The India Phenomenon and Finland

BACKGROUND STUDY FOR SITRA'S INDIA PROGRAMME

Edited by

Elina Grundström

Vesa-Matti Lahti

SITRAN
REPORTS
56

The India Phenomenon and Finland

BACKGROUND STUDY FOR SITRA'S INDIA PROGRAMME

Edited by
Elina Grundström
Vesa-Matti Lahti

SITRA • HELSINKI

Sitran reports 56

Translation: Koulutus ja täyskäännös Miller Oy, Erik Miller and Tomi Snellman
Graphic design: Marjut Heikkinen
Cover photography: Bryan Lee/Corbis/SKOY
Layout: Maikki Rantala

The Finnish National Fund for Research and Development (**Sitra**) is an independent public foundation under the supervision of the Finnish Parliament. By law, it is Sitra's duty to promote stable and balanced development in Finland, the qualitative and quantitative growth of its economy and its international competitiveness and cooperation.

ISBN 951-37-4531-7
ISSN 1457-571X (paperback)

ISBN 951-563-508-X (URL: http://www.sitra.fi)
ISSN 1457-5728 (URL: http://www.sitra.fi)

In its Sitra Reports series Sitra publishes results from research, reports and evaluations. The publications can be ordered from Sitra, tel. +358 9 618 991, e-mail julkaisut@sitra.fi

Edita Prima Oy
Helsinki 2005

FOREWORD

The global economy is undergoing constant structural change, and companies operate on a progressively international basis. Goods and their manufacture cross borders and today also more and more knowledge work, so easily transformed into bytes, moves from one country to another. In addition to the China Syndrome i.e. factory work going to China, there is now also the 'India Phenomenon'.

In many ways, India is right at the centre of the latest stage of globalisation. More and more service production and design work, particularly in the ICT sector, is being transferred to the country from the West. Yet globalisation is not a one-way street for India. The growth of its economy is largely attributable to domestic businesses, the most successful of which are expanding abroad, including Finland. India has also set itself the objective of making its scientific research to world class. It wants to take the initiative in all areas, and will not be content to merely follow.

Despite the serious problems that continue to trouble India, such as massive poverty and heavy environmental loads, it is, nevertheless, already a significant economic power. For example, it did not consider direct outside assistance necessary to help with the initial emergency work after the tsunami of late 2004.

There are several reasons why India is so appealing to Western companies:

- its economy has expanded and opened rapidly in recent years;
- it has made good progress in removing trade restrictions;
- it has a growing affluent middle class and working-age population, which mean a potentially enormous market;
- the share of poor people is falling in the most successful states;
- its standards of technological competence and training are to an extent top-class;
- English is spoken widely in India; and

- More and more demanding research and development work is moving to India where wages are lower than in the West.

The Finnish ITC sector has close contacts in India and it has set its goals high. The fact that India is attracting ITC research and development is not without problems for Finland, but on the other hand, India does have great opportunities to offer. India is also growing in other sectors where Finnish companies have competence. These include the environmental and health sector and sectors dealing with infrastructure construction.

However, economic growth has benefited only a part of the population thus far, making India's economic rise more difficult to manage. The benefits are coming too slow to the poorest of Indians. Income and other differences are painfully obvious and their importance must not be played down. They endanger balanced growth.

* * *

Two specific questions have been put to us by many people since Sitra announced that it would launch an India programme. The first question is what do we want to achieve with the programme. The other question is why India, and why not China, whose economy is expanding even more rapidly?

This report concludes the first stage of the programme. Its key objective is to provide information to everyone who is interested in the India phenomenon. While the opportunities offered by India attract many Finns, we still have rather poor or restricted knowledge of India's economy and society. More information will be needed in the future to keep collaboration and business partnerships from running aground because of insufficient understanding of Indian culture and practises. From the outset, we have also sought to form contacts between various organisations because Finnish activities involving India have been very disorganized.

In the next stage we will focus on producing specialised reports to help Finnish businesses and organisations interested in India to

succeed in their partnerships with Indians. Associations and cultural actors, too, have more and more contacts with India. Another programme objective is to help people understand the changes taking place in the global economy, and promote a globalisation that is based on good practises and reciprocity. The latter, general goal is not in conflict with Finnish interests. The best collaboration and business are based on mutual benefits to Finns and Indians. Although Sitra cannot alter the course of globalisation itself, it can influence the ways we in Finland react to global challenges.

In the third stage of the programme, on which no decision has yet been taken, the objectives will be much more concrete. In stage three, Sitra would implement its range of tools widely (research, training, pilot projects, business development and venture capital). Decision on this more practical stage will be taken by September 2006.

What about the other question: Why India, why not China? The answer is simply because India is especially interesting in the light of the latest developments in globalisation. But there are other reasons, too. In the case of China there is already many other Finnish players producing information and helping companies. For example, a Finnish centre for innovation, FinChi, has recently been set-up in China. Another reason involves democracy. After all, India has generated its growth with a democratic system, even if the expansion achieved by China has been even faster. Moreover, democracy means stability in the long-term.

⋆ ⋆ ⋆

Several recent publications offer solid basic information on India. Especially useful sources have been Finpro's memo on India (*Intiamaakansio*), the special India issue of *Kauppapolitiikka* (Trade policy) 2/2005 and the section on India in the *Maailman kasvumarkkinat* (Global growth markets) report, which is part of the report *Suomi maailmantaloudessa* (Finland in the global economy) drafted under commission from the Finnish Government and published autumn 2004. Recent feature issues of *The Economist* on India, global outsourcing

and comparisons between India and China have also been very useful. For this study, a macro-economic background report was also commissioned from Etla, the Research Institute of the Finnish Economy, entitled *India in the global economy*. It is available at the Etla website.

This study, however, is more than a basic information package. It will analyse and examine the India phenomenon from fresh perspectives. It will draw a picture of India that does not merely serve the interests of established Finnish export companies because our goal is to find new ways to operate and new targets for improvement. We will also provide a preliminary assessment of the risks involved in operating in India, and discuss what sectors, Indian centres of growth and population groups are the most interesting and important to Finland.

Chapter 1 in the report will discuss the debate on the India phenomenon, India's recent progress and Finland's standing in a progressively globalised world. Chapter 2 will analyse India's economic progress in the light of statistical data obtained by Etla. Chapter 3 will examine the operations and operating potential of Finnish businesses in India. The factors behind the India phenomenon are examined in chapter 4. It will clarify issues related to standard of education, the growing middle class and English language skills. Chapter 5 will look at where Finnish companies operate in India. Chapter 6 will consider the activities of Finnish organisations concerning India and chapter 7 does the same for international ones. In the final chapter, chapter 8, we draw our conclusions and make recommendations for the next stages of Sitra's India Programme.

The book includes an appendix in which several India experts answer two questions: What will happen in India in the next 5–10 years? What role can Finland play in India's change?

I would like to offer my appreciation to the contributors of this study and its background material. I would also like to thank all those who commented on the text in its draft stage.

Vesa-Matti Lahti
Research Manager
Head of Sitra's India Programme

CONTENTS

1 The India Phenomenon

ELINA GRUNDSTRÖM

Is it a new China Syndrome? Or even perhaps an Indonesia phenomenon?

In winter 2005, one topic of discussion related to Finland took precedence over all others in New Delhi. At the time, three of us were on a visit to the chilly capital in February, to interview representatives of Finnish firms operating in India for this report. Nearly every meeting ended with speculations about which city Nokia would choose to set up their promised factory.

Our research group of three made a bet on the outcome. My bet was Bangalore, because Nokia's subcontractor Elcoteq had just opened a factory there. Vesa-Matti Lahti, the research manager in charge of the India programme, put his money on Pune, because it is one of the most developed cities in India, and is within easy reach of the Mumbai port. Our economic reporter Matias Möttölä could not make up his mind at first, but then the director of Wärtsilä's plant in North India, Debashish Mazumdar sang the praises of the state of Himachal Pradesh, and drew a small cross on our map of India over the city of Kasaul. Möttölä made his choice on the spot.

We all guessed wrong. At the beginning of April, Nokia announced that it would build a mobile phone factory in Chennai[1], formerly known as Madras. The plant will provide employment to about 2,000 Indians, and Nokia will invest USD 100 to 150 million in it over a period of four years.

Nokia's decision will create an entire Finnish enclave in Chennai. The number of Finns resident in India may even double at the

launching phase of the plant. Although there are over one billion inhabitants in India, up to now only about a hundred Finns have resided there permanently.

DELHI GETS POPULAR

We were by no means the only Finnish visitors in Delhi that April. Two Finnish ministers were visiting India at the same time. Foreign minister Erkki Tuomioja was chairing a meeting of the Helsinki Process, while foreign trade minister Paula Lehtomäki was on a tour to promote exports, accompanied by an unprecedentedly large delegation of business representatives.

"There used to be only half a dozen corporate representatives in the delegations of Finnish ministers. Now Lehtomäki says there were 30. And Indian businessmen were so interested in them that there were not enough chairs at the meetings," says Anand K. Sethi, a consultant in India for Finnfund, the Finnish development finance company.

According to Sethi, Finnfund is now involved with more India-related projects than ever before. "Over the next couple of years, more Finnish investments will be coming this way than in the last ten years put together," he estimates.

In addition to Elcoteq's factory, opened in Bangalore in December 2004, four or five other Finnish telecom companies were coming to India in the wake of Nokia.

There were also clear signs that the Finnish forest cluster was arriving in India. In December, Andritz Oy Finland, the former Ahlström Machinery, received a giant order of EUR 40 to 50 million. Andritz will design and build India's largest pulp mill in Andhra Pradesh. Moreover, Finnish paper and pulp companies had 4 to 5 advanced plans for investment. For instance, Outokumpu and Kone had received large orders, and engineering and energy companies as well as health care enterprises were doing business and investing in India.

According to Finnfund's Anand K. Sethi, many Indian companies are actively looking for partnerships with Finnish companies.

Their main interest is in Finnish technology. According to Sethi, this has occurred without any special marketing efforts. "A couple of years ago Indians still thought that Nokia and Kone were Japanese companies. Now the recognition and image of Finns is much better."[2]

LIKE CHINA 15 YEARS AGO?

In July 2005, there were signs everywhere that business co-operation between Finland and India was picking up. An India team had just been set up in the Finnish Ministry for Foreign Affairs, and the Ministry of Trade and Industry had established an India network. Just two weeks prior to our trip, Finpro, the organisation for promoting the internationalisation of Finnish businesses, had appointed Seppo Keränen as the director of Indian export centres in New Delhi. Finpro was also extending its operations in India by hiring more Indian employees.

We were also told that Finnair was planning on launching regular flights to India. Director Petteri Kostermaa, who is in charge of network strategy, admits that Finnair is looking all the time into launching direct flights to either Mumbai or New Delhi. The company does not yet have the necessary traffic rights, but the Finnish and Indian authorities will negotiate these in June 2005.

"If we can get sufficiently liberal traffic rights, it is not impossible that we would begin flying already in autumn 2005. Usually, however, flights do not start until a year from the decision, and this decision has not yet been made," Kostermaa says.

There would seem to be a demand for direct flights. According to Om Prakash Gupta, the Indian ambassador to Finland, the embassy has granted about four times as many business visas in spring 2005 than when he started work in Finland. "Three years ago we issued 4 to 5 a day, while this spring the numbers have risen to 20 to 25."

Glen Lindholm, the Finnish ambassador to India, stated in a press interview that when he came to India in 2001, there were 30

Finnish enterprises established there. In spring 2005, the number of Finnish companies was over 70. In addition to this, around a hundred Finnish companies were importing goods to India through local representatives.[3]

The Finnish embassy in Delhi reported in April 2005 that according to their information, the number of Finnish citizens resident in India has grown from 86 to 142 in the course of one year.

IT'S EASY TO GROW FROM ZERO

The enthusiasm of Finnish companies about India in spring 2005 was such that embassies and export promotion bodies were almost in trouble with them. Nevertheless, statistics show that trade between Finland and India is modest – even small – in volume.

India's share of Finnish exports was only about 0.5% in 2004. The volume of Finnish exports to India, with its population of over a billion, was as large as, say, exports to Greece or Ukraine. India's share of Finnish imports was even smaller, 0.3%, roughly the same as our direct imports from the Dominican Republic.

Finnish companies have also invested very little in India. According to Bank of Finland statistics, cumulative Finnish investments in India at the end of 2004 were still less than EUR 50 million. This is a small amount when compared with Estonia, for example, where Finns have invested EUR 1.5 billion. Only a few Finnish companies, such as Wärtsilä and Kone, had significant production in India at the end of 2004.

The situation will change radically during 2005, however. Current plans of which we are aware suggest that Finnish cumulative investments in India may double in the course of a single year. Some estimates are even predicting a tenfold increase in just a few years. Finnish exports to India are also growing very fast.

Statistics show that India is now in the same situation as China was in relation to Finland about 15 years ago in terms of trade and the presence of Finnish companies in India. Business between Finland and India seem to be increasing at unprecedented speed.

If the role of India in the world economy is strengthening, as international economic press predict, Finns are making precisely the right kind of deductions.

THE INDIA PHENOMENON IS FILLING HOTELS

The availability of hotel accommodation is a good indicator of what is happening in a country. In February 2005, it was almost impossible to find a hotel room for a reasonable price in the centre of New Delhi.

India was a closed and regulated economy for a very long time, and it took a very negative view of foreign corporations. Liberalisation of the economy began in 1991. That year is considered a turning point for India like Deng's takeover in 1978 was for China.

India has opened itself to the world markets since 1991. The national economy has grown at an average of 6% annually. This has attracted foreign companies to India, companies interested in the combination of fast economic growth, potentially huge markets and low wages.

In 2004, economic growth in India increased to over 8%. Inflation is low and foreign currency reserves are at an unprecedented height.[4] In May 2004, the Congress party won the election and Manmohan Singh was appointed the new Prime Minister. Singh had been the finance minister in 1991 and was thus the architect of the successful economic policy. A period of economic reforms that facilitate the operations of foreign companies was launched under Singh. For example, a uniform value added tax system is being introduced[5] and laying off of industrial workers, hitherto impossible in practice, has been made easier.

It is estimated that major foreign investments to India will triple in 2005 from last year's 5 to 6 billion to about USD 15 billion. But statistics show that this is just a fraction of what China is getting. According to UNCTAD, China received a total of USD 60 billion in foreign direct investments in 2004, whereas the same figure for India was less than 6 billion.[6] However, such comparisons are commonly regarded as misleading. If we add to the official figures fund investments and

the money Indian expatriates send back home, FDI to India in 2004 comes to 50 billion. This is not very far from China's 60 billion, which apparently includes the above-mentioned sums. It is also said that the Chinese cycle domestic investments abroad to avoid taxes.[7]

The figures can also be considered misleading on the basis of the results of a survey by IBM Global Investment Trends. The survey is based on real investments in production as reported by businesses themselves. According to the survey, China received over 1,600 new investment projects in 2004, and India only slightly less, around 1,400. However, the companies reported that the impacts of investments on employment were greater in India than in China. According to the IBM survey, new investments made in India in 2004 provide employment for about 320,000 people. Corresponding investments in China provide employment to only about 170,000 people. The survey especially noted that, in terms of jobs, India took the lead for the first time, surpassing the United States.[8]

A WHITE-COLLAR REVOLUTION?

Although India is catching up with China in terms of economic growth, it is integrating with the world economy along different lines than China. A frequent way of explaining the difference between economic growth in India and China is to observe that the China syndrome is based on blue-collar work. By contrast, the economic growth of India seems to be based on white-collar jobs, that is, service production which utilises Indians' proficiency in information technology and also on English.

When Finns talk about the China syndrome, they are not referring indiscriminately to any kind of economic growth in China. They are referring above all to the changes taking place in the international division of labour. In China's case, this means the shift of industrial work to that country.

The term 'India phenomenon' began appearing in the Finnish press at the end of 2004.[9] Just as in the case of China, the issue

that especially attracts attention regarding India is the changing international division of labour. When people use the term India phenomenon, they are usually talking specifically about the possible shift of software design and various call centre and data recording services as well as corporate research and development from the West to India.

If such a shift in the world economy is actually taking place, it is naturally of vital interest to Finland, as information technology is a strong element of our economy. It can both increase the competitiveness of Finnish IT companies, and take away jobs from Finland.

Western, especially American and British, companies have outsourced a great deal of their Internet and telephone services, software production and product development to India. These IT services account for a rapidly growing proportion[10] of India's foreign trade. Last year, they accounted for about one fourth of India's export revenues.

Around 20% of global cross-border software production is today commissioned from India. Cross-border outsourcing of IT services is estimated to be increasing rapidly and is expected to at least treble by 2012. Although services will also shift to China and Russia, for example, India seems to be the overwhelmingly most competitive choice.

This development is still very new. Major corporations in the West have only outsourced an average of 8% of their office work, but many of them estimate that they might in the near future outsource at least one half.[11]

HOLD YOUR HORSES

Although India seems to be becoming the back office of many foreign companies, talk about the India phenomenon is full of exaggeration and downright mysticism. A good example is the famous Indian columnist Gurcharan Das, who writes about the economic shift in his book *India Unbound*.

In it, he explains that Indians are a conceptual people, who have wrestled with the concepts of Upanishad for three thousand years.

They invented zero. Cyberspace is invisible like spiritual space, and their core competence is invisible. According to Das, information technology may at last provide India with the keys to success, altering the rest of the world at the same time

It is surprising how often the IT miracle of India is linked with mystic ideas from Indian religions and culture. Even Indian engineers can claim in all honesty that the Vedas contain instructions for building computers.

In reality, the success of a country in the global economy is not dependent on whether zeroes were invented there in the past. In examining the India phenomenon, one must be very careful not to repeat such myths, not even anecdotally. One must also be equally careful not to accept the hype of Indian authorities and companies without a grain of salt. For example, it is anticipated in the Indian government's *Vision 2020* that by that year India will have become an information society and that the per capita national product will have increased four-fold. This is quite a goal for a country where 40% of the children stop attending school before the fifth grade.[12]

The IT service sector in the heart of the India phenomenon is very interesting and it certainly has an effect on the operations of Finnish companies such as Nokia and TietoEnator. On the Indian scale the phenomenon is quite small, however. The IT service market accounted for less than three per cent of India's GDP in 2004.

Although the economic press sing the praises of IT successes such as Wipro, which in the past few years has recruited as many as a thousand new employees a month, one must remember that IT services only provide jobs to less than a million Indians. Even if the figure were to increase to two million by 2008, as forecast by Nasscom[13], that would still be but a drop in the ocean, since some nine million new young people enter the Indian labour market every year. The country has a workforce of about 470 million at the moment, of whom only 7.5% work under a formal employment contract. The rest work either in agriculture or in the unofficial sector.[14]

”Even animal husbandry accounts for a bigger proportion of the Indian GDP than IT services. IT services account for two per cent, cattle husbandry for six. And animal husbandry employs nine million people,” said Jairam Ramesh, MP for the Congress party, with a laugh when I asked him whether IT services were the engine of Indian economic growth. ”The IT sector is important to us, but it is not a question of life and death. In the next five years the priority would be to build new manufacturing industry.”

