

COMPANY PROFILE



INNOVATIVE
ENGINEERING SERVICES

Company Overview

Innovative Engineering Services (IES) is a research and consulting firm, dedicated to designing and implementing solutions that promote the sustainable use of natural resources and improve overall well-being. Our expertise lies in water infrastructures, river & floods, climate change & disaster preparedness, water security and sustainability, agriculture, ecosystems & society. We understand the growing threat of climate change and disasters, and proactively integrate climate resilience into our projects to safeguard communities & ecosystems for the future.

IES offers a comprehensive service in our focus areas. This includes data collection & resource monitoring, impact assessments, modelling and analytical studies, utilizing GIS and remote sensing technologies, and implementing ICT solutions with a core focus on sustainability. For water-related engineering projects specifically, we conduct feasibility assessments, detailed engineering design, construction monitoring, project management, and impact assessments.

We also collaborate with diverse clients on policy development, training programs, capacity building initiatives, and institutional development. Additionally, IES specializes in monitoring and evaluating projects implemented by donor agencies, development partners, and the Nepalese government across various sectors.

Message from Executive Chairman



It is my great pleasure to introduce you the journey and future prospects of Innovative Engineering Services (IES). Founded on a strong foundation of technical expertise and a commitment to excellence, IES has gradually grown into a leader of research, engineering and consulting services.

Our success is rooted in our unwavering dedication to delivering innovative solutions that address the complex challenges faced by this Himalayan country. From climate change and disaster risk reduction to sustainable development and environmental protection, IES is working at the forefront of these critical issues.

As we look to the future, we remain committed to our core values of integrity, accountability and collaboration. We will continue to invest in our people, our technology, and our partnerships to deliver exceptional results for our clients and contribute to a more sustainable development.

I invite you to explore the pages of our company profile to discover how IES is making a positive impact on the technology, society and environment. Together, we can shape a better future.

Anup Khanal
Executive Chairman

Winner of Best Innovation Award 2022
(Nepal Engineer's Association)

Top 40 Influential Youths of Nepal 2024
www.onlinekhabar.com

WHAT WE HAVE ACHIEVED SO FAR



Districts Covered

77

Out of 77 Districts



Annual Turnover

NPR **140 Million**
(USD 1.08 Million)



Contracts Executed

500+



Projects Involved

300+



Clients Served

250+



Largest contract Executed

NPR **227.5 Million**
(USD 1.75 Million)



No. of Employees

60-100

(Fulltime & Project-Based)



Annual Job Creation

5000+

(Man Days, Site-based)

CLIENTS & PARTNERS



GOVERNMENT AGENCIES

- ✓ Department of Hydrology & Meteorology
- ✓ Department of Water Resources & Irrigation
- ✓ Department of Electricity Development
- ✓ Department of Water Supply & Sanitation
- ✓ Water & Energy Commission Secretariat
- ✓ Water Resources Research & Development Centre



Government of Nepal

- ✓ Department of Roads
- ✓ Nepal Shipping Office
- ✓ High Powered Committee for Integrated Development of Bagmati Civilization
- ✓ Provincial Governments & Directorates
Koshi, Bagmati, Lumbini, Gandaki, Karnali & Sudurpaschim Provinces



Nepal Electricity Authority



Armed Police Force
Nepal



Kathmandu Valley Water Supply
Management Board



Kathmandu Upatyaka
Khanepani Limited



Hydroelectricity Investment &
Development Company Ltd.



विद्युत उत्पादन कम्पनी लिमिटेड
Vidhyut Utpadan Company Limited



Rastriya Prasaran Grid
Company Limited



DEVELOPMENT PARTNERS DONORS & INTERNATIONAL ORGANIZATIONS



European Union
Humanitarian Aid



United Nations
Development Program



United Nations Office
for Project Services



International Water
Management Institute





PRIVATE GROUPS & COMPANIES



BANKING & FINANCIAL INSTITUTIONS



Nepal Bank Limited



CONSULTING & CONTRACTOR FIRMS



PricewaterhouseCoopers India



NIPPON KOEI



Full Bright Consultancy Pvt. Ltd.



RIVER MORPHOLOGY & DYNAMICS

River Flow Patterns

Flood Studies

Sedimentation

River Basin Analysis



- ✧ Catchment Area Assessment
- ✧ Climate & LULC Projection & Modelling
- ✧ Flow and Sediment Monitoring
- ✧ Sediment Control & Management
- ✧ River Training & Flood Management

- ✧ Hydrological and Hydro-dynamic Modelling
- ✧ GIS & Remote Sensing Applications
- ✧ Real time monitoring & ICT based Solutions
- ✧ Adaptation Strategies, Policies, Plans & Frameworks



