### Dredging & Reclamation LEVERAGING EXPERIENCE. DELIVERING EXCELLENCE.

शाली सागर-17 MTI SAGAR-17



Ports and Logistics

### Growth, the way it is meant to be.

Growth, to us, isn't about the businesses we're involved in. Growth is about the real impact we can create. It's about the lives we can touch, the communities we can nourish, the future we can inspire. With our sheer size of operations, we have been able to reach out to the remotest of geographies with ease. Be it power transmission or solar energy generation or agri logistics, we go for large scale execution that benefits millions of Indians. We are proud of this quality of our operations, which we have consciously extended beyond our businesses, to impact healthcare, education, employment generation and creation of sustainable livelihoods for the communities that deserve them. It is the belief that growth can lead to goodness, which inspires us and drives us.

### Vision

To be a world class leader in businesses that enrich lives and contribute to nations in building infrastructure through sustainable value creation.



### **ADANI PORTS AND SPECIAL ECONOMIC ZONE**

### The undisputed leader in Indian ports sector

APSEZ provides seamlessly SEZ & Dredging

- One-stop solution for business
- Pan-India presence
- Largest integrated infrastructure company
- Dedicated, committed and passionate team to provide superior services
- Technology-driven systems and processes
- State-of-the-art dredging equipment and highly experienced staff



### integrated services across three verticals, i.e. Ports, Logistics,

#### Exceptional features of **APSEZ** Ports

- Deep-water, all-weather, direct berthing facilities
- Large-scale mechanisation
- Connectivity to national highways and rail networks
- Scope for major expansion at our ports
- Operational benchmarks comparable to the best in the world

### A MARKET LEADER IN THE MAKING



APSEZ provides

- of ports

# Dredging and Reclamation solutions for:

#### • Port and harbour development • Maintenance of navigable areas

 Inland waterways dredging • Environmental dredging • De-siltation of inland water bodies Adani Group started investing in owning and developing its dredging fleet since 2005 to achieve planned high-paced growth in the port sector. It has been a major success story since then and APSEZ currently owns a large fleet of 23 dredgers, having the largest capital dredging capacity in India, with;

- 12 Cutter Suction Dredgers (CSDs)
- 4 CSDs for Inland Waterway Dredging
- 3 Trailing Suction Hopper Dredgers (TSHD)
- 2 Grab Dredgers
- 1 Water Injection Dredger (WID)
- 1 Special Dredger for Under Berth Dredging

APSEZ, besides owning dredgers, has a large fleet of support vessels and equipment operated and maintained by a team of over 1000 personnel.

Well maintained dredgers, highly motivated and trained personnel, in-house innovative workshops, dry dock facilities and survey support are vital strengths that enable efficient operation.

Owning, operating and maintaining these dredging assets gives Adani a substantial edge over the competition. Adani Ports, backed by its dredging strength, has attained the top position in the port sector in India.



# factor

- Young and state-of-the-art dredgers (of European make)
- a dredging depth of 29 m
- ~ Two TSHDs of 8000 cum
- Very strong logistical support, including owned workshops and well stocked spares inventory, to minimise down-time

### Differentiation

• Impeccable track record of taking up projects with a client-centric approach and ensuring completion to the clients' satisfaction

- ~ India's largest Cutter Suction Dredger with

Over 15 years of experience implementing dredging projects all along the Indian coastline. Successful implementation of projects of

- Capital Dredging
- Maintenance Dredging
- Land development through Reclamation
- Maintaining navigable channels in the National Waterways

## OUR LOCATIONS

Barh Farakka Sultanganj

• Gangavaram

Katupalli

Dhamra

Mundra Tuna Kandla 🗶 Dahej Hazira • JNPT

> Jaigarh 💽 Angre

> > Cochin

Mormugao 💽

Capital Dredging

Maintenance Dredging Vizhinjam •

National Waterways

APSEZ's core strength has been capital dredging. We own and operate 12 CSDs of varying sizes and capacities. We have 4 booster stations which can be utilised along with the dredgers for long distance pumping and enables us to execute all capital dredging as required for our ports. Our fleet is supported by extensive offshore and onshore equipment and pipelines. Using our capital dredging equipment, we have successfully created the deepest ports in the country (up to -21 m) and have also reclaimed very large parcels of land for the required backup support areas. Our in-depth knowledge has enabled us to take up and successfully complete a variety of challenging assignments. The dredging team has dredged more than 350 million cu m and has filled/reclaimed more than 3500 ha of land so far.

