



Neer Jaal

India's first holistic water resource management system

Neer jaal is an Information Communication Technology enabled water resource management system for grassroots communities. It is about collation of ground water related content and information and management of water resources with the available information. The Neerjaal software facilitates generating, storing and making public the water related information in a village. The core objective of Neerjaal is to contribute towards managing scarce water resources across communities in India.

Why Neerjaal

Alarming Ground Water Depletion in India

Managing and safeguarding ground water has become a critical challenge for sustainable development in India. There are alarming stories to tell that India is depleting its groundwater at an alarming pace over the last few decades. The country is running through its groundwater so fast that scarcity could threaten the whole South Asian region. This is at a time when the country's population is soaring past one billion and there is the urgent need to boost agricultural production.

There are reports that Indians are tapping their groundwater faster than nature can replenish it. Indian surveyors have divided the country into 5,723 geographic blocks. More than 1,000 are considered either overexploited, meaning more water is drawn on average than is replenished by rain, or critical, meaning they are dangerously close to it. Across Rajasthan State up to 80 percent of the groundwater blocks are in danger of running out. In Punjab 79 percent of groundwater blocks are classified as overexploited or critical; in neighboring Haryana, 59 percent; and in southern tropical Tamil Nadu, 46 percent. The situation is such that even fertile, rain-drenched pockets of the country are not immune.

Reasons cited for water resource depletion are commercial harvesting of ground water as well as rising demand for water for irrigation. The catastrophic impact is projected in dry farmlands, dying trees, and dwindling ability to farm and feed the burgeoning population and the animals. The crisis has been exacerbated by good intentions gone awry and due to poor water resource management planning by governments and water management and monitoring agencies.

Saving Ground Water is a Must

If groundwater can be thought of as a nation's savings account for dry, desperate drought years, then saving this scarce natural resource is a must. This can be done through proper planning of ground water resources, its availability, the demand and supply estimation and sustainable use of it. The need is to evolve out effective water resource management process as per the need and available ground water resource. Thus time has come to think how to

preserve our one of the scarce natural resources. Preservation is all the more important to facilitate India emerge as a water-just nation with equal rights, access for all and equal responsibility for water conservation.

Neer Jaal: Facilitating Water Resource Management

Neer Jaal is India's first attempt to evolve out a holistic water resource management system using Information Communication Technology (ICT) tools. The Neer Jaal software enables effective ground water management with effective participation from the local community keeping in mind the hard facts about ground water information.

The Neer Jaal application is presently made applicable looking after three basic ground water resource structures available in the rural areas:

- Hand pump
- Well and
- Tanka (Rain water reservoirs)

Neer Jaal Stakeholders

The stakeholders of Neer Jaal water resource management system cut across public and private players.

- ❖ The community is the prime stakeholder. The support of the community is critical in getting all vital water related information and data and their timely updation;
- ❖ The government is an important stakeholder consisting of Water Ministry, National water agencies, irrigation departments, agriculture and weather ministries;
- ❖ The Private stakeholder includes national and international development organizations, local level development NGOs and academic institutions;
- ❖ Neer Jaal is useful for anyone who wants to provide any water resource information i.e. problem wise as well as for those who wants to analyze that information available;
- ❖ Anyone who wants to know the Drinking Water related information of a country (i.e. India) they just need to click one button i.e., www.neerjaal.org

Neer Jaal Partners

The idea behind the launch of Neer Jaal goes back to ground water management practices being followed in villages around Tilonia in Ajmer District of Rajasthan. DEF has partnered with Barefoot College in facilitating water resource management for the local communities across India.

Barefoot College (Social Work & Research Centre, Tilonia, Ajmer, Rajasthan):

The Barefoot College began in 1972 with the conviction that solutions to rural problems lie within the community. The College addresses problems of drinking water, girl education, health & sanitation, rural unemployment, income generation, electricity and power, as well as social awareness and the conservation of ecological systems in rural communities.

