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*Special Report 2012*

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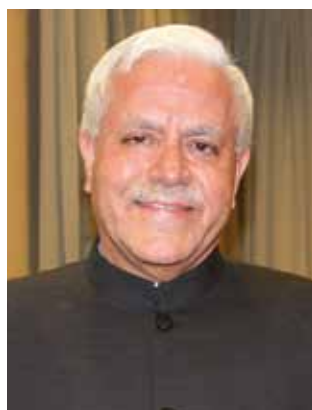
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**Published and Produced by**  
**Diplomatist Magazine**  
an imprint of **L.B. Associates (Pvt) Ltd**  
*in association with*  
**The Embassy of India, Sweden**

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# Ambassador Speaks



**H.E. Ashok Sajjanhar**  
Ambassador of India to Sweden and Latvia

I am pleased that L.B. Associates (Pvt) Limited have decided to bring out a Special Issue on India-Sweden Relations.

Relations between India and Sweden are warm, friendly and cordial and are developing at a dynamic and robust pace. Both countries are mature democracies and share similar principles and fundamental values of rule of law, respect for human rights, freedom of religion and expression.

In recent times our relations have witnessed a significant upswing. This is evident in bilateral visits at high political level in both directions. Over the last two years, these included the highly successful visit by Hon'ble Speaker of Lok Sabha (Parliament) accompanied by six Members of Parliament to Sweden in June 2011. In addition, Ministers of Power, IT, HRD & Telecommunications several senior Parliamentary, official and business delegations visited Sweden from India. A 20-member delegation from the National Defence College led by Air Marshal PK Roy, AVSM VM VSM, Commandant of NDC visited Sweden from May 20-26, 2012. Several Ministerial and senior official visits from India to Sweden are scheduled to take place in the coming months.

Similarly, Swedish Ministers of Foreign Affairs, Health and Social Affairs, State Secretaries of Foreign Affairs and Health and several Parliamentary delegations visited India during this period. Swedish Ministers of environment, enterprise, energy, IT and infrastructure and many parliamentary delegations are scheduled to visit India from Sweden in the coming months. Two high level delegations from Swedish Association of Local Authorities and Regions will be visiting India in September and November 2012.

Business and economic relations have registered a huge upswing and emerged as the foundation for expansion of bilateral ties. India's exports to Sweden increased from \$600 Million in 2009 to \$930 million last

year registering an impressive growth of 55 percent, notwithstanding the debilitating impact of the Euro-zone sovereign debt crisis. Last year saw the largest Indian investment of \$ 340 Million into Sweden by Aditya Birla Group. Early this year, ABB signed the largest ever High Voltage DC Transmission Line project valued at \$1.2 billion. IKEA recently announced its intention to invest \$1.87 billion to set up 25 single brand retail stores in India. In addition, according to the recent Business Survey conducted by the Swedish Trade Council, Sweden's investment into India over the next two years is expected to grow threefold as compared to the past two years.

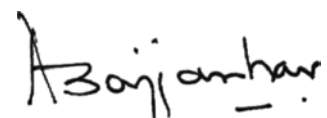
Significant opportunities exist for further expanding and diversifying bilateral relations. India's economy is growing at a rapid pace notwithstanding some temporary difficulties being experienced principally on account of the deteriorating international economic situation. Fundamentals of the Indian economy are strong and robust. India continues to be on target to register high and impressive growth in the coming years on account of its high domestic demand, low dependence on external trade, high savings rate, growing inward remittances, motivated and skilled workforce, and entrepreneurial businessmen. Sweden has also been successfully navigating the turbulent economic waters that surround it.

The future holds immense promise for the two countries to significantly upgrade their bilateral ties. Currently there are 170 Swedish companies in India. They are expanding rapidly both in terms of numbers as well as in magnitude of their operations. More than two new Swedish companies are getting established in India every month. All big names of Swedish industry are already present in India. What is urgently needed today is to expose and encourage Swedish small and medium enterprises to look more seriously at India.

It is imperative that Swedish companies look at India not only as a huge market with a middle class of around 400 million people with average per capita purchasing capacity comparable to that of Europe and the US but also to explore opportunities for establishing joint ventures and undertaking joint projects in India. India's strong research and product development base in the area of life sciences, automotive components, IT, power generation and transmission machinery etc would be an excellent complement to the Swedish leadership in the field of innovation and creativity. This has already started happening. ABB has established its Global R&D Centre in Bangalore. Volvo Trucks is developing a mid-size engine in collaboration with its partner Eicher Motors. This would be marketed both in India as also globally in other markets. Ericsson, Scania and others are following a similar strategy. Joint development of new products and joint execution of projects in India and third countries is a sure recipe for success and a win-win proposition.

Some areas which offer immense potential for enhancing collaboration and partnership include green energy, clean technology, conversion of waste to energy, bio energy, infrastructure including power generation and transmission, roads, ports, minerals and metals, life sciences, bio-technology, civil and defence security equipment, telecom, education and others.

I congratulate LB Associates for their commendable initiative to bring out this Special Edition on India-Sweden Bilateral Relations. I am confident that it will go a long way in further informing the political, strategic, economic, business and academic communities as well as the common people in both countries about the enormous opportunities and potential available for further strengthening and deepening our bilateral relations.



**Ashok Sajjanhar**  
Ambassador of India to Sweden and Latvia



# India and Sweden: A Way Forward

## An Overview of Trade & Investment

India and Sweden have a long history of trade ties right since the time when Svenska Ostindiska Companiet (SOIC) or the Swedish East India Company was founded in 1731 to search and develop territories in the east to do business. The Swedes were aware of the bright prospects which were on offer, especially the tea trade which made huge profits in the European markets. More recently, Ericsson supplied its first manual switchboard to India in 1903, and in 1920, Swedish Match set up its first factory here.

In 2011, some 140 Swedish companies had established operations in India. Trade between India and Sweden annually grows at a rate of approximately 20 percent. Textiles and garments make up the main part of Indian exports to Sweden, but manufactured goods, and in particular machinery, are rapidly gaining ground among Swedish imports from India. Indian service exports to Sweden are also growing, in particular in the field of computer and information services. Recognising the booming trade and investment opportunities in India, the Swedish Trade Council opened its third office in Mumbai in March 2008, while two other offices operate in New Delhi and Bengaluru. The agency, Invest Sweden has also opened its office in New Delhi in September 2009. A Swedish-India Business Council has been established to enhance trade and investment cooperation. It has a membership of over 120 Swedish companies, including small and medium enterprises (SMEs).

The Swedish Trade Council assists those entities who are interested in doing business

with Swedish companies or has queries on Swedish exports. The Swedish Trade Council also works with Swedish companies desirous of establishing presence in India. Over the years, there have been steps taken by government of both countries to step up trading activities and promote investment such as:

- Agreement for duty free entry and defrayment of inland transport charges for supplies and equipments gifted to voluntary agencies in India, signed in 1966
- Avoidance of Double Taxation Agreement, notified on December 17, 1997
- Bilateral Investment Protection Agreement (BIPA), signed on July 4, 2000
- MoU between the Sweden India Business Council (SIBC) and the Federation of Indian Chambers of Commerce & Industry (FICCI) signed in June, 2005
- Setting up of Indo- Swedish Joint Commission for Economic, Industrial, Technical and Scientific Cooperation
- MoU on Air Services Agreement between India and the Scandinavian countries i.e., Sweden, Denmark and Norway signed on November 30, 2006
- (MoU on co-operation in health care and public health signed in February 2009.)

The Swedish and Indian governments have showed constant interest in promoting trade relations between the two countries and the above steps taken are an illustration

of the mutual agreement and cooperation in this regard.

### Recent Developments in Trade and Investments

As of 2012, India has emerged as Sweden's 19th largest export market and third largest trade partner after China and Japan in Asia. Sweden is the 12th largest FDI investor in India according to Sweden Investment Agency (SIA) figures with investments of just under \$1 billion.

There are over 40 Indian IT companies in Sweden and their cumulative exports are estimated at \$600 million. Indian pharma and biotech companies like Dr Reddys, Biocon, Kemwell and Ranbaxy have formed collaborative relations in Sweden.

Bharat Forge acquired the Swedish firm Imatra Kilsta AB in 2005 with a workforce of over 500 employees. In 2006, Wipro acquired 100 percent equity of the Sweden-based Hydraul Group AB which produces hydraulic cylinders for a consideration of \$31 million. In April, 2011 Aditya Birla Group acquired the Swedish speciality pulp maker and bio-refinery company Domsjo Fabriker for SEK2.1 billion. In May, 2011 India's Crompton Greaves signed an agreement to buy Emotron which develops electric motors in Helsingborg. In all there are over 70 Indian companies including IT companies currently present in Sweden.

The growth of Indo-Swedish Trade and investment is expected to follow an upward trajectory for a foreseeable future owing to

governmental support and close cooperation between the two countries.

## Areas of Cooperation between India and Sweden

The ties between India and Sweden are close and friendly, based on a shared history of common perceptions on issues related to democracy, social and economic development, and disarmament. There have been frequent high level contacts between the two countries beginning with the 1957 visit of Prime Minister Jawaharlal Nehru to Sweden. As such, both countries have made constant efforts to promote and expand the areas of cooperation.

## Research and Development

In recent years, research and development (R&D) India and Sweden have taken a centre stage. Altogether, the public and the private sector in Sweden allocate nearly four percent of GDP to R&D, which makes Sweden one of the countries that invest most in R&D. Sweden tops European comparative statistics both in terms of research investments as a percentage of GDP and in the number of published scientific works per capita.

- In December 2005, Sweden and India signed an MoU on Science and Technology. The purpose of the agreement was to promote and strengthen research cooperation between the two countries. VINNOVA (Swedish Governmental Agency for Innovation Systems) is the nodal agency in Sweden for the implementation of the MoU
- MoU between India and Sweden in the field of renewable energy was signed in New Delhi on April 19, 2010
- MoU signed between Central Pulp and Paper Research Institute (CPPRI) and the Swedish Pulp and Paper Research Institute (STFI)

In June 2009, Sweden and India decided to jointly support research in tuberculosis. VINNOVA and the Department of Biotechnology (DBT), Ministry of Science and Technology, India, agreed to support top level research cooperation between Indian and Swedish scientists in the field of 'Biology, diagnosis and treatment of Tuberculosis'. The programme was one of the first bilateral cooperation, based on joint funding, between the two countries. Under this scheme, VINNOVA funds the Swedish research teams and DBT, the Indian side. The project is running smoothly with close cooperation between the two sides. A prototype has been created, and in 2013 the new instrument, specially designed to detect TB from a minimum sample of bacteria, will be tested at hospitals in New Delhi and Mumbai.

