

By Regd. Post

(3)

GOVERNMENT OF ANDHRA PRADESH
INFRASTRUCTURE & INVESTMENT (PORTS) DEPARTMENT

Letter No. INI01-PORT/109/ 2023, Dated: 19.10.2023

From

The Special Chief Secretary to Government (FAC),
I&I Department, AP Secretariat.,
Velagapudi, Amaravati 522238.

To

The Secretary,
Ministry of Ports, Shipping and Waterways,
Government of India
Transport Bhawan, 1, Parliament Street, New Delhi-110001.

Sir,

Sub:- I&I Dept., - APIWA - Proposal for development of the Urban Passenger Waterway Transportation - Requested - Reg.

Ref:- From the CEO AP Inland Waterways Authority, Lr. No. 117/ APIWA/ 2023-24,
dated: 12.09.2023

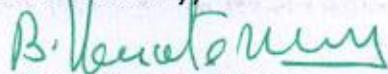
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I invite your kind attention to the reference (copy enclosed) containing the proposal of AP Inland Waterways Authority (APIWA) "**Development of Urban Passenger Waterway Transportation to envisage efficient connectivity to tourist places located on the bank of River Krishna in the vicinity of Vijayawada city in Andhra Pradesh through riverine route**" proposed under the Sagarmala Scheme of the Government of India with the project costs of Rs. 50 Cr and with the proposal to implement the project on PPP mode by forming a Special Purpose Vehicle (SPV) under Channel-2 mode i.e., through Sagarmala Development Company Limited (SDCL)..

2. Hence, I request you to examine the proposal from the State of Andhra Pradesh / APIWA for financial assistance under Sagarmala Scheme, towards construction of seven terminals at the indicated locations and development of urban passenger waterway transportation to connect tourist places on the banks of River Krishna in Vijayawada city and sanction the same at the earliest.

3. APIWA will provide all required information required towards appraisal of the proposal.

Yours faithfully,



For SPECIAL CHIEF SECRETARY TO GOVERNMENT

Copy to:

1. Spl CS, WRD, GoAP and Spl CS, Tourism Department, GoAP.
2. Commissioner, Vijayawada Municipal Corporation
3. The Chief Executive Officer, AP Inland Waterways Authority for following up the matter with GoI.



Andhra Pradesh
Inland Waterways Authority
(Government of AP)

4th Floor, NTR Admin Block, PNBS, APSRTC, Vijayawada - 520013
Email: info.inlandwaterways@gmail.com

Lr. No. 117/APIWA/2023-24

Dt: 12.09.2023

To
Special Chief Secretary to Govt,
I & I (Ports) Department,
Govt of Andhra Pradesh,
Secretariat, Velagapudi.

A.S/ J24
on 11/9/2023
1259.

Sub: Proposal for development of the Urban Passenger Waterway
Transportation - Reg.

Ref: Agenda Item 2 of 19th Maritime State Development Council (Annexure-1).

Sir,

The Sagaramala program of the Union Government is aimed at harnessing the potential of Inland Waterways in the country through various projects connected with:

1. Port modernization & new port development,
2. Port connectivity enhancement,
3. Port-led industrialization,
4. Coastal community development and
5. Coastal Shipping and Inland Water Transport

States can identify projects which are prone to foster positive social outcomes and contribute to the overall development of the community for execution under the Sagarmala program even though such projects are projected to be of Low Internal Rate of Returns.

The category of projects under the Coastal Shipping and Inland Water Transport sector which can be of protracted functionality Including Ferry Services, Urban Passenger Waterway Transportation, etc., could be taken up under the Sagaramala scheme. The Sagaramala scheme can support these projects through two channels.

- Channel -1: MoPSW budget-funded projects
- Channel -2: Equity-funded projects through Sagaramala Development Company Limited.

We may avail provisions of the scheme for our Waterway projects also through appropriate channels. One of the projects that could be considered is "Urban Passenger Waterways Transportation to connect temples in the vicinity of Vijayawada City". This project is assessed to have multiple benefits over other modes of transportation as under

- 1) Minimised travel time
- 2) Reduced risk of accidents
- 3) Low-cost transportation
- 4) Lower Fuel consumption
- 5) Lower congestion on roads
- 6) Reduced Air, Noise and Land Pollution
- 7) Seamless and strainless travel to passengers, particularly senior citizens and children.

We may consider to implement this project through PPP mode by forming a Special Purpose Vehicle(SPV) and request fund assistance from the Ministry of Shipping and Waterways (MoPS&W) under Channel 2 i.e., through Sagarmala Development Company Limited(SDCL). Andhra Pradesh Inland Waterways Authority has the mandate to execute this projects in terms of APIWA Act, 2023(18 of 2023).

A draft project proposal at a cost of rupees 50 crores in this regard has been prepared. The same is enclosed herewith at Annexure-2 for perusal and approval to forward the proposal to MoPS&W for consideration by Sagaramala Development Company Ltd.

Encls: As above.

Yours Sincerely

SVK Reddy
Chief Executive Officer
AP Inland Waterways Authority

Agenda Item 2: Overview of Sagarmala Programme

Background

Sagarmala is a National Programme aimed at accelerating economic development in the country by harnessing the potential of India's 7,500 km long coastline and 14,500 km of potentially navigable waterways. The concept of Sagarmala was approved by the Union Cabinet on 25th March 2015. These projects are categorized into five pillars:

1. Port modernization & new port development,
2. Port connectivity enhancement,
3. Port-led industrialization,
4. Coastal community development and
5. Coastal shipping and Inland water transport

Status

Currently, **809 projects** worth more than **Rs. 5.74 lakh Cr.** are being monitored under the Sagarmala Programme, for implementation by 2035. Out of these, **237 projects** worth **Rs. 1.22 Lakh Cr.** have been already completed and **262 projects** worth **Rs. 2.44 lakh Cr.** are under implementation. These projects are being implemented by various Central Line Ministries, State Governments, Major Ports, and other agencies. Stage-wise categorization of Sagarmala Projects is in the table below:

Pillar	Total		Completed		Under Implementation	
	No of Projects	Total Cost (Rs. Cr.)	No of Projects	Total Cost (Rs. Cr.)	No of Projects	Total Cost (Rs. Cr.)
Port Modernization	238	2,54,950	94	31,517	65	79,958
Port Connectivity Enhancement	208	1,71,098	78	41,561	72	81,991
Port Led Industrialization	33	1,19,846	9	45,865	22	73,206
Coastal Community Development	82	11,653	21	1,559	32	6,166
Coastal Shipping & IWT	248	17,061	35	1,834	52	16,116
Total	809	5,74,607	237	1,22,337	262	2,44,199

Budgetary grant funded projects

Projects with high social impact, such as fishing harbor development, coastal community skill development, and coastal tourism infrastructure, are being granted financial assistance under the Sagarmala Programme from the budget of MoPSW. While these projects may not generate significant financial returns or have a low Internal Rate of Return (IRR), their focus lies in fostering positive social outcomes and contributing to the overall well-being and development of coastal communities. The Sagarmala Programme recognizes the importance of these initiatives and supports them to create a sustainable and inclusive coastal ecosystem.

Under the Sagarmala Programme, MoPSW has provided funding to **171 projects** worth **Rs. 10,981 Cr.** Out of these, **53 projects** worth **Rs. 3,316 Cr.** have already been completed whereas **70 projects** worth **Rs. 5,955 Cr.** are currently under implementation.

Equity Funded projects

As a part of institutional mechanism to implement Sagarmala Programme at National Level, Sagarmala Development Company Limited (SDCL) was incorporated on 31st August 2016 under Companies Act, 2013 to assist project SPVs set up by the Central Ministries / State Government / Ports / State Maritime Board etc. through equity participation.

So far, SDCL has already invested an amount of **Rs. 542 Cr.** in 5 projects through equity participation. These include an investment of **Rs. 125 Cr.** in SPVs for providing rail connectivity to **Krishnapatnam Port (KRCL)**, **Rs. 337 Cr.** in **Haridaspur Paradip Railway Company Limited (HPRCL)**, **Rs. 10 Cr.** for developing and operating **Chabahar Port** in Iran after taking over from India Ports Global Limited (IPGL) in 2018-19, **Rs. 50 Cr.** in SPV formed with **NHAI** for development of ROB at **Haldia Port** and **Rs. 20 Cr.** in a road connectivity project providing connectivity from **Visakhapatnam Port** to the National Highway.

National Sagarmala Apex Committee

The National Sagarmala Apex Committee (NSAC) is the apex body providing policy directions and guidance for implementation of Sagarmala projects and reviews its implementation. The NSAC was constituted on 13.05.2015 by the Union Cabinet and is chaired by **Hon'ble Minister for Ports, Shipping & Waterways** with **Cabinet Ministers** from stakeholder Central Ministries and **Chief Ministers & Administrators of Maritime States and Union territories** respectively as members. To review the progress of Sagarmala Programme, **three meetings** have already been conducted till date on 5th October 2015, 9th April 2016, and 6th May 2022. During the last NSAC meeting held in May 2022, all the Coastal States and UTs were requested to prepare a detailed '**Maritime Master Plan**' encompassing world class facilities and technology for Port and other Maritime Facilities within their respective jurisdictions, with timelines.