<http://www.barefootcollege.org/>

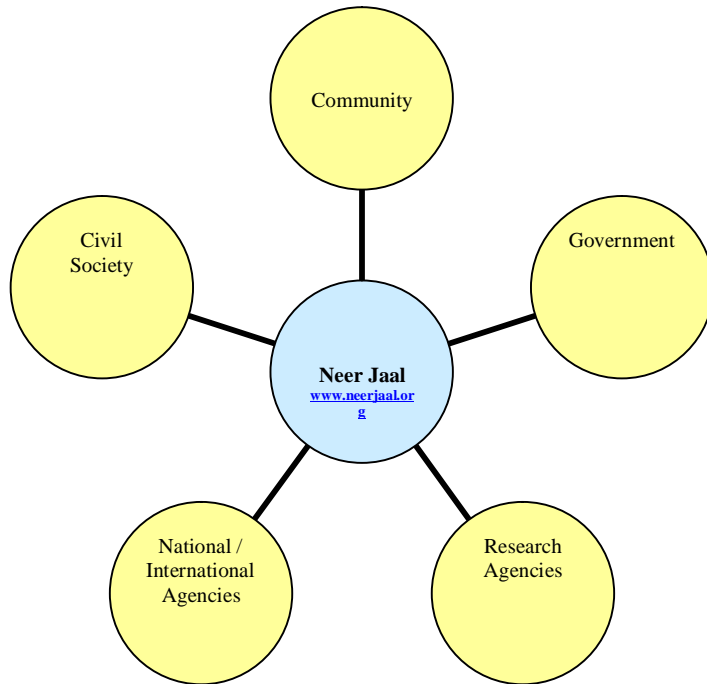


Digital Empowerment Foundation (DEF), New Delhi

Digital Empowerment Foundation is a national development organization working towards ICT for development in India and South Asia. DEF's mission is to facilitate and encourage ICT and ICT enabled content and service usage among grassroots communities. This way DEF wishes to contribute towards sustainable community development.

www.defindia.net





What Neer Jaal offers

The Neer Jaal software application facilitates ground water preservation and sustainable use in many ways:

- ☞ Allowing the community to keep record of amount of water available from each of the water resource base;
- ☞ Keeping record of water quality testing as well informs about the quality of water i.e. the quality of water resource is potable or not
- ☞ Recording the maintenance required in ground water management and listing out activity priorities in the management process regarding what work has to be done;
- ☞ Providing an estimate of the demand and supply of water availability for domestic and livestock use;
- ☞ Generation of monthly water resource budget based on the monthly records;
- ☞ Providing information to the users about the demand-supply chain of water resources and how much the water demand is being met from various water resource bases.
- ☞ Facilitating in water resource management and planning through usage of available data.

Using the Neer Jaal Management System

Website wise:

Anyone not only share but as well get information related to water irrespective of community, region through multi-media applications on the web.

Application wise:

Once the water resource information is approved by the Panchayat (village) representative, the application of the Neer Jaal management system is made operational through:

a. Using the Web:

If there is internet connectivity then the option for the user is:

- i. Applying for the membership and filling in the requisite form online.

- ii. Downloading the form from the website filling it and send it back of the manager;
- b. **Offline usage:** If there is no internet connectivity the user must request for requisite forms. Once received the user must fill in detain information and send it back to the concerned managers.

DEF’s Mandate for Neer Jaal

The mandate for Digital Empowerment Foundation in Neer Jaal is to provide a holistic water resource management system that has all the vital components in proper maintenance water resource related data, information and content all round the clock with regular update. So far DEF has deployed sizeable amount of time, resource and man power in evolving out the Neer Jaal ICT application and technology solution.

The Road Ahead

The upcoming efforts are towards is to encourage and facilitate bringing up bottom up information and content on water resources across the length and breadth of the country and make the collated and localized information web enabled for further usage and dissemination. Neer Jaal is aimed to bring bottom up information about various aspects of water and life dependent on it.

In course of time Neer Jaal will evolve out as a vibrant web-based multi-lingual information and content platform for anybody and everybody to use. Neer Jaal aspires to provide water information from all 6, 45, 00 villages of India along with all urban areas though democratic participation and contribution of the people of India

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