- 1** Detailed Assessment of River Basin Characteristics & Flow Dynamics along Kaligandaki River for Feasibility Study of Navigation along Kaligandaki River from Ramdi to Devghat (95 km)
- 2** Intensive River Morphology Monitoring and Study of six river basins (Mawa-Rautwa, Bakraha, Lakhandehi, East Rapti, West Rapti & Mohana-Khutiya) for Design of Flood Forecasting & Early Warning System
- 3** Study of West Rapti River Morphology & Basin Characteristics & Preparation of Detailed Project Report (DPR) for River Training Works with Road Corridor on either side on 25 km stretch for the development of Provincial Capital of Lumbini Province - 369
- 4** Detailed Assessment of River Basin Characteristics, Hydrological & Hydro-dynamic Modelling & Development of Flood Forecasting and Early Warning System for Narayani & Karnali Rivers with verification of the model output
- 5** Study of Sedimentation Pattern and suggest for Sustainable Extraction of River-bed Materials along Narayani River
- 6** Detailed Assessment of River Basin Characteristics and Flow Dynamics along Koshi River for Feasibility Study of Navigation from Tumglingtar to Chatara (75 km)
- 7** Detailed Design, Cost-estimation & Preparation of Material Specifications for construction of Beach cum Flood Protection Structure along Narayani River (1.4 km stretch) at Bharaptur
- 8** River Basin Characteristics and Flow Dynamics Study for design various sub-projects along Rapti, Babai & Tinau rivers for Preparation of River-system based Watershed Management Plans;
- 9** Monitoring of River Morphology (Profile & Sections, Flow & Sediment) of Lohandra & Kesaliya rivers for development of Flood Control Master Plan for both river basins (JICA funded Project)
- 10** River Basin Characteristics/ Flow Dynamics Study & preparation of River Training Master Plans for Tamakoshi (80 km) & Bhotekoshi (23 km) Rivers
- 11** River Morphology, Hydro-dynamic study, Design, Cost Estimation & preparation of Detailed Project Report for various River Training Projects **(10+ Projects)**
- 12** Review of River Morphology, Hydro-dynamic & Sedimentation Study, Survey & Detailed Feasibility Study of Diversion Structure at Koshi River for Sunsari Morang Irrigation Project
- 13** Study of River Morphology and Sedimentation Characteristics for Development of Fewa Tal Integrated Development Master Plan
- 14** Detailed Assessment of River Basin Characteristics and Flow Dynamics for Feasibility Study of Navigation along Sunkoshi River (153 km)
- 15** Monitoring & Collection of Hydro-morphological Data of Seti River for Flood Analysis to construct Dam across Seti River for Tanahun Seti Storage Hydropower Project (1440 MW)
- 16** Analysis of River Basin Characteristics, Sedimentation Modelling of Bagmati River and study on Sediment Management Techniques of Major Irrigation Systems of Nepal with reference to the finding of Bagmati Irrigation Project

MOUNTAIN HYDROLOGY

Snow

Glaciers

Glacial Lakes

Snow Hydrology



- ✧ Climate Change Impact Assessment
- ✧ Risk Mitigation & Adaptation Strategies
- ✧ GIS & Remote Sensing Applications
- ✧ ICT based solutions
- ✧ Hydrological Analysis
- ✧ Forecasting & Early Warning Systems
- ✧ Project Risk Assessment
- ✧ Management Planning
- ✧ Monitoring



- 1 Scientific Study of Tsho Rolpa Glacial Lake- 4580 masl and Lower Barun Glacial Lake (4500 masl)
- 2 Intensive Flow and River Section Monitoring and Hydrological Analysis of 6 snow stations of Nepal: Langtang khola (3600 masl), Annapurna (3600 masl), Khumbu-Imja [Dingboche (4300 masl) Pangboche (3950 masl)], Thso Rolpa (3700 masl) and Hurikot (2700 masl)
- 3 Assessment of Snow Characteristics & Hydrological Parameters from the existing Snow-Glacier Monitoring Stations, Glacier Mass-balance study and Operational System Design and Establishment for Daily, Seasonal and Annual Snow and Glacier Monitoring
- 4 Hydrographic Survey, Flow Monitoring and Study of Kahpuchhe Glacial Lake (2546 masl)
- 5 Establishment of Flood Forecasting Stations in Nepal-China Transboundary Rivers
- 6 Residential Training on Hydrological Modelling of Snow-fed Rivers using Google Earth Engine, QGIS and HEC-HMS to DOED officials
- 7 Assessment of Mountain Hydro-geology for Sustainable Exploitation of Groundwater in Sindhupalchowk and Ramechhap Districts
- 8 Hydrological Assessment of Various Snow-Fed Rivers for the study of various Hydropower Projects **(10+ Projects)**

Message from Director

Business Development & Project Implementation



IES is committed to fostering strong and enduring partnerships with clients from diverse sectors, including government agencies, NGOs, private companies, and international development organizations. Our team of experienced professionals is dedicated to understanding your specific needs and providing customized solutions. By combining technical expertise with a deep understanding of local contexts, we ensure the success of your projects. Our unwavering commitment to quality, innovation, and sustainability drives us to deliver exceptional results that have a lasting impact.

Hari Krishna Dawadi
Director

DISASTER ASSESSMENT & MITIGATION

Landslides & Geohazards

GLOFs

Floods

Debris and Sediment Flow

Droughts

Thunderstorm



- α Monitoring & ICT-based Solutions
- α Impact Assessment on Projects
- α GIS & Remote Sensing Applications
- α Forecasting & Early Warning Systems
- α Awareness & Capacity Building

- α Modeling & Analysis
- α Climate Change Impact
- α Hazard Mapping
- α LULC Change Impact
- α Nature-based Solutions



- 1** Establishment of Flood Forecasting Stations in Nepal-China Transboundary Rivers (Trishuli at Rasuwagadhi, Arun at Kimathanka and Bhotekoshi at Kodari)
- 2** Establishment of Flood Forecasting Network in Province-2, Terai and Urban Area of Nepal **(62 Stations)**
- 3** Rainfall Induced Landslide Study, Threshold Determination of and Develop Web-based Early Warning Portal
- 4** Community Based Disaster Risk Management (CBDRM) Consultant for Priority River Flood Risk Management Project (PRBFRMP)
- 5** Assessment of Dam-break scenario and proposing suitable mitigation measures for the study of Lamiraha Multipurpose Dam Project
- 6** Assessment, Design and Installation of Flood Forecasting Stations for Priority River Basin Flood Risk Management Project (PRBFRMP)
- 7** Establishment of Flood Forecasting Early Warning System in Mahakali River Basin focused for the Flood-prone Areas of Kailali & Kanchanpur
- 8** Design & Installation of Landslide Monitoring & Early Warning System and Monitor the Effectiveness of the system
- 9** Survey and Assessment for determination of threshold river levels to establish Early Warning System (EWS) in Nalgad Municipality and Barekot Rural Municipality, Jajarkot
- 10** Intensive Monitoring of Hydrological Flood Forecasting Stations set-up by Department of Hydrology & Meteorology (DHM) **(100+ stations)**

