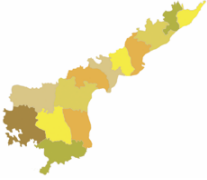


World Bird Strike Association Aviation Safety Conference, Vishakapatnam, 11th – 13th December 2017

**Bhogapuram Airport land Acquisition Process,
challenges & sustainable approaches**

By: Mr. Virender Singh,

CEO, BIACL

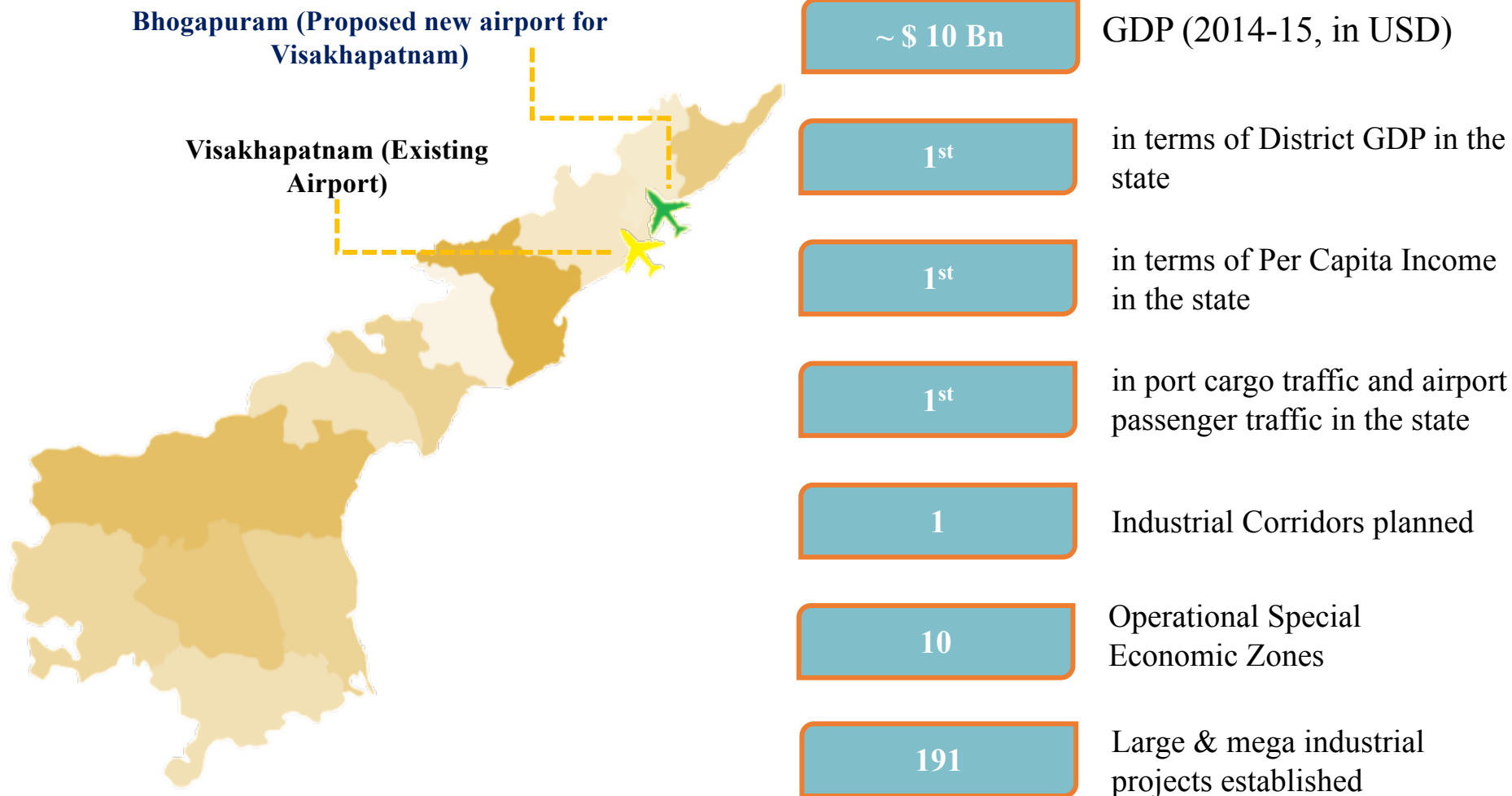


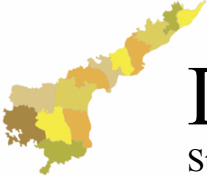
The major Aviation hub and one of the fastest growing cities in Andhra Pradesh