State Sagarmala Committee

The State Sagarmala Committees (SSCs) have been conceptualized as part of the Sagarmala Institutional Framework to have an effective mechanism at the State level for coordinating and facilitating Sagarmala related projects. All Coastal States and Union Territories have constituted SSCs at the State/UT level, headed by Chief Minister / Minister in charge of ports with members from relevant Departments and Agencies.

The effective functioning of the SSCs is critical for ensuring the successful implementation of the projects under Sagarmala Programme at the State/ UT level. It is a very useful platform to firm up action plan for implementation of Sagarmala Projects in the State/ UT and to plan further development projects for the State/ UT which may require funding from MoPSW for DPR / implementation.

At present SSC meetings have been conducted in 8 states and 3 UTs, while West Bengal and Daman & Diu are yet to conduct the meeting. Details of SSC Constitution and meetings held are as below:

Coastal State	Date of SSC constitution	No of meetings held	Date of last SSC Meeting
Goa	16 th Nov 2015	4	11 th Mar 2022
Tamil Nadu	3 rd Feb 2016	4	12 th Jan 2023
A & N Islands	1 st Dec 2015	3	29 th Nov 2021
Maharashtra	15 th Oct 2015	1	20 th Mar 2017
Gujarat	2 nd May 2016	2	17 th Dec 2021
Puducherry	6 th Oct 2015	1	12 th Jan 2018
Odisha	3 rd Aug 2015	1	7 th Apr 2021
Karnataka	1 st Apr 2016	4	6 th Mar 2023
Kerala	19 th Oct 2015	1	4 th May 2022
Andhra Pradesh	1 st Oct 2015	3	26 th Apr 2022
Lakshadweep	23 rd Jul 2021	8	20 th Feb 2023
West Bengal	29 th Jun 2015	-	-
Daman & Diu	3 rd Nov 2020	-	-

Compliance of Statutory Requirements

The transportation, storage, and distribution of cargo through sea and ports is hazardous. Any accident occurring can be extremely damaging to the environment, infrastructure, and human lives. Therefore, it is pertinent to maintain utmost standard and checks while creating infrastructure for ports. Further, Port security is essential since sea transportation is a very active and widely utilized mode of transportation, particularly for the movement of goods. It covers both the defense of the actual seaports as well as the defense and inspection of the goods passing through the ports.

All Ports/ Terminals:

Along with other statutory compliances in order to ensure that requisite safety and security standards are maintained, the ports require NSPC (Navigational Safety in Port Committee) compliance certificate from Directorate General of Shipping which standardizes navigational safety in ports including safe entry, berthing, operations and exit of vessels from ports. Further, Compliance of ISPS Code (International Ship & Port Facility Code) from Directorate General of Shipping enables the detection and deterrence of security threats at ports within an international framework.

Measures for Ports/ Terminals handling POL/ LPG/ LNG cargo

Rule 16 of Petroleum Rules, 2022 elaborates on procedures regarding importing of petroleum by sea. The Rule 16 (1) states that "Petroleum shall not be imported into India by sea except through the ports which are duly approved for this purpose by the Ministry of Shipping, Government of India, in consultation with the Chief Controller and declared as Custom's ports by the Commissioner of Customs."

The list of all approvals which are required for commencement of operations of Ports/ Terminals handling POL/ LPG/ LNG cargo include (but not limited to)

- a. Gazette Notification from Ministry of Ports, Shipping and Waterways (MoPSW)
- b. Construction and Commissioning permission from Petroleum and Explosives Safety Organisation (PESO), Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry (PESO approvals are required for each terminal, jetty, storage, and associated pipelines.)
- c. Environmental Clearance from Centre/ State Agencies, as applicable
- d. Compliance of ISPS Code from Directorate General of Shipping, MoPSW
- e. NSPC from Directorate General of Shipping, MoPSW
- f. Clearance from Customs, as applicable
- g. Any other NOC/ Compliance required from Centre/ State Agencies, as applicable for the project.

The Ministry in consultation with stakeholder organization is consolidating data of statutory compliance/ approvals obtained by all the ports/ terminals across the country to ensure that requisite standards are maintained while creating infrastructure and approvals are renewed/ updated from time to time, as required. This exercise is necessary to prevent any untoward incident at the ports.

Action requested:

The council is requested to take note of progress. Action solicited from Coastal States and UTs for the following:

- Prepare a Maritime Masterplan for their State/ UT
- Endeavor to conduct regular SSC meetings at least once in 6 months.
- Conduct a thorough review of statutory compliance/ approvals obtained by the ports/ terminals in their purview. The status of approvals may be shared with the Ministry.

Project Feasibility Report on

**Development of Urban Passenger Waterway
Transportation and to envisage efficient
connectivity to the tourist places located on the
bank of River Krishna in the vicinity of
Vijayawada city in Andhra Pradesh through
riverine route.**

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1. PREAMBLE:

The Government of Andhra Pradesh proposes to provide efficient connectivity to the important locations including tourist places located on the bank of River Krishna in Andhra Pradesh through riverine route by providing proper vessel berthing facility, terminal facilities for commuters and operating catamaran vessels to decongest road traffic and save considerable travel time. The proposal contributes to the overall development of local community and promotes Inland Water Transport in the region.

The introduction and application of this scheme will also become an innovative project in the inland water transport sector enabling public to have protracted range of benefits in the fields of transport & tourism and have a feel of thrill & fantasy of journey on waters. It also envisages visit of maximum number of places of attraction including temples located on the banks with least efforts & costs and hassle-free access to the tourist spots promoting tourism as well as Inland Water Transport simultaneously at no extra cost.

Since the project involves direct access to the intended places of visit without necessitating intermediate stoppage for tea breaks, lunch, etc with post visit transportation facility to the destinations, it shall have economy of time without any scope for unforeseen things like missing of persons and belongings.

The Government intends to operate the project on Public Private Partnership (PPP) mode to encourage Private Sector Investments and ensure Professional Standards in Operations.

The project will be implemented by AP Inland Waterways, Infrastructure & Investment Department, Govt of AP.

2. Project Rationale & Justification:

The State of Andhra Pradesh is one of the fastest growing and developing state after the bifurcation of unified Andhra Pradesh. The State in the process of pooling from various sources to have a strong revenue base. Taken by the fact that the state has many temples and places of interest and navigable water bodies, Inland Water Transport tourist based related projects could be considered for potential revenue generating asset for the government.

Majority of temples in Andhra Pradesh are located near to banks of Rivers. Conducted tours covering temples & places of attractions on the banks of waterbodies utilising waterways is expected to give a new dimension to the tourism boosting up the sector with enthusiastic revenues. Such tourism shall also have numerous other advantages which include.

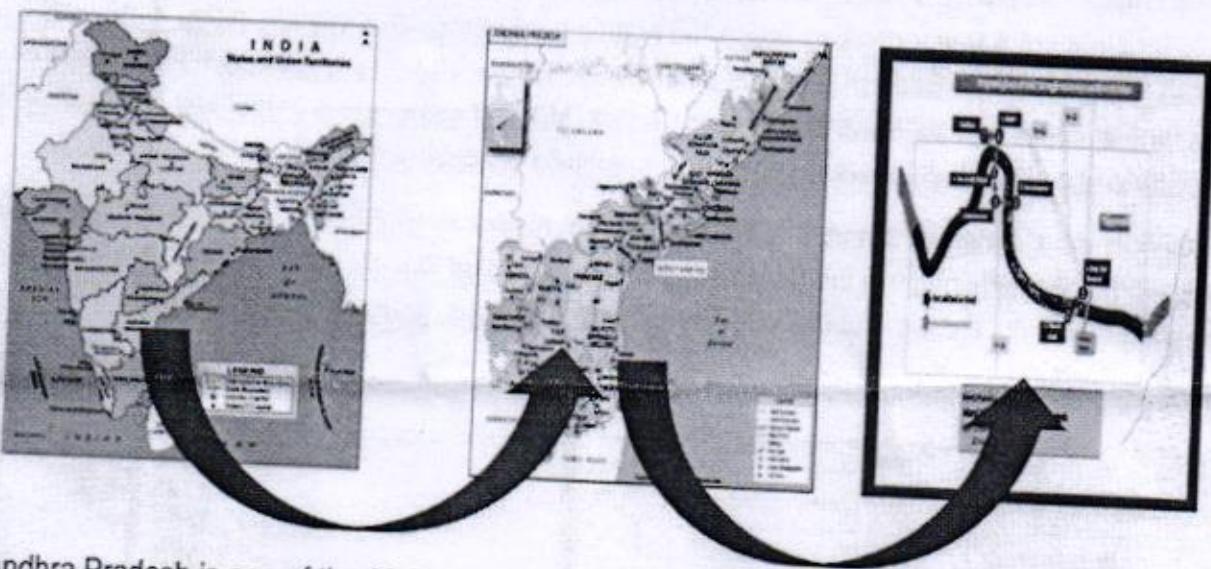
1. Provision of direct access to the places of visit avoiding long walks from the bus stands when travelled by road.
2. Increase in number of locations to be visited enhancing location coverage ratio from approx. 30% (by road) to 100% (by water) as it provides direct access avoiding time loss on long walks.
3. Provide hassle free visits avoiding traffic-zam.
4. Avoid time loss for lunch breaks/refreshments as the same would be available on board the vessel.
5. Decongestion of roads.
6. The IWT mode will be cheaper and is a preferred mode for the population segment involving aged persons due to jerk free travel.

