## Environmental work in India provides jobs



for Swedish environmental technology company

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Industrial companies in Hyderabad, India need knowledge and technology to purify waste water. In collaboration with IVL Swedish Environmental Research Institute, they are enhancing their expertise and are now considering holistic solutions for polluted water. The cooperation has been supported initially by Sida. This is helping open doors for Swedish environmental technology companies seeking to enter the Indian market.

Jonas Röttorp, the department manager at IVL who is responsible for areas including modelling and optimisation of industrial manufacturing processes, explains: "We have arranged workshops for some 50 industrial companies and are holding in-depth discussions with about 20. At five companies, we have already conducted practical experiments."

According to him, this is highly positive for IVL, which is now studying the possibility of opening an office in India.

"Many Swedish environmental technology companies will also benefit from the collaboration when the time comes for the Indian companies to invest in technical solutions," he says.

## Many partners

Several other partners in India are participating in the collaboration, including CII, the Indian equivalent of the Confederation of Swedish Enterprise; JNTU, one of the technical universities in Hyderabad; the environmental institute EPTRI; and Gamana, a voluntary organisation promoting environmental debate in society.

Sundaresan Raghupathy, President of the Confederation of Indian Industry, says "the concept of 'cleaner production' that IVL works with is completely new for us. It offers us extensive opportunities to develop the efficiency of our processes and in the use of water at our factories."



IVL collaborated with industrial companies in many different fields in Hyderabad. Process water being sampled at a factory in Hyderabad, India.

IVL is working to increase knowledge on "cleaner production" by sharing its experiences and demonstrating the advantages by means of experiments at textile factories.

Sundaresan Raghupathy continues: "I consider this an excellent start in disseminating the concept among companies throughout India. And we are happy to continue this process together with IVL and other Swedish experts and using Swedish environmental technology."

## Researchers show the way

The cooperation between IVL Swedish Environmental Research Institute and the Indian industrial companies originated in a field study conducted by a student from the University of Gothenburg several years ago. The student received a minor field study



Sara Nilsson from IVL Swedish Environmental Research Institute conducting laboratory experiments together with Rambabu Nedunur at the Jawaharial Nehru Technological University (JNTU) in Hyderabad.



By treating and reusing water, companies can save a lot of money while also lessening their impact on the environment. Process water being sampled at a factory in Hyderabad, India.

grant from Sida to try out a new method for testing industrial waste water in Hyderabad.

The samples collected in collaboration with the Indian environmental protection agency showed the water in the Hyderabad region to be highly contaminated by emissions from the pharmaceuticals factories.

In Sweden, researchers at the University of Gothenburg conducted more detailed tests that showed water being used as drinking water by local people contained at least 21 active pharmaceutical ingredients. Research is still in progress in collaboration with Indian scientists and partly financed by Sida.

"The minor field study made the Indian authorities and business community realise that they needed more knowledge and expertise. We now have a very creative and open discussion on problems and solutions," says Jonas Röttorp.

## Sound environment need not cost more

The Hyderabad region is one of the world's largest centres of pharma-

ceutical production. Large quantities of raw substances are produced here and bought by international pharmaceutical companies, some Swedish, for the production of medicines. The area is also home to chemical, paper and manufacturing industries that also have problems with polluted waste water.

As an independent research institute owned by the Swedish Government and business community, IVL Swedish Environmental Research Institute focuses on enhancing efficiency in the use of energy and resources, thereby benefiting the environment.

"Our assignment is to demonstrate that sound environmental practices need not always costs more," explains Jonas Röttorp. There are many good examples of this. We emphasise the cost effectiveness of treating water and reusing it, thereby reducing consumption. This can save money for Indian companies, since the cost of water there is high. We focus on active measures and invest in holistic solutions. But we don't supply the technology and this is where Swedish environmental technology companies have an opportunity to enter the market."

India is one of the countries where Swedish aid is changing. Cooperation between various Swedish players – authorities, organisations and businesses – and partners in the country is increasingly taking place on equal terms and through mutual interest. The objective is long-term self-sustaining relations, for the partners in the countries and for the people living in poverty.

Sida is stimulating Partner Driven Cooperation by facilitating contacts, arranging meeting, disseminating knowledge regarding possible partners and markets, as well as providing initial financial support.