Beginning 2012, Sweden through SIDA, has decided to support the construction of a pilot plant to convert organic waste into biogas to run buses in New Delhi. The biogas is meant to partly replace the natural gas, which currently is used to run capital's bus service. The natural gas could be instead used for other purposes, and be of use to meet the energy demand generated by the rapid economic development of the country.

## Arms and Ammunition: Sales and Technology Transfers

In recent years, Sweden has emerged as a major player in the global defense market. India being one of the top importers of defense equipments and machinery is a lucrative market for Swedish defense industry. India was the biggest arms importer in the period covered 2007-11, accounting for 10 percent in weapons volume.

Gunnar Wieslander, Swedish Deputy Minister of Trade, speaking at a seminar organised by FICCI, Embassy of Sweden and Swedish defense industry, pointed out that Sweden was looking for long term partners in the defense sector and was offering the entire chain in the transfer of technology, from design to verification and production and validation to the feedback process. India, he said, had the right requisites to be the right partner for Sweden and as partners the two countries could develop competitive products. He stressed that transfer of technology goes on a daily basis in the globalised industrial world and trust between the two countries have to be a priority. These will be followed by expertise and financial strength, he has said.

Gyanesh Kumar, Joint Secretary, Defence Production, Ministry of Defence (MoD), underlined the need for ensuring product cycle support for Indian companies through co-development based on transparency. Management of timelines in technology transfer, he said, was critical which the private players would have to manage to keep in line with the fast changing technology. The MoD, he said, was interested in critical technologies that Indian industry could absorb. He also informed that a new clause of 'Buy and Make' Indian has been added in the defence procurement procedure. This criterion under the Defence Procurement Policy 2009 was intended to encourage the big foreign arms manufacturers to set up joint ventures in India. Under this new category, the production and development will be through transfer of technologies and not through R&D. This, he said, would result in the development of a robust and self reliant defence sector through true transfer of technology and the technological knowhow.

## Defence Cooperation and Disarmament

Like India, which had adopted a policy of non-

alignment with any of the world powers during the cold war era, Sweden too has remained a neutral country emphasising on peace and disarmament. It is significant in the context of its long-practiced policy of neutrality; Sweden being an active member of the EU has not joined the NATO, but has sent a military contingent to Afghanistan for peacekeeping operations. An MoU on defence cooperation was signed in November, 2009 between the governments of both countries.

It is hoped that in near future, both countries owing to similar views and policies in maintaining world peace will jointly play a constructive role in resolution of conflicts globally.

## Academic Collaborations and Student Exchanges

Sweden is home to some of the most renowned institutions in the world like Karolinska Institute, University of Uppsala and Stockholm University. The Swedish Universities have a strong tradition of carrying out high quality research and innovation in technology and have been attracting students and researchers from across the globe. Under the EU's Erasmus Mundus Scholarship and Academic Cooperation Programme, a large number of Indian students and postdoctoral researchers have joined Lund University and Karolinska Institute in Sweden. India being a developing country with a huge manpower resource in hand can look towards Sweden as an ideal destination for joint studies on topics of mutual interest.

Keeping in view the growing interest towards India in Sweden, in November 2010 a chair on India studies at Lund University was started. Further, the Embassy of India, Stockholm, and the University of Gothenberg signed an agreement on December 20, 2011 to establish a Chair on Indian Studies at the university for the year 2012-2015.

## Cultural Relations

Despite the absence of the Cultural Exchange Programme between India and Sweden, the Embassy in coordination with ICCR and local NRIs has sponsored cultural performances several times in Sweden during the last few years. Every year ICCR offers two scholarships to Swedish nationals for studying dance and music.

Indian diaspora provides potential for further development of bilateral relations with as many as 14,000 people of Indian origin and 4,500 Indian passport holders residing in Sweden currently. In addition to that, a number of students visit Sweden for higher education.

Sources: <http://www.thehindu.com>, <http://www.thehindubusinesslive.com>, <http://www.economictimes.indiatimes.com>, <http://investsweden.se>, <http://swedenabroad.com>

# India & Sweden

## Past, Present and Future Prospects

A glance at relationship between the two nations throws up interesting observations and a history of shared perception on a variety of issues



**E**arliest contact between India and Sweden dates back to medieval times. The Swedish East India Company formed in 1731, was dubbed to be one of the most successful business entities of those days until its existence. Modern day bilateral relations were initiated with the 1957 visit of Prime Minister Jawaharlal Nehru to Sweden. Since then, Sweden and India have developed similar views on democracy, social and economic development, and disarmament among others.

India's contribution to peacekeeping efforts of the UN Secretary-General Dag Hammarskjöld in Africa further strengthened the relationship. Gunnar Jarring as the Swedish Ambassador to India in the early 1950s played an active role in promoting trade and shipping between the two countries. Sweden's peace efforts in the Middle East was also appreciated and actively supported by India. Both the countries have a history of maintaining neutrality with regard to the world affairs and have showed great fortitude in resisting pressure from power blocs especially during the cold war era. Jawaharlal Nehru policy of non-alignment was in agreement with Olof Palme's

unequivocal opposition to the aggressive posture acquired by the superpowers in those times. India and Sweden played a proactive role in maintaining world peace and condemning the policy of apartheid in South Africa.

After the end of Cold war, both countries have been forced to revise their strategies according to the changing times. Sweden has not joined NATO but sent a contingent for peacekeeping operations in Afghanistan. India too, is actively involved in providing economic and other assistance to the war-torn nation. Both countries continue to play an active part in regional associations, Sweden being an active member of Council of Baltic States, the OECD and the EU while India being the largest and the most dynamic member of the SAARC.

### **Diplomatic Exchanges and Bilateral Visits**

To keep the friendship ties strong and steady, there have been frequent bilateral ministerial visits with the aim to enhance cooperation between the two sides. There has been continual sharing of ideas and along with an amicable relationship throughout which has

helped in shaping a common perspective on vast number of issues.

Prime Minister Olof Palme's first visit to India in 1985, Indo-Swedish relations were almost at their peak owing to the charismatic persona of the Swedish leader and shared perceptions on world affairs which envisioned strict neutrality and non-alignment. He visited India the second time shortly afterwards in 1986. King Carl Gustav XVI and the Queen Silvia visited India twice in 1993 and 2005 which went a long way in restoring normalcy between the two nations. Between these monarchical visits, Prime Minister Goeran Persson visited India in January 2004. Recently Swedish Prime Minister Fredrik Reinfeldt visited India in November, 2009 for India-EU Summit and bilateral talks. Carl Bildt, Swedish Foreign Minister visited India in October 2011 for Nobel Week celebrations.

From the Indian side, Prime Minister Indira Gandhi visited Sweden in 1972 followed by Rajiv Gandhi's visit to the nation in March 1986. More recently, Meira Kumar, Speaker, Lok Sabha visited Sweden on June 13-16, 2011. Sushilkumar Shinde, Minister of



in terms of providing efficient and universal healthcare to its citizens. It is also a world leader in developing clean energy and waste disposal. Its systematic approach towards environmental awareness and resolution of the most pressing environmental problems is a lesson for India in public planning and sustainable development. Bio-energy generation, bio fuel development and green buildings along with efficient urban planning are amongst the areas in which further development can be expected.

Sweden is amongst the leading countries which focus on innovation in technology. The ability to work across multidisciplinary areas and derive fruitful results from the same along with bridging corporate and academic research environments makes Sweden a country an interesting country to work with. India being a large market, offers great prospects to the Swedish firms which are desirous to expand their operations in India. Being the industrially most advanced country of Northern Europe, Sweden has every reason to strengthen its relations with India, a fast growing economy and a capable partner commanding a strong geo-strategic and maritime position.

Sources : <http://www.sweden.gov.se> , <http://www.mea.gov.in>

Power visited Sweden on June 19-23, 2011. Kapil Sibal, Minister for Communications & Information Technology and HRD visited Sweden on September 21-24, 2011.

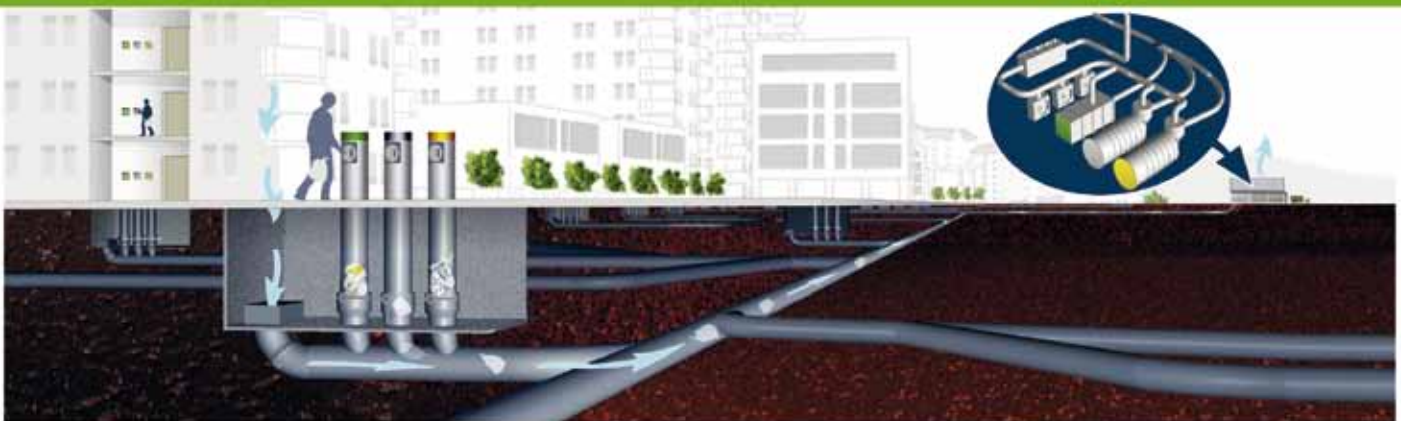
resolution of the most pressing problems in a coordinated manner.