Visakhapatnam City (Vizag) – Overview

Vizag is the commercial capital of the State and a cosmopolitan trade and cultural hub





Driving Growth in Vizag

Strategic Projects which would ensure traffic growth at Vizag



World class Smart City



Sagarmala



East Coast 4-lane Beach Road (1,000 km)



Chennai Bengaluru Industrial Corridor

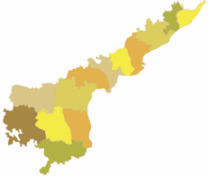


Vizag Chennai Industrial Corridor

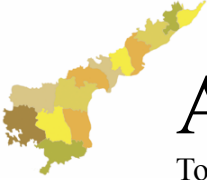


Bhogapuram Greenfield Aerotropolis





Airports in Andhra Pradesh and Civil Aviation Policy



Andhra Pradesh Civil Aviation Policy – 2015

To ensure robust growth of aviation sector in the State



Andhra Pradesh Regional Airport Development Fund (APRADF)

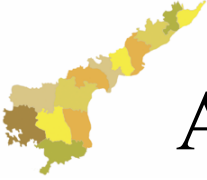
- ✈ APRADF to provide financial support for the development of regional airports
- ✈ The APRADF will be utilized to provide financial support for the development and operation of airports and/or to underwrite seats for commercial airline operations

Fiscal and other Government support

- ✈ Land acquisition and pooling
- ✈ Viability Gap Funding (VGF) from State and Central Governments
- ✈ Incentives/reimbursements (underwriting seats, exemption from aeronautical tariffs, exemption from taxes and duties) to encourage development of airports and to encourage airlines to connect the cities of Andhra Pradesh

Tax incentives for Ancillary Infrastructure

- ✈ 100% stamp duty and property tax reimbursement for aircraft MRO and air-cargo infrastructure like warehouses, air freight stations and processing facilities
- ✈ 100% stamp duty and property tax reimbursement for aviation education, training institutes, (providing pilot, cabin crew, airport management, airline management and aircraft maintenance training) and flight schools with aircraft simulator
- ✈ Incentives to Aerospace & Defense manufacturing, aerospace R&D and services as per Industrial Policy