#### Capital Dredging & Reclamation

#### Maintenance Dredging

Increasing port capacities across the Indian coastline have resulted in increased maintenance dredging requirements. APSEZ has been steadily increasing its maintenance dredging capability over the past few years. We operate a range of maintenance dredging equipment including 3 TSHDs, a WID, a self-propelled grab dredger and a dumb grab dredger. With this equipment, our team ensures that Adani Ports remains operative all through the year and also services the maintenance dredging demands of other ports all over India. To cater to the increase in demand for maintenance dredging, a new company 'Shanti Sagar International Dredging Pvt. Ltd.' (SSIDPL) has been established under APSEZ.

#### Inland Waterway Dredging

Government of India's 'Jal Marg Vikas' plan has outlined a plan to develop navigable channels on rivers with the aim of reducing rail and road congestion, reducing the carbon footprint and minimal resource depletion. With 4 modified small top-of-the-line CSDs for waterways dredging, APSEZ is establishing itself as the go-to solution provider for creating and maintaining India's waterways.

## OUR DREDGERS PORTFOLIO

#### **CUTTER SUCTION DREDGER**

DREDGER	CONSTRUCTION YEAR/DREDGING DEPTH (M)	INSTALLED POWER/CUTTER POWER (KW)	MANUFACTURER	DISCHARGE PIPE DIA. (MM)
SHANTI SAGAR I	2005/20	2700/585	IHC	650
SHANTI SAGAR II	2007/20	4604/450	VOSTA LMG	650
SHANTI SAGAR III	2007/25	2700/450	IHC	650
SHANTI SAGAR VI	2008/20	2700/585	IHC	650
SHANTI SAGAR VII	2008/25	8942/1000	MANUFACTURED IN CHINA	750
SHANTI SAGAR VIII	2009/25	2700/450	IHC	650
SHANTI SAGAR IX	2009/25	2700/450	IHC	650
SHANTI SAGAR X	2009/25	4571/750	IHC	750
SHANTI SAGAR XI	2009/22	2700/585	IHC	650
SHANTI SAGAR XII	2009/22	2700/585	IHC	650
SHANTI SAGAR XIII	2009/22	2700/585	IHC	650
SHANTI SAGAR XVI	2012/29	13000/1500	IHC	900
SHANTI SAGAR XX	2019/8	483/55	IHC	400
SHANTI SAGAR XXI	2019/8	483/55	IHC	400
SHANTI SAGAR XXII	2019/8	483/55	IHC	400
SHANTI SAGAR XXIII	2019/8	483/55	IHC	400



#### TRAILING SUCTION HOPPER DREDGER

DREDGER	CONSTRUCTION YEAR/MANUFACTURER	HOPPER CAPACITY (CU M)
SHANTI SAGAR IV	2007 / CHINA	5200
SHANTI SAGAR 17	2017 / IHC	8000
SHANTI SAGAR 18	2017 / IHC	8000

#### MECHANICAL DREDGERS

DREDGER	CONSTRUCTION YEAR	HOPPER CAPACITY (CU M)
SHANTI SAGAR V	2007	400 (2 DUMB BARGES)
SHANTI SAGAR 14 (SELF PROPELLED GRAB DREDGER)	2012	600
SHANTI SAGAR XIX (SPECIAL DREDGER FOR UNDER BERTH DREDGING)	2016	

#### WATER INJECTION DREDGER

DREDGER	CONSTRUCTION YEAR	INSTALLED POWER (KW)	
SHANTI SAGAR 15	2012	1800	

#### JACK UP BARGES

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DREDGER	CONSTRUCTION YEAR	LEG HEIGHT (M)		
JUB I	2009	55		
JUB II	2009	50		

### CAPITAL DREDGING PROJECTS



#### HAZIRA PORT

The capital dredged material amounting to 30 M m<sup>3</sup> has been used for reclaiming the backup area. A WID is used for the regular maintenance of the port, assisted by a TSHD





#### DHAMRA PORT EXPANSION

Capital dredging of 9 M m<sup>3</sup> conducted for constructing the berths numbered 3 and 3A