### Future Possibilities and Prospects

These high level diplomatic exchanges have gone a long way in enhancing mutual trust and shaping common viewpoint on the prevailing issues, understanding the global problems and their intricacies, and the

Both India and Sweden have seen tremendous growth economically and their progress as a welfare state committed to the well being of their respective populace. Sweden offers a great model to be replicated

## Taking sustainable waste collection into the 21st century



**Envac's vacuum waste system takes waste collection out of sight and out of mind – by taking it underground.**

Automated vacuum waste collection improves the streetscape by removing unsightly bins, eliminating waste-related vermin problems and reducing pollution generated from waste collection vehicles by transporting waste by air in an underground pipe network.

The Envac system handles in minutes what conventional waste collection methods take all day to do.

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Envac – a sustainable approach to the global landscape





Arindam Pakrashi  
Country Manager- India  
Regula Systems AB, Sweden



# Application of Swedish Technology - Heralding New Era in Indian Welding Industry

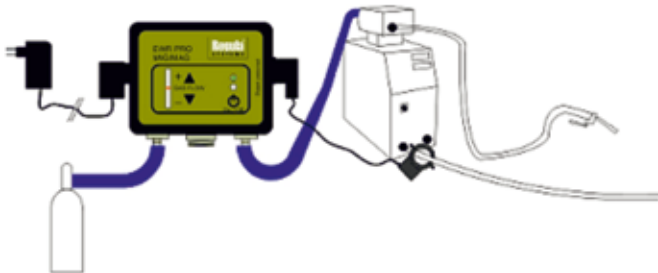
## INTRODUCTION

The emerging need of economizing the consumption of shielding gas both as a means of cost cutting mechanism and for the positive impact on environment is the essential factor to be addressed in contemporary welding fraternity. This Electronic Welding Regulator (EWR) adjusts to the welding process by sensing the variations in current supply and automatically regulates the gas flow. The gas flow is therefore maintained at an optimum level and as a result a uniformed weld seams with a reduced gas consumption is achieved. The advent of EWR ushers a new dimension in the field of Gas Metal Arc Welding (GMAW) in India. The genesis of EWR dates back not so long ago. As the shielding gas becomes imperative in MIG / MAG & TIG welding so the desire to reduce the cost of consumables like shielding gas emerges. Moreover the handling of enormous quantity of gas by means of plenty of cylinders preoccupies the workforce with not such warranted job.

## TECHNOLOGY BEHIND ENORMOUS SAVING

Regula Electronic Welding Regulator Saves by releasing optimum gas flow at all point of time during welding and saves more than 50% of shielding gas due to the combination of following four methods:

- The gas flow is regulated automatically and synchronously with the welding current during the entire process. "More current – more Gas/Less current – less Gas"
- Extremely fast Gas valve that opens and closes even at very short welding stops.
- Pulsed Gas allows more reduction of Gas flow depending on the possibility for trimming "programming" with unchanged high Gas protection.
- Elimination of Gas puffs as a side effect of the above.



## ROLE OF REGULA EWR

The manufacturing industries in India posts rapid growth and the Indian industry is traditionally growing strong at 8% annually. The automobile industry amounts 24% of the total manufacturing industry. It is observed that over 9.9 million vehicles are being produced by India. Besides 1.3 million passenger cars and about 4, 00,000 lakhs commercial vehicles are also produced annually. Indian automobile industry is growing at more than 15% annually and over 6000 automobile suppliers are presently operating in India. Therefore there is a huge potential for Regula EWR to cater the need of Indian welding industry.



## IMPACT ON ENVIRONMENT

The global warming and depletion of ozone layer is no longer a far

cry but a harsh reality threatening the very existence of planet Earth.

As one of the fastest growing economy of the world Indian industries need adequate care to address the ominous threat to environment. Welding constitutes a very significant part in many industries in India like automobiles, railways, ports, ship building, oil, gas and refineries, nuclear power etc. to produce various components. At this take off stage of technological up gradation and a vision to be at par excellence in welding in the comity of nation, the result of cutting edge technology like Regula EWR warrants essential application in manifold avenues.

The implementation and application of Regula EWR will save energy and reduce emission of CO<sub>2</sub>, Argon and other shielding gases to a large extent.

## IMPACT ON MICRO LEVEL ENVIRONMENT

A random survey of Indian factories or workshops will generally reveal an awesome picture of health hazards. During our several visits to many Indian Industries cutting across the product differences, it is observed that the welders' working condition is deplorable. While the factories employ a huge no. of welders adequate care are hardly taken for their health and plant working environment. The level of CO<sub>2</sub> or Argon which is thrown in atmosphere of the plant most of the time are much above the permissible limit. A smoky environment with great difficulties in breathing is a very common scenario in the Indian welding industry. However, it is observed that in several occasion management of the industry are inclined to arrest the emission of excess gas but the absence of such devices till the advent of Regula EWR in Indian welding industry kept the task uphill.

Therefore Regula EWR will be an essential instrument to save the health of welders and the environment at large.

## Conclusion

The introduction of Regula EWR in the indian market dates not so long ago. It was in the year 2009 that REGULA SYSTEMS opened its Liasion office in Kolkata .The early days were not so encouraging primarily because the technology is several generations ahead of shielding technology practised for ages in India. Moreover, in the absence of such technology ,the shielding parameters were set by several standard bodies in a very high LPM and the companies needed to follow such guidelines. The difficulty to comprehend the establishment of current-gas relationship never heard by the welding fraternity posed the tough test challenge for adoption of this cost saving devise. However, the result was so encouraging both as a cost saving devise as well as addressing the CORPORATE SOCIAL RESPONSIBILITY (CSR) by arresting the huge emission of co<sub>2</sub> into the atmosphere that major automobile companies like HERO HONDA, MARUTI SUZUKI, TOYOTA KIRLOSKAR, TATA MOTORS SANAND etc took bold steps to implement this cutting edge technology. It was also noticed that the quality of welding is never compromised while Regula ewr is used. Moreover, several additional attachments like digital gas monitor, automatic gas controller for Robotic applications, gas controller lamp for manual welding, etc makes added advantage for gas control in the welding. Even with the help of Gas analyser ,the customer can observe and generate data of total gas, consumption, average flow, current flow, pressure etc for a particular welding cycle.

Therefore, Regula EWR usher a new era in shielding technology in the indian welding industry which will go a long way in days to come.

You may reach the write at email - arindhampakrashi@regulasystems.com

# Investing in India

## from the Perspective of Swedfund



With a GDP growth that slowed down 2011 and 2012 compared to previous years, India is still growing at a high speed. According to the IMF the estimated growth rate for 2012 is 6.9%. Despite a global economy that has not yet fully recovered from the financial crisis of 2008-09, the FDI inflow to India increased by 20 percent in 2011. India attracts investors mainly for the growth opportunities it offers businesses and for its lower cost base. Together with an enormous and growing domestic market, India offers and will continue to offer great opportunities for Swedish companies as well as other international companies.

Swedfund International, an investment company established in 1979 by the Swedish state, has substantial experience investing in India. Swedfund provides capital and financial support to companies that establish or expand their businesses in emerging markets and has been able to follow the remarkable development that has taken place in India over the years. Out of Swedfund's

present portfolio of 90 investments in 36 different countries, six are located in India. Five of these are direct investments together with Swedish or international companies, while the remaining one is a fund investment. Swedfund's past and present Indian investments are mainly found in sectors such as energy and manufacturing. Based on that, as well as on discussions with Swedish companies, Swedfund believes that future investment proposals will mainly be seen within sectors related to infrastructure, manufacturing (e.g. automotive industry), clean-tech, health care and ICT.

One of Swedfund's current direct investments in India is Artheon Battery Company, which was made in 2010 together with the industrial partner Northstar Group/Sitetel. The purpose of the investment was to modernise and expand a factory producing telecom batteries in Nashik, Maharashtra. India is one of the fastest-growing countries when it comes to the number of mobile telephone users, which has created a huge demand for high-performance batteries. Thanks to the

investment in Artheon, battery technology from the United States and Sweden has been transferred to India. This has not only resulted in better access to quality batteries in India, but more importantly, it has enabled Artheon to produce batteries that can tolerate the high temperatures and recurrent power outages associated with the Indian telecom grid. No batteries in India currently meet these requirements; therefore the investment will stimulate competition as well as demonstrate to other companies that it is possible to produce high-quality batteries in India.

Today Artheon Battery Company employs 200 workers, and the spillover effect of the investment in the supplier and distribution links has created a substantial number of job opportunities. Another of Swedfund's direct investments in India is Quippo where Swedfund – together with SREI (founders of Quippo), IFC, FMO and Ingersoll Rand – provided growth capital in 2004. Quippo had been established four years earlier and offered rental services of infrastructure equipment. During the first couple of years,

Quippohad, a small-scale operation required additional capital to enable it to grow which led to discussions with Swedfund and other investors. As a result of the subsequent capital injection, Quippo could rapidly grow its business and soon became the market leader in the development of new rental concepts covering the entire country. The expansion of the company contributed to the development of both the Indian countryside and the equipment rental market. Increased competition also resulted in lower prices in the rental segment. After four years of steady growth, SREI acquired the shares of Swedfund in 2008.

For the past three years Swedfund has also offered financial support to small- and medium-sized Swedish companies that are establishing operations in emerging markets. The purpose of the financial support (a grant of up to \$100,000 to Swedish company) is to help Swedish companies create businesses together with local partner companies. The grant covers costs such as the transfer of knowledge and equipment from the Swedish company to its local partner. This programme is called Swedpartnership.

At the moment, Swedfund runs six Swedpartnership projects in India within the following industry segments: measurement of electricity systems, manufacturing of saw blades, and production of ergonomic chair accessories to large vehicles such as tractors, production of wallets and handbags, furniture production and production of electronic systems. All six Swedish companies are very pleased with the high level of competence of their Indian partners.

One of the six Swedpartnership programmes in India is with the Swedish saw blade producer Hakansson, which is part of an industrial group with 220 employees. Hakansson has expanded its subsidiary in Chennai by investing in new machines for the manufacturing of saw blades meant primarily for working in metal. The company has also grown its sales force in Bangalore, Pune, New Delhi, Mumbai and Indore. The Swedish CEO emphasises that India is a tremendously interesting country for manufacturing as well as a market with many potential new customers. The Indian staff of Hakansson is budgeted to grow from five to 25 persons within three years.

Another example of Swedpartnership's Indian programme is with the highly specialised company Unipower AB, which has started cooperation with an Indian enterprise to analyze the grid capacity and quality of the Indian electricity distribution sector. As India is a rapidly growing industrial nation, a solid distribution of electricity is of great importance and is therefore given the highest priority by the authorities.



