



PAKISTAN PETROLEUM
EXPLORATION & PRODUCTION
COMPANIES ASSOCIATION

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Water

Welcome to the fourth issue of the PPEPCA CSR Newsletter! The theme this quarter being 'water', the newsletter aims to present the efforts made by Exploration and Production (E&P) companies in the water supply sector of some of the remotest areas of Pakistan. As one of the most essential resources required for human survival, potable water—water fit for human consumption—is a precious and vital necessity of life.

Pakistan faces the uphill task of ensuring universal access to potable water under great financial and technical constraints. Water-borne diseases take innumerable lives every year. According to one study, life expectancy of Pakistanis which is 65 years today, can be increased to another 5 years by just eliminating water borne diseases. The health problems resulting from the consumption of unsafe water and lack of sanitation not only affect the quality of life and burden the health infrastructure, but also lead to a loss in workforce productivity. The rural areas particularly lack a proper water-supply infrastructure and the availability of potable water is limited. Villagers make use of natural springs, deep open wells and rainwater (wherever these may be available) to fulfill their water needs.

The E&P sector's commitment to improve living conditions for the communities of its concession areas finds the perfect opportunity to make a real and substantive difference in this backdrop. Aware of their corporate social responsibility and using their geographical outreach - particularly in the water-scarce regions of Pakistan - the E&P sector has risen to the occasion by designing water supply schemes and making heavy monetary investments to improve water supply in its operational areas. The companies appreciate the active involvement of the communities in these water supply projects and believe that working together ensures better sustainability in outcomes and impacts.

We hope that you will enjoy reading the articles that depict the dedicated efforts of the E&P companies in addressing the water needs of their neighbouring communities.

—Editorial Team

* Ali, S. Mubashir. 2002. "A Comparative Analysis of Gain in Life Expectancy by Elimination of Specified Causes of Death in Pakistan". Population Association of Pakistan: 3rd Conference Proceedings Issue.



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villages, which has proved to be the first step towards gender empowerment.

(This project is supported by BHP Billiton Pakistan's JV Partners - Government Holdings, Eni Pakistan, & PKPEL1, & PKPEL2)

Contributed By:  **bhpbilliton**



Women utilising a source of water close to home

Empowering Communities for Better Water Management

Access to potable water is a rarity in Dadu, which affects the local people's quality of life as the duty to fetch drinking water from distant sources falls upon women and children. Due to the lack of easy access to potable water, the communities are forced to use highly contaminated river water. Consequently, there have been outbreaks of a number of deadly water borne diseases.

BHP Billiton initiated a water management scheme in Dadu to improve the access to water. To ensure long-term feasibility of the project, the local people were consulted at each step. Based on these consultations, a reverse osmosis filtration plant (RO Plant) that provides drinking water to more than 1100 people daily was installed. A committee of locals that included women engaged itself to educate and train the community about the plant's usage and maintenance.

Cognizant of the management and transfer-of-ownership difficulties that technical units present, BHP Billiton Pakistan decided to bolster the water supply from the RO Plant with the installation of traditional hand pumps throughout the area. A local NGO carried out need-assessment surveys to identify villages that possess underground water reserves but lack the financial resources to install hand pumps. Based on these findings, BHP Pakistan joined hands with two local NGOs to install 120 hand pumps in 87 different villages to provide easy access to potable water to more than 10,000 people.

To make these measures more effective, water management committees were formed in each village to train locals to use this precious resource efficiently. Hand pumps were installed in BHP Billiton-supported community schools to ensure children's access to clean drinking water at school. Another successful outcome of the project is the involvement of women from the

Combating Drought Through Innovative Projects

Eni Pakistan believes in taking a holistic approach to community development, partnering with renowned NGOs and local communities to improve the quality of life of the inhabitants of its concession areas. Eni Pakistan strives to achieve local capacity-building and social mobilization by making community participation a vital part of its community development efforts.

Eni Pakistan's concession areas of Bhit and Bhadra in District Dadu, Sindh, suffered an eight-year long dry spell, drawing the company's attention to the severe water shortage being faced by the residents of the area. Rainwater, natural springs, and deep open wells


are the three sources of water available to the people of Bhit and Bhadra for household use and irrigation. Rainfall replenishes the underground water-table that sustains natural springs and wells. Although traditional methods are used to conserve water for household use, women face great difficulty in fetching water from wells. In drought conditions, the water table falls and the wells and springs dry up, creating an acute shortage of drinking water. The search for more reliable sources of scarcity of water forces locals to adopt a nomadic lifestyle and migrate to the Indus plains.

