

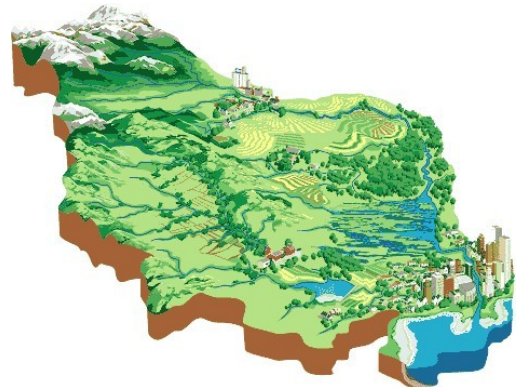


Water Resources Management

IRG Systems South Asia (P) Ltd. (IRGSSA) is a subsidiary of IRG Ltd., registered in India as a management-consulting firm, providing worldwide management consulting services in environment, energy, natural resources, and disaster management. The firm provides international quality service at competitive costs to Indian and multinational clients specifically providing energy and environmental solutions. Our clients include multilateral donor agencies like the World Bank and the Asian Development Bank; Bilateral donor agencies like USAID and CIDA; the government of India, public sector undertakings and its agencies like the Ministry of Environment and Forests and IREDA, and corporate clients like Coca Cola and General Electric.

IRGSSA staff includes specialists in environmental economics, law, policy, resource, accounting, environmental impact assessment, watershed management, agro forestry and biodiversity. IRGSSA is highly qualified to conduct macro- and micro-level projects, evaluate long-term programs and design and develop new initiatives for public and private sector clients. IRGSSA has experience in the following areas:

- Water Resources Management
- Environment and Natural Resources Policy
- ENR Management
- Forestry, agro forestry and biodiversity
- Sustainable agriculture and food security
- ENR information, monitoring and evaluation
- Environmental assessment and pollution prevention
- Training and capacity building



IRGSSA has undertaken long- and short-term projects in these areas include work in the evaluation, development and revision of environmental policies.

IRGSSA's Environment Team is focused on finding ways to use resources that are environmentally sustainable, equitable and financially viable. IRGSSA's staff has built upon environmental impact assessment, community-based management and monitoring and evaluation as critical tools for environmental management. Our work in building institutional capabilities and technical skills has included the design and development of a regional environmental database.

Water Resources Management

IRGSSA along with IRG work with governmental agencies to increase overall efficiency and equity of water use and allocation to satisfy the growing demand of urban and rural households, industries, and farmers. IRGSSA provides services in water quality management, water resource economics, social sciences, and institution building, especially water user organizations and other stakeholders. IRGSSA & IRG have extensive integrated water and land management experience guided by a deep understanding of the ridge-to-reef dynamic.

IRGSSA's experts help prepare for and mitigate the negative effects of floods, droughts, and accidental contaminating spills. We are practiced in developing flood and water quality monitoring networks, obtaining better allocation decisions among competing users, and are skilled in improving decision support systems for irrigation and integrated water management.



IRGSSA has developed performance monitoring and evaluation system for agriculture / irrigation and allied studies, pulp and paper, cement, fertilizer, highways / expressways, municipal services for cities in India & South Asia. The major tasks include development of performance indicators, their measurement, assessment and performance reporting. The monitoring and evaluation system has been pilot tested and institutionalized from base level up to top level at the implementing agency. The detailed description of relevant project completed is given below.

IRGSSA is also currently implementing the Impact Assessment Studies of "Farmers' Participatory Action Research Programmes (FPARP)". Under the Farmer Participatory Action Research Programme (FPARP) initiated by the Ministry of Water Resources during 2007-08 kharif season onwards in arid, semi-arid, hill, coastal and irrigated areas of the country as a follow up of the recommendation of a Sub Committee under Dr. M. S. Swaminathan, eminent Agricultural Scientist as decided by the Advisory Council on Artificial Recharge of Ground Water under the Chairmanship of Prof. Saifuddin Soz, the Hon'ble Minister (WR). The Programme has been operationalized in accordance with the guidelines formed by the Ministry of Water Resources incorporating the

recommendations of the Sub Committee headed by Dr. Swaminathan and is under implementation and is being monitored by Central Water Commission (CWC), Central Ground Water Board (CGWB) and Project Implementation Team (PIT) constituted by the Ministry.