On our visit to Delhi we heard lots of comments like that. The number of jobs in the IT service sector is small on the Indian scale, and even then they employment is concentrated in half a dozen growth centres. 60 70% of Indians still live in the poor rural areas, and the majority of them are both underemployed and undernourished. Indian economists and businessmen alike are much concerned about how to find employment for the rural population. Although industrial production in India began growing in the 1990s, it has still not absorbed much new labour. On the contrary, the number of industrial jobs was on the decline in the 1990s due to increased efficiency. In 1991, about 6.3 million Indians were working in industry, while in 2002 the figure was only 6.2 million. In China, the industry employs about 160 million people.[15]

In the last couple of years, however, industrial investments have also started to improve the employment situation, and the Indian economists whom we interviewed saw new industrial investments, such as those of Nokia and Elcoteq, as being very welcome. However, they would be particularly glad to see the development of industrial agriculture and related food production industry: fruit canneries, dairies, and vineyards.

Shashanka Bhide from the National Council of Applied Economic Research (NCAER) points out that although IT services are a small component of the Indian economy, their fast development is a good sign of the capacity of Indians. ”The success of IT services shows that we have the capacity to rapidly adopt new ways of operation in almost any field.”

Nor do the activities of Finnish companies in India support the idea that Indian economic growth would be based solely on white-collar work. Finnish businesses in India operate in very much the same way as in other rising export markets.

Finnish companies have established themselves in India in more or less the same way as in China. In the first wave, a number of sales representatives from the most important export companies went there along with Kone, Wätsilä and Huhtamäki, which have production plants in India. The next wave will consist of the Nokia plant with its subcontractors, energy companies, paper industry consultants, and engineering works.

In addition to export companies, Finnish buyers also visit India. Nearly one half of Finnish imports from India are made by the textile, clothing and footwear industries. However, it would seem that the purchasing operations of Finnish retail chains and consumer goods businesses in India are only incidental and on an even smaller scale than in China. According to Finpro, Finnish textile, clothing, leather and footwear industries have no buying offices in India. By contrast, Swedish retail chains have been in India for a long time, and most of our Indian imports actually come through them. Swedes in general do more trade with India than Finns. Information for 2003 indicates that Finnish exports to India totalled EUR 203 million, while the corresponding figure for Sweden was 780 million. Finnish imports from India were 93 million and Swedish imports EUR 248 million.[16]

Along with traditional imports and exports, IT services in India are being utilised in new ways, although the volume is small. Nokia has established three R&D units in India, which in February 2005 had about 150 Indians working for them. Nokia was also commissioning R&D from several Indian subcontractors, providing employment indirectly to an estimated one thousand people. Indian software service companies have already established themselves in Finland, and TietoEnator for one has outsourced software development operations to India through its subsidiaries.

It is unlikely that Finnish call centre operations would move to India to a significant degree, even though a few Finnish women are taking orders for the eBookers travel agency in New Delhi. For call services production, Finnish-speaking Estonians are a much more attractive option than English-speaking Indians. Moreover, Baltic and other east European countries may be a more important source of inexpensive IT and software services for Finland than India. Yet it remains important to monitor developments of the IT service sector in India, because it can have an indirect effect on Finland by altering the procedures and cost structure of our American or British competitors, for example.

Finnish business operations in India should therefore be examined from at least three different angles.

1. Import and export operations, which include exports from Europe or from the Chinese production plants of Finnish companies, as well as goods made by Finnish companies in India for the Indian home market as well as other countries. The operations of Finnish companies in the telecommunication and energy sectors especially are growing rapidly in India right now. The prospects of Finns are also good in the paper industry, construction and infrastructure projects, and in environmental technology.

2. Outsourcing of IT services and R&D to India has been on a minor scale, but may be getting off to a strong upward trend. It can threaten Finnish jobs, but also improve the competitiveness of some companies.

3. Imports and contract manufacturing have been slight, but would have great potential right now. The international Multi-Fibre Agreement that has been regulating Indian clothing exports expired in the beginning of 2005, and the Indian government has been liberalising the textile industry. As a result of these changes new, competitive production of clothes is emerging in India. India offers many other fine import opportunities, too. For example, contract

manufacturing of foodstuffs, pharmaceuticals, and interior decoration or cast iron products could be very profitable in India.

THE THIRD STAGE OF GLOBALISATION

Although the wildest visions of the migration of office work to India are unfounded and exaggerated, we must remember that the globalisation of white-collar work has only just begun. For instance, engineering has traditionally been considered one of the competitive factors of Finland. Such expertise will certainly be found in India at cheaper rates.

In his book *India Unbound*, Gurcharan Das recalls how as a young idealist he used to admire Jawaharlal Nehru and did not realise how disastrous Nehru's regulatory policies were to the Indian economy. However, with an old man's optimism, Das now thinks that the delay was ultimately good for India, because the world has since then developed into an information economy. India, in other words, is getting a better deal than China.

The Economist also seems to think that India may end up with a better deal than China in globalisation. *The Economist* is not referring to the Indian IT service sector, however, but to the fact that Indian economic growth is based on Indian companies, on Indian capital and on products sold above all on the Indian market. This may in the long run represent more sustainable development than the Chinese model, which is based on foreign corporations, foreign capital and the export industry.

Indian companies are also investing quite a lot abroad. For instance, Infosys, Wipro and Tata Consultancy Services have even invested in Finland. There were 18 Indian companies listed on the London Stock Exchange in 2004. According to the IBM survey, India was the fifth largest source of foreign investment in 2004 if we measure investments by their number instead of the total amount invested. India had investments in about 700 foreign projects.[17]

But India is not the only one. Also others, including Chinese, Brazilian and Malesian companies have started to invest abroad.

According to the World Bank, 'developing countries' – and all the above countries are classified as such – invested a total of USD 16 billion abroad in 2002, but as much as 40 billion in 2004.[18]

Indeed, the India phenomenon is part of the growth of the BRIC countries (Brazil, Russia, India and China), which many economists believe are becoming the new driving force of the world economy. According to estimates of the Goldman Sachs investment bank, they will by 2050 have surpassed the powerful G7 industrial countries. However, none of the BRIC countries is very stable, and the earth's ecology may not be able to sustain the sort of radical growth forecast for these countries with their huge populations. Nevertheless, Indians like to refer to the BRIC phenomenon. It is for them the same kind of source of self-esteem as the success of Indian IT services.[19]

Many aspects of the India phenomenon indicate that globalisation has changed its character since the time when the first factories subcontracting American brands were established in China. India has jumped on the globalisation wagon at a stage when globalisation has become deeper. Foreign companies in China still use a lot of foreign employees, partly for language reasons. By contrast, almost no expatriates are sent to India any more, and highly educated English-speaking Indians are hired in their stead. China still uses a great deal of research and development results produced elsewhere, while R&D is already one of the main export services produced by India.

In his latest book *The World Is Flat*, published in April 2004, the American journalist Thomas L. Friedman, who is a specialist in globalisation issues, argues that the IT service companies in Bangalore are the clearest example that the world has entered the third stage of globalisation in the 2000s. The first stage, which lasted from the age of explorations to the 19th century, was a period of globalisation for nation states. The second stage, the 19th and 20th centuries, was a period of corporate globalisation. In the third stage, which began at the turn of the millennium, the dynamic of globalisation arises from individuals. According to Friedman, the world has become flat. The playing field has become level, because thanks to advanced Internet connections, information jobs are easy to relocate anywhere in the

world. The most talented youth in the West and in countries like India are competing for the same jobs.

Also for the Finnish economy, the India phenomenon is more perplexing than the China syndrome. An increasingly smaller proportion of the operations of Finnish companies in India show up in customs statistics, because it is quite common that products manufactured by Finnish companies in China are sold to India. Even the revenues of many large Finnish corporations from their Indian operations are small, in the form of fees for technical consultancy or licensing. On the other hand, their expenses are very small. Finnish companies have only 20 or so expats in India altogether. Wärtsilä and Nokia, for example, have operated there for long without a single Finnish employee. On the other hand, at least Nokia has conspicuously increased its R&D in India just at a time it has cut back on R&D jobs in Oulu.

This kind of globalisation based on equal partnership is of course fairer trade than sweatshop production, but we may also ask, to what extent does the India phenomenon benefit the Finnish national economy?

If a Finnish corporation owned by American pension funds contracts products to be made in China, benefits for the Finnish economy mostly comprise salaries for research and development in Finland and for the expatriates working in China. But what can Finland get from India, if we send the R&D there, but not even Finnish employees?

REMEMBER THE INDONESIA PHENOMENON?

Do you still remember the time when the talk was not of China, but of South East Asia?

In the mid-1990s, the favourite country among Finnish companies was Indonesia. In 1997, Indonesia was the sixth largest recipient of Finnish exports. There were about 600 Finns living there, most of them expatriates from Finnish companies and their families.

The end of the Indonesia phenomenon was dramatic. President Suharto's regime collapsed in May 1998 so violently that two Fin-

nair planes were sent to Jakarta to get Finns out of the country. There are currently only about 160 Finns living in the whole of Indonesia, and exports to that country are only a quarter of what they were at the peak level of activity. Many loans issued during the Indonesia phenomenon have not been paid back. For example, the Finnvera financing company has about EUR 60 million in recovery in Indonesia, mainly in the forest sector.[20]

China has also been a disappointment to many corporations. According to one survey conducted by PriceWaterhouseCoopers, 74% of international corporations operating in China made a loss in 2004. However, it was estimated that some of them would become profitable once they had been in China for a longer time.[21]

The lessons from Indonesia and China should not be forgotten. India is very attractive at the moment, but also very demanding for companies; it is an operating environment with a lot of risks. Some of the risks are due to the rapid economic growth.

One example of the unrest seething below surface was the feelings released on St Valentine's Day, which we saw in Delhi in February 2005. Newspapers and hotels were strangely full of gentle Valentine's Day celebrations. What seemed even stranger was that the Hindu nationalist Shiv Sena party felt the day to be such a threat that it organised demonstrations, with Valentine's Day cards being burned. According to Shiv Sena, Valentine's Day is a western attack on the morals of young Indians.

Emerging in the 1990s, Hindu nationalism can largely be seen as a counter-reaction to the cultural crisis caused by globalisation[22] and the inequalities of economic growth. New magazines and television programmes are marketing modes of consumption that only the educated elite in a few growth centres is able to afford. Even though India is one of the main markets for Nokia's expensive communicators, there are also about 300 million people in the country living on less than a dollar a day.[23] The functioning and continuity of economic reforms in 'the world's largest democracy' is constantly hanging in the balance.

Problems associated with the sufficiency of natural resources and their ownership are also difficult in India. The country suffers from overpopulation and in many places has been destroyed by erosion, chemicals and pollution. Waste management is almost non-existent. One of the worst problems is the lack of water. India has 17% of the world's population, but only 4% of its water resources. In a context where a single soft drink plant has depleted the water resources of entire villages, causing enormous migration, the environmental impacts of, say, a pulp mill must be evaluated with the utmost care.[24]

India is a demanding environment for corporate social responsibility, because the country has not only environmental problems, but also a great deal of child labour. Unlike China, child labour in India is also a big problem in the export sector, such as textiles and clothing.[25] Environmental and employment conditions violations are also publicised much more easily in India than in China, because India has a free press and a strong tradition of civic activism.

Other perceived risks to corporate operations in India include corruption, bureaucracy, weak infrastructure, slow judicial system, deficiencies in copyright protection and complex legislation that varies from one state to the next. Although India is in a very interesting state of development, this involves such grave risks that SMEs in particular are advised to plan their operations in India very carefully indeed. There is no call for all Finnish companies to go to India to do anything. But it is certainly worthwhile for some Finnish companies to do well-planned things there.

WILL POVERTY DISAPPEAR?

This report focuses largely on the operative conditions of Finnish enterprises in India. The aim is to divide the great and heterogeneous country into sections to discover 'Finnish Indias' – sectors, states and growth centres where Finns are already operating or which might be interesting from the Finnish point of view.

Finnish Indias by any means include only New Delhi, Mumbai and the IT centres and industrial areas of the southern states. They

also include the slums of Calcutta, where FinnChurchAid (FCA) supports nearly a hundred community projects, or the Fida International relief centre, also known as Aune Hyny's orphanage, in Machilipatnam in Andra Pradesh.

India is not a target for bilateral development aid for Finland, but in terms of its level of development there is no reason why it could not be. The huge population of India has more illiterate and more undernourished people than the whole of Africa. Yet India has announced that it will not accept bilateral development aid from small countries.[26] Instead of development aid, the Indian government has chosen to use trade and attract foreign investments. However, NGOs are still allowed to undertake grassroot level operations, and there is a dire need for them.

In April 2005, at the same time as Finnish companies were flocking to the opening markets of India, a group of Finns translated Mahatma Gandhi's *Hind Swaraj* in celebration of the 75th anniversary of the Salt March.[27] Mahatma Gandhi was one of the world's first critics of globalisation. He was opposed to industrial imports and believed that only small-scale local production could offer work for the rural poor in India. As a result of Gandhi's thought, there are still about 600 products in India that may be produced only in factories employing no more than a hundred people. Such products include hairbrushes and socks, for instance. On the village scale, such Gandhian policies may be sound, but one of the results has been that mass production of consumer goods has moved to China instead of India.[28]

Although the Indian flag carries the emblem of a spinning wheel symbolising Gandhi's ideology of small-scale industry, *Hind Swaraj* is not popular among Indian businesspeople. They instead prefer Indian-born economist C. K. Prahalad's *The Fortune at the Bottom of the Pyramid*. The book has also been popular reading among the Indian marketing executives of Nokia. Its basic idea is that when companies take the poor into account in the right way, market mechanisms can be much more effective in eradicating poverty than the state or development aid. This pyramid theory was so popular in India that more than one businessman drew for us a

schematic pyramid where affluence flows from above to the poor majority on the bottom.

The problem of India has nevertheless been that poverty has not decreased at the same rate as the economy has grown. Although relative poverty in India has decreased, actual figures are depressing. According to an estimate of the FAO, the number of undernourished people in China decreased from 194 million to 142 million in the 1990s. The decrease in India was only nominal, from 222 million to 216 million. Illiteracy has also decreased more rapidly in China than in India. The difference is particularly dramatic in the case of women. Unesco statistics for 2003 indicate that a mere 48% of Indian women were literate, while the figure for China was 80%.

According to *The Economist* in its theme issue comparing India and China, the Chinese have not managed to establish successful international companies like the Indians have. However, if the average Chinese has become twice as prosperous in two decades as the average Indian, it probably does not make any difference. T*he Economist* points out that economic growth is also spread out more evenly in China than in India, because the moderately affluent middle class in China is larger than that in India. However, the leader reminds us that tough reforms are easier to push through in the Chinese one-party system than in the Indian multiparty system.

Keys to the reduction of poverty are in the hands of Indians themselves. The budget published in February 2005 promised more money for health care and the improvement of rural infrastructure. Nevertheless, the connecting thread of the budget was ”growth through jobs”.

There is a common tendency in Finland to pit the interests of the Finnish export industry and the interests of development countries against each other. Sometimes development activists make the unthinking demand that Finnish companies should not be allowed to operate in poor countries at all. However, the juxtaposition of NGOs and corporations often seem pointless when one looks at things from the perspective of the developing countries themselves. It is likely that the presence of Finnish corporations in India will create new jobs that will in one way or another also help the poor.

I discussed this issue a great deal in December 2004, when I was visiting slum projects supported by the FCA in Calcutta. The purpose of the projects was to improve the self-esteem of the poor and their opportunities for political participation so that they would be able to advocate their rights themselves and develop the schools and health care in their slums. The Indians working in these projects were by no means convinced that increasing middle-class prosperity would automatically help the poor. They were nevertheless emphatically in favour of both grassroot level development work and new jobs for India. In their opinion, the FCA and the Nokia production plant were necessary and welcome to India.

Finnish export industry does not automatically benefit India, however. With poor planning and execution, it can at worst cause irreparable damage both to natural resources and people in India, as well as to the reputation of Finnish companies. NGOs that are networked on the grassroots level can help companies to recognise such risks.

When Finnish companies start to utilise the low wages in countries like India, they should do so with especially high ethical standards to ensure that the exchange will also promote development and not only exploit people living in destitution and their meagre natural resources.

The Finnish National Fund for Research and Development would be a natural organisation to promote precisely the kind of business that would benefit both Finns and Indians. If Finns want to promote the development of India through trade, support measures should be targeted to the importation of goods requiring a high level of manual labour, such as clothes, and the export of health care, education and environment technologies. Indians are at the moment particularly interested in Finnish environmental technology. Many of the Indians interviewed for this report wished for co-operation with Finns in areas as such water treatment, waste management or the use of bioenergy.

2 India in the World Economy

JYRKI ALI-YRKKÖ, ANTHONY DE CARVALHO, PAAVO SUNI [1]

The importance of India to the world economy is still small, but is growing rapidly. In 2004 the Indian economy grew faster than at any other time since the end of the 1980s.

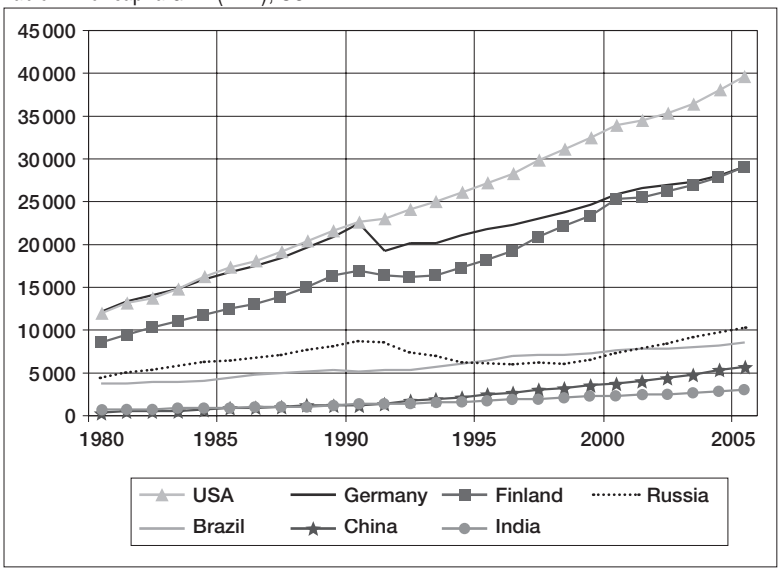
India has for a long time been a typical developing economy where production has increased slowly in comparison with population growth. Total per capita production in India was only 679 dollars in 2004. Adjusted for purchasing power parity, the figure comes to 3,029 dollars, as prices are low in India compared with those of industrialised countries. Yet the standard of living in Finland is ten times higher than in India, even adjusted for PPP. India is also much poorer than China.

Poverty is one of the greatest problems of India, even though it has decreased in relative terms due to rapid economic growth. There are about 300 million people who are classified as poor, whereas the figure in the early 1950s was about 200 million.[29] According to the World Resource Institute, 35% of Indians in 2004 lived on less than a dollar a day, and the percentage of those living on less than two dollars a day was 80%.

The weak economic development of India picked up after the 1970s. Growth was especially intense in the 1990s, and has also been quite rapid in this century. Growth is being boosted in particular by increases in services, especially in the production and export of

[1] This chapter is an abbreviated version of a background study conducted by Etla for this report. Ali-Yrkk Jyrki, de Carvalho Anthony, Suni Paavo (2005): Intia maailmantaloudessa (India in the world economy). ETLA, Keskusteluaiheita 977, accessible at www.etla.fi.

