



महाराष्ट्र शासन

तंत्र शिक्षण विभागीय कार्यालय, पुणे

दूरध्वनी क्र.०२०-२५६५६२३४/२५६५७१७६
Email ID : ropune@demaharashtra.gov.in

४१२-ई, शिवाजीनगर, पुणे - ४११ ०१६.



जा. क्र : तंशिविकापु/विवि-४/संकीर्ण/२०२२/ 2035
महत्वाचे

दिनांक : 04 MAY 2022

प्रति,

या विभागीय कार्यालयाच्या अधिनस्त,
पदवी/पदविका अभियांत्रिकी/तंत्रज्ञान/
औषधनिर्माण/वास्तुशास्त्र व हॉटेल मॅनेजमेंट अँड केटरिंग टेक्नॉलॉजी,
अभ्यासक्रमाच्या संस्था.
पुणे विभाग, पुणे.



विषय : Green Campus बाबत मार्गदर्शक सूचना.

- संदर्भ- १. तंत्रशिक्षण संचालनालय, महाराष्ट्र राज्य, मुंबई यांचे पत्र.क्र.१०/एनजीपी२०२२/३४८
दि.२१.०४.२०२२
२. मा. प्रधान सचिव, उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य, यांचे पत्र क्र. राप्रसं/रूसा/
२०२२-२३/२०७ दि.०५.०४.२०२२

उपरोक्त विषयास अनुसरून संदर्भिय पत्र क्र.१ सोबत प्राप्त झालेल्या संदर्भ पत्र क्र. २ अन्वये 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 अंतर्भाव राहिल. या सर्व बाबींबद्दल टप्प्यानिहाय (पहिला टप्पा ०९ महिना व दुसरा टप्पा ०९ ते ११ महिने) हे उपक्रम हाती घेता येतील.

या कार्यक्रमाच्या अंमलबजावणीसाठी उपयोगी पडेल अशा कार्यपद्धती बाबतची मार्गदर्शक तत्वे सोबत पाठविण्यात येत आहे.

तरी या विभागीय कार्यालयाच्या अधिनस्त संस्था/ विद्यापीठे यांनी या मार्गदर्शक तत्वांची अंमलबजावणी करावी. तसेच याबाबत अधिक माहिती हवी असल्यास डॉ. प्रमोद पात्रेकर, वरिष्ठ सल्लागार, राष्ट्रीय उच्चतर शिक्षा अभियान (रूसा), मुंबई यांना (ईमेल आयडी- tsgrusamah4@gmail.com) संपर्क करता येईल.

सोबत - वरील प्रमाणे


(डॉ. द. व्यं. जाधव)

सहसंचालक

तंत्रशिक्षण विभागीय कार्यालय, पुणे.

प्रत- प्रोग्रॅमर यांना संकेतस्थळावर प्रदर्शित करण्यासाठी.

सोबत मा. प्रधान सचिव, उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य, मुंबई यांचे "Green Campus बाबत मार्गदर्शक सूचना" या विषयाचे पत्र जोडले आहे.

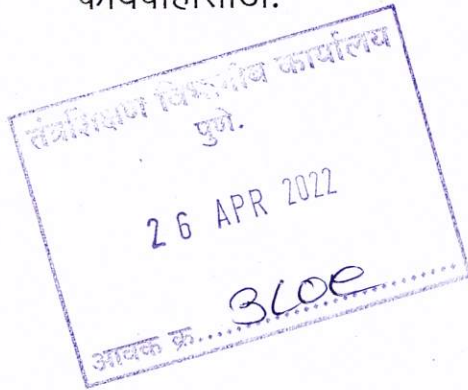
क्रमांक: १०/एनजीपी/२०२२/ ३४८

तंत्रशिक्षण संचालनालय, महाराष्ट्र राज्य,
३, महापालिका मार्ग, पत्र पेटी क्र. १९६७,
मुंबई-४००००९.

दिनांक : 21 APR 2022

प्रति,

१. मा.सहसंचालक, 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 केटरिंग टेक्नॉलॉजी या अभ्यासक्रमाच्या संस्थांच्या पत्रासोबतच्या मार्गदर्शक तत्वांची अंमलबजावणी करण्याबाबत कळवावे आणि विभागनिहाय बैठक घेऊन त्यांना ह्याची माहिती द्यावी, ही विनंती.
२. मा.संचालक, महाराष्ट्र राज्य तंत्रशिक्षण मंडळ, मुंबई, यांना माहिती व कार्यवाहीसाठी.



(गोविंद संगवई)

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

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

प्रति
सहा.संचालक
तंत्र शिक्षण
महाराष्ट्र राज्य
मुंबई



विकास चंद्र रस्तोगी, भा.प्र.से.