Message from Director

Project Implementation



As the Project Implementation Director at IES, I take immense pride in leading our dedicated teams to deliver exceptional results. At IES, we believe that true impact comes from the ground up. Our dedicated field teams are the backbone of our operations, working tirelessly to bridge the gap between theory and practice. We take pride in our hands-on approach, ensuring that our solutions are not just conceptual, but tangible and effective.

Sagar Shahi
Director

WATER RESOURCES RESEARCH & MANAGEMENT

River Basins

Lakes

Wetlands

Watersheds

Snow

Glacial Lakes

Aquifers

Groundwater



- ✧ GIS & Remote Sensing Application
- ✧ Climate Change & LULC Projection & Modelling
- ✧ Conservation & Management Planning
- ✧ Policies, Plans & Frameworks Development
- ✧ Nature based solutions & Adaptation Strategies

- ✧ Hydrological Modeling
- ✧ Basin level planning
- ✧ Water Recharge Strategies
- ✧ Stakeholder Engagement
- ✧ Water-balance studies



- 1** Bathymetric Survey and Development of Elevation Depth Profile of Dhap Dam
- 2** Planning, Survey and Feasibility Study & Design of various components (dam and associated structures, foot trails, landscaping plan) for Rupa Tal Conservation Integrated Development Project (RTCIDP)
- 3** Field based observation & analysis for estimation of Manning's Roughness Coefficient (n-value) of boulder reach rivers of Nepal
- 4** Detailed Study of Conceptual Masterplan Preparation of Fewatal Integrated Development Works and Conservation
- 5** Field based observation & analysis for estimation of Manning's Roughness Coefficient (n-value) of alluvium reach rivers of Nepal
- 6** Bathymetric Survey, Hydrological Survey and Scientific Study of Rara Lake
- 7** Assessment of Water Recharge and Extraction Parameters and Municipal Capacity Assessment at 16 districts of Feed the Future Agricultural Inputs Zone of Influence (Zoi)
- 8** Impact of Dhap Dam Reservoir on surface and ground water and on water quality in Bagmati River
- 9** Updating of Hydrographic Survey, Hydrological and Sediment status and Inventory Status of Rupa Lake and Periphery, Pokhara
- 10** Calibration of Dhap Dam Outlet for discharge monitoring & control from Dhap Dam
- 11** Preparation of River-system Based Watershed Management Plan of Rapti, Babai & Tinau Rivers
- 12** Study and Preparation of Detailed Project Report for development of Betauna Water Conservation and Multipurpose Project
- 13** Study and Preparation of Detailed Project Report (DPR) for development of Swami Park Water Conservation & Multipurpose Project
- 14** Site Survey & Preparation of Site Appraisal Report for Spring Source at Matatirtha for set up of Drinking Water Processing Plant
- 15** Conceptual Planning, Structural Designing and 3D Modelling of Chitwan Water Park Development Project
- 16** Feasibility Study and Climate Change Impact Assessment for the Development of Sot Khola Multipurpose Project
- 17** Impact Assessment of Climate Change on Water Availability of Kankai River Basin by conducting hydrological modelling in various Climate Change scenarios
- 18** Preparation of Design Guidelines for different Flow Monitoring Stations covering by various types of Rivers and Streams of Nepal

WATER RESOURCES ENGINEERING

Multipurpose Projects

Dams & Diversion Structures

Hydropower

Navigation

Water Supply

Irrigation



✧ Basin Level Planning

✧ Detailed Engineering

✧ Due Diligence Study

✧ Viability & Implementation Modality

✧ Projects Identification

✧ Climate Change Impact

✧ Construction Supervision

✧ Monitoring & Evaluation

✧ Feasibility Study

✧ Disaster Impact

✧ Project Management



- 1** Detailed Study & Design of Shithung Tal Dam & Lift Irrigation System, Chaubise RM-2, Dhankuta
- 2** Survey, Design, Cost Estimation and Drawings for Feasibility and IEE Study of Hima KHola Peaking Run-of-River Scheme Hydroelectric Project (10 MW)
- 3** Design Review of Hydraulic Components of Bheri Babai Diversion Multipurpose Project (BBDMP) - 40 MW
- 4** Survey, Design, Cost Estimation & Preparation of Detailed Project Report for Development of Lamiraha Multipurpose Dam Project
- 5** Review of Feasibility Report and conduct Detailed Engineering Design & Preparation of Construction Drawings of Nyadi-Phidi Hydropower Project (21.4 MW)
- 6** Preparation of Detailed Feasibility Study Report for Development of Waterways along Koshi River from Tumglingtar to Chatara (75 KM)
- 7** Maintenance Work Design and Cost Estimation for Daraudi A Hydropower Project (6 MW)
- 8** Detailed Design and Preparation of Tender Documents with Technical Specifications for Maintenance, Modernization and Upgradation of Koshi Pump Irrigation Project
- 9** Survey, Design & Estimation of 2 water supply Project Schemes for Kaligandaki Rural Municipality, Gulmi
- 10** Updating of Feasibility Study, Detailed Engineering Design and Design Support during Construction of Madhya Tara Hydropower Project (2.4 MW)
- 11** Review of Detailed Design, Quality Control, Inspection & Monitoring of Renovation and Modernization of Narayani Lift Irrigation System
- 12** Preparation of Detailed Project Report for Construction of Passenger River Terminal at Koshi River
- 13** Preparation of Detailed Project Report for Construction of Passenger River Terminal at Narayani River
- 14** Preparation of Detailed Feasibility Study Report for Development of Waterways along Kaligandaki River from Devghat to Narayani River Bridge (95 KM)
- 15** Detailed Study of Maintenance Requirements for System Upgradation of Narayani Lifting Khageri Irrigation Project-196
- 16** Detailed Feasibility Study of Diversion Structure along Koshi River for Sunsari Morang Irrigation Project Water Intake
- 17** Preparation of Detailed Project Report for development of Talpokhari Multipurpose Reservoir Project
- 18** Preparation of Detailed Feasibility Study Report for Development of Waterways along along Sunkoshi River (153 km)
- 19** Preparation of Detailed Project Report (DPR) for development of Sikharbesi Multipurpose Reservoir Project
- 20** Detailed Engineering Design, Survey & Cost Estimation of Various Water Supply Projects for Water Supply & Sanitation Division Office, Gorkha

