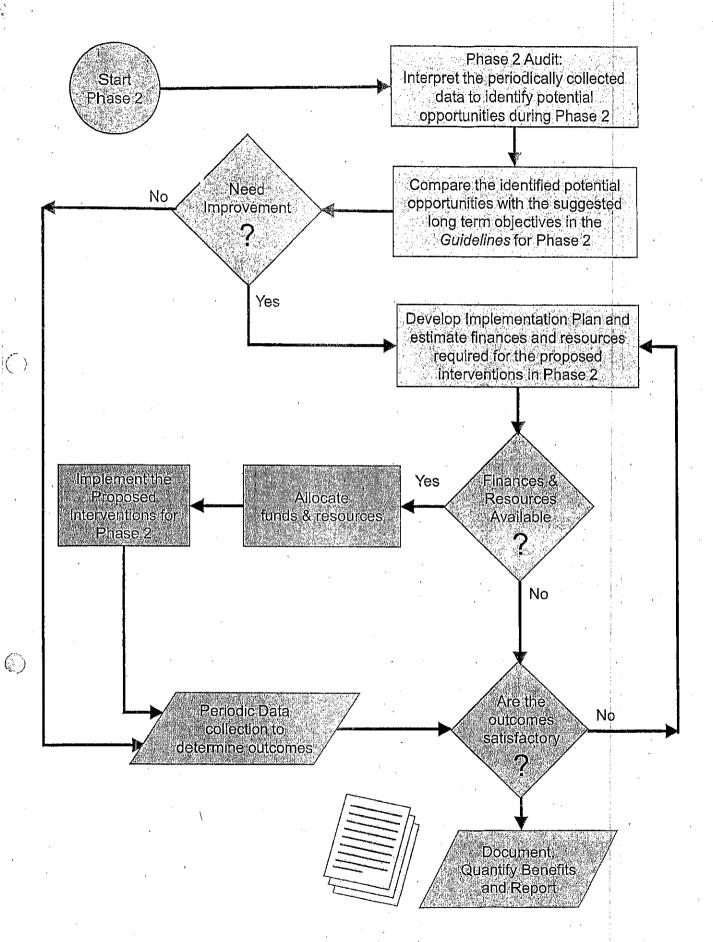


Figure 2: Work-Flow Diagram for Implementing Phase 2