#### FACILITATED EXPANSION AT GANGAVARAM PORT

Capital dredging of 2.4 M m<sup>3</sup> was done by a CSD and a TSHD including hard strata dredging by self propelled grab dredger

### APPROACH CHANNEL FOR SANGHI CEMENT

Capital dredging of 1.4 M m<sup>3</sup> dredged to deepen and widen the approach channel for Sanghi Cement, Kharo Creek

### CAPITAL DREDGING PROJECTS



#### WEST BASIN, MUNDRA PORT

Created the largest coal import terminal in the world. Dredging 42 M m<sup>3</sup> and reclaimed over 450 Ha. Dredging included rock dredging of 4.2 MMT





### SOUTH BASIN, MUNDRA PORT

Created a deep draft basin for large container vessel movement. The basin was dredged to a depth of -16.5 m CD by dredging 35 M m<sup>3</sup>



#### TUNA, KANDLA PORT

Dredged 0.65 M m<sup>3</sup> of the basin and facilitated offshore disposal which was carried out by a TSHD by re-handling dredged material

#### INTAKE AND OUTFALL CHANNELS & POND FOR UMPP AT MUNDRA

Intake Channel: Sea Water Intake Channel of 6.7 Km for Power Plants; Volume Dredged: 8.8 M m<sup>3</sup>; Outfall Channel: 3.1 Km Length Channel; 1.4 M m<sup>3</sup> including 10,000 m<sup>3</sup> of Hard Strata

### **CAPITAL DREDGING PROJECTS**



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#### **ONGOING PROJECT** -VIZHINJAM PORT

Utilising a multitude of equipment to create a berth face and TC of 18.4 m depth and the channel depth of 20.8 m. Over 3 M m<sup>3</sup> has been reclaimed

## NATIONAL WATERWAYS





#### NATIONAL WATERWAYS

Assured depth contract for 5 years for the following stretches at

National Waterway 1:

- Farakka Kahalgaon
- Sultanganj Mahendrapur
- Mahendrapur Barh

### MAINTENANCE DREDGING PROJECTS



#### AT DHAMRA PORT Maintenance dredging of 8.2 M m<sup>3</sup> dredged using TSHD and dumped at sea disposal areas. Length of the channel is 18.6 kms

**TC AND CHANNEL** 







### JAIGARH PORT

Maintenance Dredging of 1.2 m<sup>3</sup> using a TSHD and the material dumped at the sea disposal area

#### JAWAHARLAL NEHRU PORT TRUST

Maintenance dredging of 2.1 M m<sup>3</sup> dredged using TSHD and WID. The dredged material was dumped at designated disposal areas at a distance of 19 NM

#### SOUTHERN NAVAL COMMAND - KOCHI

Multi-year Maintenance Dredging contract. 1 M m<sup>3</sup> dredged from Nov '18 to Feb '19

### MAINTENANCE DREDGING PROJECTS



#### PLL AND PETRONET LNG, DAHEJ

Maintenance Dredging of 2.8 lac m<sup>3</sup> using a TSHD with the material dumped at the designated sea disposal area. 2 campaigns conducted in the year 2018-19

Dredged 0.36 M m<sup>3</sup> for maintaining the berth face to the required depths of -15.0 m CD using the TSHD







#### GCPTCL, DAHEJ

Dredged approx. 0.13 M m<sup>3</sup> for pre monsoon Maintenance Dredging using TSHD to achieve —16.0 m CD

#### ANGRE PORT

Maintenance Dredging of 3.5 lac m<sup>3</sup> with the dredged material being dumped at designated disposal ground

#### GOGHA DAHEJ ROPAX

Maintenance dredging of 9.5 lac m<sup>3</sup> with the dredged material dumped at designated disposal ground

## OUR STRENGTH

#### OUR PEOPLE

Over 900 personnel working round the clock

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#### IN-HOUSE SURVEY TEAM

State-of-the-art softwares are used for analysing the survey details. We have an experienced survey team at all ports

#### IN-HOUSE DRY DOCK

A self sufficient dry dock used for docking our vessels to ensure lowest possible operational costs for our dredgers

#### IN-HOUSE MAINTENANCE

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Dedicated in-house workshop used for overhauling engines, gear boxes and fabrication of parts for the dredger provides support to the port as required

### **ADANI FOUNDATION**

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#### 1. Education

Adani Vidya Mandir, Ahmedabad (AVMA) is the first cost-free school in India to receive NABET Accreditation by Quality Council of India, creating a benchmark in the field of education. Adani Public School, Mundra is now the first school in Kutch and Saurashtra region to receive the NABET Accreditation. Adani Vidya Mandirs in Ahmedabad, Bhadreshwar and Sarguja are schools that provide cost-free education to about 2100 students annually. Adani Public School in Mundra, Adani Vidyalayas in Tirora and Kawai, Adani DAV Public School in Dhamra and Navchetan Vidvalava in Hazira provide subsidised education to students across the country. Adani Foundation also provides quality education to 100,000 children through 600 schools and balwadis.