Andhra Pradesh Airports

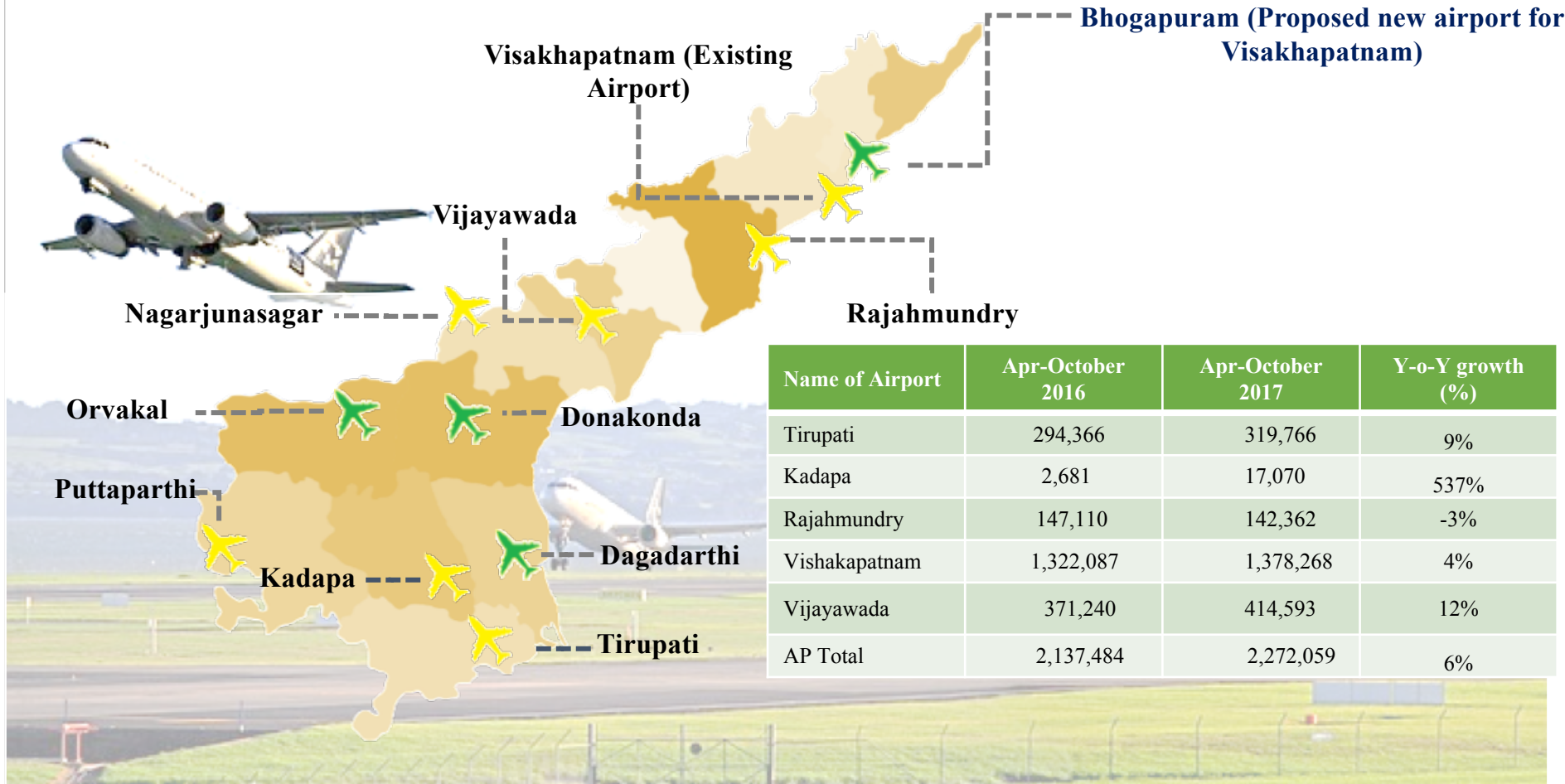


Salient Features

- Air Passenger Traffic growing at an average of 44% - One of the fastest in India
- Excellent air connectivity to all major Indian cities and metros
- AP Airports are operated by all major Indian carriers
- International flights to Middle East and Far East from Vizag and more international flights planned from other AP Airports
- New Greenfield Airport projects underway in the state of Andhra Pradesh
- Expansion of current airports to support massive growth of civil aviation
- Several incentives from the GoAP to support civil aviation in the state of Andhra Pradesh



Existing commercial and proposed airports in Andhra Pradesh



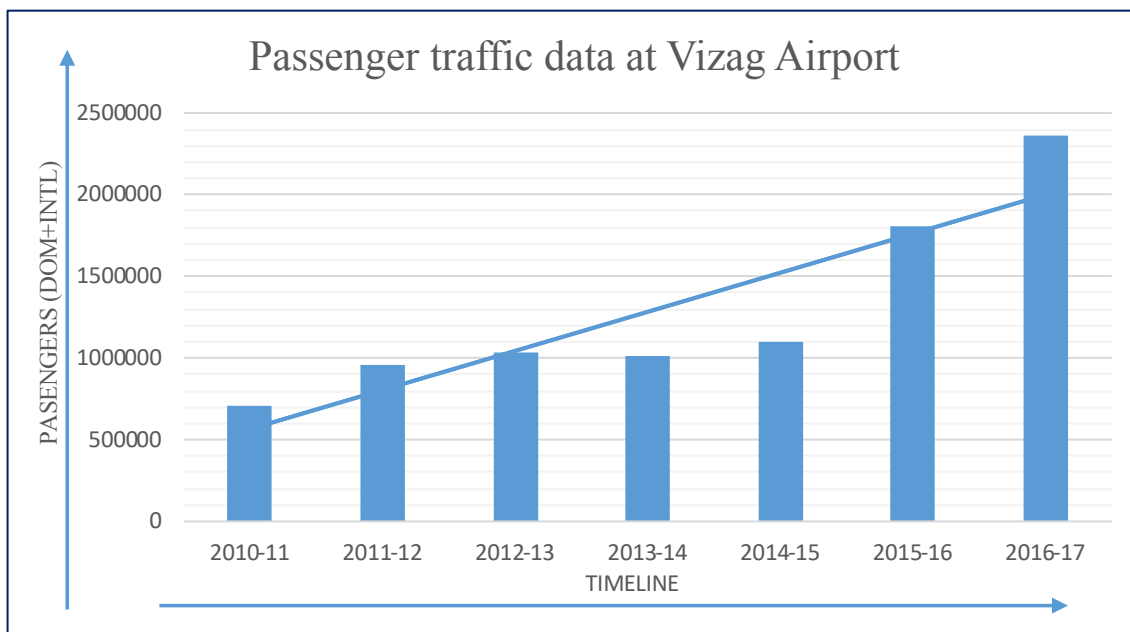
 Proposed Greenfield Airports  Existing Commercial Airports