Realizing the dire need for intervention, Eni Pakistan engaged its partner NGO TRDP, which has a specific program for Eni Pakistan – the Bhit Rural Support Program (BRSP) – to initiate and support community-based efforts to establish access to water. Under the initiative, 12 new tube-wells were dug, 114 hand pumps installed, and 14 water tanks constructed throughout the Bhit-Bhadra valley. Eni Pakistan also supported community efforts to successfully complete another project with community participation which involved the construction of three rainwater-harvesting ponds with the ability to store water up to a year, at the top of Badhra Mountain. With technical expertise and financial support from the BRSP, the communities also began the construction of an irrigational watercourse at the foot of the Bhadra Mountain to direct water to crops and optimize its usage for irrigation. Moreover, the BRSP supplies water to twenty villages of the area through water tankers.

The projects initiated by the BRSP are now completely run by the communities who have formulated mechanisms to sustain them. These schemes have been highly successful in guaranteeing the availability of potable water and have saved a large number of tribal people from having to migrate to other places.



Maximizing water availability through a watercourse

Contributed By:  **Eni**

**Investing in Water projects:
Improving Lives**

Under the guidelines of its CSR policy, Tullow Pakistan is committed to addressing the potable water needs of the general public in its areas of operation. Tullow has undertaken several projects to ensure supply of clean and safe drinking water for the surrounding communities of its Sara/Suri and Chachar D&P Leases.

In 1998 Tullow Pakistan provided District Ghotki with water tanks to improve access to water for twelve villages with an investment of US\$ 25,000.

Under another initiative, seven villages were connected to a source of water with supply lines in 2001. This US\$ 65,000 project benefited over 700 residents.

In 2003, an additional US\$ 98,000 were invested to extend these supply lines by ten kilometers to include nine more villages in a remote desert location. Another 800 people were thus ensured access to clean drinking water.

Tullow Pakistan plans to build a Reverse Osmosis Plant in Chachar D&P Lease area to create a source of safe drinking water for its neighbouring communities.

Contributed By:

A Multi-Pronged Approach to Improve Access to Water

The United Nations (UN) has designated the years 2005-2015 as the International Decade for Action 'Water for Life'. As a socially responsible corporate citizen, the Oil and Gas Development Company Limited (OGDCL) has geared itself to contribute to the success of this UN initiative by ensuring a regular supply of potable water to the inhabitants of its concession areas.



Clean drinking water supply - Healthier students

The OGDCL has undertaken various water supply schemes in its operational areas to provide water to people through hand pumps, water pipelines, bowzers, and tractor trolleys. The projects, costing over PKR 32 million for the period 2005-2007 alone, have benefitted thousands of people in the OGDCL's operational areas across Pakistan.

In the barren, water-scarce province of Balochistan, the OGDCL has laid and maintains a 12-kilometre pipeline to ensure constant water supply to villages surrounding the Loti gas field. Additional water is provided to the residents of Pirkoh, Loti, and Uch gas fields through water bowzers. In the Punjab, communities at Dakhni, Toot, Sadkal, Chak Naurang, Rajian, Kal, Missakeswal, and Dhodak benefit from hand pumps installed by the OGDCL. In Sindh, too, OGDCL-funded hand pumps and water bowsers guarantee the supply of potable water to the residents of Tando Alam, Kunner, and Hundi Sari. At Shakardara in the dry province of NWFP, a water supply scheme has recently been completed by the OGDCL. Moreover, the company supplies clean drinking water to villages surrounding its Chanda oil field through water bowzers.

Improved access to water ensures its availability not only for drinking and cooking purposes, but for sanitation as well. The consumption and use of clean water contributes to improved health and nutrition. Moreover, improved accessibility of water through sources such as motorized pumps has the added advantage of increasing the water supply of the household - more than what women and children can carry in their water-pots. This, in turn, improves the overall quality of life for the communities by providing them with more free time to dedicate to household chores and education.

Contributed By:



Sustaining Water Schemes Through Community Participation - A Case Study

Freshwater—a blessing that sustains human life—is scarcely available in the desert areas of Pakistan. Some areas of the Nara Desert, however, are blessed with the presence of the Nara Canal that winds through them. The water from this canal trickles through the earth and provides sweet underground water resources to the surrounding areas. Villagers often walk for miles in the rough terrain and



Sweet water at their doorstep - A dream come true

tough climatic conditions to collect potable water from such sources. The residents of the Village Muhammad Pannah Nizamani were facing similar problems - the hand driven bore pumps in their village yielded only brackish water.

Muhammad Pannah Nizamani is a small village with a household size of 60 and is located in the Nara Desert of the District Khairpur. To address the potable water needs of the populace of the Village Pannah Nizamani, a piped-water scheme was developed from the nearest available groundwater source yielding sweet water. This scheme comprises of a pumping house at the site of the groundwater boring and two water tanks located at the Village. The pumping house pumps groundwater and transports it through the pipeline to the water tanks constructed in the village. After its completion, the water supply scheme has been handed over to the community itself, which means that the community is in charge of its operation and maintenance.

