Dredging & Reclamation
LEVERAGING EXPERIENCE.
DELIVERING EXCELLENCE.
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.
The undisputed leader in Indian ports sector

APSEZ provides seamlessly integrated services across three verticals, i.e. Ports, Logistics, 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

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 Dredging and Reclamation solutions for:

- Port and harbour development
- Maintenance of navigable areas of ports
- 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.
STRATEGIC ADVANTAGES

Differentiation factor

- Impeccable track record of taking up projects with a client-centric approach and ensuring completion to the clients’ satisfaction
- Young and state-of-the-art dredgers (of European make)
  - India’s largest Cutter Suction Dredger with a dredging depth of 29 m
  - Two TSHDs of 8000 cu.m
- Very strong logistical support, including owned workshops and well stocked spares inventory, to minimize down-time

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

Capital Dredging & Reclamation

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.

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 WIO, a self-propelled grab dredger and a combo grab dredger. With this equipment, our team ensures that Acani Ports remains operational 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 ‘Launched Viva’ 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

<table>
<thead>
<tr>
<th>DREDGER</th>
<th>CONSTRUCTION YEAR</th>
<th>DREDGING DEPTH (M)</th>
<th>INSTALLED POWER/CUTTER</th>
<th>MANUFACTURER</th>
<th>DISCHARGE PIPES (M)</th>
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<tr>
<td>SHANTI SAGAR I</td>
<td>2005/05</td>
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<td>IHC</td>
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<tr>
<td>SHANTI SAGAR VII</td>
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<tr>
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<td>650</td>
<td>IHC</td>
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<td>IHC</td>
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<tr>
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<td>SHANTI SAGAR XXII</td>
<td>2018/18</td>
<td>483/0/5</td>
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<td>2018/18</td>
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TRAILING SUCTION HOPPER DREDGER

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<thead>
<tr>
<th>DREDGER</th>
<th>CONSTRUCTION YEAR</th>
<th>MANUFACTURER</th>
<th>HOPPER CAPACITY (CU.M)</th>
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<tr>
<td>SHANTI SAGAR IV</td>
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<td>SHANTI SAGAR 18</td>
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MECHANICAL DREDGERS

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<th>HOPPER CAPACITY (CU.M)</th>
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<tr>
<td>SHANTI SAGAR 14 (DEFIN)</td>
<td>2012/12/00</td>
<td>600</td>
</tr>
<tr>
<td>SHANTI SAGAR XV (DEFIN)</td>
<td>2016/12/00</td>
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WATER INJECTION DREDGER

<table>
<thead>
<tr>
<th>DREDGER</th>
<th>CONSTRUCTION YEAR</th>
<th>INSTALLED POWER (KW)</th>
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<tr>
<td>SHANTI SAGAR 15</td>
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</table>

JACK UP BARGES

<table>
<thead>
<tr>
<th>DREDGER</th>
<th>CONSTRUCTION YEAR</th>
<th>LADLE HEIGHT (M)</th>
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<tr>
<td>JUBI</td>
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</tr>
<tr>
<td>JUBII</td>
<td>2009/09/09</td>
<td>10</td>
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</table>
CAPITAL DREDGING PROJECTS

HAZIRA PORT
The capital dredged material amounting to 30 M m³ has been used for reclaming the backup area. A WID is used for the regular maintenance of the port, assisted by a TSHD.

FACILITATED EXPANSION AT GANGAVARAM PORT
Capital dredging of 2.4 M m³ was done by a CMD and a TSHD including hard strata dredging by self propelled grab dredger.

DHAMRA PORT EXPANSION
Capital dredging of 9 M m³ conducted for constructing the berths numbered 3 and 3A.

APPROACH CHANNEL FOR SANGHI CEMENT
Capital dredging of 1.4 M m³ dredged to deepen and widen the approach channel for Sanghi Cement, Khara Creek.
CAPITAL DREDGING PROJECTS

WEST BASIN, MUNDRA PORT
Created the largest coal import terminal in the world. Dredging 42 M m³ 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 -16.3 m OD by dredging 33 M m³.