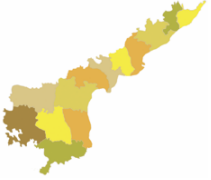
Vizag – Existing Airport

Surpassed its design capacity and a new airport is required



- ❑ **Largest and busiest airport** in Andhra Pradesh
- ❑ **Significant growth** in the last decade, with the commencement of international flights to Dubai, Singapore and Kuala Lumpur
- ❑ **Strategic locational advantage** over many other airports in Southern India - shortest distance connecting to South East Asian destinations such as Bangkok, Singapore, Kuala Lumpur and Ho Chi Minh City





Bhogapuram International Airport





Bhogapuram International Airport

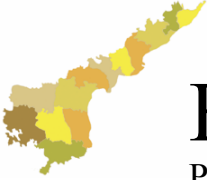
Strategic locational advantage



- GoAP plans to develop an International Airport in Bhogapuram to meet the future growth potential of Visakhapatnam, a fast-growing industrial city
- Strategic locational advantage over many other airports in Southern India - shortest distance connecting to South East Asian destinations such as Bangkok, Singapore, Kuala Lumpur and Ho Chi Minh City



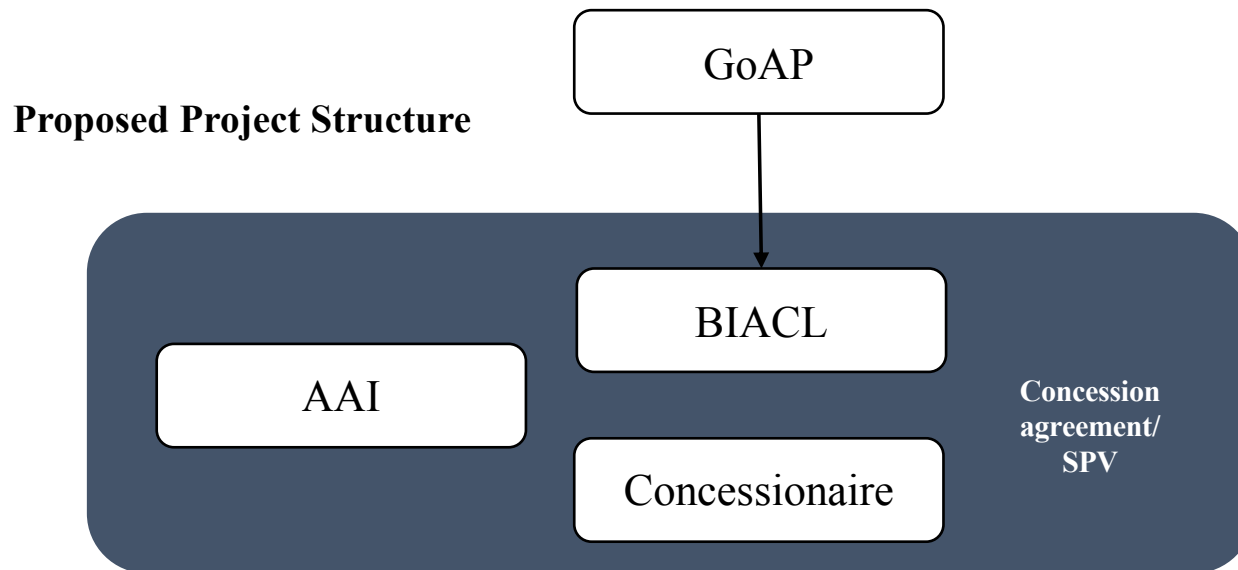
	Distance	In km
1	Bhogapuram	0
2	Vizag	40
3	Chennai	839
4	Tirupati	803
5	Vijayawada	387
6	Bhubaneshwar	382
7	Hyderabad	657
8	Bangalore	1,049
9	Mumbai	1,380
10	Delhi	1,742
11	Singapore	2,905
12	Dubai	3,000