In the light of above Govt of Andhra Pradesh propose to synergise Inland water Transport with tourism mode for visiting the tourist locations located on river Krishna (NW-4) in the phased manner by organising conducted tours through self-propelled catamaran vessels by setting up community jetties/terminal facility at seven (7) locations under the present project. The project operations, since one being planned through PPP basis used also generate rural employment contributing the economy of the rural areas. The Project is also relatively environment friendly where compared to a similar project with other mode of transport.

Therefore, the project is justified on economic, environment, social and safety point of view and shall be to the advantage of communicating.

3. Background

India and AP Map



Andhra Pradesh is one of the 29 States of India, situated on the country's south-eastern coast. The state is the eighth largest state in India covering an area of 160,205 km² (61,855 sq miles). As per the 2011 census of India. The state is tenth largest by population with 49,386,799 inhabitants. In accordance with the Andhra Pradesh Reorganisation Act – 2014, Hyderabad will remain the de jure capital of both Andhra Pradesh and Telangana states for a period of time not exceeding 10 years.

The erstwhile State of Andhra Pradesh was bifurcated under the State "Reorganisation Scheme on June 02, 2014 and new state of Andhra Pradesh was declared with thirteen districts of erstwhile Andhra Pradesh. Post bifurcation, the districts have been reorganised to increase the number to 26. The state has the second longest coastline of 974 km (604 miles) among all the states of India. It borders Telangana in the northwest, Chhattisgarh in the north, Odisha in the northeast, Karnataka in the west, Tamilnadu in the south and the water body of Bay of Bengal in the east. A small enclave of 30km² (12sq miles) of Yanam, a district of Pondicherry, lies south of Kakinada in the Godavari delta to the northeast of the state.

There are two regions in the state namely Coastal Andhra and Rayalaseema and hence, the two regions are more often referred as seemadhra by the media. There are 26 districts with 12 in Coastal Andhra and 14 in Rayalaseema. Vishakhapatnam is the largest city and a commercial hub of the state with a GDP of \$43.5 billion followed by Vijayawada with GDP of \$3 billion. Guntur, Nellore, Kurnool, Kadapa, Tirupati, Rajahmundry, Kakinada, Vizianagaram, Eluru and Ongole are other important cities.

3.1 Geography:

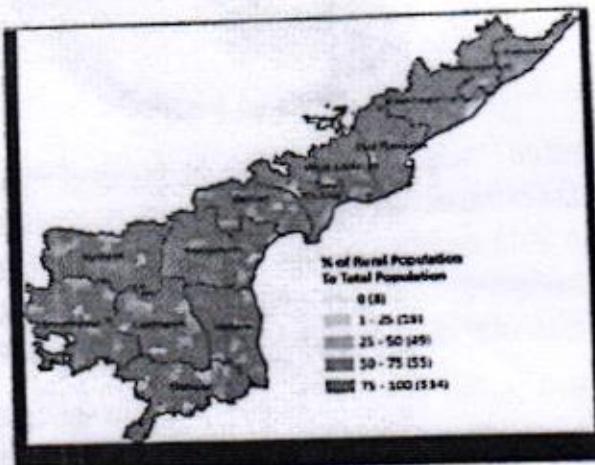
Geographically, Andhra Pradesh is bestowed three mighty river systems Penna, Krishna and Godavari. Its varied topography ranging from the hills of Eastern Ghats and Nallamallas to the shores of Bay of Bengal supports varied ecotypes, rich diversity of flora and fauna. The state has two regions Coastal Andhra and Rayalaseema. The plains to the east of Eastern Ghats from the Eastern coastal

plains. The coastal plains are for the most part of delta regions formed by the Godavari, Krishna and Penna rivers. The Eastern Ghats are discontinuous and individual sections have local names. The Eastern Ghats are a major dividing line in the state's geography. The Kadapa Basin formed by two arching branches of the Eastern Ghats is a mineral-rich area. The Ghats become more pronounced towards the south and extreme north of the coast. Most of the coastal plains are put to intense agricultural use. The Rayalaseema region has semi-arid conditions. Lambasingi (Lambasingi).

A village in the Chintapalli Mandal of Visakhapatnam district is situated at 1000 meters above the sea level. It is the only place in the South India which has snowfall and is also nicknamed as Kashmir of Andhra Pradesh. Throughout the year the temperature here ranges from 0 C to 10 C.

3.2 Population:

S. No	Pre/undivided	Total	Rural	%of
1	Srikakulam	27,03,114	22,66,411	83.8
2	Prakasam	33,97,448	27,32,866	80.4
3	West Godavari	39,36,966	31,28,189	79.5
4	Vijayanagaram	23,44,474	18,53,563	79.1
5	East Godavari	51,54,296	38,40,324	74.5
6	Anantapur	40,81,148	29,35,437	71.9
7	Kurnool	40,53,463	29,04,177	71.6
8	Nellore	29,63,557	21,05,927	71.1
9	Chittoor	41,74,064	29,42,678	70.5
10	Guntur	48,87,813	32,35,075	66.2
11	Cuddapah	28,82,469	19,03,337	66
12	Krishna	45,17,398	26,73,738	59.2
13	Vishakapatnam	42,90,589	22,54,667	47.5
Andhra Pradesh		4,93,86,799	3,47,76,389	70.4



3.3 Climate:

The climate of Andhra Pradesh varies considerably, depending on the geographical region. Monsoons play a major role in determining the climate of the state. Summers last from March to June. With temperature ranging between 20° C and 40° C. July to September is the season for tropical rains in Andhra Pradesh. October and November see low-pressure systems and tropical cyclones from the Bay of Bengal which along with the Northeast Monsoon, bring rains to the southern and coastal regions of the state. November, December, January and February are the winter months in Andhra Pradesh.

Andhra Pradesh is well-known for its temples, natural resources and rivers. The beauty of the place calls people from all across the globe throughout the year. But there is always a best time to visit any place. On an average, the temperature remains hot and humid in the state. October to February is considered the best time to visit the place as the temperature remains somewhere around 16°C. It is an ideal time for sightseeing around the different destinations of the state.

3.4 Tourism:

The tourism in Andhra Pradesh is being promoted by Andhra Pradesh Tourism Development Corporation (APTDC), a state government agency. Described as the Koh-I-Noor of India. Andhra

Pradesh has a variety of tourist attractions including reservoirs, beaches, hills, caves, wildlife, forests, and temples.

3.4.1 Major Tourist Destinations in Andhra Pradesh:

Almost every district in Andhra Pradesh has a tourist spot. Tirupati, Srisailam, Gandikota, Ahobilam, Nagarjuna Sagar, tourist spots/Pilgrim Centres in Vijayawada, Vishakapatnam, Araku valley, Annavaram, Simhachalam. In addition to these, the following attract considerable tourists every year.

(i) Beaches: Vishakhapatnam has many beautiful beaches along the Bay of Bengal namely R.K Beach, Rishikonda Beach, Lawsons Bay Beach etc. There are other beaches too along the long coastline of the state, such as Suryalanka Beach, located 9km from Bapatla in Guntur District, in Nellore district, Ongole district which have potential for development as tourist spots.

(ii) Caves: The Borra Caves in the Ananthagiri Hills of the Eastern Ghats, near Vishakapatnam at an altitude of about 800 to 1300 meters are famous for million-year-old stalactite and stalagmite formations. They were discovered by British geologist William King George in 1807. The caves got their name for a formation inside the caves that looks like the human brain, which in Telugu language is known as burra. The Belum Caves in Kurnool District have a length of 3,229 metres (10,594 ft), making them the second largest natural caves on the Indian subcontinent. The Belum Caves derive their name from Bilum, the Sanskrit word for caves. The caves have long passages, spacious chambers, freshwater galleries, and siphons. The caves deepest point is 120 feet (37m) from the entrance and is known as Patalaganga.

