



Capitalizing knowledge sharing in environmental rehabilitation

A project shaping new collaboration paradigms in environmental management

Executive summary

Abstract

Environmental rehabilitation of sites contaminated by chemical substances is a worldwide issue. Even if the awareness of the risks related to chemical contamination of soils and groundwater is growing, more effort is still needed to face this challenge, in view of the impact of a quite large number of sites on the human health and environment, and of the consequences of non-action.

The need to join forces to address environmental legacies and to overcome some historical barriers between stakeholders is being progressively recognized.

Leveraging on a first collaboration project between the International Council of Chemical Associations and two internationally recognized NGO's, and with the conviction that capitalization of knowledge is key to ensure long term effectiveness of collaborative actions, the Indian Chemical Council, the Gujarat Pollution Control Board, and ALEPH CARE, Belgium-based Consultancy, develop a strategic partnership to shape and experiment a new collaborative paradigm between the Chemical Industry, Service Providers and Environmental Authorities.

Key objectives of this partnership will be to share and to develop the knowledge basis in key domains of environmental management, and to demonstrate the effectiveness on the longer term of such collaborations.

The partnership will first focus on the domain of management of environmental legacies, with the particular objective to build capacity within Gujarat Pollution Control Board and Chemical Industry staff. The knowledge sharing program on environmental legacies will totally rely on the voluntary contribution of experts from international chemical companies and from specialized service providers.

1. The challenge of environmental legacies in the chemical industry

The 20th century has been marked by an unprecedented development of chemical manufacturing operations all over the world. As a consequence of plant design which prevailed in that period, accidental losses of containment or inappropriate operational practices, those operations caused in many cases soil and groundwater contamination.

Soil and groundwater contamination resulting from past or current operations can represent a real risk for the health of people on and around the sites, and for the surrounding environment - in particular for the water resources. The awareness of the need to manage those impacts and to prevent new occurrences increased in the last three decades, and led to the development of specific regulatory frameworks and voluntary initiatives, but environmental legacies still need to be addressed on a huge number of contaminated sites.

The quite diverse nature of substances which contaminated soil and groundwater, the variety and the complexity of hydrogeological structures underlying the plants, and the need to consider the specific local environmental context are all factors which determine the real challenge of environmental legacies management.

Addressing this challenge requires the active involvement of all stakeholders, but also to develop innovative approaches.

2. Shaping new collaboration paradigms

The need to join forces between stakeholders and to overcome some historical barriers to address environmental legacies is being progressively recognized.

- Legacy projects : a first partnership of ICCA with international NGO's

At global chemical industry level, and as part of their commitment to the UN-led Strategic Approach to International Chemicals Management (SAICM), the ICCA, International Council of Chemical Associations, entered into a first partnership with two international NGO's - Blacksmith Institute and GIZ (Gesellschaft fuer Internationale Zusammenarbeit) to jointly address legacy pollution, by lending expertise to their efforts on two specific cases. These two pilot projects realized in 2012 with the execution of dedicated expert missions have

paved the way to reflect on possible follow-up actions which would create more sustained added value.

- Shaping a new collaboration paradigm with the Indian chemical industry and the Environmental Authorities of Gujarat State

Gujarat has been since decades a preferred location for many chemical companies, both subsidiaries of international companies and independent indian companies. The Gujarat Pollution Control Board - GPCB - was constituted by Government of Gujarat on 15th October, 1974. The mission of the GPCB is *"aiming at developing all round capabilities to protect the environment by preventing and controlling pollution by effective law enforcement and by adopting best environmental practices to keep the State on course of sustainable development"*.

Leveraging on the ICCA Legacy projects initiative, and with the conviction that **capitalization of knowledge is key to ensure long term effectiveness of collaborative actions**, the Indian Chemical Council, the Gujarat Pollution Control Board, and ALEPH CARE, Belgium-based Consultancy, develop a strategic partnership to shape and experiment a new collaborative paradigm between the Chemical Industry, Service Providers and Environmental Authorities. The basis for the collaboration program has been laid down in a tri party *Memorandum of Understanding* undergone by ALEPH CARE and the Indian Chemical Council with the Forest and Environmental Department of the Government of Gujarat in January during the Vibrant Gujarat Summit 2015.

Key objectives of this partnership will be to share and to develop the knowledge basis in key domains of environmental management, and to demonstrate the effectiveness on the longer term of such collaborations.

The partnership will first focus on the domain of management of environmental legacies, with the particular objective to build capacity within GPCB and Chemical Industry staff. The knowledge sharing program on environmental legacies will totally rely on the voluntary contribution of experts from international chemical companies and from specialized service providers. To ensure an effective capitalization of knowledge, this program will be designed over an initial period of two years, and will also foresee in the structuration of an expert network.