Local capacity building and community participation led to successful planning, implementation, operation and maintenance of the project. The households in the village selected a four-member water management committee that is responsible for the smooth running of the scheme. The committee collects a monthly contribution from each household and deposits it in a bank account allocated for the collection of the water scheme fund. An operator is appointed by the villagers for the working of the water pump and is paid monthly remuneration. Meaningful and effective participation of the Nizamani community in the water supply scheme has not only given them the ownership of the scheme, but has also ensured its long-term sustainability.

(This project is supported by OMV led South West Miano II Joint Venture)

Contributed By:





Constructing water distribution networks

Committed to Ensure Access to Water

In line with its commitment to be socially responsible, Orient Petroleum International Inc. (OPII) has undertaken several welfare projects to improve the quality of life of the residents of its concession areas. A water supply scheme in Dhurnal at Fatehjang is one such project. Initiated in 1986, this scheme addressed a severe water shortage problem in the village. Under the project, OPII laid down a pipeline and installed generators to pump water to a storage tank near the Soan River, which is twenty-three kilometers away from Dhurnal village. The local government and community joined hands with OPII to create a network of distribution pipelines to supply water to every house in the village.

In 1988, the scheme was upgraded and the generators were replaced with three tubewells. The electric poles and transformers required for the project were provided by WAPDA. The project which has an estimated cost of PKR 600,000 provides the entire village of over 5000 residents with potable water. In order to ensure uninterrupted water supply, OPII has also installed a stand-by tube-well close to Dhurnal.

Contributed By:



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PPEPCA welcomes you to visit its new website at www.ppepca.com
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Email: mail@ppepca.com

Tubewells - A Source of Clean Drinking Water

At PETRONAS, we believe that our commitment to socially responsible behaviour determines our entire conduct as an enterprise. Going beyond business growth, we make conscious efforts to contribute to the betterment of our partners. PETRONAS Carigali (Pakistan) Limited, PCPL operates in the districts of Ghotki and Kamber Shahdadkot in Sindh. PCPL's three-pronged community development programme focuses on education, healthcare,



Phase I of PCPL's water scheme

and safe drinking water initiatives. PCPL's Mehar concession area in the District Kamber-Shahdadkot is a desert region, lacking even basic civic amenities such as water, health facilities, and educational institutions. Due to an acute shortage, acquiring drinking water is one of the most critical problems faced by the community. Aiming to address the community's urgent need for potable water, PCPL is supporting a water supply scheme based in Tehsil Warah of District Kamber-Shahdadkot.

The water supply scheme is being implemented in two phases. The first phase involves the installation of a tube well and has been completed. The next phase envisions supplying water to three surrounding villages with a water pipeline network. By making clean water available to the inhabitants of the villages at their doorstep, this scheme will greatly improve the quality of life for these communities. As an interim arrangement until the scheme is completed, PCPL is providing water to the communities through bowsers. In its Mubarak concession area of the District Ghotki, PCPL has constructed water tanks for communities. Moreover, in order to ensure the provision of safe drinking water to its twelve adopted schools in the area, PCPL has installed hand pumps inside the school premises. Members of the communities who have benefitted from PCPL's water supply projects feel that these initiatives have brought great relief to the people living in the challenging environment of the desert.

Contributed By:



Fulfilling Water Needs in the Town of Sui

The availability of water is a fundamental sign of life. Therefore, the provision of potable water to the masses is an integral part of the United Nations' Millennium Development Goals. In keeping with its commitments as a responsible corporate citizen, Pakistan Petroleum Limited (PPL) has been providing clean drinking water to the town of Sui since its inception. With an



A view of the water-pumping station at Sui

investment of over PKR 150 million on water supply infrastructure alone, PPL helps some 40,000 residents of the town of Sui to fulfill their growing water needs with its water supply project. With a state-of-the-art water-pumping station installed near Kashmore, the water is pumped to Sui located 55 kilometers away where it is distributed through a 170 kilometers-long distribution network. Although the project has an annual running cost of PKR 25 million (exclusive of remuneration for technical and administrative services rendered by PPL staff), water is provided to the residents of Sui town free of cost. PPL supplies more than 3 gallons of clean water to Sui town daily. Up to two-thirds of this volume of water is supplied to various residential colonies of the Sui town, Sui Cantonment, and the villages along the main pipeline whereas the remaining one-third is utilised to meet operational requirements of the PPL.

Other districts where PPL has initiated and completed water supply schemes include Bolan, Kandhkot, Tank, Kalat, Rawalpindi, and Kamber-Shahdadkot. The success of such water supply schemes gives PPL the satisfaction of having contributed towards bringing an improvement in the lives of the people of its neighbouring communities.

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