# Dietmar Rothermund Sixty Years of Indo-German Diplomatic Relations

### The Antecedents: German Interest in India and Indian Interest in Germany

Before Nehru and Adenauer established Indo-German diplomatic relations sixty years ago, there had been mutual interests for a long time. There had been German adventurers, traders and missionaries who visited India since the 16th century. We do not want to deal with these early contacts, we shall rather begin with the German intellectual quest for India which manifested itself in the 19th century. Friedrich Schlegel's book On the Language and Wisdom of the Indians, published in 1808 became the manifesto of the new academic discipline Indology. There had been some Indologists in other European countries, but it was only in Germany that this new field of knowledge was fully developed in its manifold aspects. The German Indologists were not interested in contemporary India but concentrated exclusively on ancient India as the cradle of human thought. Three German universities, Bonn, Tübingen and Berlin pioneered three different lines of Indological studies. At Bonn August Wilhelm Schlegel, Friedrich's elder brother, started teaching Sanskrit in 1818. It is often wrongly stated that he held the first German chair of Indology. His chair was a general chair in Literature. It was his personal preference that he also taught Sanskrit. Bonn's first professor of Indology was Christian Lassen. He had studied Sanskrit with Schlegel and had also worked on Prakrit and Pali manuscripts. He was mainly interested in ancient Indian history and numismatics. In this way he transcended the philological emphasis of early Indological studies. He was appointed Professor of Indology at Bonn University in 1840. In Tübingen Indology was connected with Comparative Religion, a discipline in which the Protestant Theological Faculty of Tübingen University was deeply interested. The third aspect of Indology, which soon became the dominant one, was comparative linguistics which was introduced by Franz Bopp. He had studied Sanskrit in Paris and then spent some time in London where he met Wilhelm von Humboldt who was then the Prussian ambassador to Great Britain. Bopp taught Humboldt Sanskrit and Humboldt later on recommended him for the chair at Berlin University. Due to Bopp, Indology became the leading discipline for the new field of comparative Indoeuropean linguistics to which he made pioneering contributions.

This many-splendoured German Indology gained its fame outside Germany due to the great Friedrich Max Mueller who had left Germany for Great Britain at a young age and finally was appointed Regius Professor of Literature at Oxford University in 1868. This was not a chair in Indology. The German Indologists who were concentrating on comparative philology hardly took note of Mueller's work who was more interested in comparative religion. The monumental edition of the Sacred Books of the East which he organized is a permanent testimony to his work in this field. Max Mueller also established good relations between Germany and India. The Indian nationalists had turned to ancient Indian history in their endeavour to show that India was far superior to Great Britain in its great tradition. These nationalists regarded German Indologists as their allies. Max Mueller was an ideal representative of German Indology for them. He published in English, but he always stressed his German identity. He was a Liberal in politics and a friend of Prime Minister Gladstone. Max Mueller did not hesitate to openly support Indian nationalists, thus he defended Tilak when he was accused of fomenting sedition in India. Mueller never visited India but many Indian nationalists visited him in his home at Oxford.

Later generations of Indian nationalists retained this interest in Germany. Of course, many of them studied in England as Jawaharlal Nehru did who was sent to the elite school at Harrow as a teenager. But there were also those who came to Germany from England, like A.C.N. Nambiar. He was the son of a wealthy landlord and wellknown writer of Kerala and had initially settled in England with his wife Suhasini, a sister of the Indian poetess Sarojini Naidu. They went together to Germany in the 1920s, but were then divorced. Suhasini returned to India and became a prominent member of the Communist Party. Nambiar found a German companion, Eva Geisler, and lived in Germany for a long time as a newspaper correspondent and political activist. This is how he met Subhas Chandra Bose when Bose visited Germany and tried to get an interview with Hitler. Bose was not a fascist, but he believed in the old rule "The enemy of your enemy is your friend" and hoped that Hitler would help India in its freedom struggle against the British. When he finally got his interview with Hitler, he took Nambiar along as his interpreter. Hitler disappointed Bose, all he could do for him was to send him with a German submarine to Japan. Nambiar stayed on in Germany as Bose's representative. He also looked after the Indian Legion recruited from Indian prisoners of war. But finally Nambiar had to flee from Germany to Switzerland, pursued by the SS. Nambiar's fate was typical for the problems which Indians had to face in exile. In India hardly anybody knew about these problems. Many Indians used to lionize Hitler about whose admiration for British rule in India they did not know. Only convinced anti-fascists like Nehru who had seen fascism at close quarters both in Germany and Spain in the 1930s were against Hitler. For Nehru Hitler's demise was a relief and he was glad that he could now establish relations with a democratic Germany.