Unipower's strategy is to, together with their Indian partner, expand into the local market of electricity production and distribution. In order to do that, there will be a transfer of instruments and software to the Indian partner from Unipower along with a substantial education programme for the local staff in New Delhi, Mumbai and Bangalore.

Finally, another company that has received grants from Swedpartnership is Sittab, a Swedish company specialising in the design and sale of ergonomic seating accessories for large vehicles such as trucks and buses. As Sittab's business strategy has evolved, the company has become involved earlier in its customers' product development processes. This has shifted Sittab's focus from construction drawing to design, which has created an opportunity for Sittab to

collaborate with an Indian engineering company in converting its designs into 3D drawings. In order to gain a solid understanding of the key aspects behind the development process selected personnel at the Indian company will get training and work hands-on with key personnel at Sittab's premises in Sweden. Once the training period is over, the knowledge acquired by the Indian staff will be shared with the remaining colleagues in India. The overall goal of the project is that the Indian company will work as an integrated unit within Sittab supplying the Swedish company with complete construction drawings ready to be used in the production process.

*Swedfund International AB*

# clean air solutions

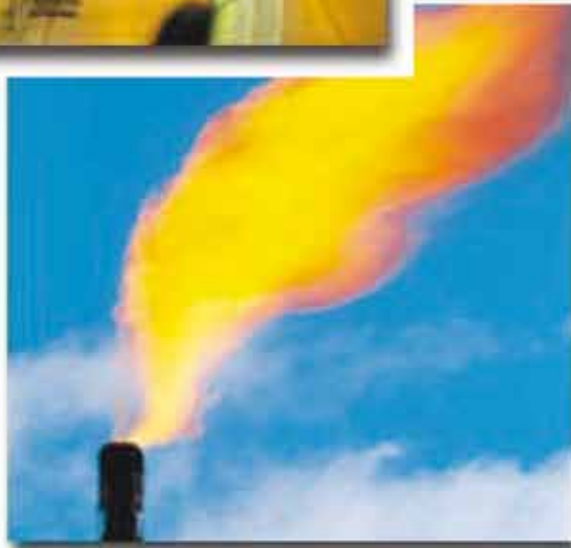
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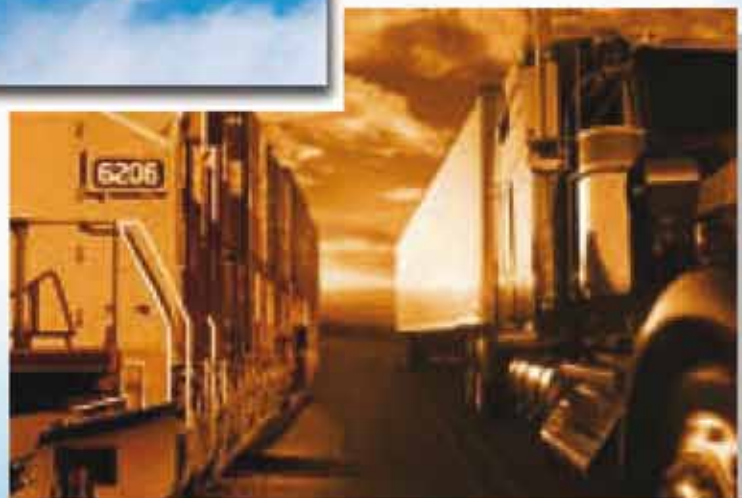
**Clean Processes**  
- protecting processes



**Comfort Air**  
- protecting people



**Safety & Protection**  
- protecting the environment



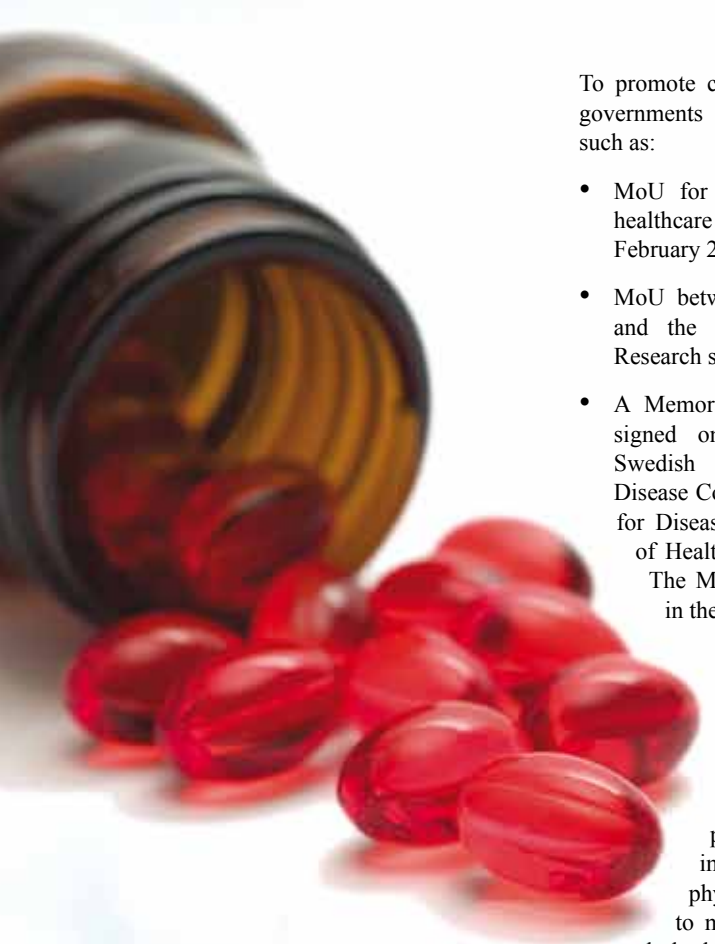
**Transportation**  
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Camfil Farr Air Filtration India Pvt Ltd.  
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# Sweden: A Potent Ground for Indian Pharmaceuticals Industry



To promote cooperation in this area, both governments have taken fruitful steps such as:

- MoU for cooperation in the field of healthcare and public health signed in February 2009
- MoU between the Karolinska Institute and the Indian Council of Medical Research signed in June 2009
- A Memorandum of Intent (MoI) was signed on May 19, 2011 between Swedish Institute for Communicable Disease Control and the National Centre for Disease Control (NCDC), Ministry of Health and Family Welfare, India. The MoI is on bilateral cooperation in the area of antibiotics

In what could be described as game changer in the present system, the Swedish government is in process to evolve a consensus to make a shift towards 'generic prescription' system. This implies that the practicing physicians there would be asked to mention the name of the salt, popularly known as the 'generic name' instead of the brand name of the drug while writing a prescription. This step would go a long way in making the idea of low-cost generics acceptable to general public, and is expected to contribute significantly to further

contain the healthcare costs of the Swedish government. A direct implication of such a decision is that it will give a boost to Indian firms which are known to make low cost, high quality drugs.

At the same time, after 40 years of state monopoly of medication distribution, the Swedish pharmacy system is now undergoing radical change. Now, consumers can experience the advantages and disadvantages of free competition in the pharmacy market, following the Swedish pharmacy industry's deregulation in 2009.

Since generic medicines may be recommended by physicians,

relatively unknown brands by Indian pharmaceuticals firms can be sold without any reservation by the consumers. This is a win-win situation for everyone involved, the consumers, the Indian companies and the Swedish government which is working overtime to pull down expenses on this aspect.

Owing to the above factors, it appears to be bright and full of prospects for the Indian pharmaceuticals companies to get a foothold in the Swedish market and establish themselves to reap the benefits of a liberal business environment.

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*Faraz Shams is a Research Writer at LBA and writes interesting articles on diplomacy and international relations for Diplomatist.*

Sweden is the 11th largest pharmaceuticals market in the EU, amounting to €4.0 billion. Swedish consumption of pharmaceuticals products increased by an annual average rate of 4.6 percent for the period 2003-07. Sweden also has one of the largest proportions of population over the age of 65 in Western Europe, expected to constitute around 21.3 per cent of the total population by 2015. As a developed economy with a highly health conscious populace, Sweden offers a very lucrative market for the Indian pharmaceuticals giants. Sweden has been a pioneer in providing public health facilities and social healthcare to its citizens. It has also supported efforts to improve the lives of people elsewhere and extended support to the Indian initiatives on public health.



# For Sapa, producing **Aluminium Profiles** for **Mounting Systems** for the **Baldock Solar Highway**, Oregon, was right up its street.



The Baldock Solar Highway project, U.S.A's largest, located near Oregon broke ground on August 23, 2011. All the aluminium profiles that the project will use will be produced by Sapa. Sapa has partnered with HatiCon Solar, who will develop and produce high-quality, environmentally-responsible mounting systems for the project. **Sapa customer, SolarWorld of Hillsboro, OR will produce 6,994 250-watt solar panels, which will generate enough clean, renewable energy to power the Baldock rest area as well as 165 homes!** In addition, the project will support local businesses and also the state economy by creating around 70 jobs. Oregon companies will supply the materials, design, install, operate and maintain this project. Enabling this transportation innovation to help protect the environment.

**Mounting systems for solar panels**



**Baldock Solar Highway Project, Oregon**

## **Sapa Profiles**

Over 47 years, Sapa has become the world's leading producer of Extruded Aluminium Profiles. And today, has customers in the building, transport, engineering and telecom industries the world over. Resulting in combined net sales of USD 4.9 Billion and a Group strength of 14,800 employees in the year 2010.

## **Enter Sapa Profiles India Pvt. Ltd.**

With a fully integrated state-of-the-art Aluminium Extrusion plant at Kuppam, just 100 kms from Bangalore and 28 kms off the Bangalore-Chennai highway, Sapa is poised to offer the Indian market a world-class range of products and services. Sapa Profiles India currently produces a wide range of profiles for building and construction, transportation, automotive, solar frames & mounting systems for photovoltaic and CSP structures, machined heat sinks for thermal management and various sections for industrial applications.

## **Total Solutions**

Sapa has installed the latest anodizing equipment from Italtelco, Italy and provides anodized sections in Silver, Black, Bronze and Champagne colours. And also offers customers Powder Coating and PVDF coatings. With two fabrication facilities in Kuppam and Bangalore, Sapa executes milling, machining, bending, punching, wire cutting and precision cutting to lengths on profiles.