Table 1. Per capita GDP (PPP), USD



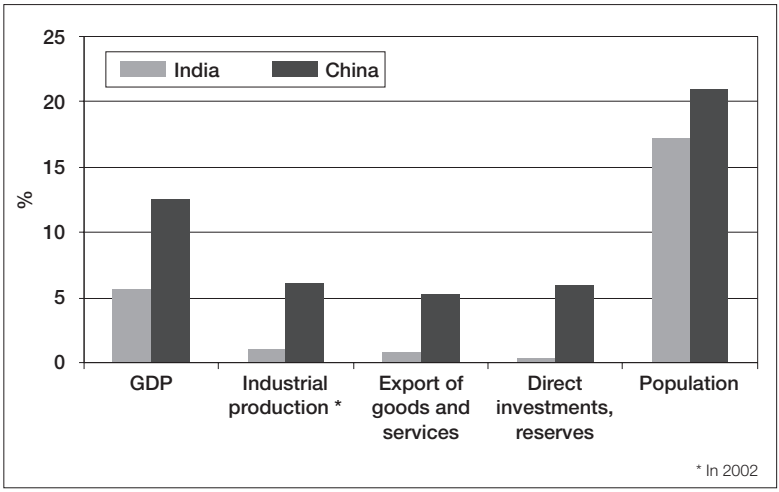
Source: IMF, ETLA

services utilising information technology. Industrial production has grown rapidly at pace with the GDP, while agricultural production has clearly lagged behind. The structural shift has made the economy less dependent on agriculture and related fluctuations in weather.

India's contribution to gross world production is small in view of its population. A population of over a billion does make the national economy a big one, however, even though the per capita figure is low. Adjusted for PPP, India's accounted for 6.2% of gross world production. Without adjustment, the figure is only 2%.

Because of population expansion, the per capita growth of GDP in India has remained insignificant for a long time. Now the rate is improving, thanks to the ageing of the population. The working-age population in India will grow more rapidly than the rest of the population for a couple of decades to come. The demographics are therefore much more favourable than in China or Europe, where it is the old age population that is increasing.

Table 2. Gross world production, industrial production, export, direct investments and population, India and China, %



Source: IMF, UNIDO, UNITAD, ETLA

For a long time, investors had little interest in India, but the robust growth has now caused them to turn their attention there. The volume of direct investment in India has increased considerably in the 2000s, although the country still receives considerably less than China.

Demographic change and the growth of foreign trade due to economic liberalisation and the consequent enhanced efficiency may push the Indian economy into long-term robust growth.

Increasing direct investments in and outsourcing of services to India have occasioned concern in the industrialised countries. There is a fear that production in developing countries will move into areas where the industrialised countries have thought in which they would specialise in the international division of labour, such as advanced IT services. India is in this respect much more competitive than industrial countries and also other developing countries, and it is only natural that Indian production in these areas is growing.[30]

However, the operations of Indian companies in these sectors remain so small that the total economic impact on employment in the industrialised countries is small. The total market for IT services is also growing rapidly, which should minimise the impacts on employment.

Economic growth in India is very different from that in China. Where China's growth was driven by investments and industry, the development in India is based on services. The main engines of growth for service production in India have been strong domestic growth of services, based on information technology, and above all the growth of foreign trade in these services, even though many other services have increased rapidly at the same time. The inefficient energy sector in India has grown rather rapidly under the government's wing. Industrial production, on the other hand, has not found a similar strong current of growth, even though it, too, has grown faster than the GDP.

A SMALL PLAYER IN THE WORLD MARKET

India's economic growth since independence in 1947 can be divided into three stages or periods.[31] Right after independence, from 1950–1975, India was a very protectionist economy and the country was in practice steered towards self-sufficiency. The second period was from 1976–1991, when economic regulation was reduced. The third period began in 1991. Since then extensive reforms have been made in the economy, triggering a real shift from central planning to a market-based economy.

At the beginning of the first phase in 1948, Indian foreign trade accounted for 2.2%of gross world trade, and fell to 0.5% in 1973. The figure stayed on this level up to the 1990s, when Indian exports started to grow at a faster rate than the world economy. In 2003, India accounted for 0.8% of world exports. Indian imports increased from 0.5% in 1973 to 0.9% in 2003. The growth in imports was accelerated by the relaxation of customs regulations, first for capital goods and later for intermediate products.

The status of India in world trade has grown slowly compared with that of China. Factors contributing to the relatively poor showing of Indian exports cited by Sachs,Varshney and Bajpai (1999) include the unclear direct investment policy of the Indian government, inflexibilities of the labour market, weak infrastructure, poor transport connections to regions of special exports, legislation that prevents the development of large corporations in sectors with potentially large relative benefits, and high duties for intermediate products.

The poor level of development of India is also apparent in its foreign trade. India's contribution to world exports in goods and services is very low in view of the size of the country, even though large economies are typically more closed than small ones. For instance, China's contribution to world trade is much larger. According to the IMF, India is still a relatively closed economy.[32]

GROWTH BEGAN WITH THE REFORMS OF 1991

The Indian term for India's economic growth from 1947 1980 was 'Hindu growth', as a low growth rate was associated in part with cultural factors associated with Hinduism.[33] Real average growth in per capita GDP from 1951–1980 was 1.5%. At the same time, the population was growing rapidly. When India gained independence in 1947, there were 350 million Indians. The figure passed the one billion mark in 2001.

Economic growth began in the early 1980s, even though at that time little economic liberalisation had taken place. Rodrik and Subramanian (2004) explain the change in trend by the fact that Indira Gandhi abandoned her predecessor's virtual hatred of entrepreneurship. Growth in the 1980s was not balanced, however, and India found itself in a serious balance of payments crisis in 1991. The background factors included a balance of trade deficit that had grown progressively since 1985, and the high price of oil caused by the war in Iraq.

It fell on the cabinet led by the Congress party appointed in June 1991 to restore foreign and domestic faith in the Indian economy.

The government devalued the Indian rupee two times in 1991 by a total of 19.5%, cut public expenditure and acquired additional funding from the IMF and the World Bank to finance the trade deficit.

The crisis led to an extensive economic reform programme led by the then minister of finance and current prime minister, Manmohan Singh. Industrial, trade and exchange rate policies were reformed. Direct investment was deregulated. Taxation, financing and the public sector were reformed. The result was that economic growth after the crisis year of 1991 was more rapid than in the 1980s. The average growth rate from 1993 to 2000 was 6.2% (per capita 4.1%).

EXCEPTIONAL ECONOMIC GROWTH NOW

The fiscal year in India does not coincide with the calendar year, but is from April to March. In the financial period of 2003/04, growth in gross production increased to 8.3% from the previous year's 4.6%. Growth was clearly more rapid than the average post-reform rate of about 6%.

Economic growth in India in 2004 was thus faster than it had ever been since the end of the 1980s. One of the reasons for the rapid growth in the fiscal year 2003/04 was good weather that increased growth in primary production to 9.1% from a decrease of 5.2% in the previous year. Growth in industrial production increased from 6.2% to 6.8%. Growth in the service sector was 8.5% compared with 7.2% the previous year. The greatest increase was in trade, accommodation services and transport and telecommunication.

Economic reforms in India have kept inflation at bay. The annual increase in consumer prices since 2000 has been about 4%. Wholesale prices, on the other hand, have risen quite fast, due for example to rises in the price of oil. Because the government has decided to ease the taxation of oil products, inflation will in all likelihood remain slight in the near future. The risk of increased inflation in the mid-term is nevertheless great owing to large deficits and loans in the public sector.

Indian public finances have been very weak in recent years. The central government and individual states have been forced to borrow annually, as tax revenues are only 15% of the GDP. Although economic growth has been rapid, public sector debt has grown since 1998 by over 17%. In 2004, it was already about 77% of GDP. The main areas of public expenditure are defence, debt repayment and subsidies. To ensure sustainable economic growth, India should have to step up its investments in infrastructure and education.

A problem that remains is the weakness of the tax system. The central government only collects about 9% of the GDP in taxes. In China, it has for example been easier to organise basic education, because the government collects about 19% of GDP in taxes.[34]

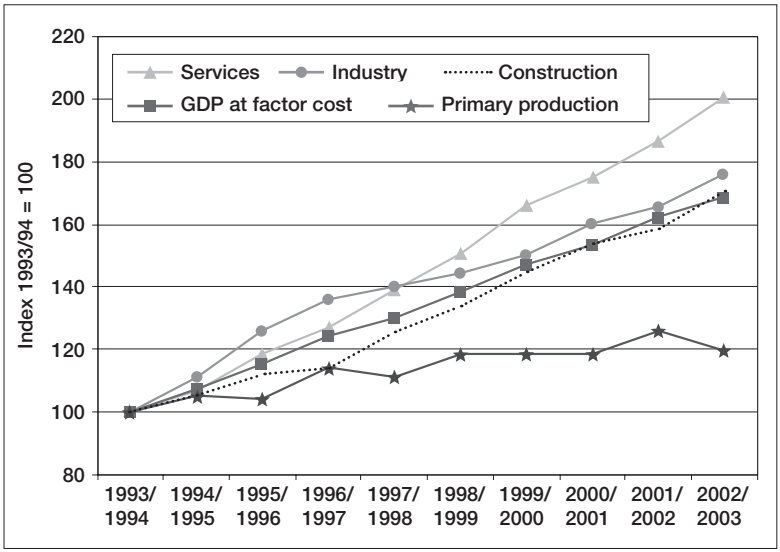
The growing budget deficit weakens the overall economic stability of India, as the interest rates will go up sooner or later. Moreover, growing public expenditure will displace private investments and slow down the growth of the domestic product. The decline of corporate investment rate (ratio of investment to GDP) has continued since 1996/97, and in this decade it already fell below the public investment rate.

The economic impacts of the tsunami in December 2004 were relatively small, although the destruction in eastern coastal areas was considerable. The damage does, however, make the balancing of the public sector in India more problematic. According to an estimate of the Indian government, the economic losses of the tsunami are about USD 1.2 billion, or about one per cent of total government expenditure.

SERVICES – THE SECRET OF GROWTH

The structure of the Indian economy has changed radically in the past quarter of a century. The contribution of primary production (agriculture) to the economy has decreased and that of services increased. In absolute terms, even primary production has increased, but the growth has been clearly below that of the average rate for total production. The contribution of industry has remained stable.

Table 3. GDP in India by sector.

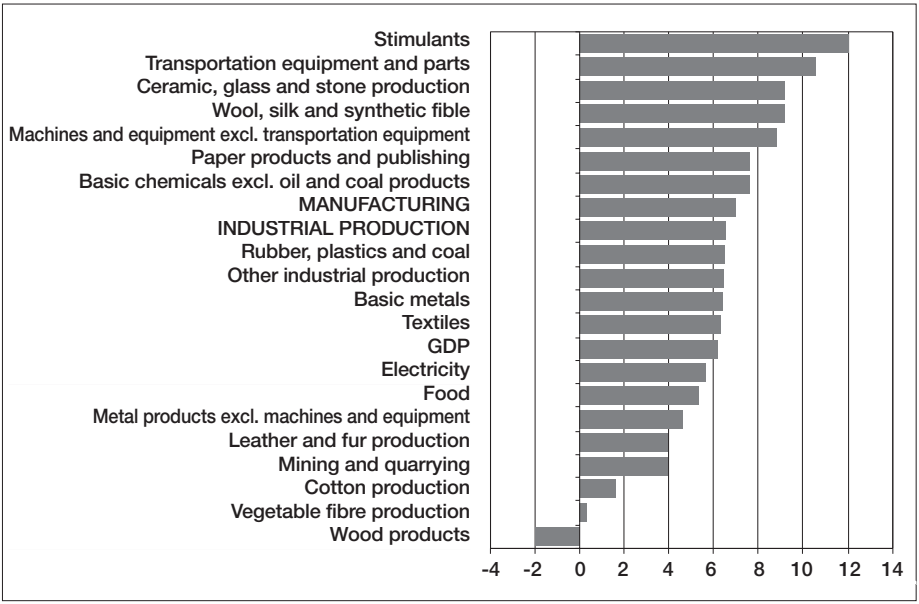


Source: UN, ETLA

Although energy production increased rapidly in the strong years of planned economy, growth has been slow in recent decades. The basic problem is that the price of electricity is too low to allow profitable production of power. According to estimates by the International Energy Association (IEA) from a couple of years back, the quality and availability of electricity production in India has deteriorated considerably in recent years, and the capacity is not enough to satisfy demand peaks. As a response, industrial plants have started to build their own power plants. The shortage of energy considerably curbs the growth potential of industry if the fundamental problems of the sector remain unsolved. The Energy Act of 2003 seeks to remedy the situation, but there is no evidence as yet that it works.[35]

The development of agriculture is very important for the overall economic development of India, because it is approximately as large as the industry. What makes primary production especially

Table 4. Average growth of Indian industrial production, by sub-group, 1993-2003



Lähde: RBI, ETLA

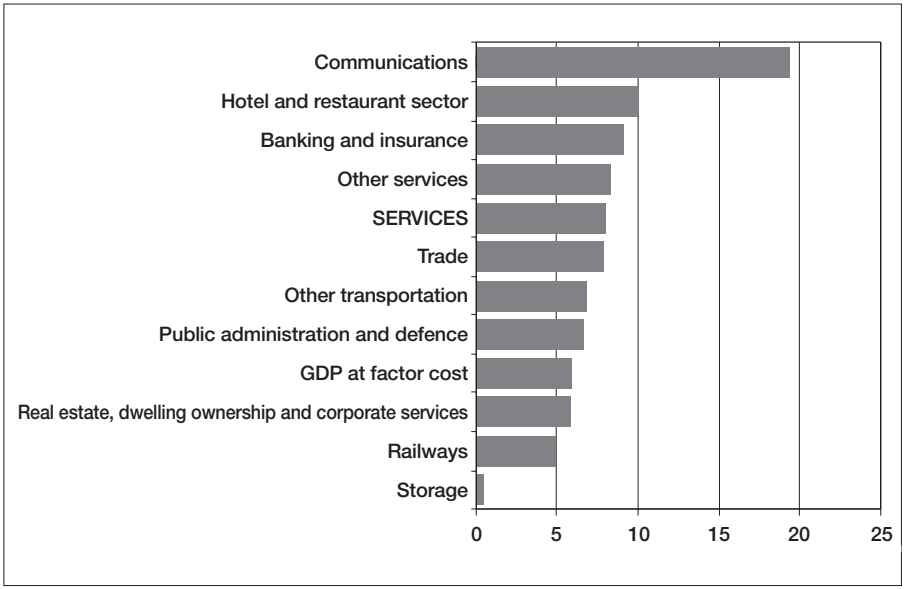
important is that over 60% of the population is directly dependent on agriculture.[36]

Agriculture remains a large factor in the economic development of India. Drought and bad harvests have generally led to a drop in the GDP. This impact was obvious in 1979. Since then the dependence of the economy on agriculture has decreased.

Industry's contribution to total production has remained fairly stable, even while the share of agriculture has diminished. The reason is that the share of service production has grown much faster than the GDP.

Of the various sectors of industry, manufacturing has grown faster than average, while roughly speaking, electricity production has followed the trend in GDP, even though growth has been smaller in recent years. The volume of mining and quarrying has clearly increased more slowly than average.

Table 5. Average growth of service production in India, 1993 – 2003



Lähde: RBI, ETLA

Indian industry did not join the industry-driven economic boom of East Asia, because the economy was not deregulated until the 1980s. Until then it was very tightly closed. The growth of Indian industrial production picked up after the reforms of the early 1990s, but it did not significantly exceed the growth rate of the GDP. The annual growth of industrial production (6.6%) and of manufacturing (7%) in the ten-year period from 1993 to 2003 can be considered good on the whole. However, industrial production in China grew by an average of 16% a year during the same period. In the fiscal year 2003/04, the volume of industrial production in India increased by 6.9%, whereas the growth in China in the calendar year 2003 was as much as 17%. However, the growth in China is already too fast for its resources, and the government is seeking to curb it.

The telecommunication market has grown fast in India, and the country has developed into a significant market for mobile phones.

The number of mobile phone subscriptions is estimated to have reached 47.3 million by the end of last year, and it has been forecast to grow to 100 million in 2007. Nokia's market share in March 2005 was about 74%. The number of mobile subscriptions exceeded the number of landlines in October 2004. The growth of the market is boosted by deregulation and decreasing call prices.[37] The growing demand is largely met by imports, but many companies have followed Nokia's example and are establishing mobile phone production plants in India.

The production of other consumer electronics, such as television sets and DVDs has also grown considerably. In 2003/04 their contribution to production in terms of value rose to about 10%. The growth in demand is boosted by the rising standard of living and demographic changes. The transport equipment industry of India has also grown fairly well with liberalisation, although there have also been fears in this sector of competition from China.

WILD GROWTH IN THE IT SECTOR

The key sector that has contributed to Indian economic growth is the production of communication services, in which IT services are also included. One of the main reasons why service production has increased faster than industrial production is that the volume of communication services has grown by about 20% annually since 1993. Other rapidly growing service sectors, such as hotels and restaurants, have kept pace with the best branches of the industry.

Indian economic growth is often said to be based first and foremost on the growth of IT services and the fact that companies are outsourcing their services to India – a phenomenon known as business process outsourcing, or BPO.

The explosive growth of the IT market – the trade in IT equipment and services is an important, albeit small factor, behind the economic boom of India. The growth of the IT sector is based first and foremost on the exportation of software services. Expanding use of the Internet has in a few years increased the value of services

exported by the Indian IT sector from about one billion dollars in 1996/1997 to nearly 16 billion in the fiscal year 2004/05. In the same period, the rupee fell against the dollar so much that the value of IT exports in rupees grew by over 30-fold. Admittedly the growth started quite low and will naturally slow down sooner or later.

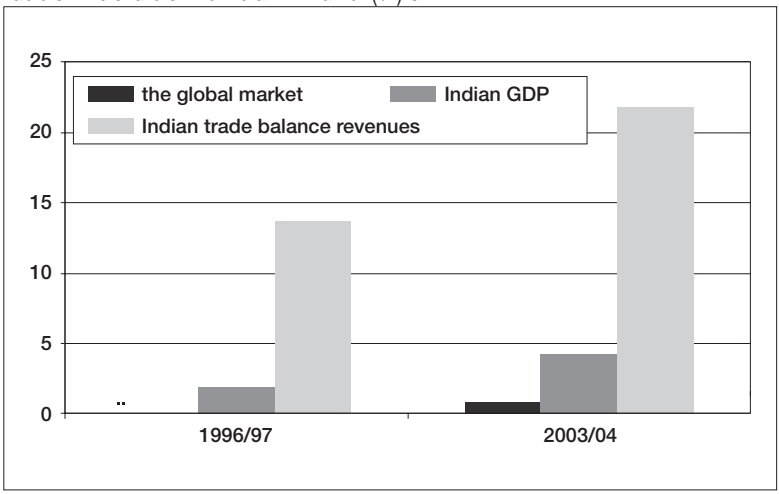
Exports account for more than 60% of the software service market in India. The volume of exports has grown explosively as western companies have outsourced their software development and especially their internet-based services to Indian producers. In the fiscal year 2003/04, BPO to India increased by as much as 54% from the preceding fiscal year. According to Nasscom, the share of services related to BPO of the export of information services is now up to about 30%.