(iii) Hills and valleys:

- a) Araku Valley is a hill station in Visakhapatnam district. The Ananthagiri and Sunkarimetta Reserved Forest, which are part of Araku Valley, are rich in biodiversity. It has thick forests, coffee plantations, waterfalls. This scenic beauty attracts large number of tourists.
- b) Horsley Hills is a summer hill resort in the Chittoor district of Andhra Pradesh. It is situated at an elevation of 1,265 metres and attracts lots of tourists. The site which is the departure point for the Koundinya Wildlife Sanctuary at 87km (54mi). The Pap Hills located in Khammam District near Bhadrachalam surrounding the Godavari River is also famous.
- c) Fields and lakes: Konaseema is a place in East Godavari for nature lovers, with scenic greenery of lush paddy fields and coconut groves along the banks of river Godavari and its canals.

Koller lake is one of the largest fresh water lakes in India. It is located between Krishna and Godavari delta. The lake was declared as a wildlife sanctuary and designated a wetland of international importance. The wildlife sanctuary covers an area of 308km. During the winter season, many birds such as Siberian crane, ibis and painted storks migrate here from Siberia and other countries to nest at the sanctuary. The sanctuary is situated about 65km from the city of Vijayawada.

(iv) Religious and pilgrimage sites:

The state's many temples and shrines, mosques and churches attract many pilgrims. Most of the temples were built during the reign of Vijayanagar empire. A number of festivals are organised every year and thousands of tourists visit them. Some of the famous temples are:

- a) Tirumala Venkateshwara Temple:** In the town of Tirumala in erstwhile Chittoor district is an important pilgrimage site for Hindus throughout India. It is one of the richest pilgrimage temples of any religious faith in the world. It is the abode of Lord Venkateshwara.
- b) Mallikharjuna swamy temple:** Situated at Srisailam in the Nallamalla Hills of Kurnool district, is the abode of lord Mallikarjun Shiva and is one of the twelve Jyotirlinga shrines in India. Lord Rama himself installed the Sahasralinga, while the Pandavas lodged the panchapandava lingas in the temple courtyard. The Vijayanagar kings build a number of monuments, including the Srisailam and Lepakshi temples.
- c) Kanakadurga temple:** The goddess Durga is situated on the Indrakeeladri Hill in the city of Vijayawada on the banks of Krishna River. A large number of pilgrims attend the colourful celebrations of Tepotsvam and for a holy dip in the Krihsna river during the festival of Dusshera.
- d) Simhachalam:** Located on a hill 20 km (12 miles) north of the Vishakapatnam city centre, is another popular pilgrimage site of national importance. Simhachalam is said to be the abode of the saviour-god Narasimha.
- e) Besides above,** The five ancient Hindu temples of Lord Shiva, known as Pancharam Kshetras, are located at Amararama, draksharama, somarama, kumararama. Other religious places include Srikalahasti temple in Chittoor district. Raghavendra swami mutt in Mantralayam of Kurnool district, Lord Venkateswara temple in Dwaraka Tirumala of West Godavari District. Annavaram temple in East Godavari and Arasavalli Surya temple in Srikakulam district are also located in the state.

Islam is also popular religion, with a number of mosques built during the reigns of Muslim rulers. One of the famous are Ameen Peer Dargah (Asthana-e-Magdoom Ilahi Dargah complex) (Badi Dargah, Pedda Dargah) in Kadapa (Cuddapah) City and Shahi masjidin Adoni of Kurnool district.

There are many famous churches constructed in centuries ago with historical significance. One of them is Gunadala Church at Vijayawada.

In addition to Temples, Churches and mosques, the state has numerous Buddhist centres at Amaravati, Nagarjuna Konda, Bhattriprolu, Dhulikatta, Bavikonda, Thotlakonda, Shalihundam, Pavuralakonda, Bojjannakonda(sankaram), Phanigiri and Kolpaka.

4. Project Profile:

The people in and around Vijayawada are religious centric and tend to visit the temples regularly and frequently. People plan to visit maximum pilgrimage centres in the available time frame. This demands a good & well-knit mass transport system and access roads leading to the places of visit to enable them cover maximum locations possible in the given time.

Of various options available, water mode of transport is considered most viable & suitable as this provides direct access to the temple avoiding traffic bottlenecks on the road. The interventions proposed to be provided in the process shall also have facilities for children care taker cells facilitating elders of being free from undue botheration during the visit. The project also provides for transportation of local cargo destined for the above locations for the benefit of the community.

The project contours envisage conducted tours of seven centres of interest located on River Krishna through riverine route. The following locations are proposed in the first phase based on the inputs of tourism department of Govt of Andhra Pradesh.

- A. Berm Park**
- B. Bhavani Island**
- C. Pavitra Sangamam**
- D. Vaikuntapuram**
- E. Amaravathi**
- F. Vedadri**
- G. Muktyala**

One circuit trip per day by an Inland vessel in clockwise direction and another in anticlockwise is envisaged. The details of each destination, significance of the place and their surroundings are presented below.

A. Berm Park

Berm Park is located in Krishna River Bank, Vijayawada. Vijayawada is a city in the southeast Indian state of Andhra Pradesh. It's known for the ornate Kanaka Durga Temple, which sits atop a hill overlooking the city. The Haritha Berm Park, Vijayawada, located amidst beautiful hills is an ultimate stopover for nature lovers. The Indrakeeladri Hill forms a spectacular backdrop to the city on the west.

The name of the city translates to 'place of victory' and it holds an important position in South India because it is home to the region's largest railway junction. The city name has mythological connections, as it is claimed that Arjuna was blessed by Lord Shiva at the top of the Indrakeeladri Hill and after that Arjuna created Vijayawada. According to another myth, Goddess Durga rested here after killed a demon and that is why the place got its name. Nonetheless, Vijayawada is a veritable paradise for people to learn more about the region's history and culture.

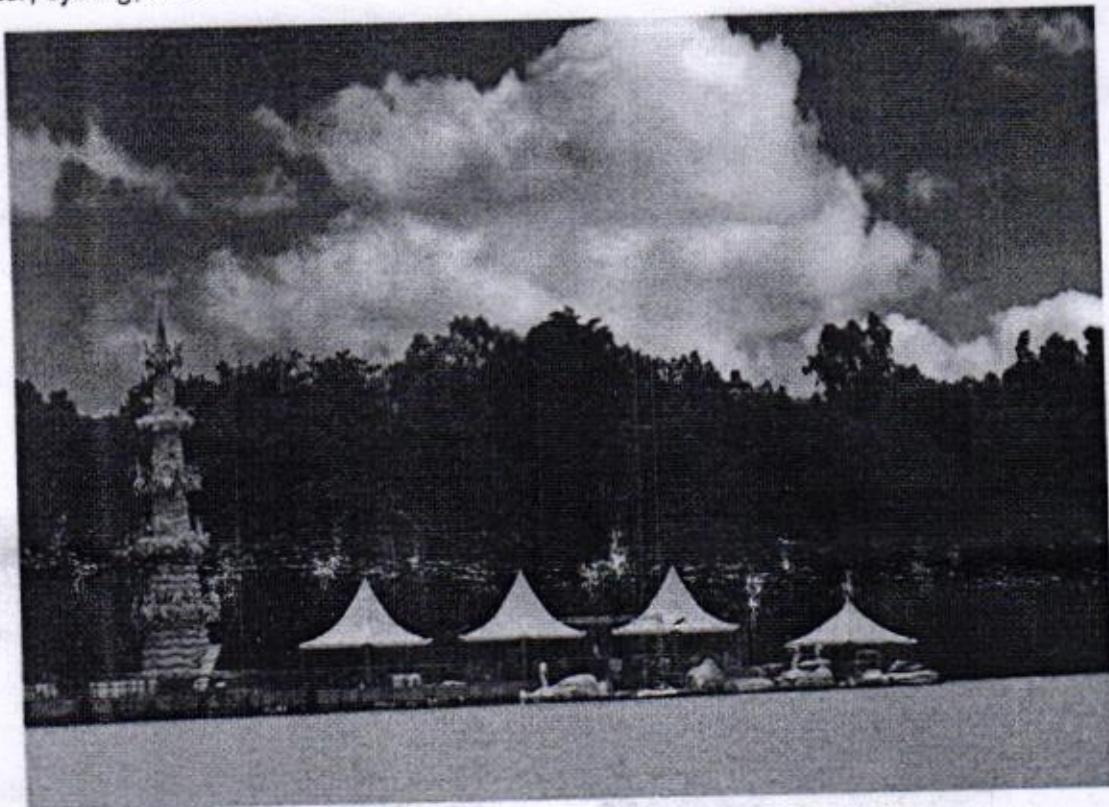
The city is renowned for some beautiful temples, Buddhist shrines and of course, the famous Prakasam Barrage. The Undavalli Caves feature ancient rock-cut temples, carved out of a sandstone

hillside and adorned with elaborate statues. Nearby is Bhavani Island, with forests and waterfront gardens.