## The Era of Nehru and Adenauer

When Nehru and Adenauer became heads of their respective governments they had to face similar problems. Nehru had to revive a country which had been nearly two centuries under foreign rule and Adenauer had to restore a vanquished nation. Both of them tried to find a place for their nations in the post-war world. The industries of both nations were in a bad shape. The British had almost "deindustralized" India and Germany was ravaged by the war. Most German cities and their industrial plants had been bombed. The British had created an interventionist state in India in order to mobilize it for the war effort. Nehru inherited the interventionist framework and used it for the establishment of a planned economy. Adenauer opted for a market-oriented economy. Enough human capital still existed in Germany, it could be utilized so as to generate an impressive recovery. Nehru and Adenauer held rather different opinions about the Soviet Union. To Nehru the Soviet Union provided an example of statedirected economic growth, although he did not like the dictatorial regime of the Soviets and did not want to join their "camp" in the incipient Cold War. Adenauer feared the expansion of the Soviet empire and felt that Germany could survive only in a strong alliacne with the West. But in contrast with conservative American politicians to whom Nehru's nonalignment only meant a rebuff of the West, Adenauer was more flexible in his assessment of Nehru's policy and was eager to establish diplomatic relations with India, the more so as India had been one of the first nations to recognize the new Germany.

Adenauer was 73 years old when he became Chancellor of Germany. He had grown up in the Wilhelminian empire and had then played a political role in the Weimar Republic. The Nazis had harassed him occasionally, but he survived in early retirement. To the victorious Western allies who occupied Germany after the war, Adenauer was an acceptable politician, not tarnished by a Nazi past. He soon played a dominant political role and remained in office from 1949 to 1963. Until 1955 he also held the portfolio of Foreign Affairs.

Adenauer had established German diplomatic relations with India soon after he could reopen the German Foreign Office in 1951 with the permission of the Allied powers. The exchange of ambassadors with India was one of the first acts of the revived Foreign Office. Adenauer showed great acumen in selecting the first German ambassador to India, Prof. Ernst Wilhelm Meyer, who held this post from 1952 to 1957. Meyer was born in 1892 and had joined the diplomatic service of the Weimar Republic in 1921. In the 1930s he was posted to the USA. In 1937 he left the diplomatic service and became a professor at an American University. In 1947 he returned to Germany and got a chair of Political Science at Frankfurt University. Adenauer then requested him to rejoin the diplomatic service and sent him to India. After completing his term as ambassador, Meyer returned to his chair at Frankfurt University and then became a member of the German Parliament. Meyer was in tune with Nehru's view of world affairs and did not hesitate to reject orders coming from Bonn when he felt that they would harm Indo-German relations. When he was asked in 1954 to protest against the establishment of an East German trade mission in New Delhi and to announce economic sanctions to this effect, he replied that German industry was just then profiting from good relations with India and that it would be counterproductive to annoy Nehru with such a protest. The German Foreign Office relented and accepted Meyer's advice. He was able to accumulate a fund of goodwill in India. Indo-German relations flourished in his period of office. Adenauer did very well in sending Meyer to India inspite of his belonging to the Social Democratic Party which was in opposition to his government. Nehru also made an excellent choice when he sent A.C.N. Nambiar as his first ambassador to Germany.