प्रधान सचिव

महाराष्ट्र शासन

क्र. राप्रसं/रुसा/२०२२-२३/२०७

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.
- ✓ २. संचालक,
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 अंतर्भाव राहिल. या सर्व बाबींबद्दल टप्प्यानिहाय (पहिला टप्पा ०९ महिना व दुसऱ्या टप्प्या ०९ ते ११ महिने) हे उपक्रम हाती घेता येतील.

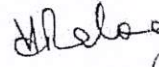
२. या कार्यक्रमाच्या अंमलबजावणीसाठी उपयोगी पडेल अशा कार्यपद्धती बाबतची मार्गदर्शक तत्त्वे सोबत पाठविण्यात येत आहे.

३. 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- tsgrusamah4@gmail.com) संपर्क करता येईल.

D-2A
D-10

सोबत :- Green Campus- मार्गदर्शक तत्त्वे.

आपला विश्वासू,


(विकासचंद्र रस्तोगी)

५६३
१०/०४/२०२२

प्र. वि. रस्तोगी
०७/०४/२०२२

०७/०४/२०२२

Guidelines for Green Campuses

Focus	Task	Work Components	Phase 1: Short Term (9 - 18 months)	Phase 2: Long Term (9 - 18 months)
1		Water & Wastewater		
	1.1	Municipal Drinking Water Supply	Metering of water consumption at activity level (especially in water intensive activities such as gardening, cleanliness & hygiene, domestic usage, cooling systems (HVAC), laboratories, etc), Periodic inspection of plumbing units,	Developing long term goals and increasing awareness towards minimal water usage, Xeriscaping of Gardens to reduce water consumption
	1.2	Borewell, Dugwell & Tanker Water	Metering of water consumption at activity level (especially in water intensive activities such as gardening, cleanliness & hygiene, domestic usage, cooling systems (HVAC), laboratories, etc), Periodic inspection of plumbing units,	Developing long term goals and increasing awareness towards minimal water usage, Xeriscaping of Gardens to reduce water 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	Tertiary treatment of wastewater to reduce discharge and reuse it for more water related activities such as non-potable water activities such as toilet 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 & Hygiene	- Toilets 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		Solid Waste		
	2.1	Wet Biodegradable 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 spoilage, 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 plastic waste at source, (waste bins around the campus dedicated for plastic) Adequate storage space for recyclable waste should be maintained	Student committee dedicated to recyclable waste management can be formed
2.4	Dry Recyclable Glass Waste	Increase usage of reusable glasses around the campus, Proper segregation 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	

	2.5	Waste Biomass (from Gardens)	Promoting on-campus composting of waste to avoid waste disposal.	Installation of biogas plant for electricity or fuel gas (Fuel for Campus Vehicles)
	2.6	Water Audit	Phase 1 Audit: Conducting a detailed water audit to understand the quantities of various uses of water across the campus	Phase 2 Audit: Based on the findings of Phase 1 Water Audit, identify the key improvement areas where minimisation can be done
	3	E-Waste & Laboratory Waste		
	3.1	Electronic Waste (E-Waste)	Bulbs, tubes, battery (dry cell), to be segregated and disposed to designated E-waste disposing vendors, Introduction of a computer re-use program (donation to community groups)	Reducing computer replacements through hardware upgrades in old computers to support updated softwares
	3.2	Discarded Chemicals	Substitution of hazardous chemicals and materials used in research work with less hazardous or non-toxic materials, Reducing usage of hazardous chemicals Secure storage of hazardous discarded chemicals for disposal	Integration of an chemical management system to avoid re-orders of chemicals
	3.3	Discarded Glassware	Proper segregation in secure storage spaces and disposal of glassware used in laboratories for chemical storage (to be kept in a safe spot and tagged as hazardous)	Developing a lab equipment exchange program to avoid wastage
	4	Air Pollution & Air Quality		
	4.1	Transportation	Encouraging pooling of vehicles (shuttle bus services), Availability of bicycles/ e-bikes for internal commutation Phasing out old inefficient vehicles Restriction on number of public transport entering the premises	Increasing usage of biogas for internal vehicles, Converting intra campus buses/ vehicles to electronic/ battery operated buses/ vehicles
	4.2	Construction	Environmental Audits and EIA to be performed before any construction projects, Avoiding any construction activities during night time, Disposal of debris, sediment, etc through construction activities to be monitored for emissions	Devise an Energy Management Policy including guidelines towards construction activities Promoting usage of machinery consuming low emission fuels
	4.3	Noise Pollution	No Noise at night (banned during 10:00 pm to 6:00 am) Ban use of horns inside the premises and have dedicated pathway for vehicular transportation	Distributed sound system during any public festivals Setting up noise limit during day hours
	5	Episodic Pollution		
	5.1	College Elections	Distributed sound systems, usage of digital methods instead of physical leaflets, etc. for campaigning, minimal usage of posters to avoid wastage Ban on usage of fire crackers	The selection process should include extra points for green campaigning
	5.2	Religious Festivals	Ban on usage of fire crackers (which harm the environment such as rockets, bombs, etc) Ban on use of single use plastic Usage of decorations made from eco-friendly / recyclable/ recycled materials Replacing plastic glasses, plates, etc with recyclable material	Promotion of eco-friendly methods towards Ganesh and Durga idol immersion, Nirmalya immersion, etc.(using ecofriendly idols, artificial ponds to avoid immersion in natural waterbodies,etc)
	5.3	Cultural Events & Gatherings	Ban on use of single use plastic Usage of decorations made from eco-friendly / recyclable/ recycled materials Replacing plastic glasses, plates, etc with recyclable material	Organising events towards environmental benefits/ promoting sustainable culture such as tree plantation drives
	5.4	Holi	Promoting Dry Holi across the campus, Restriction on any water intensive activities on account of the festival	Promoting natural colours instead of artificial colours to avoid any harsh chemicals mixing with the water/ soil
	6	Ecology and Green Cover		
	6.1	Census & Ecosystem Assessments	Identifying and documenting the number of species and their habitats around the campus (such as waterbodies, etc)	Conducting periodic Environmental Impact Assessments and conducting biodiversity assessment studies