Bhogapuram International Airport

Project Structure

- ❑ Planned to be developed as an aerotropolis in PPP mode
- ❑ GoAP has set up a SPV named Bhogapuram International Airport Corporation Limited (BIACL)
- ❑ Post selection of Concessionaire, new SPV to be formed (as BIACL is holding SPV for other airports in AP too)
- ❑ Existing airport in Vizag to be closed before commencement of ops in Bhogapuram
- ❑ GoAP to be given equity stake for land provided

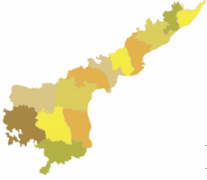




Sustainable approach to project development

After detailed deliberations, State Government has decided to develop the proposed airport near Bhogapuram, keeping in view the following:

- ✓ Reduce resettlement cost / displacement of population
- ✓ Utilizing maximum Government land
- ✓ Avoiding approved residential layouts
- ✓ Avoiding built up areas / educational institute / resorts
- ✓ Avoiding forest land, estuary, river with back-water, mangrove and does not fall within any eco-sensitive zone.
- ✓ Avoiding CRZ area, and is more than 500m from the High Tide Line.

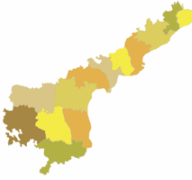


Bhogapuram International Airport

Brief Overview



PPP	
Authority	Bhogapuram International Airport Corporation Ltd – fully owned by GoAP
Mode	Design, Build, Finance, Operate and Transfer (the "DBFOT")
Concession Details	
Bidding Parameter	Percentage of the annual Gross revenue from the 10 th anniversary of commercial operation date of the project till the end of concession period (Revenue Share)
Licence Fee	Concessionaire to pay to Authority an annual licence fee of INR 20,000 per acre per annum incremented annually at 6%
Concession Period	40 years + Additional 20 years subject to terms and conditions of Concession Agreement
Capacity	Phase 1 – 6 mppa Phase 2 – 18 mppa
SCOD	1095 th day from the Appointed Date shall be Schedule Completion Date for Phase I
Bid fees	
RFP cost	INR 1 Million in demand draft
TEFR cost	INR 0.1 Million in demand draft
Bid Security	INR 120 Million as a bank guarantee
Performance Security	INR 480 Million as a bank guarantee within 60 days from signing the Concession Agreement



Bhogapuram International Airport



Project details in brief:

- Total land earmarked for the airport: 2702 acres
- Estimated Project Cost: Rs 2260 crore
- Commercial development area: 630 acres
- GoAP to hold equity of 26% in the Project and rest of 74% by developers
- Aircraft category to be handled: 4F compatible
- Runway Configuration: 10 - 28
- Runway Length: 3800 Mts x 45 Mts
- Phase 1 Terminal Capacity: 6.3 mppa (design year 2030)
- Peak hour passengers: 3457 (Phase – 1)

Bhogapuram International Airport

Conceptual Master Plan



Land Acquisition process

- Land acquisition in India is governed by the Right to Fair Compensation and Transparency in **Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR)**. Till 2013, land acquisition in India was governed by Land Acquisition Act of 1894.
- As per the Act, the union or state governments can acquire lands for its own use, hold and control, including for public sector undertakings and for "public purpose", and shall include the following purposes:
 1. For strategic purposes relating to naval, military, air force, and armed forces of the Union, including central paramilitary forces or any work vital to national security or defence of India or State police, safety of the people;
 2. For infrastructure projects as defined under the Act;
 3. Project for project affected families;
 4. Project for housing for such income groups, as may be specified from time to time by the appropriate Government;
 5. Project for planned development or the improvement of village sites or any site in the urban areas or provision of land for residential purposes for the weaker sections in rural and urban areas;
 6. Project for residential purposes to the poor or landless or to persons residing in areas affected by natural calamities, or to persons displaced or affected by reason of the implementation of any scheme undertaken by the Government, any local authority or a corporation owned or controlled by the State

Key challenges in land acquisition

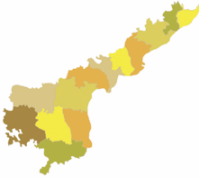


Challenges in land acquisition:

1. Acquisition of private land, Rehabilitation and Re-settlement of displaced families
2. Timeline of land acquisition and quality of land in the project
3. Regulation, Policies and procedures.
4. Minimizing land acquisition cost as far as possible.
5. Avoiding villages / habited area to the extent possible