## **Shaping the Future**

Sapa India's ultra-modern facility has been built and equipped on lines similar to those of Sapa plants worldwide. The process controls, cutting edge extrusion technology and global experience implemented here are all quintessentially Sapa. Which means that only the highest quality products are allowed to leave the plant. Today Sapa is committed to building a long-term partnership with its Indian customers: sharing skills, talent, technology and the benefits of its rich experience. Thereby affirming that its global strategy of 'Towards Solutions' is indeed an eminently effective one. Making Sapa an integral part of the India success story. In which every customer of Sapa India can confidently expect and receive the same level of quality and competence that Sapa customers the world over enjoy.

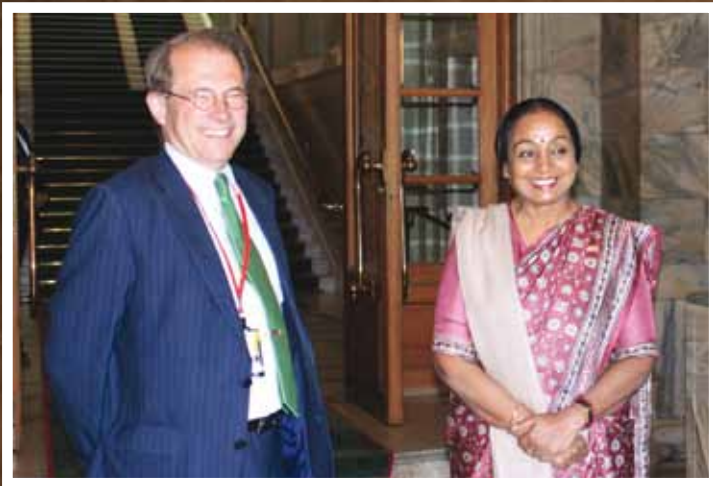
## **Sapa Profiles India Pvt. Ltd.**

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Bangalore 560076  
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email: spi.marketing@sapagroup.com  
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**sapa:**

Shaping the future

# India-Sweden Pictorial Journey



Speaker of Lok Sabha, Meira Kumar with H.E. Per Westerberg, Speaker of the Swedish Parliament (Riksdag) June 14, 2011



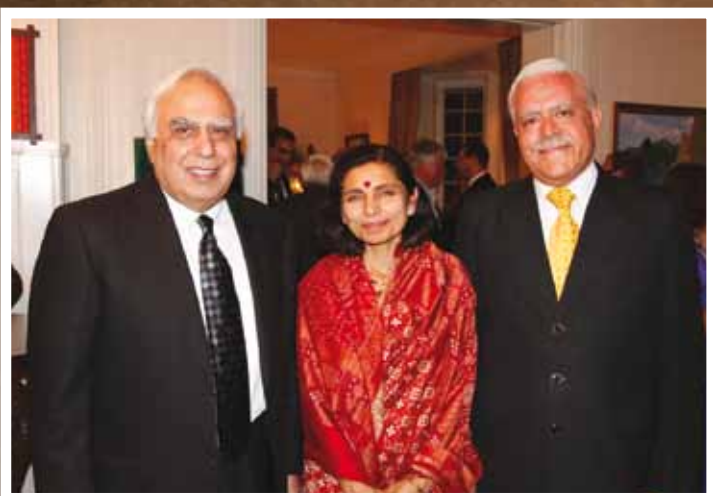
Ambassador Ashok Sajjanhar with His Majesty King Carl XVI Gustaf, King of Sweden at The Royal Palace, June 15, 2011



Ambassador hosted a Reception for Minister of Power Sushilkumar Shinde at India House, Stockholm on June 22, 2011



Kapil Sibal, Minister of Communications and Information Technology with Jan Björklund, Minister for Education and Research and Deputy Prime Minister of Sweden



Kapil Sibal, Madhu Sajjanhar, Ambassador Ashok Sajjanhar at the Reception hosted at India House on



Ambassador Ashok Sajjanhar & Madhu Sajjanhar with Commandant of National defence College, New Delhi, Air Marshal PK Roy & Ranjana Roy at the Reception hosted at India House, Stockholm in honour of the visiting NDC delegation, on May 22, 2012

# India-Sweden Pictorial Journey



Ambassador H.E. Ashok Sajjanhar with H.E. Berit Andnor Bylund, Governor of Blekinge County, Sweden April 13, 2012



H.E. Raduta Dana Matache - Ambassador of Romania, Madhu Sajjanhar, President Diplomatic Women's Club (DWC), Susanne Eberstein, First Deputy Speaker of the Sverige Riksdag at the International Charity Bazaar organised by DWC at Elite Palace Hotel, Stockholm on April 22, 2012



Ambassador Ashok Sajjanhar with Ambassador (Retd.) Pascal Alan Nazareth during the seminar on "Mahatma Gandhi: The Non-violent Revolutionary" at India house, Stockholm on April 18, 2012



Embassy of India presented a spectacular evening of Indian Classical Dances by internationally renowned Bharatanatyam and Kathak dancers on November 3, 2011 at Södra Teatern, Stockholm

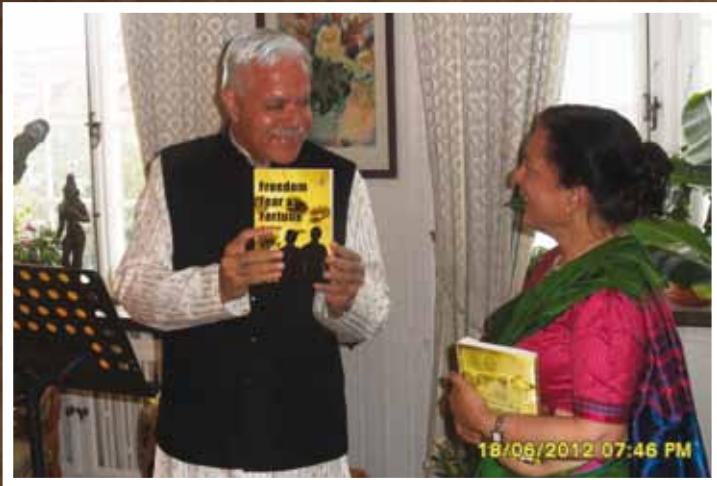


Ambassador Ashok Sajjanhar & Madhu Sajjanhar with Anna Steele (MP), H.E. Margareta Björk - President - Stockholm City Council, Dr Amita Chauhan - Chairperson, Amity Schools, RM Aggarwal, Mohina Dar at a reception hosted at India house on March 30, 2012



Ambassador with Anders Flanking, State Secretary to Minister for Environment, Kartikeya Sarabhai, Director and Founder, Center for Environmental Education India & officials of Swedish Ministry of Environment at the signing ceremony of MoU between India and Sweden on Sustainable Development at Stockholm on April 23, 2012

# India-Sweden Pictorial Journey



Ambassador H.E. Ashok Sajjanhar and Kiran Ahuja releasing the book "Freedom, Fear and Fortune" at a reception hosted at India House Stockholm on June 18, 2012



Ambassador, Margareta Bjork, President of Stockholm City Council with Bollywood Dance & Music Group MATRIX after their performance at Södra Teatern, Stockholm on April 27, 2012



Ambassador H.E. Ashok Sajjanhar with Aldona Sehgal and Rita Bajaruniene at the IWC Charity event hosted at India House, Stockholm on May 08, 2012



Ambassador Ashok Sajjanhar with Rika Hammarstrom, Zivile Slavinskaite at the IWC Charity event hosted at India House, Stockholm on May 08, 2012



H.E. Ambassador and Margareta Bjork, President Stockholm City Council with members of the SALAR delegation on June 14, 2012



Ambassador Ashok Sajjanhar was invited by the Rotary Club Sigtuna, for a Talk on India's position in the World today and the potential and prospects of India-Sweden relations on May 14, 2012

# India-Sweden Pictorial Journey



Ambassador H.E. Ashok Sajjanhar and Madhu Sajjanhar with H.E. Per Westerberg, Speaker of the Swedish Parliament at the Farewell Reception hosted at India House, Stockholm on June 13, 2012



Gaurav Sajjanhar, Son of Ambassador Ashok Sajjanhar belting out some old time favourite melodies at the Farewell Reception hosted at India House, Stockholm on June 13, 2012



Ambassador Ashok Sajjanhar, Lambah, Madhu Sajjanhar, State Secretary Gunnar Oom, Ambassador SK Lambah at the Business Seminar organised at India House, Stockholm on June 20, 2012



Ambassador H.E. Ashok Sajjanhar paid a courtesy call on H.E. Göran Hägglund, Minister for Health and Social Affairs June 25, 2012



Ambassador H.E. Ashok Sajjanhar paid a courtesy call on H.E. Gunnar Wieslander, State Secretary to Prime Minister June 29, 2012



Ambassador H.E. Ashok Sajjanhar paid a courtesy call on H.E. Karin Enström, Minister for Defence July 05, 2012

# Sweden

## A Torchbearer of Sustainable Development

India needs to replicate the Swedish model by de-linking high economic growth and greenhouse emissions along with sensitising its citizens towards ecology and environment



Sweden has been a pioneer in developing clean energy and vocal in its concerns over environmental fragility over the years. Its efforts led to the first 'United Nations Conference on Human Environment', also known as the 'Stockholm conference', held in June 1972. At the same event, the Indian Prime Minister Indira Gandhi in her seminal speech brought forward the connection between ecological management and poverty alleviation which went a long way in understanding the problem from a very different angle. Interestingly, she was the only other speaker in the conference other than the host country's Prime Minister. India too has been championing the cause of renewable energy and pollution control which can be seen through the recent steps taken and legislations passed by the Indian government in this context but owing to pressures of a large population coupled with poor implementation of environmental strategies by the authorities, a lot is left to be desired.

Indo-Swedish cooperation holds high promise in the areas of renewable energy, urban planning and conservation of ecology and environment.

### Renewable Energy and Environmental Cooperation

Sweden was an early bird in the field of waste management and in developing waste as a

significant energy resource. During the global oil crisis in the early 1970s, domestic forest (timber, resin etc) industries were quick to substitute fossil fuels with their own residues thus easing the pressure on government and industries alike. Along with that, this arrangement offered twin benefits of cutting down the costs incurred both on procurement of fossil fuels and waste management.