From the perspective of the Indian national economy, the IT sector remains rather small, in spite of the rapid growth. According to an estimate by Nasscom[38], services exports will increase in 2004/05 by 30% from the previous year. While the exportation of software services to the value of nearly USD 16 billion accounts for over 8% of the revenue from India's foreign trade, it is still less than 2% of total production of India. Even the almost astronomical growth of IT services is not enough to boost the growth of the GDP substantially.

India's share of the global IT services market is growing fast, however. According to an estimate by the Indian government published in 2003, the volume of the Indian IT service sector will grow from USD 12 billion in 2003 to nearly USD 150 billion in 2012, and India's share of the world IT services sector from 0.9% in 2003 to 4.4% in 2012. The estimate puts the annual growth of IT service production in India at over one third. Exports are growing particularly fast, and are boosted above all by the growth of BPO services. India holds already more than a fourth of this market. Indian service companies are very active in the export market. A good example is their active operations in Finland.

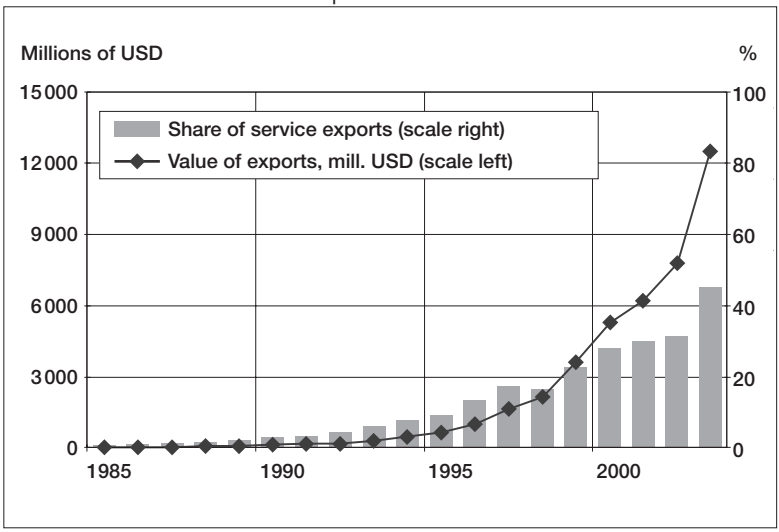
Forecasts are very tentative, however, since the sector is still in its infancy. If the international IT service market grows as predicted,

Table 6. The share of the Indian IT market (%) of



Source: Goverment, RBI, ETLA

Table 7. The value of Indian software service exports and its and their contribution to Indian service exports.



Source: Institute for Development Policy and Managment, Reserve Bank of India, ETLA

India stands a good chance of increasing its market share. The country has ample reserves of skilled labour at a competitive cost. The general proficiency in English and the time difference relative to the USA and Britain also increase the competitiveness of Indian software services. Competition with other countries with low labour costs is picking up, however. The continued success of India calls for active development of the education system, taxation, labour legislation and telecommunication policy.[39]

FAT YEARS AHEAD

The economic prospects of India remain good, even though growth is expected to slow down to 6% to 6.5% and inflation is estimated to pick up slightly in 2005 and 2006. The slowdown of growth is affected by the following factors:

- Weather conditions, especially the bad monsoon of 2004.
- Imbalances in the public sector.
- Slowing down of economic growth in other Asian countries.
- Rising price of energy and blackouts in several regions in India.

The main risk to growth has to do with the indebtedness of the public sector and the consequent rise in the level of interest and higher inflation. Factors that support growth are relatively low interest rates, economic reforms, reconstruction after the tsunami, and the expiring of the WTO Agreement on Textile and Clothing (ATC) in the end of 2004.

The value added tax reform enforced in April 2005 was an important economic reform. Exactly the same in practically all the states, the new VAT simplifies the complex tax regime and lowers prices, at least in theory. More than anything else it will help India develop into a uniform market area. In the old system, taxes inflated the price of commodities coming from other states. Inspections on state borders delayed the flow of goods, increased the need for warehousing and eroded competitiveness. The reform will sig-

nificantly improve the functioning of the economy, unless interest groups succeed in undermining it.[40]

The expiring of the so-called Multi-Fibre Agreement may increase Indian textile and clothing exports significantly. The contribution of the textile and clothing industry to total goods exports is slightly over 18%. The advantages of the Indian clothing industry are competitive labour costs, skilful designers and abundant sources of raw materials, such as cotton fields. However, India is expected to benefit much less than China from the liberalisation of the textile trade, for the reason that Indian legislation has prevented the formation of large corporations in the textile industry. Small Indian companies are hard put to compete with goods produced by Chinese mass production. Industrial productivity in India is only slightly over 60% of what it is in China. Indian textile exports are nevertheless expected to grow by over 15% annually in the near future provided the government amends the rules of the game enough.[41]

Indicators for the demand of technology, such as semiconductor sales, suggest that the growth of technology services, so important to India, may well slow down in the near future. Industrial production will continue to increase at a rate of about 6% to 7% annually, although the expected slowdown of economic growth in other Asian countries and China may limit the growth.

INDIA – THE NEXT ECONOMIC MIRACLE?

Indian economic growth has accelerated considerably in the past couple of decades. Compared with that of China, however, it has been slow, and India has not succeeded in entering the industry-driven growth spiral experienced by the rest of Asia.

Apart from manufacturing, economic growth in India has come from the growth of services, especially the astronomical growth of the IT services sector. Owing to good skills in English, abundance of educated labour and low labour costs, India has become a significant exporter of services internationally.

The prospects for the Indian economy seem good for the next 25 years. Demographic developments will support the growth of the workforce, as will increased savings and investments. The IT service sector will probably continue to pull the rest of the economy with it, and the productivity of India will probably develop favourably otherwise as well.

Indian economic growth is expected to reach nearly 7% in 2004 and 2025.[42] Even faster growth is possible, because the Indian economy remains an underachiever compared with other countries at a similar level of development. Studies suggest that the Indian per capita GDP should be up to 4 or 5 times what it is today. This implies much better future prospects for India, because technological 'catching up' offers a huge potential for growth. By contrast, China with its strong growth is an overachiever, which increases the economic risks for that country.[43]

The risk of weaker development remains great, however, even if there are no external shocks to the economy. The large developmental differences between states in India, the rapid growth of energy dependency, undeveloped infrastructure and especially the poor state of government finances in the short-term put the favourable prospects at risk.

From the Finnish perspective, India will probably be a favourably developing market, where rising purchasing power will increase the demand for such commodities as paper, mobile phones and energy production equipment. On the other hand, Finland can also benefit from the import of Indian IT services, enabling us as a national economy to focus on the production of the more highly processed goods and services. It is likely that the investments of Finnish companies in India will increase in the near future. A new feature may be that, in addition to industrial companies, also Finnish software companies will establish units in India.

The inevitable risks of economic development must not be forgotten, however. Apart from domestic factors, the risks for India also include factors involving the development of the world economy: Will increasing protectionism in the USA threaten IT

exports? And what about competition in the sector of IT exports? Even many Indian service companies are outsourcing their production to countries of even lower costs, such as Bangladesh. What prevents the clients of such Indian companies from moving their custom directly to these countries?

Should China be burdened with a recession, it can cause trouble for Indian industrial production because of escalating competition. The management of risks in Indian domestic development is not easy either. For instance, the imbalances of the public sector, great regional differences in the standard of living, and whether India will succeed in developing the infrastructure needed by strong growth, these are all factors that demand that the government continue to consistently push the difficult reform process. The new Value Added Tax that was enacted in April 2005 was a promising step in this direction.

3 The India Phenomenon and Finnish Companies

MATIAS MÖTTÖLÄ

India is emerging on the maps of Finnish companies, which are now establishing themselves in India as they did in China 15 years ago. A new factor is the outsourcing of IT services.

For a long time, India was a distant and unknown country for Finnish companies, and trade with it was negligible. Even today, only a few Finnish companies have an established position and production in India. The situation is, however, changing rapidly.

It is Nokia that is attracting the greatest attention; it announced in April 2005 that it would build its tenth mobile phone factory in Chennai, India. Two months earlier, Elcoteq opened a factory in Bangalore. Now Nokia's subcontractors are expected to announce plans for moving their production to India.

India is also viewed with interest by other than mobile phone manufacturers. Finnish companies are likely to invest more in India over the next couple of years than they did in the whole of the 1990s. One of the new elements is the IT service sector, where several Finnish companies are considering cooperation with Indian firms. According to Matti Kerppola, senior investment manager at Finnfund, one of the reasons for the increasing interest in India is that many Finns have successfully established production in China, and are in a position to direct resources elsewhere.

India has hitherto been a demanding market for Finnish companies. According to Kerppola, companies should be prepared for initial difficulties in India and not expect immediate profits. "You must go to India to stay, just like in China," he says.

FINNISH IMPORTS FROM INDIA EQUAL THOSE FROM THE DOMINICAN REPUBLIC [44]

The fact that Finnish companies regard India as remote is illustrated by trade figures. In 2004, India was the destination of only 0.5% of Finnish goods exports.[45] The volume of trade with India is about EUR 260 million. Although India is a superpower with over a billion inhabitants, Finnish exports to India are on approximately the same level as those to Greece, Ireland, Portugal, South Africa, Singapore, Taiwan, Thailand and Ukraine. Trade with India showed a clear surplus last year, which means that Finnish goods imports from India are even less than exports: 0.3%. Finland imports approximately the same volume of goods from India as it does from the Dominican Republic.

The figures do not tell the whole truth, however. Finland also imports a large volume of goods from India through third countries, since the EU is the largest trade partner of India and its most important source of investments. India accounted for 1.6% of the EU's total imports in 2004. Considering the size of India, even that is a very modest figure.

The growing enthusiasm for India is reflected by the fact that Finnish exports to India grew by 26% in 2004. This is a great leap, as Finnish exports to India increased from 1988 to 2003 by an average of 6% annually.

Finnish exports to India are more and more dominated by high-tech products. In 1988, they accounted for only 4% of all exports, whereas the figure for 2002 was over one quarter. At the same time paper industry of exports to India fell from a quarter to less than 16%.

Finnish imports from India have hitherto consisted largely of low-tech products, such as textiles, textile products, leather products and shoes. These accounted for 60% of all imports from India in 2003. However, imports of more highly developed technological products, such as electro-technical machines and appliances, motor vehicles and transportation equipment as well as chemicals, has grown rapidly in recent years.

Table 8. Top-10 Finnish export articles to India, 2004

	SITC-code	MEUR	Percentage %	Change, %
1	Radio, television and communication equipment and apparatus	59,7	23	42
2	Generators and motors	55,6	21	19
3	Paper and paperboard and products thereof	42,4	16	6
4	General industrial machinery and equipment	22,0	9	129
5	Other electrical equipment	19,4	8	17
6	Machinery for particular industries	18,6	7	23
7	Instruments and apparatus	5,5	2	-49
8	Inorganic chemical elements	5,0	2	76
9	Office machines and automatic data-processing machines	3,8	1	449
10	Other metals	3,7	1	-31
	Total of the top 10	**235,7**	**91**	**24**
	Total Finnish exports to India	**259,0**	**100**	**26**

Source: National Board of Customs, change % from the same time previous year

Table 9. Top-10 Finnish import articles from India, 2004

	SITC-code	MEUR	Percentage %	Change, %
1	Clothing and accessories	34,8	31	3
2	Textile yarn, fabrics, etc.	17,5	15	2
3	Medicinal and pharmaceutical products	8,5	8	419
4	Organic chemicals	7,2	6	10
5	Miscellaneous manufactured goods	5,6	5	106
6	Metal manufactures	4,4	4	51
7	Electrical machinery	4,0	4	-35
8	Ore and scrap metal	2,7	2	>999
9	Mineral products	2,5	2	87
10	Fruit and vegetables	2,2	2	10
	Total of the top 10	**89,3**	**79**	**20**
	Total Finnish imports from India	**113,3**	**100**	**22**

Source: National Board of Customs, change % from the same time previous year

A new investment protection agreement between Finland and India was signed when Minister of Trade and Industry Jari Vil visited the country in 2002. In the future, opportunities for Finnish companies will open up in India within all manner of EU projects. At an EU's India Summit held in November 2004 in The Hague, the EU and India signed an agreement on strategic partnership. Negotiations on the content of the partnership are still pending. The role of Finland in relations between the EU and India will be high profile in the near future, as the EU–India Summit will be held here during Finland's EU presidency in 2006, when a major economic summit between EU and India will be held.

PRODUCTION FACILITIES IN THE 1980S

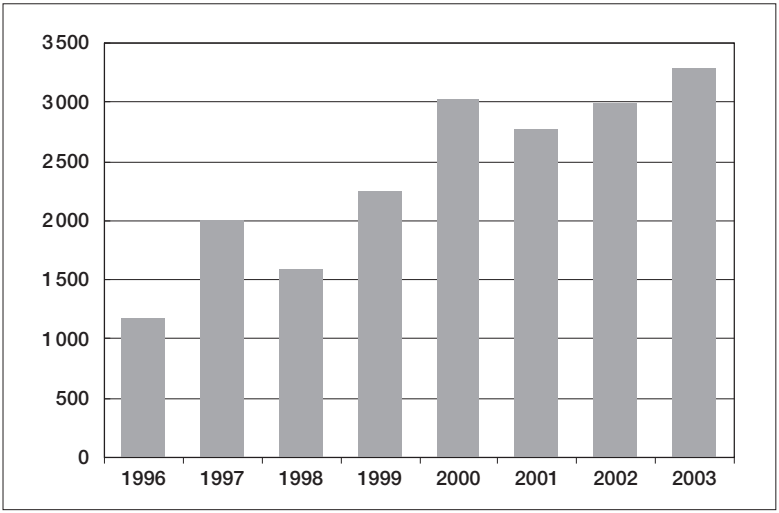
As a venue for production, India has fascinated Finns for a long time. The development finance company Finnfund began planning their first project in India back in 1981, and Kone and Wätsilä started production in India in the mid-1980s. At the time, the political regime espoused an Indian brand of socialism, which limited the operations of foreign businesses. However, Kone and Wätsilä, both of which went to India early on, are Finnish success stories there. Huhtamäki and Metso Minerals have also had significant production in India for quite some time.

The cumulative investments of Finnish companies in India are approximately EUR 50 million. In 2003, Finnish firms in India had a total of nearly 3,300 employees. Well under one half of them worked in production. Most were in maintenance, sales and marketing.

If current investment plans are carried out, the investments of Finnish companies in India may in the next couple of years increase fourfold to EUR 200 million, with their personnel doubling to 6,000 to 7,000 people.

The majority of Finnish companies have only been exporting goods to India. Now a new phase is beginning, with Finnish firms starting to produce more and more in India and even exporting Indian-made goods to neighbouring regions. Apart from Nokia and Elcoteq, many other Finnish companies are looking into India as a

Table 10. Personnel of Finnish companies in India.



Source: DIrect investment statistics of the Bank of Finland

location for production. Their interest is increased by the continuous lifting of restrictions to foreign company operations in India.

The operations of Finnish companies inIndia can be devided in three categories.

The most important is **import and export operations**, which in the global economy includes both exports to India from Europe or from the Chinese production plants of Finnish companies, as well as the production of India-based Finnish companies for the Indian home market and other countries.

Another mode of operation is that of TietoEnator and Indian IT and software companies that operate in Finland. In different ways, these companies are utilising inexpensive and skilful IT service labour to boost the efficiency of their operations in Finland. Finnish firms have mainly outsourced software design to India. A new type of operation is the outsourcing of research and development functions to India.

The third group presented here is **business based on imports from India**, such as contract manufacturing of clothes or the im-

portation of foodstuffs or pharmaceuticals. There is much unutilised potential in the field of imports, and one can expect it to gain in importance in the future.

1. EXPORTS AND PRODUCTION

The number of Finnish companies established in India has more than doubled in the 2000s. In 2001 there were about 30 such Finnish firms. In early 2005, already over 70 Finnish companies were present in India either through their subsidiaries or joint ventures with local companies. In addition, about a hundred Finnish firms export their products to India or operate on the market through local representatives.[46]

All established companies are exporters in practice, but a decreasing number of them are solely in traditional exports, selling 100% Finnish goods to India. Globalisation has introduced production networks that extend from one country to another. Many Finnish firms are exporting to India products that are manufactured in their Chinese factories. On the other hand, India has started to interest them as a venue for production because it allows them to export goods to neighbouring regions, such as the Arabian Peninsula.

Nokia, the telecom flagship

When Jairam Ramesh, an MP of the Congress party, met Nokia CEO Jorma Ollila in 1996, he wondered if it were not time for Nokia to start making mobile phones in India. Ollila assured him that a production plant would be established there. "Since then we have been hearing the same thing year after year. 'We are coming, we are coming,'" laughed Ramesh, a well-known economist and columnist, in his office in New Delhi in February 2005.

The wait has been long, but now Ramesh's wish is coming true. Nokia announced in April that it would build its tenth mobile phone factory in Chennai. In four years Nokia intends to invest

USD 100 to 150 million in production in India. When finished, the factory will employ about 2,000 people.

Hitherto the phones sold by Nokia in India were mainly produced in China. The growth of the Indian mobile phone market has exceeded all expectations, however. Nokia's sales in India grew 2.5-fold in 2004 to EUR 1.36 billion. According to GFK, a German market research institute, Nokia's share of Indian mobile phone sales was about 74% in March 2005.

Nokia is one of the first mobile phone giants to launch production in India. The Korean LG has already opened an assembly plant in Maharashtra and has announced it will also start mobile phone production there. The Indian government is also expecting investments from Alcatel and Ericsson. Dayanidhi Maran, India's minister for communications and information technology, believes that foreign mobile phone companies will invest a total of USD 800 million in India in the fiscal year 2005/06.[47]

Of contract manufacturers, the Finnish company Elcoteq was in India before Nokia. It now has a production plant in Bangalore waiting for orders. When the plant was inaugurated in April, Elcoteq had not announced any orders yet. However, the company did promise that it would export phones from its Indian factory to south and west Asia and east Africa.

Up to 150 million users in 2010

The view from Gurgaon, Nokia's head office in northern India, is reminiscent of Irving, Texas – and many other towns built to cater for new technology industry. Gurgaon is an office community that has sprung up south of the Delhi airport. Nokia's head offices are in a shining glass tower, in the middle of still undeveloped land.

In the Nokia foyer there is a multimedia show about smart phones and accessories that most Indians will never be able to afford. However, thanks to the growing middle-class mobile phone demand has grown exponentially and now the more expensive models are also selling in India. Whereas there were five million mobile phones in

India in 2001, at the beginning of 2005 some 49 million Indians already had a mobile phone. The number of users is expected to increase to 210 million by the year 2010. There are already more mobile phone subscriptions than landlines in India. Even according to the most conservative estimates, the number of users will grow by 1.2 million every month. The growth is across the board in all segments. Jay Vikram Bakshi, Nokia's head of corporate communication in India, waves the 9500 Communicator in his hand: "Even if only one per cent of Indians were to buy this phone, it means 10 million users," he reminds us.