#### 2. Community Health

Adani Foundation brings quality medical care to a vast population of underprivileged people, through Mobile Health Care Units, Rural Clinics and General Medical Camps. Adani Foundation reaches out to 400,000 people annually through these initiatives, which includes a vast population of Senior Citizens. Situated in the centre of Bhuj, Gujarat Adani Institute of Medical Sciences, along with the GK General Hospital is the biggest hospital in the district. On an average, 1,700 patients are attended to and 50 surgeries are conducted in the hospital every single day at this 750-bed hospital. In addition, 48 General Health Camps and Specialty Camps were organised in various interior villages of Kutch that created magical impact and benefitted 25,000 patients with specialised treatments. In order to spread awareness about the services available in the hospital, 11 awareness camps and 293 village level meetings were organized in rural Kutch.

#### 3. Sustainable Livelihood Development

Adani Foundation aims at promoting growth and development of marginalised sections by promoting livelihood security. The programs span from skilling to offering support in market linkages to creation of Self-Help groups to adoption of new and innovative techniques in crop production, animal husbandry and fisheries etc. Adani Foundation is helping out more than 25,000 families through these initiatives.

#### 4. Community Infrastructure Development

Adani Foundation builds and restores infrastructure with an aim to improve access to basic services, like education, health, water and sanitation services. The initiatives include upgradation of medical infrastructure, creation of check dams, provision of household toilets, provision of drinking water facilities. improving the school infrastructure etc.

Goodness is not subject to sporadic appearances. It is a practise that ought to be ingrained in those who truly believe in it. We, at Adani, leave no stone unturned to bring happiness and livelihood at every chapter in our journey of Nation Building. The Adani Group invests about 2% of its total profit in various social initiatives through its CSR arm, Adani Foundation with an aim to lead the wave of goodness at grassroot levels. It exhibits the humane, compassionate and benevolent side of the company. Adani Foundation has touched more than 3.2 million lives in 2250 villages of 15 states through its work in Education, Community Health, Community Infrastructure Development and Sustainable Livelihood Development.

#### Special Projects:

1. SuPoshan – SuPoshan is targeted towards breaking the cycle of anemia in women and malnourishment in children below the age of 6 years. SuPoshan Sanginis who are from the community, ensure the right medical and social support to encourage mothers to adopt healthy lifestyle. SuPoshan is spread across 14 States in more than 3 lakh households/families.

2. Saksham – Saksham or Adani Skill Development Programme (ASDC) is a skilling programme that focuses on bridging the skill gap among youth, make them employable and thus contribute towards nation building. The programme is in line with the Government of India's Skill India Mission. Saksham has partnered with the National Skill Development Corporation (NSDC) and has trained more than 31,000 youth. Its innovative courses include simulator-based crane operation, 3D printing, and welding through Augmented Reality. Currently there are more than 65 Saksham centres operational across eight States in India offering skill training in 45 trades.

**3. Swachhagraha** – The project aims at engaging people and bringing about change where people get involved to take action for 'Creating a culture of cleanliness'. Through this project we have reached out to 5,700 Schools across 19 states and have more than 80,000 Swachhagraha Dal members, spreading the message further to 26,50,000 students.

Swachhagraha also reached out to 12 crore citizens through the large scale community outreach encouraging them to take personal responsibility of maintaining cleanliness at public places and be Swachhagrahis.

**4. Udaan** – With an objective to encourage young minds to develop an interest in all sorts of enterprises and to encourage them to dream big in life, Adani Foundation takes students on an exposure visit to their power plants and ports, where the students get an opportunity to experience the scale of our businesses. More than 2.76 lakh students, teachers and youth from more than 3500 schools and institutes have participated in Project Udaan.



Ports and Logistics

Ahmedabad

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