Undavalli Caves, a monolithic example of Indian rock-cut architecture and one of the finest testimonials to ancient viswakarma sthapathis, are located in Undavalli of Guntur district in the Indian state of Andhra Pradesh. The caves are located 6 km south west from Vijayawada, 22 km north east of Guntur City of Andhra Pradesh. It is one of the centrally protected monuments of national importance. These caves are said to be found in 7th century. They are associated with the Vishnukundi kings of 420-620 A.D. These caves are dedicated to Anantha Padmanabha and Lord Narashimha. Buddhist monks used these as Rest Houses.

B. Bhavani Island

Bhavani Island situated in the midst of the Krishna River, at Vijayawada. It is located at the upstream of Prakasam Barrage and is considered one of the largest river islands in India, with an area of 133 acres (54 ha). It has a robotic dinosaur park, garden maze, mirror maze, golf and badminton simulator, cycling, etc.



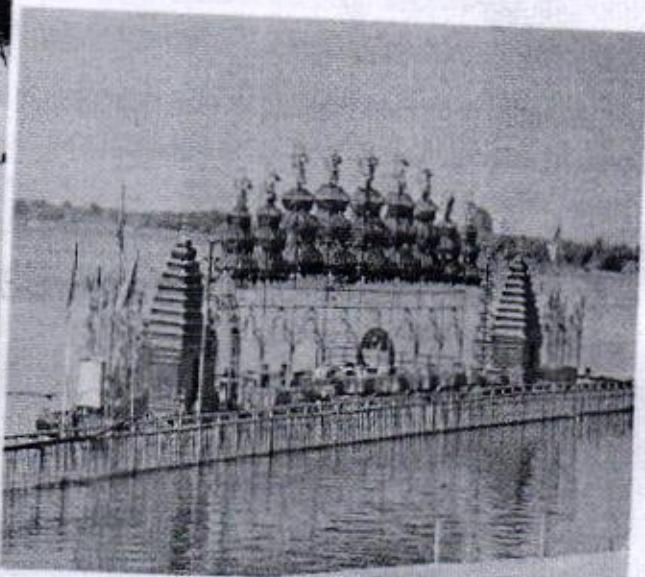
Bhavani Island is one of the most favorite travel attractions of Vijayawada, a beautiful place to visit and stay with family and friends and a great place for couples. Situated near Prakasam Barrage, it is a serene place situated on the Krishna River. One can enjoy boat rides and swimming, fishing, snoozing on hammocks along with amazing facilities offered by Andhra Pradesh Tourism Development Corporation. The picturesque location has all the ingredients that have a soothing effect.

Nearby famous places

- Sri Durga Malleswara Swamy Varla Devasthanam 1.9 km away
- Victoria Museum 0.7 km away
- Prakasam Barrage 1.6 km away
- Gunadala Matha Shrine 0.9 km away
- Undavalli Caves 2.1 km away
- Pvp Square Mall 2.2 km away
- Gandhi Hill 1.3 km away
- Mangalagiri 4 km away
- Rajiv Gandhi Park 1.4 km away
- Hazarat Bal Mosque 1.7 km away
- Lenin Statue 2.2 km away
- Ripples Mall 2 km away
- Paritala Anjaneya Swami Temple 3.4 km away
- Lazer Ops 2.2 km away

C. Pavitra Sangamam

Pavitra Sangam of Krishna & Godavari rivers at Vijayawada. This place located near Ibrahimpatnam by the side of river Krishna. After making arrangement a stream of water of Godavari river flows through kennels and joins Krishna river at this place.



The area is nicely developed with parks and gardens to attract tourist. Boating and water sports facilities are also developed by the side of the Krishna River. Colourful lighting arrangements with high mast towers are constructed to illuminate the area during evening hours.

There is an arrangement to perform evening Aarti of Krishna River in line with Ganga Aarti done at Haridwar and Banaras.

D. Vaikuntapuram

Vykuntapuram Temple is located on the bank of River Krishan and top of a hill called "Krouncha Giri". Here Lord Venkateswara Swamy is 'self-proclaimed' inside a cave. This Devasthanam has centuries of years history. Poojas won't be performed after the sunset in this temple from centuries. Here Idol will bleed Blood from chest hence will keep Sandal always. So many interesting facts are there about his Powerful temple, which must visit and experience.

One can reach VykuntaPuram by Road, Train & Flight but Road journey only leads to VykuntaPuram

Flight: Vijayawada Airport is 49 KM, we can hire a taxi from the Airport!

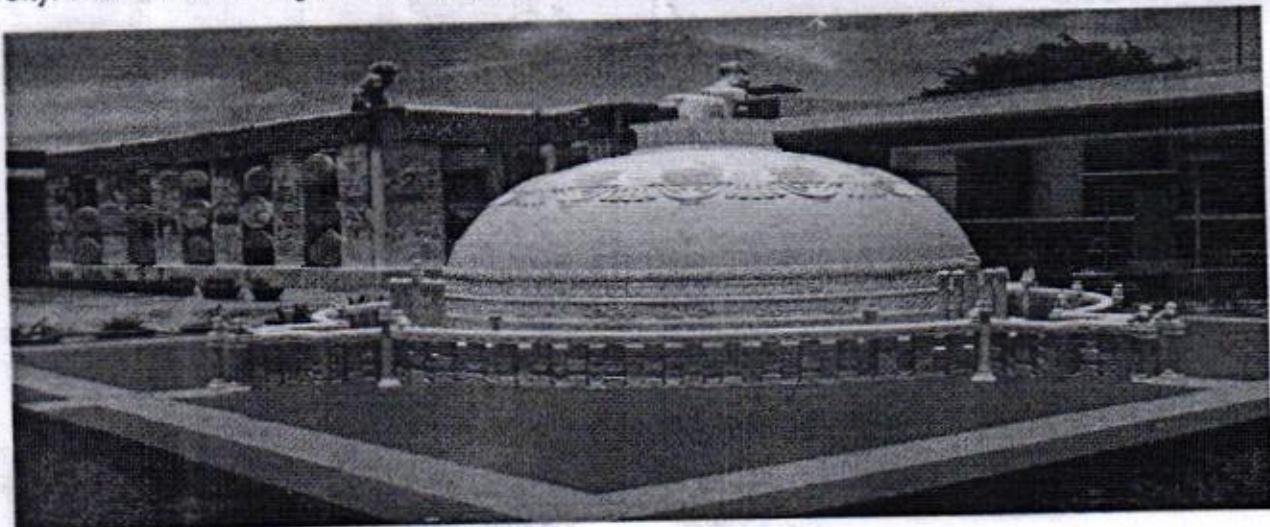
Train: Vijayawada Railway station 28.1 km, & Guntur Railway Station 25.4Km

Bus: We can get Govt. buses from Guntur, Vijayawada to Amaravati, from there you need to hire local transportation to VykuntaPuram

E. Amaravathi

Amaravati is a small town located on the banks of Krishna River. It is about 33 kilometres from Vijayawada and has historical importance. It used to be the site of an ancient Buddhist settlement, which was known as Chintapalli. The stupa at this site was said to be bigger than the one at Sachi. This stupa was built in the 3rd century BC during the reign of King Ashoka. It had gateway at each cardinal point. While these structures are no longer there, one of the gateways was meticulously reconstructed. The carvings on the gateway highlight the life of Buddha. There is a small museum that has collections right from the 3rd century to the 12th century AD and one of the images of Buddha has lotus symbols on the feet with long ear lobes and tight curls. The museum is fascinating.

Amaravathi is among the 12 cities in India that have been declared heritage cities'. The town is also popular among tourists, as the Amaralingeswara Temple is located there. In 2006, it hosted the 30th Kalachakra, which was attended by the Dalai Lama. Amaravathi, a historical town where a Buddhist Stupa and a school of art named after the Buddha are located, has been declared Unesco Heritage City. The town is among the 12 towns/cities across India that have been declared heritage cities.



