

ISO 9001:2015

Geospatial data and services for Water Resource Management (Remote Sensing and GIS)



About Us













ESTABLISHED

SATPALDA was Founded in **2002** With ISO Certification 9001:2015

PROFILE

- Satellite remote sensing
- GIS
- Photogrammetry
- LIDAR
- UAV
- AMDB
- 3D Landcape

EXPERIENCE

Twenty years of rich experience and expertise, Our company has a team of experts with thousands of man hours of production and experience

LOCATION

OFFICE 1: CP 2156, First Floor, Sector 16A, Vasundhara, Ghaziabad-201012, U. Pradesh, India

OFFICE 2: 11006, Kanchenjunga Building, 18, Barakhamba Road, New Delhi - 110001, India.

CONTACT

www.satpalda.com

info@satpalda.com



+91 7838410007



Company Overview



PRODUCTS

- Satellite Imagery : WorldView, GeoEye Pleiades, SuperView, KazEOSat, SPOT. GRUS
- TERRASAR-X
- 3D landscape- 50 cm to 5m DSM/DTM
- AMDB



SERVICES

- Drone Photogrammetry
- Satellite
 - Photogrammetry
- Land subsidence
 Mapping
- 3D Modelling
- Codestrol Mann
- Cadastral Mapping
- GIS MAPPING
- SDSS



SECTORS

- Water
- Mining
- Railways
- Forestry
- Agriculture
- Oil and Gas
- Disaster Management
- Urban Planning
- Waste Management



SATPALBA

PARTNERS

- BLACKSKY
- AXELSPACE
- MAXAR
- RESTEC
- SCANEX
- Simactive
- INTERMAP



Global Reach







High resolution satellite imagery

SATPAL**B**A

	RESOLUTION	REVISIT FREQ	PAN / MSS	SWATH AREA	ACCURACY
WorldView - 1	0.50 m	1.7 Days	PAN : 50 cm	17.6 km	<3.5 m CE90
WorldView - 2	0.40 m	1.1 Days	PAN : 50 cm MSS : 2 m	16.4 km	<3.5 m CE90
WorldView - 3	0.30 m	<1 Days	PAN : 30 cm MSS : 1.2 m	13.1 km	<3.5 m CE90
GeoEye - 1	0.40 m	3 Days	PAN : 50 cm MSS : 2 m	15.2 km	<2m CE90 Stereo <3m LE90 Mono
GRUS	2.5 m	<1 Days	PAN : 2.5 m MSS : 5 m	55 km	<10.69m CE90



Why Modern Technology ?

- Due to climate change, frequency of extreme events have increased rapidly, With GIS tools we can monitor *abnormal Variations in flood and drought in same area annually.*
- Conventional surveying of lakes especially in hilly areas needs a lot of man hour both in field and office as well. Too much of field work is required even for the survey of smaller section.
- Remote sensing allows *repetitive coverage of larger areas* enabling surveys on a variety of themes and identification of large features. It is also bit cheaper and faster as it allows map revision, reconstruction of base map in the absence of traditional land survey
- GIS is effective when it comes to characterize and model the spatial variation in hydrological process so that experts can manage the use of land within a drainage basin.





Overview

Water utilized in irrigation (80-85)% is more than used in other purposes but still irrigation efficiency is less than 40%.



Domestic

Industry and Energy

Agriculture

Source: iirs



Challenges

IRRIGATION	WATER	SURGE IN EXTREME	GROUNWATER	COASTAL AND
INEFFICIENCY	RESOURCE	EVENTS	OVER	INLAND WATER
	MANAGEMENT		EXPLOITATION	QUALITY



Solutions

IRRIGATION INEFFICIENCY	WATER RESOURCE MANAGEMENT	SURGE IN EXTREME EVENTS	GROUNWATER OVER EXPLOITATION	COASTAL AND INLAND WATER QUALITY
DTM/DEM3-D modelling	 Watershed Mapping 	 LULC Flood / snow inundation mapping Topographic map 	 Soil moisture Mapping Groundwater Zone-Mapping 	 Surface water Mapping Water quality assessment







DTM

3-D modelling



Irrigation Inefficiency



DTM 3-D modelling



Watershed Mapping

Water Resource Management





Surge In Extreme Events

SATPAL BA

LULC Using GIS and RS



Innundation Mapping

Topographic









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Innundation Mapping

Topographic Mapping





Surge In Extreme Events

Innundation Mapping

Topographic Mapping



Groundwater Overexploitation



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Soil moisture Mapping



Water quality assessment

Surfacewater Mapping

Legend

Poor

Excellent

Coastal And Inland Water Quality





Coastal And Inland Water Quality







Case Study

Lift Canal : kumbharan, Rajasthan



Nature of work

Analysis of the topographic area, designing of a selected lift system, mapping of soil types, land use pattern, network of irrigation channels, potential water source & land gradient.

Deliverables

- DTM 1m
- orthophoto
- Contour map (DWG)
- Topographic Map







Lift Canal : kumbharan, Rajasthan









Thank You



www.satpalda.com Email : info@satpalda.com

Exhibition Area: Booth no. 30