Nokia's greatest marketing efforts are targeting the rapidly growing Indian middle class. Calls are cheapest in the world. People change operators at the drop of a hat, and two out of three customers use prepaid phone cards. Indians also love additional services. Since computer penetration is low, there is great demand for mobile data and SMS services. There are plans to open third generation networks for testing in early 2006, and the first 3G networks will probably be launched in 2006 and 2007.

However, Nokia as well as other mobile phone giants also find it important to reach the poor rural areas of India. Nokia is selling its phones in rural areas using 51 Nokia buses furnished as stores. The buses visit the same villages bi-weekly for six months. The idea is to find both buyers and retailers for Nokia phones.

Networks alone are not enough for profit

To reach the mass of people with low income, mobile phone networks must also be extended. Currently there are networks in about 2,200 urban areas. The aim is to increase this figure to about 5,000 by the end of the year. Bakshi estimates that mobile phone penetration will reach 20% when the networks cover 60% of the land area.

Conquest of the Indian market is something that all the major mobile phone network suppliers have in their sights. However, owing to tough competition, network construction has been bad business in India. "Perhaps we must accept the fact that we get the

volume here and the margins from somewhere else," says Shiv Bagrodia, director of Nokia's new network operations in South Asia.

The European GSM standard and the American CDMA are advancing side by side in India. Nokia's strengths are in GSM, but they also have their eyes on the Indian CDMA market. The company has transferred their expertise from the USA to the CDMA development centre established in Mumbai.

In the field of network operations, Nokia has also expanded into maintenance services. Last year Nokia made a deal with India's leading operator, Bharti, for the upgrading and maintenance of networks in five 'telecom circles'.

Elcoteq buys components from India

The presence of Elcoteq in India is part of the company's new phase of expansion. Along with its new factory in Bangalore, Elcoteq has also increased its production in Russia and Brazil. Elcoteq wanted to go to Bangalore, even though wages in the IT sector there have increased by up to 20% annually. They were certain to find skilled labour and component suppliers in the region. Elcoteq estimates that they will buy a third of their components in India.

The Bangalore manufacturing facility is small for Elcoteq. Usually the firm's production plants are three times as large. When the new factory is in full operation, it can employ over a thousand people. The salary of the newcomers is about EUR 80 to 100 a month.[48]

After Nokia's announcement we may assume that more than a few of its Finnish subcontractors will decide to go to India. One such company to consider moving to Chennai is Savcor, which supplies covers for Nokia's phones.

The range of firms that will follow Nokia to India may be greater than in China, for example. Even Finnish software companies may establish units in India. However, as Bakshi reminded us, Finnish software developers will meet with tough competition to be accepted as Nokia's subcontractors in India. The local companies are both accomplished and inexpensive.

For instance, the Finnish-Swedish company Citec, which produces technical documentation for Nokia, has already gone to India. It has 25 people working in India, and is planning to expand its Indian operations to planning consultancy. Other customers in Citec's clientele include ABB and Boeing.

Wätsilä found a 'Gandhian' niche

Wätsilä is the largest Finnish energy company operating in India. At the beginning of 2005, its turnover in India was EUR 130 million. Wätsilä has a long history on the subcontinent. It started exports to India in the mid-1980s, and in 1987 it opened an assembly facility in Khopoli that is still in operation today.

Wätsilä's main products in India are heavy fuel oil power plants that are used for local auxiliary power supplies. With its market share of about 70%, Wätsilä dominates the market for heavy fuel power plants. The company also sells gas power plants, mainly in South India. Its power plants in India have a combined capacity of about 3,000 megawatts. Wätsilä produces about 200MW worth of new capacity annually.[49]

Wätsilä's success is facilitated by the chronic power shortage in India. Although there is a lot of new capacity under construction, the shortage will continue for years to come. In this situation, many industrial plants are forced to guarantee the supply of energy by themselves. This has created lots of opportunities for Wätsil . Local energy production is all the more important because of the enormous wastage of electricity in India's in many ways deficient power grid. Wätsilä's small-scale, local 'Gandhian' energy production has proved to be a viable alternative to the 'Nehruan' thinking of large power stations.

The demand for Wätsilä's oil and gas power plants will not grow much any more, estimates Debashish Mazumdar, Wätsilä's regional manager from north India. Wätsilä is now looking for customers in marine technology. At the start of 2005, Wätsilä announced that it would begin to manufacture reduction gears for marine engines in Khopoli.

India's role in Wätsilä's production chain is changing. An increasing share of its Indian production goes to exports to nearby areas, says Mazumdar. However, demanding parts for its facility are not manufactured in India, but are imported from Finland and Italy. The company has 850 employees in India.

India can make do without expatriates

Fortum has also had a hand in solving energy problems in India. It participated in the construction of a network connecting Indian states, mainly by upgrading communication systems. The project received considerable funding from the World Bank and the Asian Development Bank. Fortum used to have an office in India, but operates there currently through an agent.

Energy production and transmission in India was opened up to foreign competition in 1990, but distribution is still undertaken under local electricity boards.

One of the opportunities for Finnish companies might be emission reduction in the Indian energy industry. Indian energy production is based on coal, whose increased use has exacerbated India's emissions. Until now India has not paid much attention to the Kyoto Protocol, because the country's main goal is the strengthening of its own energy production. However, the government has supported the development and utilisation of renewable forms of energy. Finnfund's expert Anand K. Sethi considers energy production from biomass a significant business opportunity in India. One of the experts in this area is Wätsilä Biopower.

According to Mazumdar, Wätsilä's success in India is based very much on the fact that it found a good Indian partner right at the start. "Finland has a dominant role in the joint venture, but the Indian partner has been very useful, especially when India was still a protected economy."

Wätsilä's office in north India is situated in a modern industrial park in Noida, an industrial town adjoining New Delhi. Mazumdar shows us his office, where Finnishness is represented by wooden

tables and light-coloured walls. But there is not a single Finn, or any other expatriate in Wätsilä. The last foreigner, a French expatriate, left India three years ago.

According to Mazumdar, the Finnish influence is also discernible in the corporate culture of Wätsilä India. The company has adhered strictly to Finnish business ethics. Mazumdar points out that this has not been a bad thing, even though the company does business with the corrupt public sector. "Although we have followed Finnish codes of conduct for twenty years, we have always been successful. Of course there have been problems, and we have had to say no to some commissions."

According to Mazumdar, the secret of success in India is to use Indian labour, like Wätsilä. Components, too, should be acquired locally as far as possible. "Using Indian resources brings local support – economically and politically."

Will a Finnish paper mill go up in India?

Would it be worthwhile to build a Finnish paper mill in India? The answer remains uncertain. UPM has said it is considering India, but the company refuses to say anything about the schedule of possible decisions.

At the moment, Finnish paper giants only sell in India. They import their paper from abroad, including Finland. This explains why imports of Finnish paper products by India were worth 42 million euros in 2004. UPM has the best market position of the Finnish companies in India. The Indian sales of StoraEnso are less in monetary terms, but the company is still estimated to be the market leader in high-quality magazine paper in India. StoraEnso has a sales office with five people in New Delhi, selling an annual volume of 30,000 to 50,000 tonnes of paper to India from several European countries. The company does not have any investment plans for India.

India is an attractive target, because its own paper industry has developed slowly. Conditions for foreign paper industry are getting better: international investments are now allowed a hundred per

cent, and the tariffs for wood products, which used to be a major obstacle, have come down from 140% to about 30%.

Internationally speaking, Indian paper mills are small and technically old-fashioned. The Indian Ministry of Commerce and Industry estimates that the utilisation rate of paper mills is 60%, which is very low internationally. Since the demand for paper is growing rapidly, they are looking at upgrading the machines and building new ones. Based on existing plans, it seems that more than a million tonnes of paper production capacity is coming to India in 2004 to 2007. Indians have up till now mainly invested in the modernisation of their pulp machines. Paper machines are probably next in line.[50]

There are already signs of this. Andritz Finland is building parts of a paper machine for Indian AP Paper. The components come from Kotka in Finland. Metso Paper has supplied paper and pulp manufacturing equipment for over 30 clients in India and is now considering whether it should build an assembly plant for pulp and paper machine parts there. Metso believes it will get a deal of at least USD 100 to 200 million for new machines in India.[51] Metso Paper is already producing a small part of its components in India, but is considering an increase in volume.

The Indian paper industry is very undeveloped. The total production of paper in India in 2002 was in excess of five million tonnes, while the figure for Finland in 2003 was over 13 million tonnes. Growth is slowed down by the shortage of raw materials. Most of it is imported from abroad, mainly as pulp. The government owns a great part of India's forests, and does not permit logging companies to fell as much as they would like. According to a report prepared by Jaakko Pöyry Consulting for the Indian Ministry of Commerce and Industry, the country should increase the recycling of paper and the importation of waste paper.[52]

The largest Finnish employer in India in the paper sector is Huhtamäki, which in 1999 acquired a packaging company named The Paper Products Ltd. from India as a joint venture. In its three production plants, PPL manufactures flexible packaging for the Indian and nearby markets. The factories are located in Thane and

Nagpur in the state of Maharashtra and in Hyderabad, and they employ over a thousand people. The sales of PPL are growing. In 2004, the volume was about EUR 80 million.

Also Eltete, a packaging company from Porvoo, Finland, is operating in India. The company has received funding from Finnfund. Eltete has a production facility in Gujarat.

Kone's success spurs on the metal industry

If you are in the underground in Delhi, look around. The escalators and lifts in the stations are part of a Finnish success story in India. They are manufactured at Kone's factory in Chennai. In summer 2004, Kone received an order for 64 escalators, the largest such order in the history of India.

The deal further strengthened Kone's firm position in India. Last year, the company bought the lift sales and maintenance operations of the Indian company Bharat Biljee. With the acquisition, Kone's market share came close to 30% in the sales and maintenance of lifts. Kone will double the capacity of its factory in 2004–2006.

Kone has 700 people on its payroll in India. Its turnover in India is about EUR 26 million. Operations are moderately profitable at the moment, but as late as 2002 the subsidiary was making huge losses.[53]

Kone launched its Indian operations in 1984 by establishing a joint venture with an Indian company, Beacon Kone, which opened the Chennai facility in 1987. Five years later Kone bought out its partner. Kone has spread wide in India; it has maintenance and sales offices in 30 cities. The Chennai factory also produces lifts and escalators for export to nearby countries. However, the factory is not part of Kone's global production organisation, but an independent unit. The most advanced models are not assembled in Chennai. Kone imports parts of lifts for luxury hotels, for instance, from abroad.

Road projects bring orders for Metso

Kone is the largest Finnish player in the metal industry in India, but many other firms are hopefully looking there as well. This has been the case for a long time. Matti Kerppola, senior investment manager at Finnfund, has a list of 88 projects from 1980 to today. Most of the projects are in the metal products industry. Only a few of the applications have led to a positive funding decision.

Apart from Kone, one of the first representatives of the Finnish metal industry in India was Fiskars. Fiskars established a scissor factory in Pune in the mid-1980s, which it sold recently, mainly because of problems in the marketing of their scissors.

Infrastructure projects in India provide opportunities for Finnish machine manufacturers. One firm that seized the opportunity was Metso Minerals, which sells mining drills and road-building equipment. The company has a factory in Faridabad and a foundry in Ahmedabad. Metso Minerals has nearly 200 people on its payroll in India. The company says it is considering investment in an additional several million euros to expand its production plant and its foundry.

"Increasing our capacity ties in with our plans to increase exports from India. Local production is cost-efficient and the location is good with regard to the Asian market," says Metso Minerals President Bertel Langenskiöld in a press interview.[54]

The Indian prospects of Metso Automation are not as bright. "We have not received a single order for large machines from India, because foreign investments are still very small," says Teuvo Laaksonen, managing director of Metso Automation Projects. "There is intellectual capacity in India, but we have yet to see a dynamic that would take us ahead fast. Nothing is happening in India within the next five years that would be significant to us."[55]

Many other Finnish companies have also received orders from India. Outokumpu Technology has made several deals in India, the most significant of which was participation in the expansion of a EUR 25 million zinc benefication plant. Rautaruukki has retracted part of its somewhat ambitious plans, but is still selling technology in India. KCI Konecranes sells cranes manufactured by it in China in

India. Kalmar Industries, which is part of the Kone Group, received an order in March for cranes for the new port in the Mumbai area. Sandvik and Rolls Royce Marine, both in foreign ownership, are exporting parts made in Finland to India.

2. OUTSOURCING OF IT SERVICES

The triumphant march of the Indian software and IT sector has been the subject of frequent discussion for quite some time. According to the wildest estimates the laws of trade are breaking down, because India is able to compete both in the field of low-cost labour and in IT products that require top expertise.[56] What can the west and Finland do in this situation?

It is true that India is more competitive than industrial countries or other developing countries when it comes to IT services.[57] According to Nasscom, the National Association of Software and Service Companies in India, the salary of a software specialist with 3 to 5 years of experience is about one third of that in the USA and a fourth of that in Britain. According to a survey by Deloitte, the difference in wages between India and the United States can be up to eight-fold.[58]

Prashant Shani, managing director of Technovate, an Indian firm selling outsourced travel booking services, emphasises that it is not enough to have cheap labour. "India has been ahead of other countries and has received a lot of outsourced services. But now we must move up in the value chain."

Shani reminds us that cheap English-speaking labour is also available in other countries than India, such as the Philippines. Therefore Indian companies must be able to offer something more, or they will not be competitive in the future. According to Shani, the answer lies in efficiency or product development, not merely in invoicing as many hours as possible from western customers.

In addition to low wages, the other principal advantage of India is English. An estimated 50 million Indians are able to work in English.[59] Moreover, Indian IT services are considered to be of good quality. The IT company Capgemini made a study recently in

Holland, comparing the local and the Indian unit in similar projects. Their finding was that the work was done for 70% less in India, and still the quality was better there.

Nasscom is worried about the supply and availability of qualified labour in service firms and research institutes. Every year, 2.5 million students take a vocational or university degree in India, but only a small number of them are sufficiently qualified and talented to undertake jobs requiring high expertise. According to Gartner consultants, India may lose its advantage to the Czech Republic or Poland if it does not raise its level of education.[60]

Top expertise and call centres represent the two poles of Indian IT services. There are a lot of experts in India, but not an endless supply. Competition has already raised their salaries significantly. International firms are now paying approximately a thousand dollars a month for a beginning expert, and wages in Bangalore are already higher.

With the latest trend, the wages of newly graduated IT professionals have come down 6 to 7% in a year, while the wages of senior employees have gone up by as much as 30%. In 2005, nearly 300,000 new IT professionals will graduate from Indian schools.[61]

Indians are selling services in Finland [62]

The impacts of the Indian IT miracle are felt already in Finland, too, but only in a limited way. Finnish companies outsource almost exclusively software development to India, the main Finnish outsourcing companies being Nokia and TietoEnator. It is difficult to get a comprehensive picture of the situation, however, because many firms do not like it to be known that they are having work done by cheap labour.

TietoEnator has 120 employees in India as a result of a corporate acquisition last year. India is mainly a subcontracting location for the company, not an end market. TietoEnator has announced that it intends to increase its production considerably in low-cost countries. In addition to India, the company has operations in the Czech Republic, the Baltic countries, China, Russia, Malesia and Indonesia.

There are now about half a dozen Indian software companies with operations in Finland, including Wipro, Tata Consulting Services, Infosys and Zensar. They have all come to Finland in the late 1990s or early 2000s, and they operate mainly as subcontractors to software developers. Their clients include companies that use software as tools, without the software constituting core operations for them. Such clients are banks and insurance companies, for example. A second group is clients like Nokia, whose core operations and products also include software. Nokia has commissioned part of the development of the Symbian operating system to the Indian Wipro Technologies. Wipro has established a development centre in Tampere and is selling its services in Finland, but producing them mainly in India. Wipro has about 20 employees in Tampere.

Indian companies come to Finland to find customers and to increase their competence. In 2004, Indian companies had around 150 to 200 employees in Finland, some of who were Finns, some Indians. Most of the project personnel worked in India. In all about a thousand people were employed in Finnish projects in India. It is obvious that the operations of Indian companies in Finland and with Finnish companies is still not very extensive.

For instance, Digia, which supplies software design services for Nokia for the Symbian operating system, is partly in competition with Wipro, but is for now relying completely on Finnish labour. As it grows, Digia may consider establishing some operation in countries with lower labour costs.

India Has Competition, Too

Indian software houses will try to move on to high-end services. Most of the work they do currently is pure and simple subcontracting, i.e. coding where the customer has specified the technology and architecture of the software and also carries the responsibility for design. Indian companies will in the future try to gain a greater role in design and choice of technology.

Finnish justify outsourcing mainly by savings. A programmer's salary in Finland is five to ten times as much as in India. However, the difference in cost is considerably smaller if we take into account other costs of subcontracting, such as the subcontractor profit.

Another stated reason for outsourcing is to speed up product development. Some firms have outsourced the support and upgrading of their old products to Indian companies, enabling them to focus their own resources on the development of new products and technologies.

The software subcontracting by Finnish companies of all sizes to India will probably increase in the future. However, India is not the only country where outsourced programming services can be bought. It is quite possible that, at least from the Finnish viewpoint, Russia and countries in eastern Central Europe will be in increasing competition with India.

Research and development is seeping to India

The role of India is also growing in terms of the research and development done there on behalf of Finnish companies. Finnish companies operating in India need *in situ* R&D to be able to adapt to local technology and markets. But it increasingly seems that R&D operations undertaken with a view to wider markets are also moving to India.

As the Indian mobile phone market grows exponentially, tastes diverge and demands multiply. Nokia, too, should be doing product development where the market is so as to be able to respond to changes in demand promptly and in a flexible manner. Nokia's most successful mobile phone in India has been the 1100. The specifically Asian features of the phone include a flashlight and rubber-like casing that protects the phone from dust and prevents it from slipping out of sweaty hands. Nokia was also the first mobile phone manufacturer to introduce a phone with texts in Hindi in 2000. The aim is to launch nine Indian language versions by the end of this year.[63]

Nokia 1100 was developed in Copenhagen, but everything indicates that the next India hit will be developed by Nokia in India.

The number of employees at Nokia grew seven-fold in 2004. At the start of 2005, Nokia had about 550 employees in India, half of them in R&D. There are about 40 people working in Hyderabad under the Enterprise unit, about 40 in Bangalore working for Nokia Networks, and about 80 people in Mumbai working with CDMA networks and phones. Nokia Ventures opened an office recently in Pune. The company uses also a great deal of subcontractors in its R&D in India, an estimated one thousand people. The number is so big that we can assume jobs to have already moved there also from Nokia's development units in Finland.

Kone is also expanding its R&D operations in India. It has announced that it intends to double its number of engineers in Chennai to 60. Its Indian product development unit concentrates on software. Kone's product development in India serves the needs of its entire organisation.

Teuvo Laaksonen, managing director of Metso Automation Projects, says that Metso Automation is constantly looking into possibilities for outsourcing software development. "Here, India can be one option."