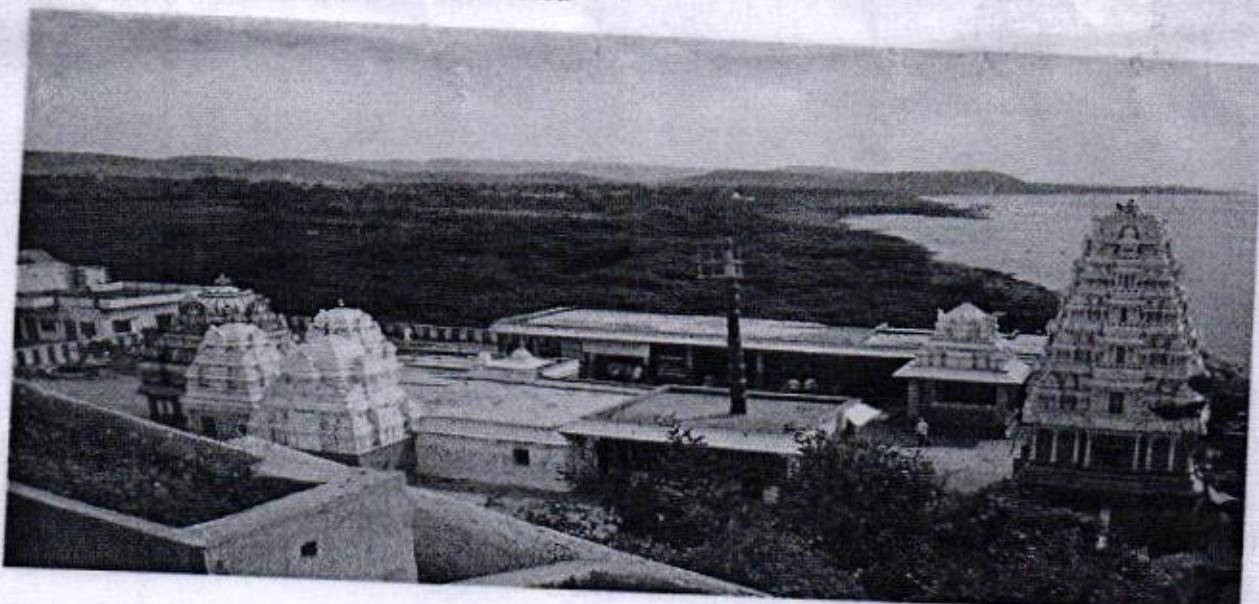
Amararama is one of the five Pancharama Kshetras that are sacred to the Hindu god Shiva. The temple is located in Amaravathi town of Palnadu district in the Indian state of Andhra Pradesh. Amareswara Swamy or Amaralingeswara Swamy refers to Lord Shiva in this temple.



The temple is situated on the southern bank of Krishna River. The consort of Lord Amareswara Swamy is Bala Chamundika. The Sivalinga at this place is installed and established by Lord Indra.

F. Vedadri

Vedadri Narasimha Temple is a prominent Hindu temple located in the town of Vedadri, Andhra Pradesh, India. It is dedicated to the worship of Narasimha. This temple is a major pilgrimage site in Andhra, attracting thousands of devotees every year, and it is one of the Pancha Narasimha Kshetras. The temple is located on the bank of the Krishna River. The Vedadri Sri Yogananda Lakshmi Narasimha Swamy Temple is a Pancha Narasimha Kshetram situated in Vedadri, Chillakallu, Jaggaiahpetta, Krishna District.



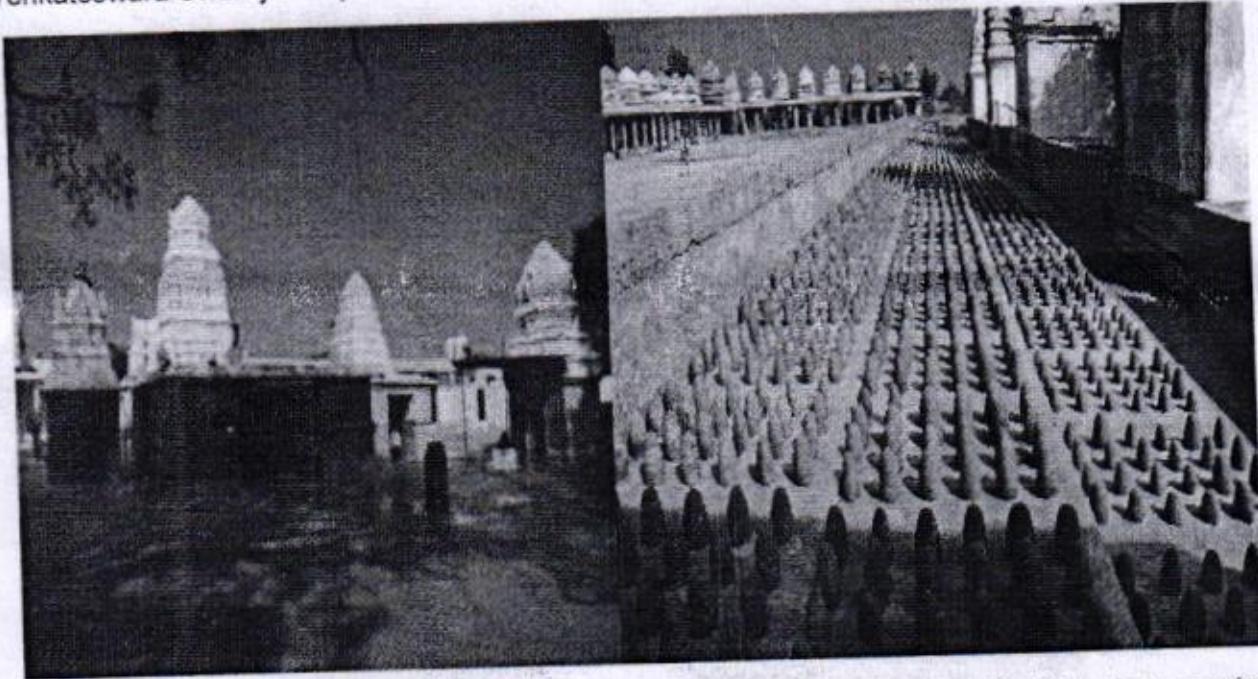
According to the temple's historical tradition (sthala purana), Vedadri represents the Vedas in the form of a hill. This mythological tradition relays that a demon named Somakasura stole the Vedas from Brahma and hid them in the ocean. The panicked gods are said to have prayed to Vishnu, who appeared in the form of Narasimha to rescue the Vedas by turning them into Vedadri on the river Krishna.

The Vedadri Narasimha Temple is said to have gained prominence during the reign of the Kakatiya Empire. Narayana Tirtha, a noted Telugu Vaishnavite saint and composer, was a routine visitor to this temple. In the 1800s, Raja Vasireddy Muktiswara Prasad Nayudu, a zamindar ancestor of Muktyala Raja, renovated and added to the temple by renewing the dhvajastabham and building 108 flight of stairs for pilgrims to reach the Krishna River from the hillock that houses the temple. A popular, annual festival is held at the temple to celebrate Narasimha Jayanati on Vaisakha Sudha Purnima.

G. Muktyala

Sri Kotilingala temple in Muktyala village near Jaggayyapeta town [Jaggaiahpet] is gaining huge popularity these days which is going to house one crore Shiva Lingas within its premises soon. Muktyala temple is at a distance of around 9.6 km from Jaggayyapeta in Andhra Pradesh, 89.2 km from Vijayawada and around 217 km from Hyderabad city in Telangana.

Sri Panchamukha Amrutha Lingeswara Swamy is the main deity of this temple. Other important temples and idols in Muktyala temple includes: Lord Shiva idol, Ammavari Temple and Sri Venkateswara Swamy Temple.



Speciality of this temple is that all devotees are permitted to do Siva Linga Prathista for a nominal fee. All Prathista items are included in the fee. We can have a holy dip at Krishna River which is at a distance of roughly 2 km from Kotilingala temple and allocate some time to visit the famous

Mukteswara Swamy Temple. There is also an ancient temple near the river and the main attraction of it is having two Shiva Lingas and two Nandi's in front of the temple. You have to climb down 30 or more steps to reach this historic temple.

4.1 Proposed Facilities

Considering the above destinations located in the water banks of Krishna River, water transport and also the fact that the visitor segment comprises people of age group nearing senior citizens in general and women folk in particular, it is proposed to provide the following amenities/infrastructure at each location.

A. Terminal Facility: The terminal facility is proposed to be provided in a land area of 0.5 Acres which will be made available by APTDC (Lr No: APTDC/WFIW/10/2022-23 dated 25.10.2022 enclosed). A provision of solar power generation is proposed in each terminal to provide the electricity required for each facility and also charge the batteries used in vessels.

B. Land development, Compound wall: The land provided by Tourism department shall be approximately dressed & levelled. Compound wall with steel gate will be provided.

C. Floating berthing jetty: The section of river Krishna in which the proposed temples/places of visit located is subjected to water level variations of 3-4 meters in height and low water line shifting by 5-10 meters horizontally. Considering i) vessel seating capacity of fifty, ii) the inward/outward movement of people on the jetty are expected to be about 115-120 at any given point of time. Taking into consideration of requirement of all-round setbacks for safety of passengers, space for passengers, space for free passenger movement, space for luggage & jetty maintenance activities, the following specifications for the berthing and approach jetty are considered.

- Berthing : 24mX9m
- Approach : 11mX2m

RCC floating jetty is proposed as the same will be maintenance free and ambience befitting the nature of activity. Approach jetty made of Aluminium frame is considered as the same shall be durable.

D. Waiting Hall: The people who visit the proposed temple/centre shall be completing their visit in groups in different time slots. Moreover, some people who are not interested in the visit of a particular place are expected to stay back at the terminal only. A covered space is required for them to take shelter during a sunny and rainy day and to wait till the entire group board the vessel. A covered shed with false ceiling and seating capacity for about 50 tourists is proposed to be provided. The hall will be provided with seating facility for fifty people along with required lighting & fans. A hall of size 40ftX30ft with RCC slab is proposed to be provided.