Diplomatically well prepared by Nambiar and Meyer, Nehru's first visit of Germany as India's Prime Minister in July 1956 was a great success. Nehru was impressed with the cordial reception by the German people and also by his conversations with Adenauer whom he compared to an old lion in his subsequent report to the Indian Chief Ministers. Adenauer and Nehru agreed that their views of world politics differed, but they listened to each other attentively. Adenauer talked about the danger of Soviet expansionism. He indicated that he was afraid that the Soviets intended to conquer Germany and France. Nehru argued that under the conditions prevailing at that time, Soviet power faced its limits and would not expand. Adenauer listened to him carefully but later on noted in his memoirs that Nehru was an idealist and not a realist. At the end of the year 1956, Adenauer met Nehru again briefly at Düsseldorf airport. Adenauer urged Nehru to use his influence to motivate the United Nations and the Soviet Union to foster German reunification. In the meantime the Soviets had suppressed the uprising in Hungary and Nehru felt that they feared a shrinking of their sphere of influence and for this reason would not be willing to think of a reunification of Germany. Adenauer had also hoped that Nehru could influence the nations which had met at the Bandung Conference. To this Nehru replied that these nations had taken it amiss that Germany had not objected to the French and British intervention at Suez. Adenauer had to accept Nehru's assessments. At least he could be pleased with Nehru's decision not to accept an invitation to visit the German Democratic Republic in 1956. The Hallstein Doctrine seemed to work, after all.

This doctrine named after the German diplomat Walter Hallstein had been formulated in 1955 after Germany and the Soviet Union had exchanged ambassadors.

There were now two German ambassadors in Moscow and other countries could be tempted to follow this precedent. The Hallstein Doctrine implied that Germany would terminate diplomatic relations with countries recognizing the German Democratic Republic and would withhold economic aid. Accordingly, the distribution of German economic aid was geared to the Hallstein Doctrine. India did not like this but had to accept it, the more so as it was soon faced with financial problems caused by Nehru's ambitious Second Five Year Plan. A crucial element in this plan was the enhancement of steel production. The very modern steel mill at Rourkela, Orissa, played an important role in this context. The construction and operation of this mill became the major item of German development aid. Originally this construction was the subject of a contract between the Government of India with private German firms concluded in the early 1950s when India still had enough money to pay for it. In 1957 India faced a balance-of-payments crisis and the Aid India Consortium was formed in 1958 with active German participation. It was only then that Rourkela emerged as a major German development project. After supporting the construction, Germany also had to provide a team for the operation of the steel mill. In its combination of continuous casting and the cold rolling of steel sheets, the Rourkela steel mill has remained an important asset to the Indian steel industry ever since its inauguration in 1959. It originally produced one million tons of steel. After expansion and modernization in the 1990s it could double its production. Its special Cold Roll Non-Grain Oriented (CRNO) -steel is in great demand. India exported it to China in recent years. After teething troubles at the time of its construction had been overcome, the Rourkela plant has emerged as a lasting monument of Indo-German cooperation.

At the time when the Rourkela plant was built, the shortage of specialised engineers was a pressing problem in India and with German aid one of the new Indian Institutes of Technology was established in Madras (Chennai) in 1959. This period of very active German interest in India also witnessed the establishment of several branches of the Goethe Institute which in India are called Max Mueller Bhavan. Thilo Bode who worked in the German Embassy in New Delhi at that time suggested this name, because he knew about the goodwill attached to this name. The South Asia Institute of Heidelberg University, opened in 1962 in the presence of Nehru's sister, Vijayalakshmi Pandit, was another testimony to this German interest in India. Originally it was to be named "Indo-Asia Institute", but President Radhakrishnan suggested the name South Asia Institute as he felt that "Indo-Asia" was reminiscent of "Greater India" and would be resented by India's neighbours.