3. IMPORTS AND CONTRACT MANUFACTURING

Finnish imports from India are predominantly textiles and clothes. The value of clothes, shoes and textiles imported from India last year was EUR 55 million, which is nearly one half of all Finnish imports from India. The amount of textiles from India is of course more than the figures from the National Board of Customs indicate, because quite a lot of clothes and shoes come to Finland via other EU countries. India produces 15% of all cotton in the world and is the biggest user of silk. The world's largest plants for manufacturing synthetic fibre are also in India.

Clothes and textiles are contracted from India by Finnish retail chains as well as by some private companies. For example, Finarte has had carpets and rugs manufactured in two places in India. Half of the products are exported directly from India. Finarte used to

make their products in Portugal. There are also agents in Finland who supply clothes from India to Finland. As an exporter of textiles, too, India is a country of extremes. The majority of the fabrics and clothes exported by India are cheap and of poor quality, yet at the same time India would like to raise its profile as a manufacturer of demanding clothes. This fact is emphasised by Gautam Nair, the managing director of Matrix Textiles, a factory in Gurgaon producing knit shirts. The factory exports nearly all its production to the USA. The plant has about two thousand employees. There are placards at the ends of the production lines telling visitors that the factory manufactures goods for well-known brands such as Reebok.

According to Nair, the difference between China and India is tailored products. "From the beginning of the 1990s, China has prepared for the changes in world trade by investing in factories. Mostly they make basic products in mass production. In India, we do demanding handiwork," Nair says.

For small companies, China has been a difficult country to import goods from, because Chinese factories do not like to produce short series. India, on the other hand, has started to market itself as a producer of short series of demanding clothes, and is therefore a suitable candidate for contract manufacturing for Finnish design production.

However, Finnish clothing companies and retail chains are operating on a very small scale in India, mainly buying single consignments. For instance, Finpro did not have information of a single permanent Finnish buying office in India. Nor has shirt manufacturer Gautam Nair ever heard of Finnish clothing companies or retail chains. "But the Swedish H&M is very well known here."

Import statistics in fact indicate that a considerable part of the Indian clothes and textiles coming to Finland come through Swedish retail chains, such as H&M or Indiska. Our clothing imports from Sweden in 2003 were about EUR 73 million, even though clothing production in Sweden is slight. Direct imports from India over the same period of time were only about EUR 34 million. Textiles were imported from Sweden to the tune of EUR 50 million, but from India with only EUR 17 million.[64]

The Indian textile industry is changing fast. Small-scale production was favoured for decades, and many rugs and other textiles are still made in the villages, partly in homes. Only four per cent of the products in this category are made in factories with over a hundred employees. Compared with China, factories are small and their technology outmoded.

The Multi-Fibre Agreement that entered in force at the beginning of 2005 lifted the quotas of international trade in clothes. "China will benefit most from the agreement, but I believe India will come second. Some people guess that India will be producing 15 per cent of world textiles in 2010," Nair says.

Salpomec, a Finnish firm that manufactures equipment for the textile industry, has studied prospects to sell their products to India. Its managing director Jarkko Kuusisto does not see India as a particularly profitable market – at least not yet. Competition is tough. Salpomec might have to produce the equipment in India in order to be able to compete with prices.

In addition to clothes, Finns would be well advised to look to India also for contract manufacturing of craft-intensive goods, such as interior decoration products. Imports of cast iron from India to Finland are growing fast. For example, the firm Finnish Cast Iron FCI has successfully outsourced its production to Calcutta. Also, the development of Indian food industry and pharmaceuticals are considered interesting in view of Finnish imports.

PROMISING SECTORS

The special India issue of the magazine *Tiede* published in February 2005 presented several exciting Indian inventions: Electric cars reducing air pollution in cities and street lamps powered by solar panels lighting up villages without electricity. Distance medicine and biotechnology offer cheap solutions for health care.

A lot of interesting development work is being done in India in the fields of information technology, biotechnology and environmental technology. This opens up prospects for Finnish

companies in many new areas of business. We will take a brief look at them below.

Environmental technology

Environmental deterioration is one of the gravest problems in India, one that can hardly be solved with the resources and expertise of India alone. The Indian Ministry of Environment and Forests is investing heavily in environmental protection strategies, prevention of pollution and support for clean technologies.

Intensive urbanisation and the desire to satisfy international environmental norms create opportunities for Finnish firms in fields such as the reduction of industrial emissions and the development of community water supply and sanitation. Lack of clean water, groundwater pollution and the incorporation and privatisation of water supply are great challenges for India. The utilisation of bioenergy has begun and significant growth is expected in this sector.

Finland has suitable expertise in this area in water purification, waste-water treatment, waste management, recycling and utilisation of renewable energy sources, among others. Finland also has a so-called TTT (science, economy and technology) cooperation programme with India, which includes co-operation among environmental authorities as a subgroup.

One of the environmental companies participating is Jaakko Pöyry Group, which is already established in the India market, and the Finnish PPM-Systems Ltd., which has supplied emission measurement equipment there. Also Scan-Water, a company owned by Norwegians and based in Tampere, Finland, that manufactures water filters, considers India a promising market.

Biosciences and medicine

India is an interesting export market for health care products. Many Finnish companies have already succeeded in making promising sales there. Hospital equipment and supplies in particular have potential.

India is also an interesting market for pharmaceutical companies. According to Finpro, promising Finnish export articles include vaccines and medicines for malaria and dengue fever.

India also has biotechnological research and industry as well as pharmaceutical industry of its own. For instance, India has several successful manufacturers of generic drugs. Indian pharmaceutical industry has the third largest volume in the world, but because of the low price of the drugs, their share of the world market in euros is smaller.[65] The sector is very heterogeneous in India, with up to 10,000 production plants.[66]

In a farewell interview, Glen Lindholm, Finnish ambassador to India, said that even though he has heard much talk about the potential of biotechnology, serious Finnish investments are still conspicuous by their absence.[67]

If the industrialisation of Indian agriculture develops, Finnish chemical industry may find some demand for its products. Kemira is already in India, but the country is a small market for it.

Construction industry and infrastructure improvement

India recently opened its construction sector and infrastructure projects to foreign investors. There are plans for large-scale national project for the building and improvement of motorways, airports and urban centres. According to Finpro, there is demand for new and efficient technology at least in the following sectors: recycling of asphalt, insulation, sewerage, and automation of road toll payment. Because of the boom in housing construction, the demand for interior decoration goods is growing.[68]

For example, Tamglass, a company from Tampere that sells security glass technology and equipment for manufacturing security glass, has received several orders from India's rapidly growing construction market and automobile industry. Paula Lehtomäki, the Finnish minister of trade and industry, inaugurated a windshield production line supplied by Tamglass when she visited Bangalore in February 2005. In spring 2005, Tamglass had received several million-dollar class orders from India.

Backpack Traveller's Working Jaunt

In summer 2002 Tea Westerlund saw an unusual ad in the paper: they were looking for Finnish-speaking people to work in a call centre in Delhi. The idea caught her fancy right away. Along with four other Finns, she enlisted herself to the eBookers call centre.

The British-Indian eBookers was in financial trouble. The company decided to outsource a large part of their call services to their Indian subcontractor Tecnovate, including other languages than English.

Now Westerlund leads a unit of ten Finnish agents working in a large open office. The Finns are easy to find by the Finnish flag hanging over their area, just like the Germans, the Swiss or the Swedes. There are a hundred foreigners working in the centre. Their term of contract is for one year, but many have chosen to stay on more than once.

The Finns earn 5,000 8,000 dollars a year, says managing director Prashant Shani. On top of the salary they get free accommodation and transport to the workplace. "People don't come here for the money. This is an off-year for many. We have 24 days of vacation a year. You get to do a fair amount of travelling then," Westerlund describes the motives of the 25 35 year-olds.

There are three shifts. Unlike many other call centres in India, Finns at Tecnovate do not work on the night shift. The morning shift arrives at eight to answer e-mails and process bookings. After 11, calls start coming from Finland, and they continue until half past nine in the evening.

Most of the calls to eBookers Finland are directed to Delhi. The India connection is starting to show also in eBookers' advertising. The company has opened a number you can call and ask their people in Delhi for tips if you are travelling to India.

The Economist reported in spring 2005 that employee turnover is clearly less at Tecnovate than in most other Indian call centres. The magazine speculated that the presence of European women makes the place 'cool'. Tecnovate's recipe for success has not yet been copied, however. Consequently, the company accounts for up to a third of Finns' work permit applications to India.

4 Makers of the India Phenomenon

MINNA SÄÄVÄLÄ

India's fortunes in global competition depend on its ability to provide its citizens with proper basic education.

Since India has no natural resources of particular note, its main resource is its enormous population. According to the most recent census, which was carried out in 2001, it has a population of 1.029 billion. This means that more than one in six persons living on earth lives in India. Its chances of becoming one of the greatest promises of the global economy have been closely associated with population structure, especially the relative growth of its working-age population.

In a country of India's size, a single state can have more people than many European countries. The northern state of Uttar Pradesh, the most populous one, has more people than there are in Russia: 166 million in 2001. The most densely populated regions are in north and east India, in Kerala in the south, and around Mumbai. The administrative centre New Delhi, the business centre Mumbai (the former Bombay), and the arts centre Calcutta are metropoles, but there are numerous other cities in the country with more than a million inhabitants. For India's economy, the most important cities are Bangalore, where most IT business is concentrated, and Hyderabad and Chennai (the former Madras), which are the most promising IT growth centres.

India's population growth is often considered a problem. It hampers economic expansion in many ways, for example, by increasing the costs of education. Currently, the annual population growth rate is around 1.5%, but it is expected to fall to around

1% after 2020.[69] Since the younger generations are heavily represented, the population is growing despite a rapidly decreasing average number of children.

Traditionally, Indian families have been large.[70] While birth rates began to fall in all states as early as the 1970s, the trend has advanced at varying rates in different parts of the country. The populations of the southern states of Tamil Nadu and Kerala are growing at a net reproduction rate, which means that the current family-making generation will give birth to a new generation of equal number. In southern India and in some of the northern states the average number of children in a family has fallen well under three. In many of the northern states, however, fertility is still quite high and families have four to five children. But even in these cases fertility is expected to fall eventually to the net reproduction rate. At the same time, average life expectancy will increase when the incidence of serious illnesses decreases and nutrition improves. The impact HIV will have on the population is difficult to estimate, however. All said, India can expect considerable population growth during the next 50 years. Estimates of where population growth will stabilize vary in the range of 1.5 billion people.

Because fertility has been so high for so long, the dependency ratio is very high, with 67% (2000) of the population living on the income of working-age Indians. Falling fertility and mortality rates, however, have caused rapid change in the age-structure. The dependency ratio began to improve by the mid-1970s when the growth of the working-age population overtook that of other groups. The Indian economy has been receiving a "growth bonus" for a long time and will continue to receive one if employment improves. According to some estimates, the dependency ratio will have fallen to 46% as soon as 2025. India's population structure is converging with that of the "Tiger economies" of East Asia in 1965–2000 when the productivity of their labour forces and the savings rate improved significantly.[71]

Problems caused by the ageing of the population will gradually start to weaken the dependency ratio only after 2025.[72]

Table 11. Comparison between China and India

	India	China
Population, billion 2004	1.07	1.30
Total fertility rate: children/woman 2004	2.9	1.7
Illiterate of those 15 or older 2003	40%	13%
Direct foreign investment 2004 (USD billion)	6	60
Direct foreign investment of GDP	0.7%	4.2%
Foreign trade 2003 USD billion	60	318

Source: Statistics Finland, Unctad, Harris 2005

STANDARD OF BASIC EDUCATION STILL LOW

India's placement in global competition will eventually be decided by its ability to provide its citizens with an education. Under the constitution of the newly independent India, all Indians up to the age of 14 were to be provided with compulsory schooling free of charge by 1960. This goal remains to be attained, however. Political intent has not been converted into action. An estimated 40% of the world's illiterate live in India. By 2001, India had attained 65% literacy. In the 1990s, women's literacy in particular improved, although it is still just under 50%. Among 10–14 year-olds, literacy was 75% at the end of last decade. School attendance had improved and 80% of 6–14 year-olds attended school at the time.[73]

In addition to public schools, India has many private ones. In 1996, more than 12% of schoolchildren aged 6 12 attended a private school. The popularity of private schools is decreasing with increasing school attendance so that among 16–18 year-olds, just under 2% go to a private institution. In some states, however, private school attendance is remarkably high. In Uttar Pradesh, for example, more than 20% of children aged 6–12 attend a private institution. To some extent, this reflects the standards of public schools, which are generally considered inefficient. In rural schools, teachers may not even be present if they live in another

village, the school buildings are in poor repair, or there are too many students per teacher. Too many children are still left without an education[74] and many drop out of school.

According to a Government survey, the most common reasons for dropping out were the child's disinterest and poor performance.[75] Hence the problems concerning school-attendance do not reflect primarily poverty, that is, parents financial inability to pay related costs or needing their children as labour. Ultimately, the most common reason for dropping out is that teaching is substandard or non-existent.

However, Indians are very keen on obtaining an education for their children. People in more or less all social classes believe that education is the key to a better future. In the cities, many families place their children in pre-school already when they are 3 to 4 years old. Proper school starts when children are 5 to 6 years old. School days are long and many children receive additional private tutoring in the evenings or mornings.

People are just as keen about education in India as they are in East Asia. All families with the means want to put their children into private school, preferably an English-speaking one. In addition to tuition, families must pay for expensive uniforms, books and material, private classes and travel. Some schools require a substantial donation to the school foundation, too. This means that a high standard education is available only to children from well-off families. Indeed, the poor standards of public schools should be improved rapidly to guarantee equal access to basic education. All in all, attaining 100% literacy could well take decades.

VARYING STANDARDS IN HIGHER EDUCATION

There is a desperate need for basic education in India, which is why higher education receives a smaller share of public funding than in many other Asian countries, including China, Malaysia and Thailand.[76]

The quality of universities varies considerably. Many renowned schools, such as the Indian Institute of Technology, offer a high-class

master's programme, but most diplomas fall far behind international standards. The majority of the country's some 300 universities are managed and funded by state governments and a few by central government. There are no private universities; they are prohibited by law, although there has been talk about making them legal. Most university diplomas – 80% of the lower and 50% of the higher degrees – are earned in colleges, which are either independent or affiliated with a university.[77] The majority of the almost 10,000 colleges in India are privately managed but partly publicly financed. The college system has been severely criticised because there are no common criteria of quality, and universities can freely affiliate colleges. Amrik Singh, a critic of the system, has estimated that perhaps less than 10% of the colleges can provide a proper science education (2003). In addition to the colleges and universities, there are innumerable private schools in India that offer various diplomas.

The Indian system of diplomas follows the model of British universities. A bachelor-level diploma can be passed in three or four years after 12 years of basic education. To earn a master's, students have to take another two years, and a doctorate requires at least three more years on top of the master's. In most universities, studies are taken in English. It is likely that in the future more private colleges and possibly even universities will be founded. The wealth-based division of the education system seems to be continuing and getting deeper.

Some 8% of each age group receives a higher education in India. This is more than in China, where the corresponding figure is 3%. There are almost 7 million tertiary-level students in India. In 2000, there were almost 8 million people in India with a higher diploma in natural sciences or engineering. Just under a million of them were engineers. While these numbers may seem huge, the situation is anything but satisfactory in higher education because the standard of college and university studies is for the large part poor and graduates do not necessarily have the skills they would be expected to have in the West.[78]

It has in fact been questioned whether there really is sufficient skilled labour in India, especially in IT.[79] Moreover, the current status of Indian higher education is not a problem only for businesses, but endangers equality and the overall social benefit from education. Fortunately, the problems can be solved by improving existing systems.

ENGLISH SKILLS A STRENGTH

The global competitive standing of India's educated population is improved by its good English skills. British colonialism left the middle class with a language that brought the speakers of India's many languages together after independence. India nevertheless has some 15 official languages, the most common of which is Hindi, which some 40% of Indians speak as their native tongue. In the south of the country, people sometimes dislike Hindi because it is associated with northern desires for hegemony. Consequently, Indians often prefer speaking English with each other. It is no longer considered the language of the conquerors, but rather a liberating and valuable asset, which offers opportunities for forming international contacts.

However, no precise information is available on the commonness of English skills in India, and less than 1% of Indians consider English to be their first language. However, the daily circulation of English-speaking newspapers is almost 10 million, which means that there must be a very large number of people who use the language actively.[80] It must be remembered, however, that very few people in rural areas speak English.

Nevertheless, the strong position of English in India is one of the reasons why India has been more successful than China in the IT sector. Other reasons are a suitable time zone, minimal regulation of the IT sector and better telecommunications links than in China. However, China offers better circumstances for demanding assembly and manufacturing operations because the average standard of education is higher among its labour force: while the average Indian

worker has attended school for four years, the Chinese worker has attended for six.[81]

GROWING MIDDLE-CLASS

The Indian population can be divided into four rough socio-economical groups. 20 to 30 per cent of the population live in extreme poverty. The majority of them earn a living as under-employed day-workers in the country and the cities. Roughly a half of Indians are skilled labourers, small farmers and entrepreneurs and artisans who suffer financial uncertainty. Some 20% of Indians are in the middle class,[82] while the fourth group is an elite with only a few dozen million people.

The middle class is difficult to define, however. Very few in India can consume as much as the Western middle class, for example. By the standards of India, however, its middle class is remarkably large. For instance, in 2001, there were 41 million registered scooters or motorcycles. This means that more than 200 million Indians live in a household with a two-wheeled motor vehicle. The same year, there were some 14 million registered private cars. In other words, some 70 million Indians lived in a household with a car, still a luxury in India.

The middle class was born out of British colonialism. In the 19th century, the British began training local men to manage the colonial administration. Since education had long-established roots in the learned Brahman caste, Indians were quick to adopt a modern system of education. Alongside the petit bourgeoisie of the old middle class of colonial civil servants and merchants, a new middle class began emerging in India following independence as the new State began building an administrative system and basic services and required educated people to run them. The liberalisation of the economy has introduced India with a new form of middle-class life: trained entrepreneurs and experts.

Some members of the middle class are very well to do. If just a single family-member gets work in the IT sector abroad, this can

multiply the family's income tenfold. On the other hand, a part of the middle class suffers continuous financial difficulty despite having a regular income.

Civil servants are generally paid only a small wage, which with expected levels of consumption often lead to corruption. For India's middle class, the education and marriage of their children are very important and they are willing to spend a great deal on them. Families may save for years to afford their daughters dowries, for example. Other important items of consumption include a home in a well-respected area, colour TV, a scooter or motorcycle and various feasts and rituals. But very few Indians who consider themselves middle class can afford a car or trips abroad. Yet because of income differences within the country, they may have home help to do laundry and the cleaning. Moreover, close relatives are expected to help each other in need, although this custom is often neglected, which can cause conflict. In south India, people have a favourable view of educated middle-class women who work, but in the north the majority of middle-class women are housewives, whether educated or not.

In the lower middle-class, people seek to improve their social status and are very prudent with their finances. They save and invest their wealth in land, gold or funds. The middle class is defined by its members aspirations of respectability and decency, while the elite is considered morally decadent, in contrast to the virtuousness of the middle class. The consumption habits, such as clothing and use of the media, of the members of the middle class may make them appear "Westernised". This is only superficial, however, because they continue to observe the customs of their community and are very committed to their religion, caste and family. For many Hindus who have risen to the middle class religious rituals have become more important, and Indian Muslims and Christians also consider practising religion a vital part of their identity. Middle-class Indians associate Western culture with individualism, which they consider morally suspicious.