OBSERVATION, FORECASTING & EARLY WARNING

Water Level

Landslides

Floods

Sedimentation

Weather

Environmental Parameters

Thunderstorm

Project Performance

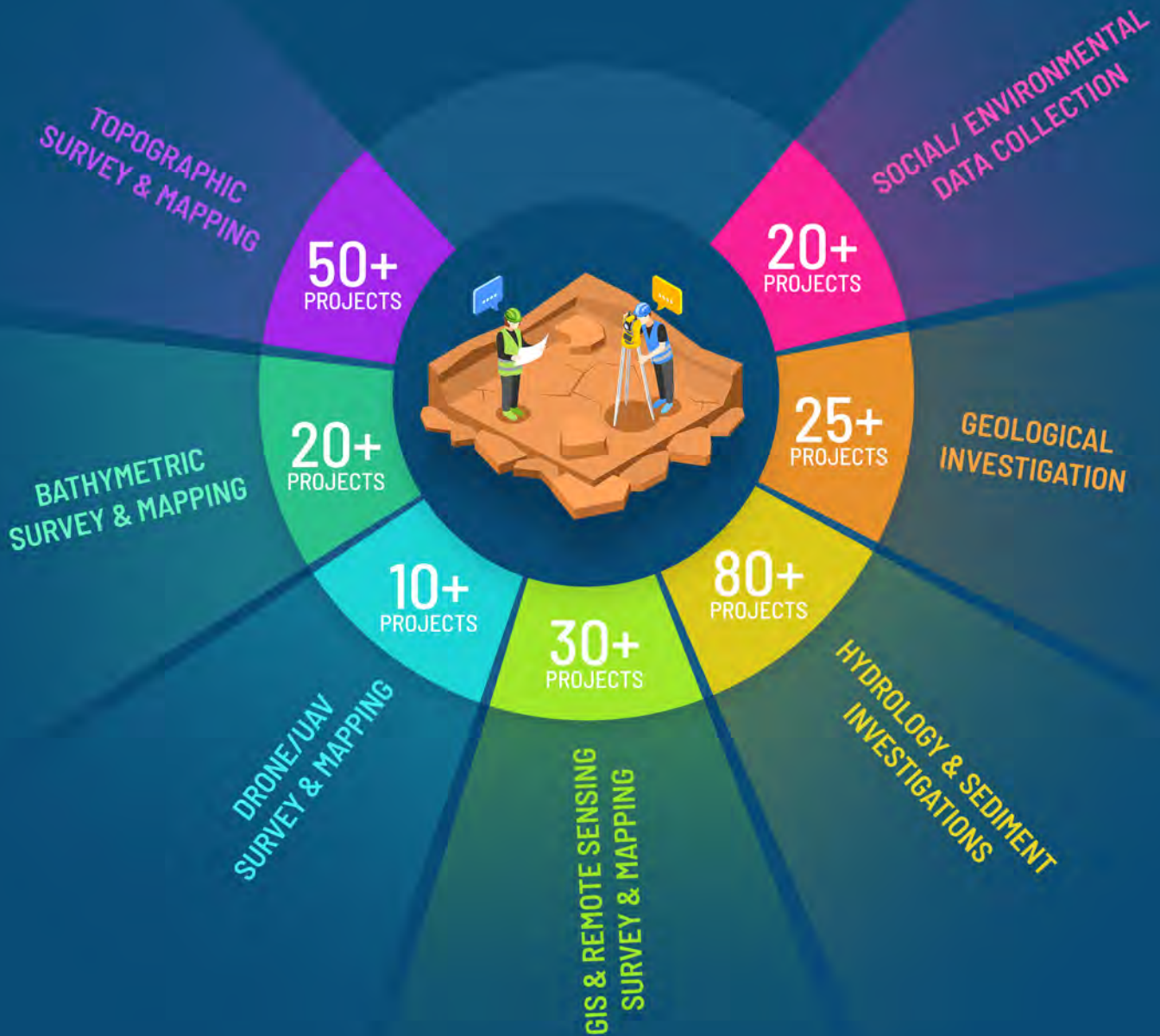


- Forecasting and Early Warning System Development
- Instrument Supply & Installation
- Structural health monitoring
- Need Assessment
- Monitoring Portals
- Operation & Maintenance
- Data Analysis
- ICT Services
- Decision Support Systems