	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 importance
	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
	7.2	Student Behaviour for Sustainable Livelihood	Conducting awareness 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

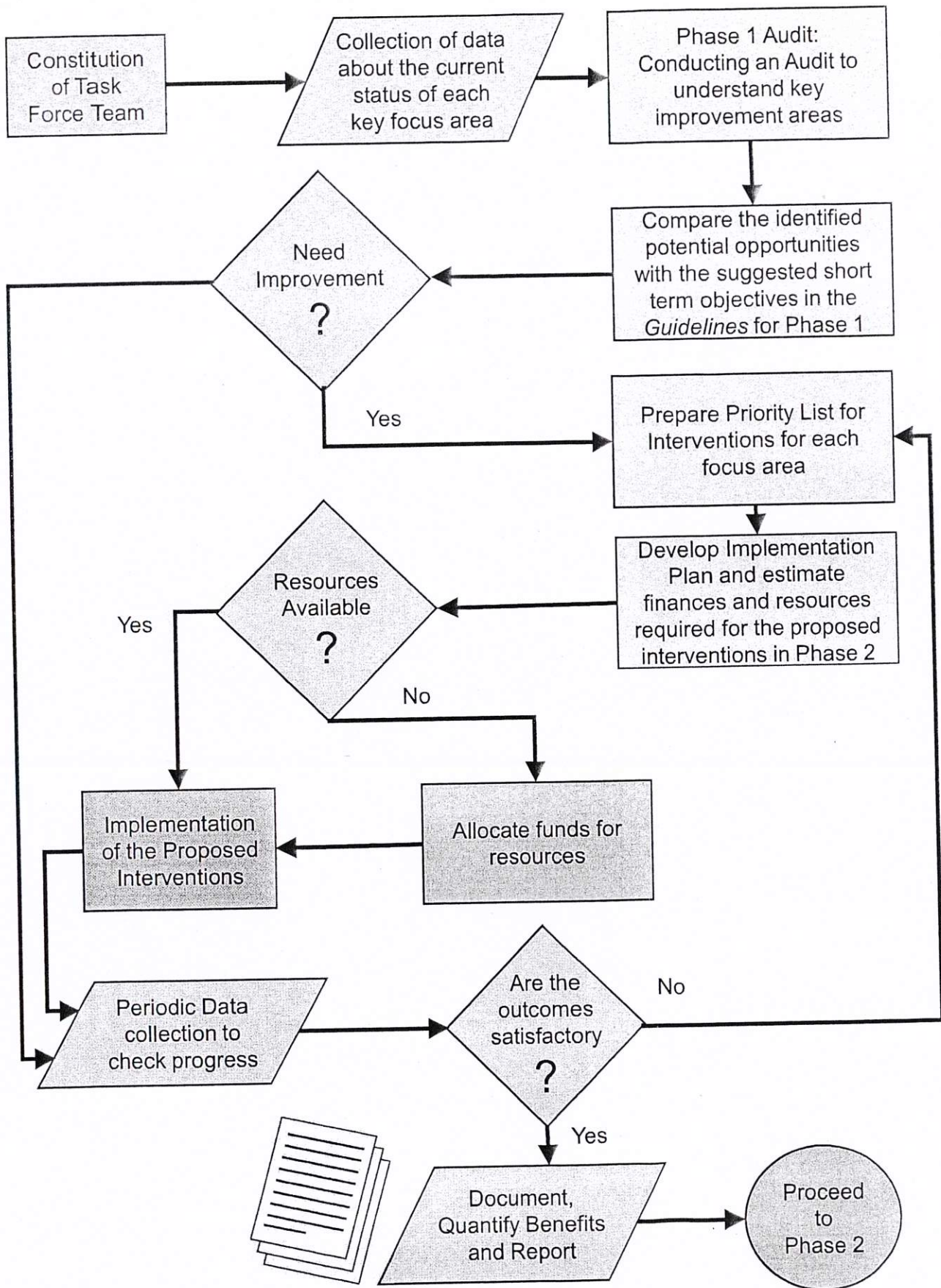


Figure 1: Work-Flow Diagram for Implementing Phase 1

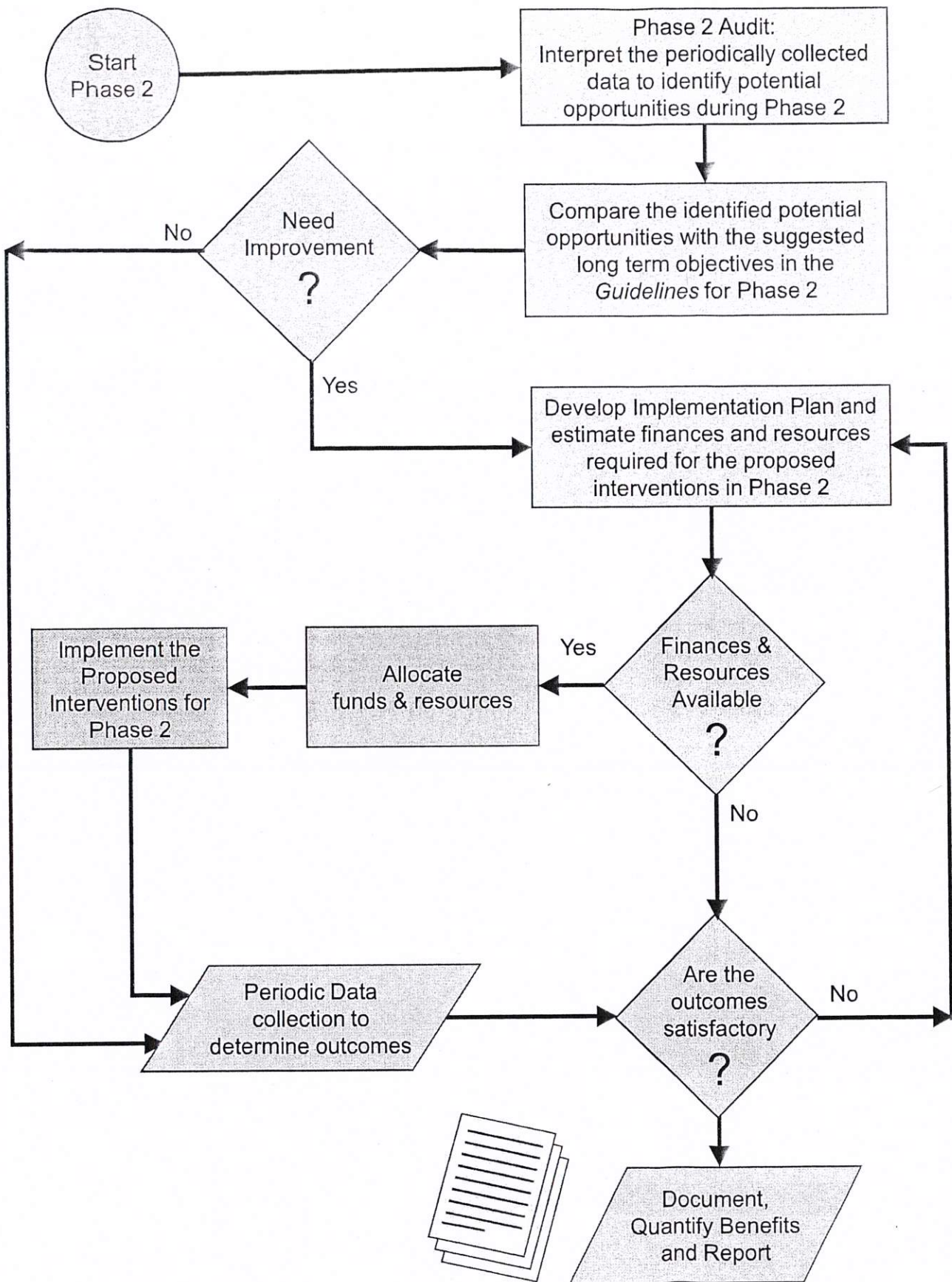


Figure 2: Work-Flow Diagram for Implementing Phase 2