The middle class values education, consumption – sometimes excessive – and emphasises decency and virtue. Many middle-classes attitudes are influenced by the threat of losing status. During the last decade, however, the middle class has begun to reject its former modesty. Before the liberalisation of the economy, the middle class kept its wealth hidden and saw its role as a nationalist one and felt an affinity with the poor majority much more than today.[83] This was partly due to poor availability of consumables because of restrictions on imports and production. The change in attitudes is similar to that which has taken place in the former socialist countries of East Europe. Today, it is important to show your status. As a result, many middle class families face impossible odds because they cannot afford everything that they assume others assume they have.

CASTE SYSTEM STILL INTACT

Over 80% of the Indians are Hindu, while 13% are Muslim and 2% Christian. The rest are Parsee, Sikh, Jain, Buddhist and others. In Jammu and Kashmir, West Bengal, Assam and Kerala Muslims compose a large part of the population, while there are many Christians in the small states of northeastern India and in Goa and Kerala. Across all language, religious and caste differences, the Indians share a hierarchical mindset, however. The caste system is not limited to Hindus; Christians and Muslim communities are also divided into groups of different status, the members of which only marry within the group.

Because of the caste system, known in India as the *jati* system, Indian society can be difficult for an outsider to understand. Each jati has a traditional role in the distribution of work, its particular strengths and weaknesses, its own way of celebrating and rituals, diet and status in the hierarchy, although the latter can be subject to incessant dispute. Local jatis, of which there are thousands, can in principle be explained on the basis of five social strata: priests, warriors and rulers, merchants, peasants and so-called casteless people who are considered dirty. This division into four *varnas* and the

'casteless' who fall outside is obvious to any Hindu. With Muslims and Christians the divisions are somewhat different, but nevertheless hierarchical and associated with origin as with the Hindus.

In modern Indian society the caste system has lost its public legitimacy, and educated Indians reject the idea that castes play any role in, for example, their business affairs. The fact is, however, that the internal solidarity of castes influences daily life in many ways, and people will eventually detect each other's jati from various indications and signs even if it is not considered correct to ask someone's caste in the cities. Educated 'casteless' people usually want to conceal their jati because they still feel discrimination because of it. In politics, caste loyalty plays an important role, and especially in rural areas a caste can decide whom its members will vote for in an election. What is more, most marriages take place within the same jati.

Indian business people come from different castes, although traditionally business has been the domain of the innumerable merchant castes, the best known of which are the Marwari. During a period of four hundred years, they have spread from Rajasthan to all of India and abroad, but have kept their ties with Rajasthan and each other. Family and caste is a vital network for the Marwari, providing access to capital, information and contacts. In the Indian mindset, each jati has its particular talent. It is assumed that trading and profit seeking are innate to the merchant castes, whereas the Brahmans are learned, and peasants tend towards physical labour. Because of this, Indians who have taken up a career that is not appropriate for their caste have to work harder to prove their abilities than those who choose a profession that is traditional to their jati. The former also have less social capital and fewer models of how to be successful in a profession strange to their caste.

While in ancient India only the Brahmans could get an education, education has become available to all castes since independence and the State has assigned the casteless and other discriminated groups with quotas in schools to improve their status. Although most Indians with a university education are still from the higher castes, there are highly educated people in all jatis. In the IT sector

the Bra hmans of south India are over-represented, although there is no precise information on the percentage accounted for by them, because of the delicateness of the caste issue. A possible reason is that in south India, especially in Tamil Nadu, the Brahmans used to hold political power and were already facing resistance by the early 20th century. As a result of this resistance, state offices no longer went automatically to a Brahman, which is why they have sought to build careers in the private sector more than the Brahmans of north India. And with the liberalisation of the Indian economy, this strategy of adjusting has proven its worth.[84]

Most educated Indians are from the 'middle' castes, which are based on land-owning peasants. They have managed to amass wealth and have also invested it elsewhere, for example in the real estate business of cities. As a result, they have been able to afford expensive education for their children. Many IT professionals also come from the populous and politically powerful peasant groups.

THE INDIAN DIASPORA

During colonialism, Indian emigration was largely forced and involved mainly workers. It resulted in Indian communities in, for example, Trinidad, Fidzhi, Mauritius, Malaysia, South Africa and Surinam. Indian merchants have been moving to East Africa for centuries. Independence and the split into Pakistan and India meant a massive flow of migrants between the two countries and lead to frequent bloodshed. Many have also taken the opportunity to move to the UK, although it tightened its immigration policies in the 1970s. The countries of the Persian Gulf have also been popular among workers, especially from Kerala and Gujarat. No one knows, however, how many Indians live abroad. To define all ethnic Indians living outside India as emigrants is problematic because their ancestors may have left India centuries ago. It has been estimated, however, that there are 20 million Indians living abroad. More than a million of those living in the USA were born in India, for example. According to the Indian Embassy, there are some 2,000 Indian-

born persons or their progeny in Finland. In the 1990s, some 250 Indians were granted Finnish citizenship.

Today, most emigrating Indians are educated and move to work in USA, Australia or Europe. They also work for Indian companies or foreign companies operating in India. Indian IT professionals have started coming to Finland only in the last ten years, however. Before that there was only a very small community of a couple hundred Indians in Finland. Some of them were married to Finns, others had come here to study and others had small businesses like shops and restaurants. Today, most immigrating Indians are IT professionals and their family members. A large part of the earlier immigrants were Sikhs from north India, whereas most of the current arrivals are Hindus.

Indians customarily send a sizable part of their income to relatives back home: the country is the second largest recipient of foreign cash flows. In 2003, these flows amounted to USD 8.4 billion. From the United States alone, where most of the money comes from, immigrants sent USD 4.5 billion. The general assumption is that most of those who have emigrated to America work in the IT sector but there are large numbers of other professionals who leave, too, such as scientists and people working in the pharmaceuticals sector.[85]

The large amount of money sent to India is explained by the high standard of education among the emigrants and the resulting high incomes, a lifestyle that is careful with money when abroad, and the importance of family. Usually the entire family, sometimes including even friends, save money to educate one family member and send him abroad to work. As a result, the leaver is under heavy pressure to succeed. Returning with empty pockets would be a disgrace.

Until very recently, investments by Indians living abroad in India have been small compared with the situation in China, where over half of direct foreign investment in the 1990s came from Chinese living abroad. Investments by Indians living abroad have come to only just under 10% of all direct foreign investment.[86] More important than the money, however, is the knowl-

edge capital acquired by Indian emigrants. It has helped many IT companies to become global players. In addition to IT companies, Indians living abroad have founded companies in India in healthcare, education, the manufacture of pharmaceuticals, and biotechnology.

5 Finnish Indias

ELINA GRUNDSTRÖM

The Finnish map of India is dotted with white.

Although only a handful of Finns live more or less permanently in India, their number has grown rapidly. In April 2005, 142 Finns living in India were registered with the Finnish Embassy in Delhi. A year earlier, in a list dated February 2004, there were only 86 names, which means that the number of Finns had grown by more than 50% in 12 months. Of course all Finns living abroad do not notify the local embassy, but crises like the tsunami of December 2004 tend to make people more inclined to do so.

The information of April 2005 included only 15 Finns who represent a Finnish company or work for one in India. There were almost ten students on the list, five of whom were in Calcutta and a couple in Delhi.

The Finnish communities are so small that there are no Finnish associations or clubs. In Malaysia and Singapore, for instance, which have much smaller populations than India, there are hundreds of Finns and active associations of businessmen and clubs for children.

Only a very few Indian towns have Finnish residents. New Delhi and its sister city Gurgaon have the largest Finnish populations. The Finns living in these cities are in India for family reasons or work for Finnish or Indian companies, international organisations or the Finnish Embassy. Tecnovate, which specialises in telephone services, has a permanent staff of 5 to 10 Finns in New Delhi, serving the Finnish-speaking customers of the travel agency eBookers. There

have been only occasional students in New Delhi, but the recently made exchange agreement between the University of Jyväskylä and the Jawaharlal Nehru University is likely to cause a more regular flow of students.

Individual Finnish businessmen live relatively permanently at least in Mumbai, Bangalore and Calcutta. Also, five Finnish students attend Jadavpur University in Calcutta. According to the information the Embassy has, there are no Finns living in Chennai but since Nokia will build a plant there, the city is expected to soon have a number of Finnish expatriates. There are also Finnish aid workers in India, in Jaipur and at the Hyny Children's Home in Andhra Pradesh.

A few Finns interested in Indian philosophy and religions also live in India. According to the Embassy's information, the majority or about 6 are in the Amma community in Amritapur in Kerala. There are a few long-term Finnish residents in Dharamsala, the central city of Tibetan Buddhists, and Varanas, the holy city of the Hindus.

India's Ambassador to Finland Om Prakash Gupta says that the Embassy granted 13,000 visas to Finns in 2004. Three years earlier in 2001 the number was only 7,000. According to Gupta, the number of business visas has grown four-fold during the same time. "Three years ago we granted 4 to 5 business visas a day. Today, we grant 20–25 each day, and the demand seems to be increasing," Gupta said in April 2005.

"In contrast, we have granted only 42 to 45 work permits during the last three years. Demand for the permits is growing, however, and what is new is that Finns are applying for permits to work in companies in India that are not Finnish."

The majority of the visas are granted to tourists, however. For several decades, India has been a favourite of backpackers on long trips and travelling on their own. In the 1990s, Goa became a popular package tour destination for Finnish tourists. Currently at least three tour operators (Aurinkomatkat, Finnmatkat and Tjäreborg) organise charter tours from Finland to India in winter. According to the Association of Finnish Travel Agents, Finns made some 5,800 holiday tours to India in 2004, up 26% on 2003.[87]

Map 1. Indian cities that have several Finnish residents or offices of several Finnish companies.

The external boundaries of India on this map have not been authenticated and may not be correct.

CORPORATE INDIA IS DOTTED WITH WHITE

Finnish companies are also concentrated in only a few cities in India. Taina Eräjuuri, portfolio manager of the FIM India investment fund, travels frequently in India to investigate local companies for investment purposes. She says that she has been the first Finnish customer at many business hotels.

At a visit with Head of Finpro India Seppo Keränen at Finpro's offices in New Delhi, we spread a map of India on the table and drew a circle around every location where Finnish companies or their partners have offices or plants according to Finpro's information. The Mumbai region had the most circles. The second most circles were in Greater Delhi, comprising New Delhi, Gurgao and Noida. These two metropolises are logical choices for setting up corporate offices in India. New Delhi is for India what Washington DC is for United States. More than anything else, it is an administrative centre, and all major companies that have frequent contacts with the authorities are present there. Mumbai, on the other hand, is India's New York City, its centre of finance and business.

There is also a substantial Finnish business presence in Calcutta, Bangalore and Chennai, but outside theses cities there is virtually nothing. Only in Pune and Hyderabad does there seem to be any emerging Finnish activity.

India's states are very different culturally and linguistically, and in terms of legislation and licensing practices. It is nearly impossible for a company to grab India all at once – it is necessary to proceed one state at a time. For many, operating in one state alone is enough of a challenge.

Glen Lindholm, the Finnish Ambassador to India, who is soon to step aside, says that even the Embassy has until now focused on three states in addition to Delhi: Maharashtra (Mumbai), Tamil Nadu (Chennai), and West Bengal (Calcutta). "We now have to add the leading IT states of Karnataka and Andhra Pradesh to this list," Lindholm briefs his successor.[88]

LAND OF OPPORTUNITY

It would certainly be a bad idea for Finnish companies to spread out their attention to every corner of India. At present, they should urgently study the 'Indian Silicon Valley' or the regions of Chennai

Map 2. The most important Indian states for Finnish business.

The external boundaries of India on this map have not been authenticated and may not be correct.

and Bangalore in Karnataka and Tamil Nadu. They should also look closely at Hyderabad and Pune because they may become even more important than Bangalore, whose infrastructure is already under heavy stress. Hyderabad especially has ambitious plans to create extensive modern areas of IT production.

The state of West Bengal is also considered a potential new centre of IT activity, especially because it produces a large part of India's IT professionals and its cost level is lower than that of the IT hubs in the south. Foreign companies have been concerned about the communist leadership of West Bengal, but both the communist leaders of the state and Calcutta have lately underscored their sympathy for business. In fact, Finnish metal and forestry industries have recently grown very interested in the state.

But there is much more to India than the half a dozen cities that appear on the maps of Finnish businesses. India is really a land of opportunity.

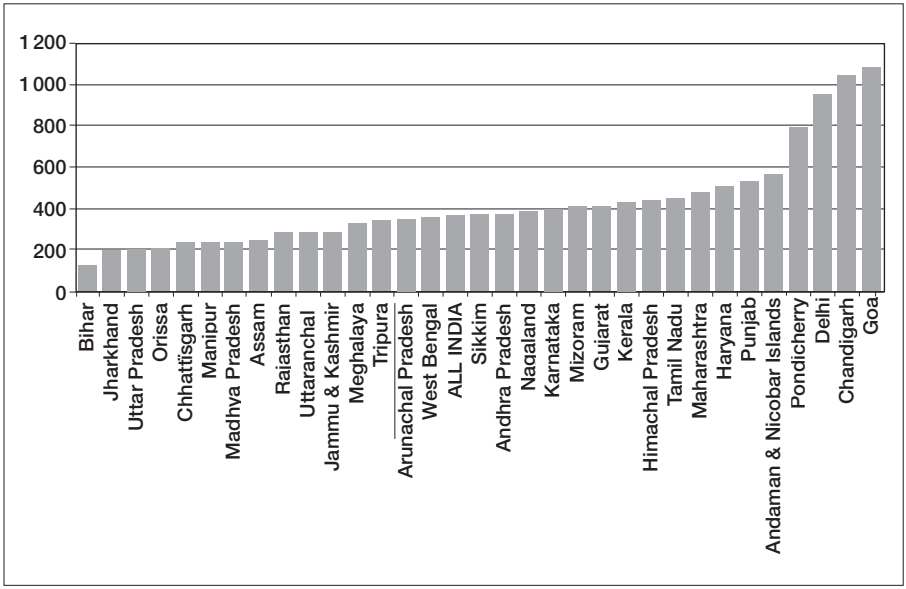
Its states are, however, in very different stages of development. A couple of years ago the GDP per person of the poorest state was roughly a third of the national average, while that of the richest was more than 2.5 times the national figure. And the differences seem only to increase. Economic expansion is concentrated in the western and southern regions and is fastest in the states that are already the most affluent and progressive in terms of economic reform.[89]

In 2001, over 66% of all foreign investment was attracted by only five states – Gujarat, Maharashtra (Mumbai region), Delhi, Karnataka and Tamil Nadu.[90]

On the other hand, concentration in just a few major cities may also be a sign of poor imagination on the part of foreigners. Companies that know India well have been doing what Nokia did before it made the decision on the location of its new plant: they considered different alternatives and negotiated with local authorities.

Wätsilä has been active in India longer and more extensively than most other Finnish companies. Debashish Mazumdar, who is in charge of Wätsilä India's northern region, encourages companies planning to enter India to make regional authorities compete with

Table 12. India's total production per person per state in 2000, USD



Source: RBI

each other. Especially when planning to set up a production plant, they would be well advised to contact more than just one state. "Ask individual states' industrial departments!" is Mazumdar's advice. States have also established numerous industrial parks and free production zones to attract foreign investment. Finns in India stress, however, that general conclusions should not be drawn on particular sites. The same benefits may be available at several locations and access to sufficient power and good connections are not always there because of the haste at which new parks are being set up.

So where should Finns look? Wärtsilä's Debashish Mazumdar emphasises that choosing the most suitable state is to a great extent dependent on the company's line of business. For industrial production he recommends the states of Himachal Pradesh and Uttaranchal that lie to the north of Delhi. They have an atmosphere that favours industry and they can provide ample energy. Anand K. Sethi,

who advises Finnfund in India, also recommends these two up and coming states because of their tax policies, which are very favourable to businesses. The large state of Uttar Pradesh, east of Delhi, has also attracted foreign industries in recent years.

In addition to Bangalore, new biotechnological and pharmaceutical production is also centred in Hyderabad, Chennai and around Mumbai. The textile industry has traditionally concentrated in Rajasthan, Punjab and Tamil Nadu, Gujarat and Maharashtra, which are especially known for their cotton industries.

For buyers, India looks quite similar as to Finnish export companies. Clothing manufacturer Gautam Nair says that, for example, 85% to 90% of the production of clothes takes place in just four cities. Over a third of exports go via Greater Delhi. Other centres of clothes export are Mumbai, Bangalore and Chennai.

6 Finnish Organisations

MATIAS MÖTTÖLÄ

Flights to India are crammed with civil servants and people from all manner of organisations.

The India boom is also obvious from the activities of Finnish authorities and organisations. Over the last two years, numerous organisations have become interested in India. Many have set up their own India networks and are drafting their own reports on the country.

ORGANISATIONS PROMOTING FOREIGN TRADE

Even before they went to China, Finnish export promoters were investigating India. Yet, trade with India is still minor and there have been only a few projects involving the establishment of a manufacturing plant. The situation has changed rapidly, however. Finnish businesses are now deeply interested in India and export promoters have responded promptly to their needs.

Finnfund or the **Finnish Fund for Industrial Cooperation Ltd.** promotes the economic and social advancement of developing countries by financing private and responsible business activity in them. Finnfund started planning its first projects involving India as early as 1981, a long time before it became interested in China. Over the years Finnfund has dealt with 88 financing applications concerning India, making 15 investment decisions with a total value of 41 million euros. In spring 2005, Finnfund was committed to four investments in India. Finnfund is represented by its adviser

Anand K. Sethi in New Delhi. In Finland, Head of financing Martti Kerppola is in charge of India projects. [89]

The objective of **Finnvera**, Finland's official Export Credit Agency is to build up and diversify corporate financing by offering loans, guarantees and export financing services. Its total export guarantee commitments involving India amount to some 100 million euros, which is at the same level as for example commitments involving Turkey. In 2004, Finnvera provided a guarantee worth 95 million dollars for a network deal between Bharti Tele-Ventures and Nokia. Currently, demand for Finnvera's services involving India is growing rapidly. In spring 2005, applications totalling more than 100 million euros were waiting for decision. In India, Finnvera's corporate risk comes mostly from listed Indian companies. In Helsinki, its India projects are handled by Senior Adviser Outi Homanen and Bank Analyst Jouni Nissinen.

Finpro's objective is to accelerate the internationalisation of Finnish businesses and reduce related risks. It assists businesses in, for example, making market analyses, forming contacts with Indian businesses, finding partners and setting up. It also keeps a list of contact details of Finnish businesses and maintains an up-to-date country file on India, which can be found on Finpro's web site. In addition, Finpro draws up reports dealing with India for Finnish companies and organisations, most recently for Tekes, the National Technology Agency of Finland. Seppo Keränen is in charge of Finpro's India operations and it has offices in New Delhi and Mumbai.