- 1** Set-up of Satellite Based/ GSM Telemetric Automatic Water Level Monitoring Stations and Web-based real-time monitoring system for numerous Hydropower/Irrigation/Water Supply Projects **(30+ projects)**
- 2** Establishment of Flood Forecasting Stations at Nepal China Transboundary Rivers and integrate the stations with DHM flood monitoring system
- 3** Establishment of multiple Weather Monitoring Stations along East-West Highway of Nepal for Department of Hydrology and Meteorology (DHM)
- 4** Establishment of GSM Telemetric Flood Forecasting Station Network of Hydrological and Meteorological Stations in Province-2, Terai and Urban Area **(62 stations)**
- 5** Set-up of Telemetric sediment monitoring station and web-based real-time monitoring platform in Bagmati Irrigation Project
- 6** Design and Set-up of Integrated Water Monitoring (at 3 different locations) and Decision Support System at Dhap Dam
- 7** Establishment of Flood Forecasting Early Warning System Network & Web-based real-time monitoring system for Mahakali Basin (10 hydrological station network)
- 8** Set-up of telemetric flow monitoring sensors, canal calibration & web-based real-time monitoring portal for development of Babai Irrigation Volumetric Monitoring System
- 9** Set-up of flow-meters for real-time flow monitoring through Penstock pipes of various hydropower projects
- 10** Development of Powerhouse/Hydropower Project Performance Monitoring and Decision Support System **(5+ projects)**
- 11** Set-up of Landslide Monitoring and Early Warning System with multiple sensors (Rain-gauge, Tilt & Accelerometer Sensors) at 3 locations together with web-based real-time monitoring & decision support system
- 12** Upgrading of existing manual meteorological stations to telemetric meteorological stations and integration with real-time data monitoring system of DHM **(7 stations)**
- 13** Set-up of Hydrological and Meteorological Station Network for 6 river basins (74 stations) to collect real-time hydro-meteorological data for setting up operational flood forecasting and early warning system at six different river basins of Nepal

SURVEY & DATA COLLECTION



Water Resources

Energy Transmission Lines

Highways

Railways

Tunnels

Bridges

Urban Development

Disasters

Research Projects

AGRICULTURE



✧ Irrigation & Water Management

✧ Agri-mechanization

✧ Climate Change Impact Assessment

✧ GIS & Remote Sensing Application

✧ Infrastructure Development

✧ Value-chain Analysis

✧ Development Planning

✧ Policies, Plans & Frameworks

✧ ICT based Monitoring

- 1** Cropping pattern planning, crop-water-requirement assessment and irrigation planning for agri-development from the construction of Swami Park Water Conservation Multipurpose Project
- 2** Review of Existing Practices, Needs Assessment and Recommendation of various Loan/financial products for Agriculture Mechanization in Nepal
- 3** Assessment of cropping pattern, crop-water requirement and irrigation planning of the agricultural land from the development of Shikharbesi Multipurpose Project
- 4** Assessment of cropping pattern, crop-water requirement & irrigation planning for agricultural land from the development of Sot Khola Multipurpose Project

- 5** Assessment of Water Recharge and Optimal Parameters for Crop productions (rice, maize, lentils and vegetables) & Analysis of Municipal Government Staff Capacity to Improve Agricultural Production and Water Conservation
- 6** Cropping Pattern and Crop-water-requirement assessment for irrigation use of Talpokhari Multipurpose Project
- 7** Cropping Pattern and Crop-water-requirement assessment and irrigation planning for agri-development from the construction of Betauna Water Conservation Multipurpose Project
- 8** Assessment of cropping pattern, crop-water requirement and irrigation planning for 300 Ha of agricultural land from the development of Lamiraha Multipurpose Project

ENVIRONMENT & BIO-DIVERSITY



- ✧ Project Impact Assessment
- ✧ Conservation & Restoration Planning
- ✧ Climate Change Impact Assessment
- ✧ GIS & Remote Sensing Applications

- ✧ Monitoring & Data collection
- ✧ Adaptation & Livelihood
- ✧ ICT based monitoring
- ✧ Project Compliance Monitoring

- 1** Initial Environmental Assessment of Tamor-Dhunge-sanghu 220 kV Transmission Line Project (30.5 km) with detailed socio-environment and bio-diversity assessment of the Kanchanjunga Conservation Project Buffer Zone
- 2** Initial Environmental Examination (IEE) Study of Sirsagad Small Hydroelectric Project (2.5 MW)
- 3** Initial Environmental Examination (IEE) Study of Naugad Hydropower Project (6.7 MW), Darchula
- 4** Basic Environmental Study (BES) of the Transmission Line for Naugad Hydropower Project (6.7 MW), Darchula
- 5** Initial Environmental Examination (IEE) Study for Construction of Navigation River Terminal in Narayani River, Chitwan
- 6** Biodiversity Assessment and Planning for Preparation of River-system based Watershed Management Plan of Rapti, Babai and Tinau Rivers

- 7** Baseline Survey and Preparation of Initial Environmental Examination (IEE) Study report for collection and extraction of river-bed materials (Stone, Sand, Gravel) from Kerunga Khola, Lokaha Khola and Patthar Khola of Kawasoti Municipality
- 8** Initial Environmental Examination (IEE) Study of Hima Khola Peaking Run-of-River Scheme Hydroelectric Project (10 MW) located in the buffer zone of Rara National Park
- 9** Basic Environment and Social Study along Kaligandaki, Arun and Sunkoshi rivers for development of navigation corridor
- 10** Bio-diversity study and Preparation of Habitat Conservation Plan for Floral and Faunal species of Phewa Watershed