Since these early steps were taken, industrial bio-energy systems have become more sophisticated and efficient over the years. India too has a long tradition of bio-energy use. The National Biogas Programme, initiated in the late 1970s, was the first major step towards promotion of biogas in India. Today, India's biogas efforts are more focussed on the treatment of organic waste in biogas plants, which is often conducted on a small scale in rural areas – the result of which is known locally as gobar gas.

In June 2009, the Swedish delegation on 'Biogas for Urban Infrastructure' visited India and toured a few Indian cities including the national capital New Delhi. The visit was the brainchild of the Swedish Energy Agency, which organised the programme in collaboration with the Swedish Embassy in Delhi, the Swedish Trade Council and Invest Sweden. This was a defining step in environmental cooperation between the two

countries. This was followed by governmental participation on the subject that included an MoU on cooperation on Environment signed in November 2009 followed by another MoU in the field of Renewable Energy signed in New Delhi on April 19, 2010. Under these agreements, a variety of initiatives have been taken such as biogas production, sewage treatment, waste handling at different places in India.

- Beginning 2012, Sweden through Swedish International Development Cooperation Agency (SIDA), has decided to support the construction of a pilot plant to convert organic waste into biogas to run buses in New Delhi. The biogas is meant to partly replace the natural gas, which currently is used to run New Delhi's bus service. The natural gas can then be used for other purposes, thus helping fulfill the high energy demand on account of rapid economic growth of the country at present. Other notable works which are under way under the scheme such as biogas production, sewage treatment and waste handling.
- Another project at Ghazipur near New-Delhi, aims to utilise waste from a large landfill covering an area of over three lakh square metres. The proposed facility will have the capacity to receive 600 tonnes of waste each day, which is expected to generate a maximum biogas production of 31,700 m<sup>3</sup> (cubic metres at a NTP) or 38,000 kilograms per day. On an annual basis, production is expected to amount to 10.4 million m<sup>3</sup> of biogas, with an energy content of 60GWh. This is expected to help cover the shortfall in energy gap between the supply and the demand in the power starved Indian capital and neighbouring areas. The project is financed by SIDA while the Swedish partner being COWI and IL&FS Environmental Infrastructure & Services Ltd, Municipal Corporation of Delhi being the Indian partner.
- The 'Bhairoba Sewage Treatment Optimisation Plan' in Pune focusses on increased utilisation of biogas produced during sewage treatment for constructive purposes. It also has provision for greater efficiency and modernisation of the existing plant aiming at development of

sustainable waste management systems as well. It has received the support of SIDA with Läckeby Water AB – Division Purac being the Swedish partner and Bharat Forge and Pune Municipal Corporation jointly being the Indian partners.

- A project which goes by the name ‘Small-scale Waste Handling in Village Panchayats Treatment of Organic Waste’ in Tamil Nadu has been taken up by Swedish consultancy Sweco and an Indian NGO - Hand in Hand - in Tamil Nadu at various locations and villages as partners from both sides, the external financiers being SIDA and the Swedish Agency for Economic and Regional Growth (formerly Nutek). The partnership has focussed on the technical and economic transfer of knowledge and the establishment of a small-scale demonstration facility for the production of biogas from food and kitchen waste. The project has supplied a technical and financial platform for the realisation of a biogas facility in Mamallapuram. This facility, with a 100-cubic-metre sedimentation tank, has been installed and has been in operation since September 2010. The energy from the biogas produced is converted into electricity using a 10 kW generator and is used locally for purposes such as street lighting in the area. The cost of the construction project was Rs2 million.

### Environmental Lessons from Sweden

Sweden has weaved together a very effective and efficient environmental policy which aims at sustainable development i.e. economic development without sacrificing the needs and aspirations of the future generations of its populace. To achieve this, the Swedish Riksdag has adopted 16 environmental

quality objectives relating to the quality of Sweden’s environment, and most of them are to be achieved by the year 2020. The 16 national environmental quality objectives are:

1. Reduced Climate Impact
2. Clean Air
3. Natural Acidification Only
4. A Non-Toxic Environment
5. A Protective Ozone Layer
6. A Safe Radiation Environment
7. Zero Eutrophication
8. Flourishing Lakes and Streams
9. Good-Quality Groundwater
10. A Balanced Marine Environment, Coastal Areas and Archipelagos
11. Thriving Wetlands
12. Sustainable Forests
13. A Varied Agricultural Landscape
14. A Magnificent Mountain Landscape
15. A Good Built Environment
16. A Rich Diversity of Plant and Animal Life

These clearly defined objectives go a long way in simplification of the environmental tasks to be worked upon and easier delegation by the authorities. It has helped Sweden contain the greenhouse emissions by putting strict environmental regulations in place. In 1999, fifteen existing environmental laws were merged into the Environmental Code which applies to everyone. Environmental taxes, fees and other economic instruments for environmental purposes are widely used in Sweden. The majority, 95 percent, of the

environmental taxes and fees are applied in the transport and energy sectors, such as taxes on energy, carbon dioxide and sulphur. Other examples are taxes on pesticides and fertilisers, the nitrogen dioxide charge, mandatory deposit refund systems for aluminium and plastic beverage containers, the landfill tax on waste and environmentally differentiated fairway dues for ships.

Swedish greenhouse gas emissions have declined by more than nine percent since 1990. These emissions reductions occurred at the same time as GDP increased by some 48 percent (1990-2007) which shows that the link between greenhouse gas emissions and economic growth has been broken.. Since 1999, emissions have annually been lower than the 1990 level. These emissions reductions occurred at the same time as GDP increased by some 48 percent (1990-2007) which shows that the link between greenhouse gas emissions and economic growth has been broken. India could very well follow the Swedish model of economic growth for attaining the objective of long term sustainable development of the country.

### SymbioCity and Sustainable Cities

India has been plagued by problems of unplanned urban conglomerations owing to large migration from rural areas in search of education and employment. This in turn, leads to a variety of environmental problems in addition to adverse impact on quality of life in general. The Swedish Model of town planning could be of great help in this context. Through its focus on environmental issues and advanced cooperation between local authorities and the business sector, Sweden has built up an extensive knowledge base for achieving sustainable urban development, with several examples that have attracted considerable international attention. Swedish systems expertise and the environmental technology sector are represented by what is termed the SymbioCity concept, and other initiatives. SymbioCity is a marketing concept and communications platform produced jointly by the government and the Swedish Trade Council. The ambition is to realise visions for future cities and sustainable housing solutions in individual neighbourhoods, urban districts and local communities, using cutting-edge technology and far-sighted planning. India could make use of this technology and Swedish expertise to reap the benefits of a well developed practice and enhance the quality of life of its citizens in long term.



*Faraz Shams is a Research Writer at LBA and writes interesting articles on diplomacy and international relations for Diplomatist.*

# ICT Industry in India: An Overview



**I**CT is the fastest growing segment of Indian industry both in terms of production and exports. In recent times Electronics, Software Development and Information Technology Enabled Services (ITES) has emerged as a niche opportunity for India in the global context.

The Indian IT-ITES industry is on a high momentum path. Rapid growth, consolidation and a move up the value chain in terms of products and services define the sectors. It has been revealed that India continues to offer and deliver the best ‘bundle’ of benefits sought from global sourcing.

With significant potential still untapped, it is expected that the global sourcing phenomenon will continue to expand in scope, scale and geographic coverage. As global delivery matures, multi-location strategies will become the norm and most sourcing destinations, including emerging locations, will grow in size. Building on its existing strengths, India will remain the leading destination and will continue to play an important role in most global sourcing strategies.

The consistent growth in export of IT services can be largely attributed to the comparative cost advantage to the developed economies in outsourcing from India along with the pro-active policies & strategies of Government both at central and state level.

## IT SERVICES INDUSTRY IN INDIA

### Strengths of Indian IT Industry

- One of the largest pool of technically qualified high class IT manpower
- Enormous skilled human resource compared to developed countries leading to lower manpower cost nearly one tenth of those in developed nations, thus giving India a comparative advantage.
- Offers a wide range of services from support / data processing to sophisticated software systems etc.
- Rich experience of working with large global companies and enjoy high credibility
- Expertise on a wide variety of platforms
- Accommodating nature of Indian IT human resource

### Expertise Attained by Indian IT Industry:

The Indian software industry today represents one of the most successful business models that has managed to sustain high growth and competitiveness as it offers cost-effectiveness, world class quality, high reliability, speedy deliveries and, above all, use of state-of-the-art technologies.

Indian software companies offer a wide variety of software packages and solutions in different fields such as multimedia, telecom, E-commerce, Internet, networking, enabled software services, data warehousing,

offshore development, virtual software organizations, software development on the net, interactive architecture / integration, remote maintenance, system integration, e-commerce solutions and services, software products and packages (It includes creation of world class IT software products and packages for segments including ERP, e-commerce, internet, client server, networking and for sectors like banking, travel, manufacturing, apparel, defence Rapid codeless technology (RCT), education & training, entertainment, electronic government / public services administration , airline / railways, travel, hotel, banking / stock exchange, etc.

### Indian Expertise in IT-Enabled Services Services

Indian companies have specialised in providing solutions for wide ranging applications including BPO/KPO/LPO, banking, insurance, tourism, construction, manufacturing, tradition and retailing, to name a few.

The projected exports of IT-enabled services from India to world wide countries in various business segments include Customer interaction centers, medical transcription, finance & accounting services, pre-press and digital pre-media, distance learning, geographic information systems, human resources services, medical billing & collection, insurance claims processing, litigation support services, insurance claims, distance learning, geographic information systems ( GIS), e-commerce, facility management, telecom solutions/ communication software systems integrations/ networking, business process consultancy / re- engineering, IT education & training, web content development, back office operations, data processing / data conversions, CAD/ CAM / CAE, etc and the innovative process of value addition continues building indian software & services industry the unmatched leaders across the world.

### India's ICT Exports

India has surely embarked on the great IT revolution. The Indian IT exports continue its dream run of capturing the remotest corners of earth, providing total solutions in a host of sectors of the economy. Today, India's competency in IT, more significant in Computer software and Information Technology Enabled services is recognised globally. Over the last decade, the Indian IT industry has been growing by leaps and bounds.

Indian ICT exports are estimated to have reached to \$ 64.67 billion during the period April 2010 to March 2011. According to ESC's reckoning, Computer software and services are estimated to \$57 billion. The



electronic hardware exports have continued to show a stable growth. The Electronics Hardware exports are estimated to be to the tune of \$7.67 billion, which accounts for a share of 15 percent in India's over all exports.