TUNA, KANDLA PORT
Dredged 0.65 M m³ of the basin and facilitated offshore disposal which was carried out by a TSHPD 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 m³; Oufall Channel: 3.1 Km Length Channel; 1.4 M m³ including 10,000 m³ of Hard Surala
CAPITAL DREDGING PROJECTS

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 22.8 m. Over 3 M m³ has been reclaimed.

NATIONAL WATERWAYS

Assured depth contract for 5 years for the following stretches at National Waterway 1:
- Farakka – Khaigaon
- Sultanganj – Mahendrapur
- Mahendrapur – Bhar
MAINTENANCE DREDGING PROJECTS

TC AND CHANNEL AT DHAMRA PORT
Maintenance dredging of 8.2 M m³ dredged using TS HD and dumped at sea disposal areas. Length of the channel is 18.6 kms.

JAWAHARLAL NEHRU PORT TRUST
Maintenance dredging of 2.1 M m³ dredged using TS HD and W&D. The dredged material was dumped at designated disposal areas at a distance of 19 Nm.

JAIGARH PORT
Maintenance Dredging of 1.2 M m³ using a TS HD and the material dumped at the sea disposal area.

SOUTHERN NAVAL COMMAND - KOCHI
Multiyear Maintenance Dredging contract. 7 M m³ dredged from Nov '18 to Feb '19.
MAINTENANCE
DREDGING PROJECTS

PLL AND PETRONET LNG, DAHEJ

Maintenance Dredging of 2.8 lac m³ 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 m³ for maintaining the berth face to the required depths of -15.0 m CD using the TSHD

ANGRE PORT

Maintenance Dredging of 3.5 lac m³ with the dredged material being dumped at designated disposal ground

GCPTCL, DAHEJ

Dredged approx. 0.15 M m³ for pre-monsoon Maintenance Dredging using TSHD to achieve —16.0 m CD

GOGHA DAHEJ ROPAX

Maintenance dredging of 9.5 lac m³ with the dredged material dumped at designated disposal ground
OUR STRENGTH

OUR PEOPLE
Over 900 personnel working round the clock

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 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 MAINTENANCE
Dedicated in-house workshop used for overhauling engines, gearboxes and fabrication of parts for the dredger provides support to the port as required
1. Education
Adani Vidyamandir Ahmedabad (AVAM) is the first cost-free school in India to receive NABARD 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 NABARD Accreditation. Adani Vidyamandir in Ahmedabad, Bhuj, Dwarka, and Surat are schools that provide cost-free education to about 2700 students annually. Adani Public School in Mundra, Adani Vidyalaya in Tinsu and Kawai, Adani DVR Public School in Shimna and Nechwan, Vidyalaya in Haho have provided subsidised education to students across the country. Adani Foundation also provides quality education to 100,000 children through 650 schools and balwadis.

2. Community Health
Adani Foundation brings quality medical care to vast population of underserved, rural people, through Mobile Health Care Units, Rural Clinics and General Medical Camps. Adani Foundation reaches out to 800,000 people annually through these initiatives, which includes a vast population of Senior Citizens. Scattered in the center of 100, Gujarat Adani Institute of Medical Sciences, along with the AK 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 295 village level meetings were organised 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 skill development 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.

Special Projects:
1. Suphanosh - SuPhansh is targeted towards breaking the cycle of anemia in women and malnourishment in children below the age of 6 years. Suphanosh; a project who care for the community, ensures the right medical and social support to encourage mothers to adopt healthy lifestyle. SuPhansh is spread across 14 States in more than 3 lakh households/ families.

2. Sakkal - Sakkal 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 Skill India Mission. Sakkal has partnered with the National Skill Development Corporation (NSDC) and has trained more than 31,000 youth. Its innovative courses include simulator-based online training, 3D printing, and welding through Augmented Reality. Currently there are more than 65 Sakkal 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 8,700 Schools across 19 states and have more than 85,000 Swachhagrahi volunteers spreading the message further to 26.50 lakhs students. Swachhagrahi also reached out to 72,000 citizens through the large-scale community outreach encouraging them to take personal responsibility of maintaining cleanliness at public places and be Swachhagrahis.

4. Udan - With an objective to encourage young minds to develop an interest in all fields of enterprises and to encourage them to dream big. Udan, 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 Udan.
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