IRGSSA has an established practice in External Monitoring and Evaluation of several government and donor funded projects in rural and urban infrastructure sector and related sectors. The firm has developed an extensive capability in the practice area and has access to resources at national and international level. Some illustrative and indicative EME projects of IRGSSA are External Monitoring and Evaluation of Diversified Agriculture Support Project – II, Uttar Pradesh – Zone –III, External Monitoring and Evaluation of Diversified Agriculture Support Project – II, Uttar Pradesh – Zone –IV, IRGSSA is conducting Post Project Environmental and Social Evaluation Studies on Mahi Bajaj Sagar Project (Rajasthan) and Post Project Environmental and Social Evaluation Studies on Mahanadi Delta Water Resources Development Project (Orissa) which are first of its kind projects commissioned by Ministry of Water Resources, Government of India.

IRGSSA have extensive experience in executing externally funded projects in water, agriculture and other development sectors in Uttar Pradesh and India. IRGSSA is currently implementing “Social and Environmental Assessment (SEA) Framework for entire Bundelkhand area of Uttar Pradesh”. IRG and IRGSSA have earlier completed the World Bank funded project “Basin Social and Environmental Assessment” for the Ghagra – Gomti Basin as part of the Bank’s Uttar Pradesh Water Sector Restructuring Project in India. The project covers thirty one districts in the basin. IRG & IRGSSA have carried out the assessment in three phases -- establishment of a social and environmental baseline and identification of impacts, assessment of proposed water resource Development and investment alternatives, and development of a social and environmental management plan These phases had been designed and carried out keeping in mind the interests of the stakeholders and vested interests in the UP Water Sector Restructuring Project (UPWSRP). In the water resource / agriculture sector, IRGSSA has completed a World Bank funded “ Environmental and Social Assessment for Proposed Channelization of Large Drains / Rivers (Ahneya, Puraha, Babarpur & Bakulahi)” located in six districts (Aligarh, Etawah, Etah, Mainpuri, Bakulahi and Babarpur) of Uttar Pradesh for the UP Irrigation Department/ UP Bhumisudhar Nigam Ltd. Additionally, as part of the JBIC funded SAPROF study, IRGSSA carried out “Social assessment study for the Hussain Sagar Lake and Catchment Area Improvement Project” in Andhra Pradesh. IRGSSA is implementing “External Monitoring and Evaluation of Diversified Agriculture Support Project – II”, in Uttar Pradesh for Zone –III & IV, and each zone comprising 9 districts i.e. 18 districts in total.



IRGSSA is implementing major environmental and social assessment related projects with major water resources agencies like National Water Development Agency (NWDA) and Central Water Commission (CWC). These relate to river linking projects and post project environment and social assessment. IRGSSA has performed the Rapid Socio-Economic Survey / Studies and Ecological as well as Environmental Impact Assessment Study for the proposed Farakka – Sunderbans link and Ganga Damodar Subernarekha link canal including assessment of short-term and long-term impacts of rehabilitation on physical, biological and socio economic environment of area taking account of pre implementation, during implementation and post implementation features of the project. The project study included recommending suitable intervention measures to mitigate adverse social and environmental impacts envisaged. It included collection of baseline data at district, block, and village level in canal command area, fixing up of baseline and impact evaluation. Further social and environmental monitoring parameters have been identified and recommended to have been identified and recommended to be monitored at project implementation stage. Further IRGSSA is carrying out post project environmental and social evaluation of Mahi Bajaj Sagar and Mahanadi Delta project for CWC.

IRGSSA is known to implement projects for the first time which sets benchmarks in the sector. One such project is development of Environment Master Plan for the state of Himachal Pradesh. This is for the first time that such a project has been implemented in the country.

Other work of IRG Systems South Asia Pvt., Ltd. with industrial and government clients has included: environmental due diligence and liability assessment, environmental analyses (environmental impact assessments, audits, EHS assessments, and regulatory reviews), environmental risk analyses and assessments, hazard analyses, solid and hazardous waste management and waste minimization studies, waste water treatment prefeasibility and feasibility studies and environmental training and capacity building. The company has also worked on projects covering macro & micro enterprises, rural livelihood and poverty alleviation.



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