The Indo-German Chamber of Commerce – about which more will be said later on – was also established in this early phase of Indo-German relations. It was inaugurated in 1956 by Adenauer's deputy chancellor, Dr. Franz Blücher. With all these new initiatives in the late 1950s and early 1960s Indo-German relations flourished in the era of Nehru and Adenauer. One would have expected further initiatives in the subseqent decades, but before there was a revival of mutual interest, a fairly long period of indifference intervened The German Chancellor Kurt Georg Kiesinger visited India in 1967 and there was no other such visit for 19 years. Willy Brandt visited India in 1969 as Foreign Minister and a Cultural Agreement was signed at that time which has proved to be of permanent value. Brandt's term as chancellor was unfortunately cut short, otherwise he would have certainly visited India again. It was an irony of fate that Brandt's successful "Ostpolitik" weakened Indo-German relations. The Hallstein Doctrine was abolished, India recognized the German Democratic Republic in 1972. One year earlier, the East German Trade Representive became a Consul General. The West German eagerness to prevent India from recognizing East Germany had become irrelevant. But there were additional reasons for a cooling of Indo-German relations.

#### The Years of Indifference

The great drought of 1965-66 affected the Indian economy very much. There was a long period of industrial stagnation from the mid-1960s until the 1980s. This diminished the interest of German industrialists in India, the more so as Indira Gandhi followed a rather restrictive economic policy. At the same time, India became increasingly dependent on the Soviet Union. The Western nations refused to supply India with modern armament and India had to turn to the Soviet Union for its defence equipment. Indira Gandhi then signed a friendship treaty with the Soviet Union in August 1971. She did this with a view to strengthen her position when she helped to liberate Bangladesh. But to Western nations this treaty seemed to provide evidence that India had finally opted for the Soviet Union in the continuing Cold War. The Vietnam War was another factor contributing to the India's tense relations with the West. Nehru and Ho Chi Minh were friends and India had stood by North-Vietnam ever since. Finally Indira Gandhi betrayed democracy by imposing an "Emergency" on India in 1975.

For all these reasons India was not very attractive for Western observers in those years. As far as Germany was concerned, there was an additional reason for a growing indifference towards India. Helmut Schmidt, German Chancellor from 1974 to 1982 was not interested in India at all. To him China was the most important country in Asia. When he was Defence Minister in Brandt's cabinet in 1972 he had urged the Chancellor to establish diplomatic relations with China. Schmidt retained this interest in China when he became Brandt's successor. But even more important were Schmidt's close relations with the USA. He knew most of the American politicians personally and met them very often. His perspective was a "transatlantic" one. India did not appear on his radar screen. When Morarji Desai once stopped over at Frankfurt Airport, Schmidt's diplomats almost forced him to meet his Indian counterpart. They did meet, but this was of no use.

In the mid-1970s Schmidt was mainly concerned with the NATO-reaction to the stationing of the new Soviet SS-20 missiles in Central Europe. He got along well with Brezhnew and invited him to his home in May 1978. He noticed that Brezhnew was genuinely afraid of the possibility of a war. They issued a joint declaration on peace and the reduction of armaments after this meeting. But the stationing of Soviet missiles continued even after this agreement and Schmidt then backed the NATOresolution on the stationing of American cruise missiles in Germany while reaffirming the need for further negotiations. Schmidt's decision roused a storm of protest in Germany, but the further course of events proved that he was right. However, that happened only after his term of office. Preoccupied with this game of political poker, Schmidt had no time for India.

## New Contacts and the End of the Cold War

Schmidt's successor Helmut Kohl initially did not show much interest in India, either. It was only in 1986 that he finally arranged a state visit, which then turned out to be a great success. Several German cabinet ministers had visited India before Kohl, but the Indian government could only get the impression, that the Chancellor was too busy and India would have to be satisfied with such ministerial visits. The ministers must have noticed that and they probably told Kohl, that further visits of this kind

would be of no use, unless the Chancellor showed up. Kohl got along very well with Rajiv Gandhi who then visited Germany in 1988.