### Presence of Global IT Players In India

There are a large number of multi-national IT enterprises operating in India in sectors such as: Integrated Chip Design, System Software, Communication Software, R&D Centres, Technology Support Sector, Captive Support Sector, BPO Sector etc reaping the cost and quality advantages.

These multinationals include Siemens, Philips, Intel, Texas Instruments etc. (Chip Design); Siemens, Motorola, Lucent Technologies, Sony, Nortel etc. (Communication Software); Microsoft, Oracle, Sun Microsystems, HP, Compaq etc. (Systems Software); Google, Yahoo etc. (R&D Centres); Axa Business Services, Swiss Shared Services, Siemens Shared Services etc. (BPO Sector); Accenture, DELL, HSBC, GE Capital, Fidelity etc. (Captive Support Sector).

### Spectrum of IT Services & ITeS From India

India has already established her brand equity in the global IT market. Indian IT software and services firms offer software products/packages; a wide spectrum of IT services including system management and maintenance, consultancy services, system integration, chip design, E-Governance, E-Commerce, IT enabled services covering banking/financial/insurance sector. Their IT enabled services also include CAD/CAM, multimedia, animation work, BPO (Business Process Outsourcing) assignments, Call centre related assignments, as well as

Knowledge Process Outsourcing (KPO) / Legal Process Outsourcing (LPO), medical lab, diagnostic and dental services, medical transcription services, e-publishing including data conversion or digitisation, type-setting, copy-editing, content and design, graphics etc.

### Advantage India

India today enjoys a comfortable position to meet the global requirements because of the following:

- Two million students graduate each year
- Indian manpower is English speaking and IT savvy
- Cost reduction up to 50 percent
- Wage differential
- Lower infrastructure costs
- Favourable time lag: 12 hours with US & five hours with Europe
- Overnight turnarounds possible
- Comparatively low rate of attrition
- Resources with experience of industrial, financial and legal systems similar to the west
- Strong domestic IT services industry to support IT led BPO
- Largest pool of SEI CMM companies worldwide

*DK Sareen is the Executive Director of Electronics and Computer Software Export Promotion Council.*



# India on Swedish Culture Map





Despite the absence of the Cultural Exchange Programme between India and Sweden, the Indian Embassy in Stockholm, in coordination with Indian Council of Cultural Relations (ICCR) and local NRIs has sponsored cultural performances several times in Sweden during the last few years. Every year ICCR offers two scholarships to Swedish nationals for studying Indian dance and music. An MoU was signed between ICCR and Lund University, on establishing a new Chair on Indian Studies at the University on June 22, 2010.

## Recent Developments in the Cultural Arena

In March 2009, at an art exhibition organised in Chandigarh, India young Indian and Swedish artists came together with the motive of “saving the earth” through the medium of art. Artists from both countries came together under a single roof at the government museum and art gallery. The event saw a distinctive amalgamation of ideas, thoughts and skills between the artists of two diametrically opposite nations. This was the initiative of Tellus Art, a non-government organisation based in Stockholm. Twelve Swedish and nine Punjabi artists conducted a painting workshop on global warming, nature and environment’ that saw participation of nearly 150 students of Chandigarh along with their Swedish counterparts.

To give the youth a glimpse of the life and ways of India and vice versa, the Swedish Youth Exchange Programme has been initiated. Swedish World Youth, SWY, is an educational and development programme, part of The Centre for International Youth Exchange’s (CIU) activities. CIU’s mission is to create possibilities for the Swedish youth



India has been a late entrant to Sweden, the earliest Indian footprints on Swedish soil can be traced back to the 1950s when students who had come for studies began settling in Sweden impressed by all that the country had on offer. As observed with most Indians, the hangover of indigenous culture never diminishes, and in case of Indians residing in Sweden too, this trait can very well be noticed. Indians in Sweden have taken great care to keep alive their traditions and foster greater understanding with the natives without compromising upon their own identity. To promote cooperation in this regard, a number of initiatives have been taken from time to time and have yielded positive results over the years.

aged 18-25 to gain international experience. This programme is supported by the Swedish government through SIDA (Swedish International Development Cooperation Agency) and has been functioning very well since January 2009 and usually lasts for six months. The participants spend half of the time in India and the other half in Sweden. The method used in the exchange can be described as experience based learning or "learning by doing".

India and Sweden also have cultural exchanges in the form of regular displays of traditional arts which have received warmly by the audiences in both countries. In October (November) 2011 for instance, a dance group led by Saroja Vaidyanathan and Shovana Narayanan with eleven dancers gave fine performances of Bharatnatyam and Kathak dances of India in Stockholm. After the 12 separate dance numbers, seven in Bharatanatyam style and five in Kathak, the groups got together for what is called a jugalbandi and perform together for the grand finale which enthralled the audience and aroused immense interest in these art forms. The Indian Embassy in Stockholm is very active in promoting cultural activities to promote greater understanding and improve bilateral relationship through people to people contacts.

In August 2010, the carnival at Gothenburg, Sweden's second largest city after Stockholm, included a large exhibition of contemporary Indian art. Volvo Cars was founded in Gothenburg, which has a spectacular boulevard known as the Avenue. The Indian art exhibition was held on the road. Titled Go India, it was the result of close cultural exchange programme between Emami Chisel Art and Aakriti Art Gallery, Kolkata on the Indian side, and Vasa Konsthal and Gallery Scandinavia in Gothenburg along with Aschan & Company on the Swedish side. The Emami Group, the city of Gothenburg and the Culture Ministry of Sweden were the chief patrons of this project which was organised in close collaboration with the Swedish Embassy in India.

In December 2010, as part of its annual cultural exchange programme with Sweden, Chowgule College recently hosted a group of 12 students and three faculty members from Tullinge Gymnasium, a high school in Sweden. The global vocational learning programme, 'Athena', aims at providing opportunities to the two developing countries to get an insight into each other's culture, traditions and lifestyle. Through this programme, Chowgule College showcases an array of diverse ethnicities possessed by Indians and more closely the Goans. A number of activities and classes were arranged for the students. From yoga to field

visits and culture lessons to sight seeing, they experienced the lifestyle followed by the people of Goa.

In an exhibition organised at Lalit Kala Akademi, New Delhi three Swedish and nine Indian artists all came together to display their individual styles in sculpture, painting and print from April 23-29, 2012. Prominent women artists from Sweden - Anita Elgerot, Eva Dillner and Gunilla Löfgren were invited to participate in the art show which received great acclaim.

### Indian Artists in Sweden and Joint Collaborations

Over the years, owing to growing popularity and interest in Indian culture and art forms, a number of Indian artists have been performing and residing in Sweden. A few names which deserve special mentions are as under:

- U s h a Balasundaram runs the Saraswathy Kalakendra Institution of Fine Arts in Huddinge, a Bharata Natyam dance school started in 2004. Usha Balasundaram originally comes from Kerala and has been trained at the famous dance institution Kalakshetra College of Fine Arts in Chennai, India. Currently the school has a large number of students of Indian, Sri Lankan, Bangladeshi, Swedish, Russian, Polish and Brazilian origin. Performances are frequent in the Stockholm region.
- Anette Pooja Claesson, a dance performer living in Göteborg who has studied Odissi dance in New Delhi on a scholarship from ICCR. She performs with an Odissi dance programme, that can be presented with live musicians on pakhawaj/ tabla, song, sitar and bansuri. An actor can take part to recite the sanskrit text, translated into english. Together with Leonardo Stephán, she is also engaged in a group combining Fakir Arts with Indian dance. Their project is titled MUSK – Indian Dance & Magic Theatre, and involves stage performances, theatre, dance, story telling and workshops, in



Indian, Oriental and Western fusion. Performances and workshops are made for children, youth and adult audiences alike. MUSK has toured all of Sweden as well as India.

- Suranjana Ghosh is a tabla player from Kolkata, now living in Uppsala. She performs regularly in partnership (with Mynta and other musicians playing Indian and fusion music in Sweden, including Ale Möller, Jonas Knutsson, Roland Keijser, Gösta Rundqvist, and the classical group Weberkvartetten. Recently, Suranjana has also performed with the Cuban violin virtuoso Santiago Jimenez and the Swedish percussionist Jonas Landahl from Sweden. Together with the Piano- och Trombone musician Ulf Werre Johansson they plan for a new crossover performance, titled “Creation Tellus” that will combine a rich variety of music, from Indian rhythm and tango to jazz and folk music.
- Jerry Johansson, a sitar player in Göteborg, released a composition called “Raga på Svenska”. In 2005, Jerry was commissioned to write a concert for Sitar and a String Quartet from the Gothenburg Symphony Orchestra. In June 2006 a new recording was released. On the CD, Jerry performs together with Camilla Wahlberg on Tambura and Farivar Khosravi on Santour.
- Lele Lele, a group (was) formed in the autumn of 2003 at the Royal College of Music in Stockholm. Mihail Dintchev, born and raised in Bulgaria plays the tamboura and sings. He has studied the traditional folk music of Bulgaria a long time. Moa Danielson (tablas) and Stian Grimstad (sitar and tuba)

have both studied for masters of Indian classical music in northern India for many years. Josef Danielson (voice and guitar) has his musical background in rock and reggae and Björn Dahlberg (saxophones and clarinet) has many years of experience as a jazz musician in Sweden, Europe and the US.

- Anita Livstrand a performer of vocal Indian music since 1974, and has through the years played the Tamboura accompanying many Indian artists visiting Sweden, such as Hariprasad Chaurasia, Shivkumar Sharma, Ustad Zia Fariduddin Dagar, and the Sarangi master Sabri Khan. Anita also teaches classical North Indian vocal music. She has released many records, individually and with various bands.
- Bubu Munshi-Eklund, originally from Kolkata, India but now living in Lund, plays the harmonium and sings Rabindra Sangeet, the songs of Rabindranath Tagore. Performed on Swedish radio and television, Bubu also performs together with Per Olov Henricson from Stockholm, with a programme titled “A Swedish View of Rabindranath Tagore”.
- Mynta, a Swedish-Indian musical group featuring one of the world’s finest tabla players, Fazal Qureshi – brother of Zakir Hussain and son of the legendary Ustad Alla Rakha – and Shankar Mahadevan, South-Indian classical vocalist with a magic voice.
- Poorva Express is a Stockholm-based North-Indian classical music duo consisting of Stian Grimstad (sitar, sur bahar) and Moa Danielson (tabla). Poorva Express was originally formed

in Oslo in 1998 by several students of Indian classical music as a collective undertaking devoted to exploration and performance of the North-Indian raga. From 2003 Poorva Express performs mainly as a duo in Sweden, Norway, India, Bulgaria, Slovenia, Serbia and Austria, but also in various projects with other musicians and artists. Among these are the ethno-fusion group Lele Lele and the international KPE Fusion project. Poorva Express also gives workshops and “guided ragas” for musicians and non-musicians in concert halls, schools and music academies.