Split of land parcels for Bhogapuram Airport project development

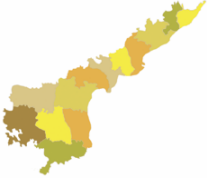
S. No.	Village	Private land	Assigned land	Govt land	Total
1	Kancheru	361.07	452.10	176.57	989.74
2	Kavulavada	530.25	205.85	35.60	771.70
3	Gudepuvalasa	464.49	136.90	94.92	696.31
4	Ravada	43.61	23.33	16.56	83.50
5	A. Ravivalasa	32.04	1.18	5.99	39.21
6	Savaravilli	11.22	0.00	0.20	11.42
7	Kancherupalem	0.00	6.90	90.10	97.00
8	Munjeru	0.00	11.14	0.00	11.14
	Total	1442.68	837.40	419.94	2702



Approach to land acquisition and sustainable project development



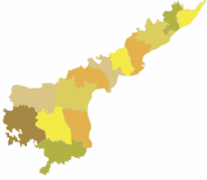
S. No	Aspect	Description
1.	Land use	<ul style="list-style-type: none">• The identified land avoids forest land.• Land is under Andhra Pradesh Government ownership, and some parts are private land. The project involves resettlement of the present occupants.• The project site falls within the jurisdiction of the following nine villages, namely, Amatam Ravivalasa, Kongavanipalem, Munjeru, Savaravilli, Kancherupalem, Gudepuvalasa, Kancheru, Kavulavada, and Ravada
2.	Re-settlement and Rehabilitation	<ul style="list-style-type: none">• Five villages will be displaced namely, Kongavanipalem, Kancheru, Kavulavada, Gudepuvalasa and Ravada villages as per state government compensation provision.• Appropriate R&R plans are developed and implemented by concerned district authorities.
3.	Coastal Regulation Zone	<ul style="list-style-type: none">• The site is near the Bay of Bengal; however the nearest point of the boundary of proposed airport, from the high tide line is at minimum distance of 671m and thus does not fall within the Coastal Regulation Zone (CRZ) notification
4.	Obstacle	<ul style="list-style-type: none">• No man – made obstacles were seen at the site and in its periphery. The Approach for Runway is proposed at 100°-280° direction. The eastern approach is on the Bay of Bengal side and hence does not have any obstruction.
5.	Water source and demand	<ul style="list-style-type: none">• The project will utilize water supply from the Municipal Corporation. The daily consumption of water during operation phase will be about 1075.7 KLD of which 183.4 KLD will be fresh water and 892.2 KLD will be recycled water.



Approach to land acquisition and sustainable project development



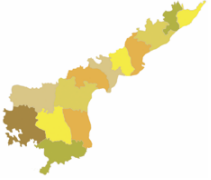
S. No	Aspect	Description
6.	Power supply and back-up	<ul style="list-style-type: none"> HT External Electrification being, critical backbone in power supply, a system with high redundancy has been envisaged achieving high score on reliability indices like SAIDI (System Average Interruption Duration Index), SAIFI (System Average Interruption Frequency Index), CAIDI etc.
7.	Sewerage treatment plant	<ul style="list-style-type: none"> A sewerage treatment plant of MBBR technology shall be located near the eastern boundary of the airport. An area of 10,000 m² has been earmarked in the master plan. The recycled water shall be utilized for flushing / landscaping etc.
8.	Green building at Bhogapuram International Airport	<ul style="list-style-type: none"> By adopting passive design strategies like building profile and orientation, natural lighting and passive solar design lesser electricity will be consumed as compared to conventional buildings On-site energy generation through renewable energy utilization to cater to its energy needs. Solar PV panels can help generate electricity which can reduce the buildings dependence on grid power. To cater to the internal and external (landscape) water demands, waste-water recycling systems and rain-water harvesting systems will be adopted



Approach to land acquisition and sustainable project development



S. No	Aspect	Description
9.	Water conservation	<ul style="list-style-type: none">At the proposed airport, water will be conserved by utilizing treated waste water for flushing of toilets and for development of greenery and landscaping.
10.	Rainwater harvesting	<ul style="list-style-type: none">Rainwater harvesting will be adopted at the proposed airport. During rains, rain water will be collected and stored in underground tank. Collected rain water will be used for greenery development/flushing purposes.
11.	Environment monitoring plan	<ul style="list-style-type: none">To monitor impacts on the surrounding environment and the effectiveness of mitigation measures during the construction and operation.To ensure that the environmental control systems are operating satisfactorily.To suggest ongoing improvements in management plan, if required, for subsequent effective monitoring.



Thank You