The end of the Cold War meant an urgent need for a re-orientation of both Indian and German foreign policy. Re-unification increased Germany's weight in world politics, but also confronted it with many new problems. India had always deplored the Cold War, but it had provided its foreign policy with a reliable framework. Now this framework was gone and India had to find new moorings. Intensifying Indo-German relations was an important element in this quest for a reorientation. The Indian economic reforms of 1991 attracted the attention of German industry. Prime Minister Narasimha Rao did well in paying his first state visit to Germany in 1991. Actually, it was not yet the turn of the Indian head of government to visit Germany, but Narasimha Rao had a special mission: he inaugurated the Festival of India in Germany. At that time he also requested Chancellor Kohl to establish an Indo-German Consultative Group consisting of leaders of industry as well as professors of different disciplines. This group has clear terms of reference: At the end of its meetings it has to produce a letter addressed to both heads of government, outlining its recommendations for the further improvement of Indo-German relations. The group met for the first time in Bonn in 1992 and has since met annually either in India or in Germany. In 1993 Germany participated in the India Trade Fair which was visited by Chancellor Kohl. The Chief Ministers of German federal states also visited India with substantial business delegations. Baden-Württemberg was most active in this respect. Its chief ministers and delegations visited India in 1986, 1995 and 2009.

Another important activity of this kind are the visits of the India group of German members of Parliament. The first tour of this kind was in 1971 and ever since there have been such visits once in each parliamentary term. More than 50 German parliamentarians of different parties are listed as members of the India group, but usually only about eight of them participate in the tour of India. They do not just visit New Delhi but go to different states also. In 2008 the group went to Kerala and Assam, where it was received with great enthusiasm. In 2011 Orissa and Tamil Nadu were visited by the group which showed special interest in tribal and minority affairs. A detailed report on the findings of the group is submitted to Parliament. Recently a Indian group of parlamentarians has also been formed. This group will visit Germany in due course. It activities have just begun.

#### India's Economic Growth and Indo-German Economic Relations

The phenomenal increase in India's growth rate in recent years has greatly activated Indo-German economic relations. The Indo-German Chamber of Commerce which was founded in Mumbai in 1956 has flourished in this new atmosphere. It has now branch offices in all major Indian cities. It is the largest bilateral Chamber of Commerce in India with altogether 6700 Indian and German members. No other bilateral Chamber of Commerce of this size exists anywhere else. The Indo-German Chamber of Commerce has a German branch office in Düsseldorf. Encouraged by the Indo-German Chamber of Commerce, 16 regional Chambers of Commerce in Germany have established India desks. In recent years the use of renewable energies has become a special focus of the Indo-German Chamber of Commerce. It also organizes trade fairs. The TECHNOGERMA of 1988 was such a fair.

Indo-German trade has grown by leaps and bounds in recent years and so have German investments in India. The big factories of Volkswagen and Mercedes-Benz in Pune are only the most visible symbols of such investment, but they are just the tip of an iceberg. Indian industrialists also invest in Germany, particularly in the pharmaceutical industry. In fact, the flow of investment from India to Germany now more or less equals that from Germany to India. This is a very encouraging sign of reciprocity in Indo-German relations.

In earlier years the Joint Venture was the favourite form of Indo-German cooperation. This was beneficial to both partners when India was still a closed economy. The German partner gained access to a protected market and the Indian partner profited from investment and technology transfer. With liberalization this relationship changed. The Indian partner could now emerge as a competitor of the German partner in the world market. Nowadays German entrepreneurs prefer the establishment of fully owned branches of their firms in India. This implies that they must solve the problem of hiring competent Indian staff on their own. In order to help German firms to solve this problem the Indo-German Chamber of Commerce has set up a department called "DEinternational" whose team advises German firms in getting started in India and in recruiting qualified personnel. Human resources are not only essential in business, they are also crucial in the academic field.