- E. Wash rooms:** Six wash rooms at each location with required facilities like four urinal basins, two wash basins are proposed to be provided. The wash rooms shall be of brick wall structures with asbestos roof.
- F. Ticket Counters & Security Cabins:** The operations of circuit tours are designed to be conducted through a private party on commercial lines. To facilitate this, ticket counters at four locations (first & last location of the circuit and two intermediate locations). Besides, the entire premises also needs to be provided with security for which a security cabins is also provided at all the locations.
- G. River bank development:** The locations to be visited should be congenial for river view recreation also. Hence river banks are proposed to be developed to be of adequate ambience and amenities to attract tourists besides securing adjoining shore from erosion during flood. To envisage this, 50m length of bank on either side of the jetty is proposed to be dressed with Random Rubble Masonry.
- H. Vessels:** The visitors of the conducted tour along river Krishna are proposed through two self-propelled Catamaran vessels and operated by Battery/ Hybrid Mode. Catamarans offer more stability as they have two hulls, which decrease the chances of people falling overboard. They are larger and more comfortable than normal sailing boats. The proposed each catamaran vessel shall have capacity to carry 50 persons and cargo of 50 tons. Brief specifications of catamaran vessel are as follows.

Particulars	Specifications
LOA	: abt. 24.80 meters
Beam O.A	: abt. 6.40 meters
Depth (MLD)	: abt. 1.70 meters
Draught (MLD)	: abt. 0.90 meters
Hull Material	: Aluminium
Superstructure	: FRP
Vessel Type	: Passenger Ferry
Service Speed	: 7 knots
Propulsion system Type	: Twin Screw
Steering gear	: Electro hydraulic
Propellers	: 2 x FPP Battery
Battery Type	: LTO
Battery Capacity	: abt. 122 kWh
Passengers	: 50
Wheelchairs	: 2
HVAC	: Fully Air-Conditioned Passenger Space

The catamaran vessel is operated by battery and the battery is charged with Solar Power. The solar power and charging stations are proposed in all terminal facilities to cater the power

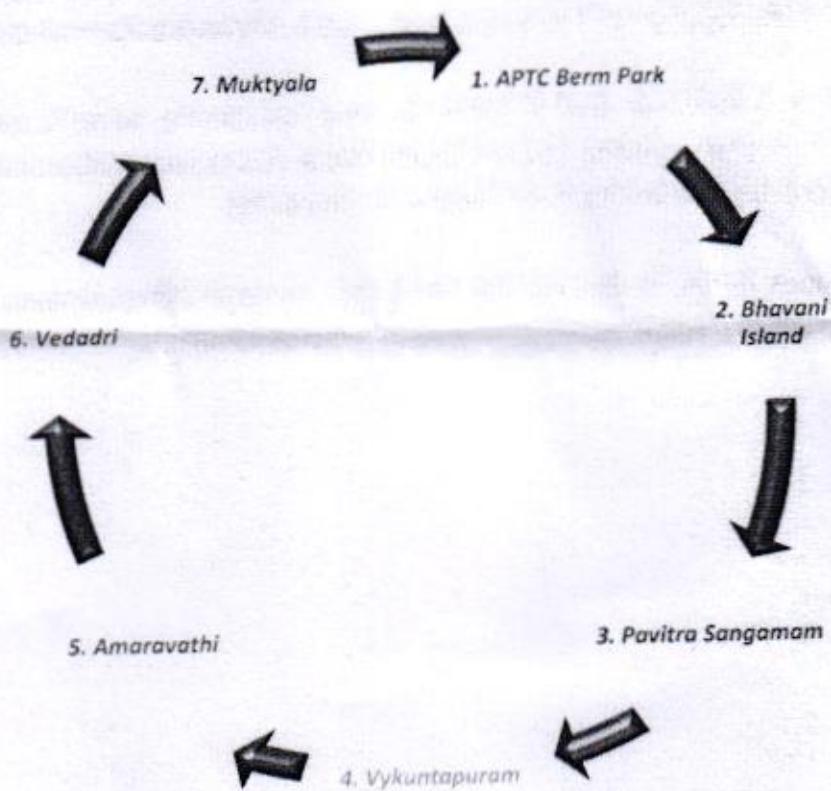
requirements at facilities provided and also charge batteries in the Vessels. This lead to reduce the carbon foot print and environment friendly.

A catamaran can last for 15 to 25 years and even 30 years if it is well-kept and maintained. Its lifespan also depends on the usage, type, quality of construction material etc.

- I. **Cargo shed:** A Covered shed to store the local community cargo is also provisioned to facilitate cargo transportation through Inland Water Transport. A closed storage room with asbestos roof of size 7 mX4m is considered for the same.
- J. **Miscellaneous items:** Navigation aids, desiltation, removal of impediments from channel etc shall be considered wherever necessary as per the requirement.

5. Trip Itenary

Clock wise:

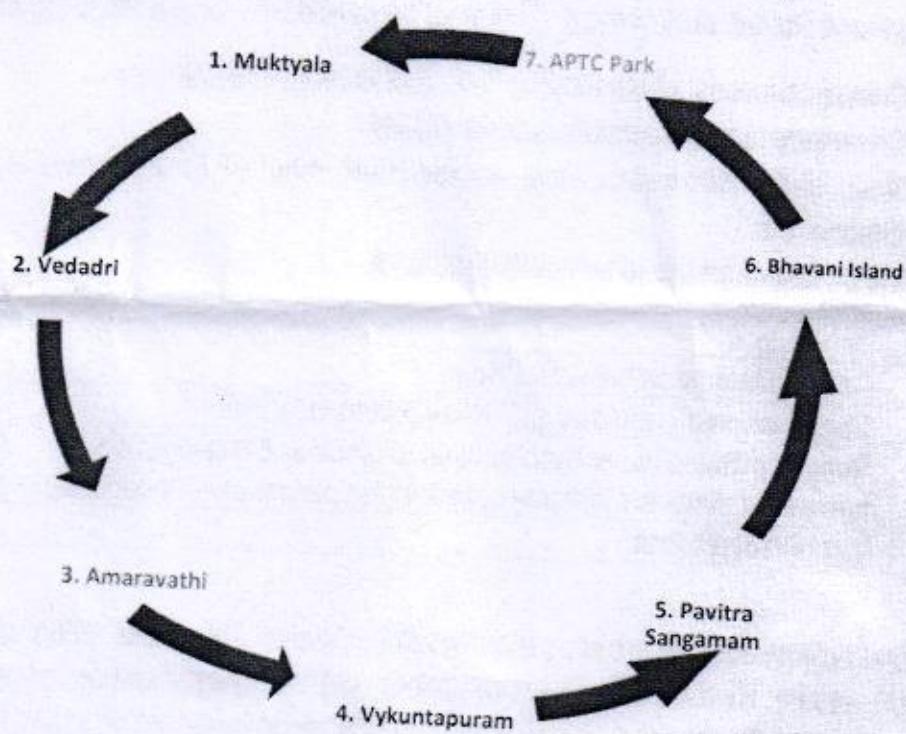


Trip Itenary

Circuit - I (Clock wise)

S. No	Location	Distance KM	Travel Time (Minutes)	Visiting Time (Minutes)	Reporting/ Departure Time (24 Hrs)	Destination/ Arrival Time (24 Hrs)
1	APTC Berm Park	0.000	0.00	0.00	8.00	8.15
2	Bhavani Island	1.000	10.00	60.00	9.15	9.45
3	Pavitra Sangamam	15.000	30.00	60.00	10.15	10.45
4	Vykuntapuram	15.000	30.00	30.00	11.15	11.45
5	Amaravathi	15.000	30.00	30.00	12.15	12.45
6	Vedadri	30.000	60.00	60.00	14.45	15.00
7	Muktyala	10.000	30.00	45.00	15.45	16.30

Anti-clock wise:



Trip Itenary Circuit - II (Anti -Clock wise)						
S.No	Location	Distance KM	Travel Time (Minutes)	Visiting Time (Minutes)	Reporting/Departure Time (24 Hrs)	Destination/Arrival Time (24 Hrs)
1	Muktyala	0.00	0.00	0.00		
2	Vedadri	10.00	30.00	45.00	8.00	
3	Amaravathi	30.00	60.00	60.00	9.30	8.45
4	Vykuntapuram	15.00	30.00	30.00	11.30	10.30
5	Pavitra Sangamam	15.00	30.00	30.00	12.30	12.00
6	Bhavani Island	15.00	30.00	60.00	14.00	13.00
7	APTC Berm Park	1.00	10.00	60.00	15.30	15.00
						16.30

6. Estimated Project Cost:

The estimated Project cost of the project shall be considered for the following proposed items.