TRAINING & CAPACITY DEVELOPMENT



- ✧ GIS & Remote Sensing Applications
- ✧ Real-time instrumentation & monitoring
- ✧ Environment & Bio-Diversity Conservation
- ✧ Resilient Farming & Agricultural Practices
- ✧ Climate Change Adaptation
- ✧ Water Resources Management
- ✧ Disaster Risk Reduction
- ✧ Integrated Planning & Development

- 1** Field Based & Residential Training for Capacity Building for total of 16 officials from DHM for A. Bathymetric Survey and Analysis and B. Ground Penetration Radar Survey and Analysis
- 2** 4-day Residential Training with theoretical and practical sessions to 20 officials from DHM for WMO standard Hydrological Data Collection & Analysis, and a one-day Workshop to a broader group of stakeholders
- 3** Preparation of Standard Manual for Hydrological Data Collection and Analysis compatible to WMO guidelines
- 4** Preparation of guidelines for set-up of flow monitoring structures suitable for various type of rivers & stream of Nepal
- 5** 10-days dedicated training session for capacity development of 20 DHM officials to implement of the guidelines for flow monitoring structures, and 2-days residential workshop
- 6** 15-days training to DHM staff (15 persons) in Remote Sensing, Digital Image Processing, Glacier Mass-balance Theory, Database Management & Operation of Daily Seasonal & Annual Snow and Glacier Monitoring System
- 7** 3-days Residential Training on Hydrological Modelling of Snow-fed Rivers using Google Earth Engine, QGIS and HEC-HMS to DOED officials
- 8** 5-days Training to 13 participants representing WRRDC, DWRI, MOEWRI, DMG, DHM and WECS on Soil and Water Assessment Tool (SWAT) model operation
- 9** Basic Environment & Social Study along Kaligandaki, Arun & Sunkoshi rivers for development of navigation corridor
- 10** Bio-diversity study and Preparation of Habitat Conservation Plan for Floral and Faunal species of Phewa Watershed

MONITORING, EVALUATION & LEARNING



✧ Baseline, Annual, Mid-term, End-line Surveys

✧ Third Party Monitoring

✧ Impact Assessment

✧ Project Evaluation

- 1** Impact Assessment of Dhap Reservoir Project on Surface and Ground Water, and Water Quality in Bagmati River
- 2** Impact Assessment of Climate Change on Water Availability of Kankai River Basin by conducting hydrological modelling in various Climate Change scenarios
- 3** Intensive Monitoring of Hydrological Stations established by Department of Hydrology and Meteorology (DHM) - more than 100 stations for multiple hydrological years
- 4** Baseline Survey for Community Based Disaster Risk Management in 6 different river basins of Priority River Basin Flood Risk Management Project
- 5** ICT based volumetric Monitoring of Water Distribution Pattern in the Eastern Canals of Babai Irrigation Project
- 6** Baseline Survey and Data Analysis for Social/ Environmental Study of various Infrastructure Projects and Preparation of Social & Environment Management and Monitoring Plan (5+ Projects)
- 7** Tab-based Questionnaire Development & Baseline Survey of 2,000 respondents across all provides for Road Safety and Gender Equality Audit for the study of Institutional Strengthening of Road Safety and Gender Equality (TA 9604-NEP)
- 8** Project Due-diligence and Evaluation of Likhu-2 Hydroelectric Project (55 MW) from Financing Perspective
- 9** Baseline Survey and Data Collection for Physical, Land-use, Biological, Socio-economic & Cultural Environment along 30.5 km of Tamor-Dhungesanghu 220 KV Transmission Line Project
- 10** Technical and Financial Evaluation of Upper Daraundi B (8.3 MW) & Upper Daraundi C (4.96 MW) Hydropower Projects for Construction Planning
- 11** Project Monitoring & Bills Verification Consultant of various Hydropower Project **(10+ Projects)**
- 12** Annual Hydrological Monitoring and Analysis of various rivers for study & development of Hydropower Projects **(20+ Projects)**

INFRASTRUCTURE PLANNING, IMPLEMENTATION & MANAGEMENT



- 1** Detailed Survey, Design, Cost Estimation and Preparation of Bidding Documents of 132 KV Double Circuit Transmission Line (15.8 km) for Myagdi Khola Hydropower Project (57.3 MW)
- 2** Planning and Feasibility Study of Location and Infrastructures for Establishment of Cement Factory of Gurans Cement
- 3** Review of Design Documents & Provide Feedback for Improvement in the design for chainage K20+700 to K21+400 for Mugling Pokhara Road Upgrading Project
- 4** Pre-feasibility Study of Railway System for transportation of Raw Materials for Shaurya Cement
- 5** Design Review & Construction Supervision of Bridge across Jagdulla River for Development of Jagdulla Storage Hydroelectric Project
- 6** Survey & Design of road for Upgrading of Udipur-Ritthebagar-Ramchowkbesi-Nauthrbesi-Sera Road Section
- 7** Survey and Design of Setapani Dihi Bridge under Kawasoti Municipality
- 8** Feasibility Study and Detailed Design of Access Road (Double Lane) and Bridge (40m span) for transportation of raw materials of Shaurya and Maruti Cement (56 km)
- 9** Preparation of Detailed Project Report (DPR) for establishment of Industrial Village in Siranchowk Rural Municipality, Gorkha
- 10** Survey, Detailed Design and DPR Preparation of Warehouse at Ward No. 4 of Palungtar Municipality, Gorkha
- 11** Survey, Design, Cost Estimate & Tender Document Preparation for construction of bridge across Wangtang River
- 12** Stakeholder Consultation and Preparation of Municipal Transport Master Plan (MTMP) in Kathekhola & Kaligandaki Rural Municipalities
- 13** Preparation of Detailed Project Report for Development of Navigation Terminal Buildings at Narayani and Koshi Rivers

CROSS-CUTTING THEMATIC AREAS

CLIMATE CHANGE MITIGATION & ADAPTATION

Climate Change and its impacts are at the forefront of global challenges. At IES, we integrate climate change mitigation and adaptation into every aspect of our work. Whether it's designing resilient infrastructure, promoting sustainable use of water and natural resources, or developing climate-smart agricultural solutions, we ensure that our projects are resilient to climate change impacts.