#### **Recent Projects of Academic Exchange and Joint Scientific Research**

While Indo-German academic contacts had existed for a long time, they have recently been promoted with added vigour. The German Research Foundation (Deutsche Forschungsmeinschaft) has opened a permanent office in New Delhi in 2004 and has signed an agreement with the Department of Science and Technology of the Government of India. Several programmes have been launched in this context. Among them are the International Research Training Groups. In Germany they are called "Graduiertenkolleg" (Graduate College). They consist of teams of Ph.D. candidates who work on a common theme. The first Indo-German IRTG was inaugurated in October 2009 at the University of Münster in cooperation with the University of Hyderabad. Two specialists in plant chemistry and plant diseases, Professors Bruno Moerschbacher (Münster) and Appa Rao Podile (Hyderabad) had been in touch for some time and have now jointly launched this new venture. A dozen Ph. D. candidates from India and Germany have started work at the University of Münster, they will also spend some time at the University of Hyderabad. Finding ways and means to combat wheat rust is one of the common endeavours of these scientists. Chitosan manufactured from shells of shrimps, a byproduct of the shrimp fisheries industry of Gujarat, has chemical properties which can be used to fight rust. This will be one of the items of joint research. In addition to training young scientists, the joint venture could thus also be of immediate use for Indian agriculture. The second IRTG was started in 2010. Its subject is "Functional Molecular Infection Epidemioloy". The main aim of this research is the identification of genetic factors which trigger the respective contagious diseases. The Indian partner is once more the University of Hyderabad, the German partner is the Department of Veterinary Medicine of the Free University of Berlin. More IRTGs are in the pipeline and it is to be hoped that they will be equally successful.

Another very important recent venture is the Indo-German Centre for Sustainability (IGCS) established at the IIT Chennai in December 2010. The German partner is the Aachen Technological Institute (RWTH). The centre will concentrate on four major fields: Water management, Land use and rural development, Waste management and Energy. Professors of Kiel University, the Munich Technological University, the University of Stuttgart and the Berlin Technological University participate in these four research groups The German Research Foundation (Deutsche Forschungsgemeinschaft) has given grants to Special Research Programmes (Sonderforschungsbereiche =SFB) for more than four decades. It has made efforts to internationalise them. For instance, a joint programme with Poland seems to have gone ahead very well. These SFBs are made up of teams of one or more universities and are often interdisciplinary. Indo-German programmes of this kind could very well follow the pace set by the IRTGs. The DFG has numerous formats of giving grants to scholars and the Indian side could explore those with the help and advice of the office in New Delhi.

The German Academic Exchange Service (DAAD) has in the meantime embarked on a "New Passage to India". It was inaugurated with great fanfare in 2008 and is designed so as to increase the mobility of German students and scholars. Whereas there were about 4000 Indian students at German universities only about 150 German students studied in India. This has changed dramatically with more than 1000 young Germans studying in India now. The German Ministry for Education and Research (Bundesministerium für Bildung und Forschung) has sanctioned more than 3 mill. Euro per year for this programme which is administered by the DAAD. While thus encouraging German students to go to India, the DAAD has also increased the number of scholarships granted to Indians in a big way. One of these programmes is the IIT-Sandwich-Fellowship which enables Indian IIT-students to spend some time in Germany and return home for their final degree. While the DAAD used to support ony individual scholars and provided funds for the exchange of academic staff, its "New Passage to India" will now also benefit centres such as the Indo-German Centre for Sustainability mentioned above. This kind of support for special centres is also extended to new centres of modern Indian studies in Germany. For a long time the South Asia Institute of Heidelberg University used to be the only centre in which modern Indian studies could be pursued in an interdisciplinary context. In 2010 Göttingen University started a Centre of Modern Indian Studies with six professorships. Its partner in India is Pune University. Würzburg University has also established a centre of Indian studies concentrating on Indian languages and literatures. A similar centre had been set up at the University of Cologne. These three new centres can invite Indian visiting professors under the programme "A New Passage to India".