- Veronica Tjerner, a Kathak dancer based in Stockholm who runs the dance group “Ghunguroos” consisting of young talented Kathak dancers. Veronica works as producer and organiser for the Asian Dance Academy (Den Asiatiska Dansakademien, DADA), an association promoting Asian dance, music and culture in Sweden. DADA runs courses in the Stockholm area, and also yearly summer camps with training in Indian classical Kathak dance and Hindustani music (on tablas, harmonium or vocal), at Helsingegården in Järvsö, 320 km north of Stockholm. Veronica Tjerner also invites guest artists from India for cultural programmes in Sweden.

### Swedish Artists in India

Twice a Man is a band formed by Dan Söderqvist and Karl Gasleben in Göteborg. They started as the Synth Band Cosmic Overdose in 1978, but changed name into Twice a Man in 1981. In May 2002 they released their latest India inspired CD called Agricultural Beauty, which is a production made in collaboration with the Swedish writer Zac O’Yeah, living in Bengaluru, India, and his Indian wife, the poet Anjum Hasan. The lyrics deal with travelling in India, and are all written by Zac and Anjum, whereas the music is more varied, with only some Indian flavour.

Sebastian A berg is Swedish percussionist combining Tabla studies for Maruti Kurdekar at Kala Academy in Goa, India, with drumming on club scenes in Sweden and England during the last ten years. Since 2006, involved in a project titled “Sangeet Project – East meets West” in collaboration with the musicians Maruti Kurdekar, Pradip Samorkadam, Viktor Buck, Tobias Ersson and others.

Sources : <http://www.sasnet.lu.se> , <http://www.ars-baltica.net> , <http://www.emamichisel.com> , <http://overseasindian.in> , <http://indiatoday.intoday.in> , <http://www.paletteartgallery.com> , <http://www.navhindtimes.in>





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# Visit India to Rejuvenate

**B**ounded by the majestic Himalayan ranges in the north and edged by an endless stretch of golden beaches, India is a vivid kaleidoscope of landscapes, magnificent historical sites and royal cities, misty mountain retreats, colourful people, rich cultures and festivities. Modern India is home to a wide range of people; for instance, tribal people with their anachronistic lifestyles and sophisticated urban jet-setters. It is a land where temple elephants exist amicably with the microchip. Its ancient monuments are the backdrop for the world's largest democracy. The timeless mystery and beauty of India can be experienced only by visiting this ancient land. A word of advice: There's just one thing you'll need with you to travel through 5000 years of culture and tradition – a comfortable pair of shoes.

## A Touch of Europe in India

Pondicherry, now officially renamed as Puducherry, is a Union Territory of India situated on the east coast. A French colony until 1954, Pondicherry is often referred to as 'The French Riviera of the East'. This coast-hugging town with colonial buildings, churches, statues and systematic town planning, still preserves much of the colonial ambience. Pondicherry has been described by National Geographic as 'a glowing highlight of sub-continental sojourn'. Pondicherry is also a popular weekend destination, which can be reached easily from the nearby cities such as Chennai and Bangalore. The main tourist attractions include beaches, monuments and statues, gardens and parks, museums and places of worship – temples, churches and mosques.

Goa – the smallest state of India – is located on the west coast. A territory of Portugal for about 450 years, Goa was annexed by India in 1961. Renowned for its beaches, places of worship and world heritage architecture, Goa is visited by large numbers of international and domestic tourists each year. Goa has two World Heritage Sites: the Bom Jesus Basilica; and churches and convents of Old Goa. The Basilica holds the mortal remains of St. Francis Xavier, regarded by many Catholics as the patron saint of Goa. The Velhas Conquistas regions are also known



for its Goa-Portuguese style architecture.

## Skiing in India? Yes Sir!

Skiing in the past decade has become quiet attention grabbing Indian sport due to the Himalayas. The vast open spaces above



the snowline have been flung open to skiing enthusiasts. The hills of Jammu and Kashmir, Himachal Pradesh, and the north eastern states of India have become the favourite ski hideouts of adventure lovers. The awesome height and spread of the snow clad mountains, with the added advantage of powdered snow are tempting enough to magnetize the adventurous spirits



of the avid skier, providing all the thrill and excitement attached to the game. Realizing the immense prospect for tourism, India has developed some of the most modern and reasonably priced ski resorts in Asia, if not the whole world.

### Wildlife Anyone?

Believe it or not; there are 99 national parks in India. Perhaps the best ones in which to view the tiger are Ranthambore and Kaziranga National Parks. Ranthambore is one of the best places in India where royal Bengal tigers can be spotted even during the daylight. The park, with rich flora and fauna, has been very popular among wildlife enthusiasts coming from different parts of the world. Kaziranga – a UNESCO world heritage site in natural category – is best known for one horned rhinoceroses. About two-thirds of the world’s one-horned rhinos are found at this park, and there is a high density of royal Bengal tigers.

### Mughal Architecture

Mughal architecture is the distinctive style developed by the Mughals in the 16th, 17th and 18th centuries in India and other parts of South Asia. While Humayun’s Tomb and Red Fort in Delhi are popular tourist attractions, the most famous example of Mughal architecture by far is the Taj Mahal in Agra, which is on the World Heritage List



of UNESCO. The Taj is considered to be one of the most beautiful monuments of the world and was included in the New Seven Wonders of the World list. It is symmetrical and decorative in style.

The Taj Mahal, the ‘teardrop on the cheek of eternity’ (Rabindranath Tagore), was completed in 1648 by the emperor Shah Jahan in memory of his wife Mumtaz Mahal. Its longest plane of symmetry runs through the entire complex except for the sarcophagus of Shah Jahan, which is placed off centre in the crypt room below the main floor. This



symmetry extended to the building of an entire mirror mosque in red sandstone, to complement the Mecca-facing mosque place to the west of the main structure.

2000-Year-Old Erotica – a ‘Must See’

India has hundreds of noteworthy temples,

that are also tourism attractions, but perhaps the most interesting are the Khajuraho Group of Monuments in the town of Khajuraho about 620 kilometres southeast of New Delhi – one of the most popular tourist destinations in India. Khajuraho has a large group of medieval Hindu and Jain temples, famous for their erotic sculptures. The Khajuraho Group of Monuments has been listed as a UNESCO World Heritage Site, and is considered to be one of the ‘seven wonders’ of India.

The temples do not contain sexual or erotic art inside or near the deities; however, many external carvings bear erotic art – even bestiality. The Khajuraho temple complex offers a professional light and sound show every evening. The show is about an hour long and covers the history, philosophy and the art of sculpting of these temples. It is held in the open lawns in the temple complex.



## Toy Trains to the Hills

While in India, take a slow toy train up to the hill resorts of Shimla, Ooty, Darjeeling or Matheran. There is nothing to match the experience of chugging up the hills, past little hamlets and terraced fields, making your way through tunnels and over breathtaking bridges. Its leisurely pace offers a panoramic view of changing vistas. The invigorating air and the delights of scenic hill resort provide a welcome respite from the hustle and bustle of the city.

## If not the Hills – then try the Deserts

Deserts form the backdrop of many a legend in India, and in present times, are touted as destinations of tourist interest. Nothing can prepare the visitor for the sheer magic and brilliance of the desert cities of Rajasthan. The camel rides on the sand dunes are an unforgettable experience as are the sunsets. These places boast of some very fine reminders of the glorious past – forts, temples and other elegant monuments of architectural and historical value, and unforgettable treats for any visitor.

At Jaisalmer in the heart of the desert the majestic golden fort is a memorable sight as is the camel ride at nearby Sam. Equally enchanting are the forts at Bikaner and Madwa, which drifts the mind to the medieval times.

## Varanasi – A Holy City

Situated on the River Ganges, Varanasi is one of the holiest cities and targets of pilgrimage for Hindus. As the place where Siddhārtha Gautama gave his first sermon to his disciples, Varanasi is also the city where Buddhism was founded. It is the birthplace of Suparshvanath, Shreyansanath, and Parshva, who are respectively the seventh, eleventh, and twenty-third Jain Tirthankars, and as such Varanasi is a holy city for Jains. Guru Nanak Dev visited Varanasi for Shivratri in 1507 and had an encounter which with other events forms the basis for the story of the founding of Sikhism. The city has a sizeable native Muslim population; it also hosts the Roman Catholic Diocese of Varanasi, and has a significant Jewish expatriate community. Varanasi is home to numerous tribal faiths which are not easily classified and many denominations of the religions which are present. Varanasi has nearly 100 ghats on the banks of the Ganges, most of which are bathing ghats, while others are used as cremation sites. One popular attraction for foreign tourists is to witness the nightly religious ceremonies at the ghats while sitting in a boat on the river

## India for Formula 1 Race Fans

The Buddh International Circuit is an Indian motor racing circuit in Greater Noida, near Delhi. The circuit is best known as the venue



for the annual Formula One Indian Grand Prix, which was first hosted on 30 October 2011 and won by Germany's Sebastian Vettel of Team RBR-Renault with a time of 1 hour and 30.35 seconds. The 2012 Indian Grand Prix will be held between the 26th & 28th of October; with the first two days for practice and qualifying.

[www.diplomatist.com/hawkesnest/index.html](http://www.diplomatist.com/hawkesnest/index.html)

## Back to the Slow Lane ...

### ... The Kerala Backwaters

The Kerala backwaters – a chain of brackish lagoons and lakes lying parallel to the Arabian Sea coast of Kerala state in southern India – are a popular destination of Western tourists. The backwaters consist of a network of interconnected canals, rivers, lakes and inlets, a labyrinthine system formed by more than 900 km of waterways. In the midst of this landscape there are a number of towns and cities, which serve as the starting and/or end points of backwater cruises. Many unique species of aquatic life including crabs, frogs and mudskippers, water birds such as terns, kingfishers, darters and cormorants, and animals such as otters and turtles live in and alongside the backwaters. Palm trees, pandanus shrubs, various leafy plants and bushes grow alongside the backwaters, providing a green hue to the surrounding landscape.





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