- Construction cost of Community Terminal facilities (7 Nos)
- Procurement of Catamaran vessels (2 Nos)
- Misc. Items -Navigation Aids, access road, removal of impediments, DE siltation of channel etc.
- O&M cost: to be borne by the PPP partner.

S.No	Particulars	Amount in Rs. Cr
1	Cost of Catamaran vessels 2 Nos.	22.00
2	Construction of Terminals at 7 Nos (seven) locations	24.00
3	Roof Top Solar Power for charging Stations and internal use at terminal stations and inhouse consumption purpose at 7 locations	04.00
	Total Project Cost	50.00

The total project cost for providing the above facilities at 7 locations along with 2 nos. vessels are estimated at Rs. 50.00 Cr. The total project cost is proposed to be met by the PPP partner availing fund assistance from Sagaramala Scheme of Government of India. The silent features of the project are as under:

I. Responsibilities of the Central Agencies:

The State Government will be fully responsible for the following components of the project:

- Making the land available for development.
- Implementation of rehabilitation package, where shifting of dwellings or commercial units is required.
- Responsibility of PPP partner: The PPP partner will solely responsible for execution of the project
- The PPP partner will follow Challenge Method Guidelines to envisage an innovative project and submit the project report for consideration. This is to encourage induction of new technology, promotion of unique solutions, provide for financially sustainable solutions, and to bring in finance and expertise in project execution. This method is to provide transparency and induction of Capital for infrastructure where innovative proposals are received. This is to ensure certainty of success under this Methodology.
- The PPP partner will operate the project in due compliance of permissible provisions under law.

II. The following activities/items may be taken up under the Project

- Improvement of the surroundings of the destination. This would include activities like landscaping, development of parks, fencing, compound wall etc.
- Illumination of the Tourist destination and the area around and SEL/multimedia/ multidimensional Shows etc. including setting up of civic amenities such as toilets/ rest rooms, ticket counter, food courts, facilities for differently abled people/ children / senior citizens/ at site of project, battery operated carts etc including publicity material as may be required.
- Re-conceptualization /up-gradation of existing SEL / multimedia shows commensurate with the requirement of Technologically Innovative show can also be considered under this scheme after a five year of initial launch of project.
- Construction of public buildings which are required to be demolished because of implementation of the Master Plan.
- Illumination/Restoration/Refurbishment of the Monuments.
- Signage and display boards showing Tourist Area Maps and documentation on places of interest at the locations.
- Tourist Arrival Centers, Reception Centers, Interpretation Centers
- Development of Cruise Terminals
- Construction of Convention Centres.

III. Release of Funds

The financial assistance sanctioned by the Ministry under this project would be released to the PPP partner in three instalments as per following details:

- First instalment – 50% of the Central Financial Assistance amount at the time of sanction
- Second instalment- 30% of the sanctioned amount on submission of Utilization Certificate of the first instalment
- Third instalment- 20% of the sanctioned amount on submission of final Utilization Certificate by the implementing agency after the entire work is completed along with an affidavit for Management of Assets created and an undertaking for maintenance of the same as per applicable GFR.

7. Mode of execution:

The procurement of vessel and construction of community jetties will be done on PPP basis adopting standard procedures of Govt of AP.

The Operation & Maintenance (O&M) of community jetties/terminals and vessels will be done on PPP basis under a revenue sharing model for a period of 10 years without any financial implication of Government.

8. SWOT Analysis:

Strength	Weakness
<ul style="list-style-type: none"> 1. Passenger Tourists can avoid congested roads and have strain free visit. 2. Cheaper, being water mode, for transport 3. It ensures coverage of maximum number of tourist places in a day, minimising travel costs and saves time. 4. Hassle free travel in water. 5. AP Govt has a separate "Inland Waterways Vertical" to regulate the vessel movement as per IV Act provisions. 	<ul style="list-style-type: none"> 1. Does not provide option to use other modes of transport 2. Restricts movement through thickly populated narrow streets in rural zones. 3. Reduces the road traffic.
Opportunities	Threats
<ul style="list-style-type: none"> 1. More number of passenger tourists will be attracted as river cruising is clubbed with tourist spot without additional financial implication. 2. Boosts up the tourism sector with increased revenues contributing to rural economy. 3. The floating Jetties & catamaran vessels once provided can also be used for rescue, evacuation of people during flood and during disaster Management. 4. This project is first of its kind and can attract tourists & similar circuits in other waterways boosting tourism. 	<ul style="list-style-type: none"> 1. Require skilled manpower for vessel operation 2. Vessels need prompt repair & maintenance facilities 3. Need a regulating mechanism and Disaster Management mechanism in place.

Note: The threats are proposed to be mitigated by complying the premises of IV Act-2021 which addresses issues.

9. Project Financials

9.1 Total Project Cost:

The total project cost towards establishment and implementation of the project is Rs. 50.00 Cr. The detailed cost break of the project components is mentioned below.

S.No	Particulars	Amount in Rs. Cr
1	Cost of Catamaran vessels 2 Nos.	22.00
2	Construction of Terminals at 7 Nos (seven) locations	24.00
3	Roof Top Solar Power for charging Stations and inhouse purpose (7 nos).	04.00
	Total Project Cost	50.00

The total project cost for providing the above facilities at 7 locations along with 2 nos. vessels are estimated at Rs. 50.00 Cr. The total project cost is proposed to be met by the PPP partner availing fund assistance from Sagaramala Scheme of Government of India.

9.2 Revenue Assumptions:

The following revenue assumptions considered for assessing the financial viability of the project. The revenue assumptions taken on a very conservative basis.

- a. Fare Revenue
- b. Cargo Revenue

a) Fare Revenues:

- ✓ Total number of persons across all the locations considered per day -100 members
- ✓ Ticket rate per person - Rs. 1000 per member
- ✓ Number of days - 300 days
- ✓ Increase in the number of persons visiting the locations - 5% every year

b) Cargo Revenues:

- ✓ Cargo revenue considered as 50 tons per day across all the locations
- ✓ Charges per kg - Rs. 1
- ✓ Number of days - 300 days

9.3 Operation & Maintenance Cost:

The facility required to operate year-round and required to hire an operation and maintenance (O&M) agency through PPP model. The agency shall operate the entire facilities. The details of expenditure for operation of facilities are given below.

- ✓ Fuel consumption - 80 litres per day of 2 hours
- ✓ Rate per litre - 120 Rs
- ✓ Manpower assumed - Rs. 50000 per month for 4 persons (semi-skilled persons)

- ✓ Maintenance - 1% of the project cost
- ✓ Snacks, Food and Beverages - Rs. 300 per day per person

9.4 Inflation Assumptions:

The growth rate of inflation considered nominal as below while projecting the revenues and expenses

- ✓ Revenue Inflation - For every 2 years 3% increase
- ✓ Cost Inflation - For every 1 year 3% increase
- ✓ Increase in the number of persons visiting the tourism - For every 1 year 5% increase

9.5 Occupancy Assumptions:

Occupancy for increase in the footfall assumed at 50% in the first year, 55% in the 2nd year, 60% in the 3rd year and thereon 5% increase every year.

9.6 Financing Assumptions:

Entire project is funded from the assistance to central agencies for tourism infrastructure development, Government of India, Ministry of Tourism, (Infrastructure Development Division).

- ✓ Equity - 100% as Grant from Central Agencies
- ✓ Debt - Nil

9.7 Profit and Loss A/c:

The profit and loss account projected for the period of 10 years is given below

Particulars	1	2	3	4	5	6	7	8	9	10	11
Inflows(A):											
Revenues	1.73	2.04	2.33	2.64	3.06	3.41	3.81	4.37	4.83	5.34	
Cargo Revenues	0.83	0.93	1.00	1.08	1.19	1.27	1.35	1.48	1.56	1.64	
Total Revenue	2.56	2.97	3.33	3.72	4.25	4.68	5.16	5.85	6.39	6.98	
Outflow(B):											
Fuel Cost	0.16	0.18	0.20	0.22	0.24	0.25	0.28	0.29	0.32	0.34	
Man Power Cost	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Maintenance Cost	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	
Snacks, Food and Beverages Cost	0.54	0.61	0.72	0.81	0.94	1.05	1.22	1.35	1.54	1.70	
Total	1.26	1.37	1.51	1.64	1.81	1.95	2.17	2.32	2.56	2.76
Profit	1.30	1.60	1.82	2.08	2.44	2.73	3.01	3.52	3.83	4.22
% Of Profit on Total Revenue		50.70%	53.91%	54.62%	55.92%	57.39%	58.31%	58.25%	60.18%	59.92%	60.49%

1. Implementation Plan:

The project operation is scheduled to commence in a period of one year as detailed below;

S. No	Activity	No of months											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Approval of Proposal												
2	a) Tender for floating Jetties												
	b) Construction of Jetties												
3	a) Tender for Vessel												
	b) Construction of Jetties												
4	Preparation of Transaction document for O&M												
5	EOI for operation, selection & award of work to the operator												
6	Readiness of fairway & Financing												