The DAAD now has a new Vice President, Prof. Joybrato Mukherjee, a German of Indian parentage who is the President of the University of Gießen. He has studied English Literature and Genetics and is an expert in computer linguistics. Born in 1973 he was the youngest German university president when he was elected to this post in 2009. He has continued taking classes even as university president as he is deeply committed to teaching and research. Being equally qualified in humanities and science he will be able to set new standards for Indio-German cooperation.

In addition to the DAAD there is another important German organization in the field of academic exchange: the Alexander-von-Humboldt-Foundation which grants post-doctoral fellowships.. It has awarded more than 1000 fellowships to Indians in recent decades, among them about 150 engineers. After the USA and Japan, India holds the third place among all nations in this programme. There are no quotas for specific nations or disciplines therefore these numbers would indicate that Indians have done very well in the international competition for these coveted fellowships. Germans have also profited from such grants, because there is an additional programme for German scholars who are invited to work with alumni of the AvH-Foundation abroad.

The Max Planck Society is another leading organization of science in Germany. It encompasses 80 German research institutes. Most of them are doing fundamental research in the natural sciences, but in recent years some institutes devoted to the humanities and the social sciences have also been added. These institutes are not linked to universities, but their academic staff often also holds chairs in their repective displines in the universities of the cities in which they are located. The staff of the Max Planck institutes is international, for instance, the young Indian professor Rupak Majumdar is one of the directors of the Max Planck Institute of Software Systems in Kaiserlautern. He heads the Rigorous Software Engineering Group. Prof. Majumbar has participated in setting up the Indo-German Max Planck Center for Computer Science at the IIT New Delhi. The speciality of that centre is research on algorithms and encryption. It was inaugurated in February 2010 by the German President Horst Köhler. At present there are about 500 Indian scientists working as staff members of the Max Planck Institutes in Germany. Some of them have returned to India and have started institutes of their own with the support of the Max Planck Society which has also sent a permanent representative to New Delhi.

Whereas top-level academic exchanges have a long tradition, the exchange of high school students and their teachers is a very new experience. A project called "Schools. Partners of the Future" has been launched recently. It is supported among others by the Goethe Institute and the German Foreign Office. There is an initial emphasis on German language teaching in secondary schools. The Delhi Public School with its 146 branches all over India encompassing altogether 250,000 students is a major partner in this project. It has now been joined by Kendriya Vidyalaya Sangathan which has 981 branches with altogether about a million students. These major schools have opted for German as the first foreign language (other than English). The Max Mueller Bhavans are also experiencing an increasing interest in their German language training centres in Hyderabad, Trivandrum, Chandigarh, Coimbatore and Ahmedabad. These centres are practically self-supporting as they can rely on the fees paid for their courses. The phenomenal surge in the Indian interest in the German language is a harbinger of increasing future cooperation.

## The Future Development of Indo-German Cooperation

With all the activities which have been mentioned so far Indo-German cooperation is destined to grow very fast in many fields. An important signal will be the opening of the German Centre for Research and Innovation (GCRI) in New Delhi in the summer of 2012.. Such centres have already been established in Tokyo, New York, Moscow and Sao Paolo. They serve as showcases of German technology and enable experts to establish contacts. A similar centre already exists in the field of Indo-German cooperation in science and technology: the Indo-German Science and Technology Centre (IGSTC) in Gurgaon, established in 2010. It is co-sponsored by the Union Ministry of Science and Technoolgy and the German Ministry of Education and Research. The special focus of this centre is the 2+2 appoach, which means the cooperation of industrial firms and research institutes on both sides. For a long time Indian industrial firms have not devoted much attention to Research and Development (R&D) but have rather imported blueprints of established technologies from abroad. This has changed only in recenty years and Indian firms have become much more R&D-conscious. Both the IGSTC and the GCRI will help to encourage this trend.