GENDER EQUALITY & SOCIAL INCLUSION (GESI)

We integrate GESI aspect in all our project phases, from planning & design to implementation & monitoring. By analyzing the specific needs & vulnerabilities of different social groups, we ensure that our solutions are inclusive and equitable. We actively promote gender equality, empower marginalized communities, and create opportunities for inclusive participation in decision-making processes.



GIS & REMOTE SENSING

GIS and Remote Sensing are integral to IES's approach to addressing complex challenges in the fields of water resources, bio-diversity, agriculture, climate change, and disaster risk reduction. By leveraging the power of geospatial technologies, we analyze vast amounts of data, visualize spatial patterns, and create accurate maps and models leading to more informed decision-making and effective interventions.



POLICY & GOOD GOVERNANCE

We collaborate with governments, civil society organizations, and communities to promote transparent, accountable, and inclusive governance. By integrating policy analysis, advocacy, institutional assessment, and capacity building into our work, we ensure that our projects are aligned with national priorities and promote good governance.



STAKEHOLDER PARTICIPATION & COMMUNITY ENGAGEMENT

We prioritize building strong relationships with local communities, government agencies, and other stakeholders in our projects. By actively involving stakeholders in decision-making processes, we ensure that their voices are heard and their needs are addressed. This approach fosters trust, builds ownership, and ultimately leads to more successful and impactful projects.



INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)

From developing robust early warning systems to implementing advanced monitoring and evaluation tools, IES leverages ICT to deliver sustainable and impactful solutions. By integrating ICT solutions into our projects, we enhance efficiency, improve decision-making, enable data-driven innovation that empower stakeholders and promote transparency.



COMPETITIVE UNIQUENESS



UNPARALLELED FIELD-BASED EXPERTISE

Our unique advantage lies in our deep-rooted expertise in surveys & data collection. This in-house capability ensures accurate data collection, translating into efficient and effective project design and implementation. By seamlessly integrating field data into our design and engineering processes, we deliver sustainable solutions that address the unique challenges of each project.



EXPERIENCE IN ALL DISTRICTS OF NEPAL

Our experience in managing projects across Nepal's diverse landscapes positions us as a trusted partner for sustainable development. Our deep-rooted presence has cultivated strong relationships with local communities, government agencies, and stakeholders. And, this extensive reach has empowered us to confidently tackle large-scale and complex projects.



EXTENSIVE CLIENT NETWORK

Our diverse client base is a testament to our expertise, reliability, and our ability to deliver exceptional results. Our extensive network of clients is not just a statistic; it's a powerful indicator of our market penetration. And, almost with all Clients/ partners we have executed multiple projects.



COMMITMENT TO RESEARCH & ANALYSIS

Our research is data-driven, compiling comprehensive information and meticulously linking it to solutions using globally-validated methodologies. We leverage sophisticated modelling and analytical tools within the specific context of each project. Our extensive research demystifies complex issues, breaking them down into manageable components. This allows us to tailor solutions specifically for our client's unique needs.



MODELING & SIMULATIONS / DATA ANALYTICS

IES's expertise in modelling and simulation provides a competitive edge by enabling us to deliver data-driven, actionable insights. Our ability to predict future outcomes, understand complex relationships, and assess risks empowers our clients to make informed decisions and build a more sustainable future.



ICT-FOCUSED SOLUTIONS

At IES, we believe technology is a powerful tool for driving positive change. Our unique approach to consulting centres around designing innovative ICT-focused solutions that empower our clients to make informed decisions.



MULTI-DISCIPLINARY RESOURCE TOOL

At IES, we've developed a rich pool of multidisciplinary experts who are passionate about contributing to our projects. We're dedicated to maintaining and growing our resource pool, ensuring we have the right expertise for every project. This diverse team, a blend of in-house and external resources, empowers us to tackle complex projects.



INSTITUTIONAL DEVELOPMENT & KNOWLEDGE MANAGEMENT

IES's is committed to institutional development and knowledge management. Our approach ensures that the lessons learned from each project are preserved, shared, and applied to future endeavours. This approach ensures that IES remains at the forefront of our industry, delivering exceptional value to our clients while building a sustainable future.



QUALITY COMMITMENT

While ISO 9001:2015 certification is a valuable recognition for IES, our commitment to quality is deeply ingrained in our culture, reflected in our continuous improvement practices, client-centric approach, and dedication to delivering exceptional results.



Mission

Collaborate with Clients to design & deliver solutions that empower resilience, promote environmental stewardship, and create a sustainable and equitable future for all.



Vision

Be comprehensive in our service sectors.

CORE VALUES



STEWARDSHIP

We act as responsible stewards of the environment, integrating sustainability principles into all aspects of our work. We respect the delicate balance between human needs & natural resources.



WELL-BEING

We prioritize human well-being and strive for solutions that empower communities and promote equitable development. We respect diverse cultures & perspectives.



COLLABORATION

We participate with our clients to develop innovative & tailored solutions that address the specific needs & circumstances of each project.