One field which may prove to be of special significance is the exploration of alternative and renewable sources of energy. German engineers have done pioneering

work in this field and much of it is applicable to India. The acquisition of the German firm Repower by the Indian firm Suzlon shows how the use of wind power can be developed jointly. In recent years several big German companies have sponsored DESERTEC, a bold multinational venture aimed at producing energy by means of collectors of sunlight in the deserts of Africa and elsewhere. A grid of direct current transmission lines of high voltage would transfer part of this energy to Europe. Sceptics have pointed out that the problems of making DESERTEC work and bearing the cost for it may stymie this project. But there is no doubt that DESERTEC on a smaller scale constructed within one country could work very well. India with its huge Thar desert could utilize the technology which is at the disposal of DESERTEC. The giant Spanish solar power station ANDASOL close to the Sierra Nevada has demonstrated the utility of such projects.

Huge projects like DESERTEC and ANDASOL tend to fire the imagination of many people while modest small-scale schemes are often overlooked although they could also contribute a great deal to a new type of energy supply. One such scheme is the Competence Network Distributed Energy Technologies which has organized a Cluster Network Germany-India (CNGI) on renewable energy and energy efficiency. It is supported by the German Ministry for Research and Education (Bundesministerium für Bildung und Forschung). The University of Kassel (Hesse) has taken the initative to study and to provide advice to local enterprises engaged in the decentralized production and distribution of energy. This experience will be shared with partners in India.

The exploration of geothermal energy is another field in which Indo-German cooperation would be useful. India has great resources in this field which have been hardly utilized as yet. There are about 400 hot springs in India, some of them with a surface discharge of water at 90° C. Their location is known, there may be many more which have yet to be discovered. Experts have estimated that geothermal energy could yield 10,000 Megawatt in India. In Germany several methods of the use of geothermal energy have been introduced. There are deep borewells whose output is reinjected. But there are also shallow drillings of about 5 m depth into which coils are inserted which help in the heating of houses. Indian entrepreneurs could profit from German work in this field. The German agency GIZ (Gesellschaft für Internationale Zusammenarbeit) has now two permanent representatives in New Delhi, one of them is dealing with energy the other with the protection of the environment. They are competent partners for Indians working in these fields.

Another interesting field of potential Indo-German cooperation is comparative research on demographic transitions. India is at present profiting from a "demographic dividend" which accrues to countries where the working population has less dependents to take care of due to a reduced total rate of fertility. South India has reached the reproduction rate of 2.1 while North India is still much more "fertile". Demographers have been puzzled by the rapid drop in the total fertility rate in states like Andhra Pradesh. They have been able to map it but are unable to explain it. The conventional explanations that a rise in income and an improvement of the education of women lead to an acceptance of birth control have not proved to be convincing in areas where poor, illiterate women have been in the vanguard of fertility reduction. Decisions about birthcontrol may reflect perceptions of the immediate future. An interesting example is provided by the steep and sudden decline of births in East Germany after 1989. It seems that many young women felt insecure about their future prospects at that time and postponed having children. Comparative studies of this

phenomenon and the reduction of the fertility rate in South India may shed light on aspects of demographic change which have not been analysed so far.

Creative productions in literature and the performing arts should also be encouraged. The Max Mueller Bhavans have launched a project called "48°C – Public, Art, Ecology". This encompasses performances in cities, using public spaces for illustrating ecological problems. We are now in the midst of the German Year in India, 2011-2012. This will certainly enhance Indo-German cooperation in many fields. Hopefully Indo-German relations will never again experience a relapse into indifference.