CURIOSITY

We embrace a culture of endless curiosity, fostering continuous learning and growth, both for ourselves and our clients, to reach new heights of success.

INTEGRITY

Our commitment to integrity is unwavering. We uphold the highest ethical standards in all our interactions with clients, colleagues, and stakeholders.

TEAMWORK

We foster a collaborative environment where open communication and shared responsibility ensure effective delivery of each project.

WORK ETHICS



RESPONSIBILITY

We understand individual project goals and take full ownership of delivering them on time and to the highest quality standards.



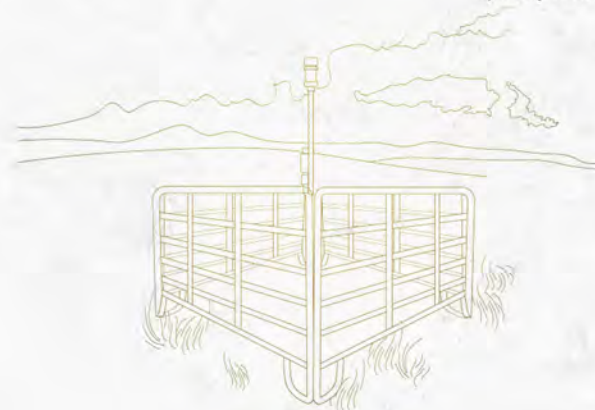
ACCOUNTABILITY

We hold ourselves accountable for exceeding Client's expectations & delivering solutions that create sustainable value & a positive impact.



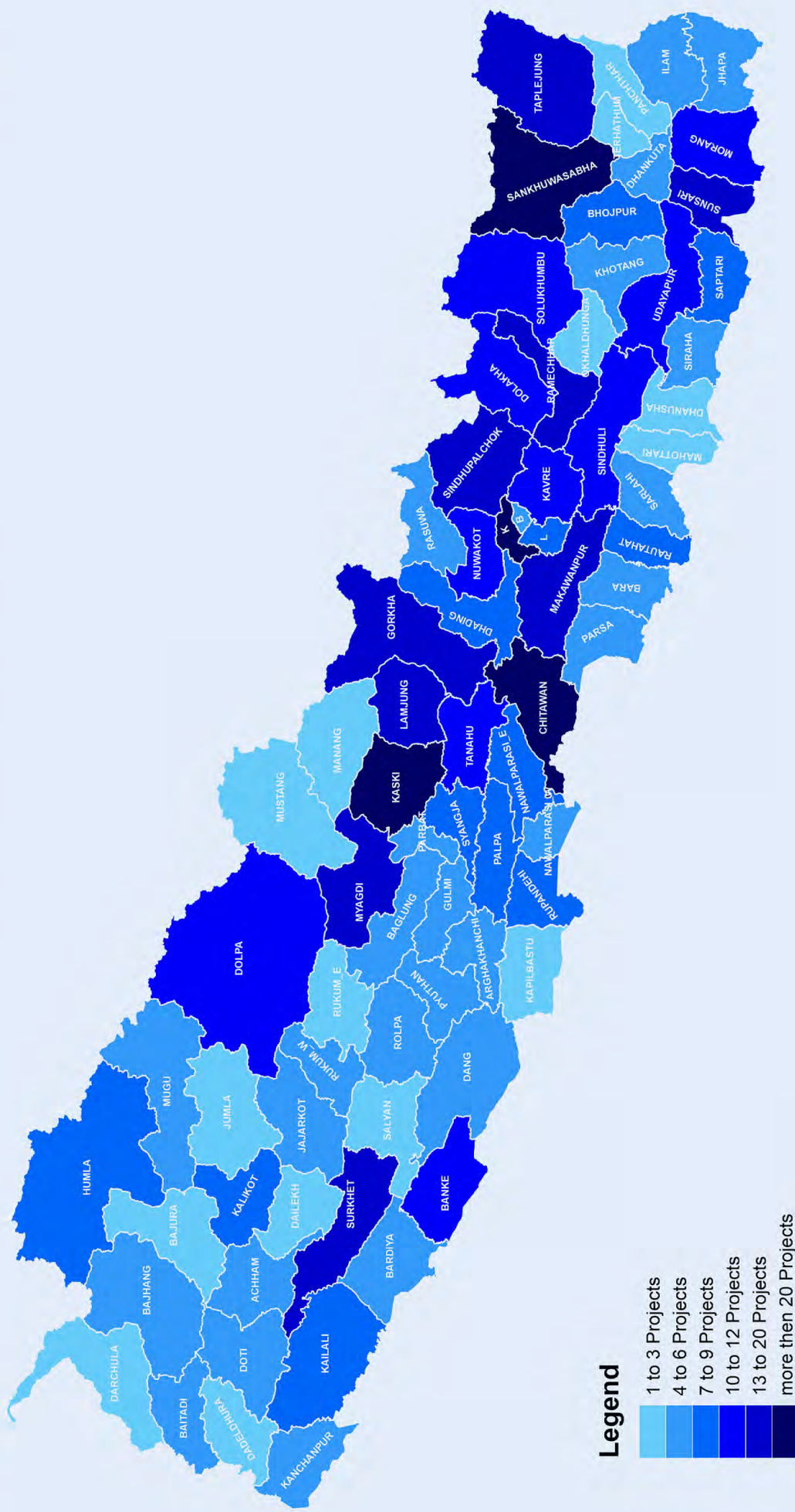
QUALITY

Through dedication and continuous improvement, we deliver exceptional results that consistently exceed client expectations.





OUR PRESENCE



Legend





INNOVATIVE
ENGINEERING SERVICES
Dedicated to Sustainability

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