Invest in Finland markets Finland as a location for foreign companies. The purpose of its India operations is to attract Indian software companies to set up in Finland. Its representatives visit India twice annually to meet with businesses. They have met with several since 2001 and drafted preliminary need surveys for 200 companies. All Indian software companies operating in Finland have used the services of Invest in Finland at some point during their establishment here. ICT team leaders Taneli Saari and Atso Vainio are in charge of projects involving India.

The goal of the **Tampere International Business Office** or TIBO is to attract foreign companies and investment to the Tampere region. TIBO is preparing for the launch of collaboration between the region and the Indian city of Pune. The goal is extensive collaboration that would reinforce the competitiveness of the business environment and businesses of both regions. It plans to supplement collaboration focusing on business and research with, for example, student exchange, cultural cooperation and tourism. In addition to TIBO, the Asia Business Academy of the University of Tampere's School of Economics and Business Administration is also involved in the project. TIBO's director is Vesa Kaasalainen.

MINISTRIES

Finnish authorities have direct contacts with their counterparts in India and also through the EU. Although India does not want direct development aid from Finland, it is one of the countries with which Finland is engaged in active economic, industrial and technological collaboration, planned by a 'mixed committee' of Finnish and Indian officials from various ministries.

An India network has been set up at the **Ministry of Trade and Industry.** Its purpose is to promote the sharing of information between departments and improve the focusing of activities and the strategies concerning India. The goal of the Ministry's Trade Department is to improve Finnish businesses competitive standing on the Indian market. To this end, it uses financing instruments and its contacts with the authorities. It grants sector-specific assistance for internationalisation, but this have attracted rather modest interest – in 2004, for example, assistance was granted for a single trip by a business delegation.

Internationalisation assistance for individual companies is granted through **T&E Centres.** In 2004, assistance was granted to five projects involving India. The Ministry's Energy Department promotes the extensive interests of the Finnish energy cluster in India. The Ministry's Technology Department is active in the Finnish in-

novation sector. Its objective is to build up technology cooperation between Finland and India. The Ministry drafted its first reports on India's technology policies in the late 1980s.

Three diplomats and support and consular staff work under the **Ministry for Foreign Affairs** in New Delhi. The current ambassador is Glen Lindholm, who will be succeeded by Asko Nurminen as of 1 October 2005. Relations with India are the responsibility of Counsellor Mikko Pyhälä of the Ministry's Unit for Asia and Oceania. The Ministry considers India so important that it has recently set up a special India team.

While India receives no development aid from the Finnish State, the Ministry provides funds of some 1.5 million euros to Finnish non-governmental organisations' India-related projects each year. In addition, the embassy in New Delhi has an annual budget of just under 400,000 euros for local cooperation with Indian NGOs. The Ministry also funds cultural cooperation and brings Indian journalists to Finland. In addition, it grants funds for collaboration in economics, technology and science. There is an application form on the Ministry's website.

In 2005, the Ministry drafted a report on barriers to international trade in collaboration with the Ministry of Trade and Industry, the Confederation of Finnish Industries, the Federation of Finnish Commerce and Trade, the Central Chamber of Commerce, the Federation of Finnish Enterprises, and Finpro. The report involved India, too.

The Finnish and Indian mixed commission on economics, technology and science has an environmental sub-group operating under the **Ministry of the Environment**, which met for the first time in 2002 in India. The second meeting was held in Finland in 2003. The Indian delegation included representatives of environmental sector companies. The next meeting will be held in autumn 2005 in India. Senior Adviser Tita Korvenoja of the Ministry's Unit for International Affairs is the contact person in matters involving India.

INTEREST GROUPS

India is one of the emerging markets that the Federation of Finnish Commerce and Trade follows closely. Trade unions activities involving India are concentrated with the Trade Union Solidarity Centre of Finland (SASK).

For the **Federation of Finnish Commerce and Trade**, India is one of the key emerging markets in addition to Russia and China. Its activities mostly comprise monitoring developments in India. It also took part in drafting the report in trade barriers experienced by Finnish businesses, which revealed various problems in India. The Federation's India expert is Pirkko Haavisto.

The Trade Union Solidarity Centre of Finland (SASK) has three projects that involve India. Its international partner UNI (Union Network International) is conducting a project to improve trade unions' ability to deal with the changes in the communications sector that are taking place in South Asia. UNI and SASK are also involved in a project to unionise the employees of India's call centres. Also, SASK is involved in a labour protection project of the Indian railroad workers union, the aim of which is to improve the labour protection culture of trade unions. SASK is an active funding partner in all of these projects, taking part in, for example, planning and evaluation. The projects also involve Finnish trade unions. Director Hannu Ohvo is responsible for SASK's India activities.

SCIENCE, RESEARCH AND EDUCATION

Having recognised the importance of India, the Finnish science and technology community has taken action to gain better knowledge of it. It has launched several collaborative projects, which look promising.

The **University of Helsinki** is part of an India network of Nordic universities (www.nci.uio.no), which has organised summer schools in Hyderabad. The university has no exchange programmes with India, while it has several with China. The University of Helsinki has an Indian partner in bioinformatics, which looks for po-

tential Indian doctoral students willing to come to Finland. Markus Laitinen is the Head of International Services at the University and in charge of exchange issues.

The Institute for Asian and African Studies offers courses in Sanskrit, Hindi, Urdu and Tamil. It has also offered courses in, for example, Bengali and Kashmiri. Three to five master's theses completed at the Institute deal with India each year. More and more frequently, their subject is modern India, in contrast to the Institute's earlier focus on classical studies. The South Asian Studies unit has recently been given a five-year professorship but it still lacks a permanent chair. Master's theses and doctoral dissertations dealing with India are also written in the unit of social and cultural anthropology. Its staff includes two researchers whose dissertations dealt with India.

The **University of Jyväskylä** has made a cooperation agreement with the Jawaharlal Nehru University in New Delhi and the Indian Institute of Science in Bangalore. The agreement covers student and teacher exchange and research, with special emphasis on doctoral training. The collaboration with the Jawaharlal Nehru University focuses on social sciences and information technology. The University of Jyväkylä is already engaged in cooperation involving chemistry and nanophysics with the Indian Institute of Science, and will intensify this work.

The **Sibelius Academy** has run an exchange programme with the school of the Brhaddhvani organisation in Chennai for ten years. Two folk music students have been to India on exchange.

Sitra launched an India programme in the beginning of 2005. It is headed by Vesa-Matti Lahti. This study is part of the programme. The next stage will involve more detailed reports that will be completed during 2006. At that time, Sitra will decide whether to expand its India programme.

The **Academy of Finland** is in the process of agreeing on cooperation in research funding with India. Since India does not have an organisation corresponding to the Academy of Finland, the Academy intends to sign the agreement with five different organi-

sations. These are the Department of Science and Technology (the principal source of funding for basic research in India), the Department of Biotechnology (responsible for biotechnology), the Council of Scientific and Industrial Research (an autonomous organisation conducting and funding research), the Institute of Medical Research Council (conducts and funds research) and the Indian Council of Social Science Research (conducts and funds research in social sciences and operates under the Ministry of Education).

Science Adviser Eeva Laurila is the contact person at the Academy's International Relations Unit.

The Asia Business Academy of the **University of Tampere**'s School of Economics and Business Administration organised a training course under the title *India outsourcing* and related seminar in spring 2005. The seminar dealt with opportunities for cooperation between the Indian and Finnish ICT clusters. The programme was headed by Najmal Hasan, the Director of the Asia Business Academy.

Tekes has recently commissioned two reports in India from Finpro. They deal with India's innovation system and with mobile technology and the content business. No new reports are being prepared or actively planned. The contact person at Tekes is Kari Komulainen, Head of Internationalisation Services.

The **Helsinki University of Technology** in Espoo is taking part in a EU-funded project to increase contacts between and innovation in companies in Finnish and Indian ICT sectors. The project also aims to create new ways of sharing work and knowledge. Companies can share information and contact each other free of charge on the project's website. In summer 2005, a business conference will be organised in Espoo. At HUT, the project is headed by Raisa Suominen and Tapio Koskinen.

There are also Indian researchers and students at HUT.

CULTURE

Indian culture will have an exceptionally frequent presence in upcoming Finnish cultural events.

In March 2005, the **Museum of Cultures** and the **Helsinki City Art Museum** will open a series of exhibitions and events dealing with India at the Tennis Palace in the centre of Helsinki. The Art Museum's exhibition will deal with the role of myths in Indian culture through contemporary art, altars used in religious festivals and popular culture. The exhibition at the Museum of Cultures will deal with India's traditions in handcraft and its association with European culture in special. The exhibitions will include a variety of events and educational activities.

With support from **Vikes**, the Finnish Foundation for Media, Communication and Development, a documentary project of **YLE**, the Finnish Broadcasting Company, has brought Indian filmmakers to meetings preparing for the founding of the Steps India organisation and the production project Shifting Times. Ten films will be produced in international cooperation under Shifting Times during 2006–2007. YLE's channel *Teema* has already funded and acquired several Indian documentaries for be broadcast in 2005 and 2006. Producer Iikka Vehkalahti, who is also on the executive committee of Steps India, is coordinating the documentary project.

Eero Hämeenniemi, who teaches composing at the **Sibelius Academy**, has conducted two or three composing and recording projects each year with Finnish and Indian musicians. They have been organised in collaboration with, for example, Kerava Jazz and *The Other Festival* organised in Chennai.

The **Finnish-Indian-Society**, a Finnish-Indian friendship society, is one of the oldest such associations in Finland. It was founded in 1949 and has almost 300 members, including many Indians living in Finland. The society organises a variety of activities dealing with India and its culture, including seminars, talks and courses. It also organises Indian festivals such as the *Diwali*, which takes place every autumn. It is active mainly in the Helsinki region. The society's website should be published in May 2005. Its chairman is Minna Kiiskinen.

ENVIRONMENTAL SECTOR

The expertise of the Finnish environmental sector is in demand in India.

The **Finnish Meteorological Institute** is involved in a project studying the pollutant cloud hanging over South Asia and evaluating its effect on the health of the population and on the climate. It also studies how climate change will influence biomes and land use India. The Institute will deliver a mobile laboratory to India for non-stop study of particles. The project is being funded by the Ministry for Foreign Affairs and implemented in collaboration with the Indian TERI institute.

The **Finnish Environment Institute** is acting as a consultant in Finnish CDM or Clean Development Mechanism projects in India. These are projects in which an industrialised country can purchase emission rights to meet the requirements of the Kyoto agreement. Projects of this kind have to meet stringent standards and both India projects are only being validated at the moment. Other projects include a project on biomass gasification and a small hydropower plant, both built by Indian companies. Finnish technology is not used in these projects.

VTT Technical Research Centre of Finland is involved in a project involving emission measurement in India. The project was launched in 2000 when VTT was commissioned by Wätsilä to audit the activities of an Indian emission measurement consultancy. In 2001, VTT received a Ministry for Foreign Affairs economics, technology and science grant, and used it to transfer expertise to the consultancy and train its staff. This project was completed in 2004 but VTT, the Finnish Meteorological Institute and the environmental authorities of Andhra Pradesh are currently investigating how the monitoring of air quality and emission measurement could be improved in the region. The project contact at VTT is Tuula Vahlman.

Because India wants direct development aid from only the major donor countries, Finnish development aid is channelled through various NGOs. The most important projects are those of the Family Federation, Fida International, Finnish World Vision, Plan and FinnChurchAid.

FinnChurchAid's main project in India concentrates on the poor people of the cities. The project is active in Calcutta and the cities of Cuttack and Bhubaneshwar in the state of Orissa. In includes reading and writing skills programmes intended especially for women and children, basic health care and vocational training. In addition, the project's objectives include improving the livelihoods of the poor urban population.

Fida International is the development organisation of the Finnish Pentecostal Churches. Its best-known project in India is a complex of day-care centres, pre-schools and schools in Machilipatnam in Andhra Pradesh. Fida also has a slum project in Mumbai, a cooperation project with minorities in Maharashtra and it is involved in village development work in Lucknow in Uttar Pradesh. In Machilipatnam, it is also assisting people in, for example, health education and planting mangrove trees. In addition, it is involved in reconstruction work in Chennai to repair damage caused by the 2004 tsunami.

In 2002, the Finnish branch of Plan International, ***Plan Suomi Säätiö***, started a project to offer girls in the remote areas of the states of Orissa and Rajasthan an opportunity to acquire basic education and skills. The project includes education camps for girls and teacher training.

Finnish **World Vision** is conducting a programme in Ambegaon in Maharashtra to improve the food security of families, encourage school attendance and improve the status of girls. The programme includes 12 village communities and it also distributes health information. It is also conducting a project in the Andhra Pradesh city of Rajahmundry to reduce the use of child labour. The project's aim is to improve health care and provide teaching to children who

are outside the school system. Also, World Vision has a development project in Rajnandgaon in the state of Chhattisgarh.

The Family Federation is running a project to reduce HIV infections in rural areas in Madhya Pradesh. It educates villagers on preventing HIV infection at 18 market places on village days and by working door to door, too.

Websites:

Finnfund www.finnfund.fi/en_GB/
Finnvera www.finnvera.fi/index.cfm?id=3
Finpro www.finpro.fi
Invest in Finland www.investinfinland.fi
Ministry of Trade and Industry www.ktm.fi/?l=en
Tampere International Business Office www.professia.fi
Ministry for Foreign Affairs www.formin.fi/english/
Ministry of the Environment www.ymparisto.fi
Confederation of Finnish Industries www.ek.fi/ek_englanti
SASK www.sask.fi/english/index.htm
University of Helsinki www.helsinki.fi/university
Institute for Asian and African Studies www.helsinki.fi/hum/aakkl/english/index.htm
University of Jyväkylä www.jyu.fi/indexeng.shtml
Sibelius Academy www.siba.fi/eng/
Sitra www.sitra.fi/eng/index.asp
Academy of Finland www.aka.fi
University of Tampere www.uta.fi/english
Tekes www.tekes.fi/eng/
Helsinki University of Technology www.dipoli.hut.fi/english/projects/eu_india.html
Helsinki City Art Museum www.taidemuseo.fi/indexen.html
Museum of Cultures www.nba.fi/en/museum_of_cultures
YLE www.yle.fi
Finnish Meteorological Institute www.fmi.fi/en/index.html
Finnish Environment Institute www.ymparisto.fi
VTT www.vtt.fi/indexe.htm
FinnChurchAid www.kua.fi
Fida International www.fida.fi
Plan www.plan.fi
Finnish World Vision www.worldvision.fi
The Family Federation www.vaestoliitto.fi/in_english/
Finnish-India-Society www.suomiintiaseura.fi/english3.htm

7 International Organisations

VESA-MATTI LAHTI

Many international think-tanks already have their own India projects.

Wealthy nations have taken an interest in India. India and its strong economic expansion are analysed widely in the media and with such enthusiasm that talk about an India phenomenon would be justified based simply on the publicity currently being received by the country. There is a steady stream of delegations from industrialised countries arriving in India to learn about the background of the phenomenon and to look for opportunities for profitable cooperation.

This enthusiasm caught on relatively late in Finland, whereas in the USA and UK, India's role in the world economy has been discussed for some time. The principal reason for this is probably that so much work has been outsourced from the USA and UK to India. Sweden has also awakened to India's growing importance. A **Sweden-India Business Council** was established in 2003 to promote business between the two countries.

For historical reasons, British companies have been active in India for a long time. The UK also has a large population of Indian immigrants, and while India became independent in 1948, the British did not pull out entirely. Moreover, the two countries have very strong cultural ties. For example, the **British Council**, which focuses on cultural issues, plays a very visible role in India. Its central offices in New Delhi are in a building that looks very much like a work of modern art, and the British consider it the crown jewel in the Brit-

ish Council's worldwide network. There are four Council offices and 11 libraries in India.

It has a carefully targeted audience in India, comprising 18 to 35 year-old English-speakers who earn above a certain sum and are considered India's future. The Council is in the process of establishing an advanced networked learning environment for their use.

The reason why the United States has such close links with India is its large population of Indian immigrants, many of whom moved to the USA because of the IT boom. The success story of California's Silicon Valley was largely made by engineers of Indian origin: five to seven years ago, at the peak of the boom, roughly one in ten IT start-ups were founded by Indians[91] and there were Indian software engineers in countless other companies. More recently, however, the flow of skilled Indians has reversed and is now back to India. In fact, venture capital investors from the USA are turning Bangalore into another Silicon Valley.[92]

In the USA and UK, a high number of businesses have improved their competitiveness by outsourcing both service production and research and development operations to India. This has brought criticism, too, especially in the United States, and outsourcing has been branded unpatriotic by many influential quarters. However, Indians believe that the managements of US companies cannot ignore the increased profitability provided by outsourcing.

PROBLEMS? THE EU CAN HELP

The **European Union** has considerable influence on relations between Finland and India, both in foreign and in trade policy, even if a large number of issues are still handled bilaterally and in business directly between companies. The EU is also increasing support to student exchange between its Member States and India, although the majority of exchange students never apply for or receive EU assistance.

In 2006, during its EU presidency, Finland will host a summit between the EU and India, which will include an EU-India Business Summit. The Finnish Ministry for Foreign Affairs estimates that as many as two hundred or more Indian businessmen may attend the business summit. Because of the growing interest in India, more is expected from the summit than from previous ones, which critics fault for having been a lot of talk with few real results.

At least in business, EU Member States and businesses have so far acted very independently with India. They have turned to the EU mainly to help resolve problems and to influence the tax treatment of companies. The EU has a variety of programmes in different fields to promote collaboration between Indians and Europeans in business. More information on these programmes can be found on the website of the European Commission (www.delind.cec.eu.int/en/eco/index.htm).

ORGANISATIONS STUDYING INDIA'S DEVELOPMENT

The following is a listing of Indian and international planning and research organisations whose activities and research results should be monitored to gain a better understanding of Indian society and its economic expansion. They are also relevant to Sitra's India Programme.

The **Planning Commission** of the Indian Government plays an influential role in India's economic progress. As India has moved from a centralised, planned economy to an open one, the Commission's focus has shifted from the drafting of conventional five-year plans to more modern and adaptable five-year planning, or to developing long-term strategic visions. The Commission's objective is to steer the Indian economy in the planned direction.

The **National Advisory Council** NAC is another important, if very different organisation of political strategy. It was founded only very recently, after the current Government came took office in 2004. The NAC is largely composed of representatives of civil

society. Its role is to connect the objectives of the Government programme with grassroots reality.

The NAC's chair is Sonia Gandhi, who is also the chair of the National Congress Party, which won the election. Despite the party's victory, Gandhi was unwilling to accept the prime minister's seat despite being the leader of the main Government party. She nevertheless has several important roles behind the scenes. The NAC is one of them.

There also are several academics and research institutions in India that focus on the country's future. Indeed, Indians are themselves the best experts of their society, and a lot of good, solid academic research is done in India. Also, many Indian academics are not active only in their own country, but also in the USA or Europe. The most interesting local research institutions that study India'sprogress include the **National Council of Applied Economic Research** (NCAER) and the **Centre for Policy Research** (CPR). The cultural organisation **India International Centre** IIC also publishes studies and reports on important issues.

The NCAER is a top-class Indian economic research institution. It has a staff of 150, with some 80 people engaged in research. Its research falls under five broad themes: 1) agriculture and rural development, 2) poverty, development and equality, 3) industry, science, technology and infrastructure, 4) growth, trade and economic integration, and 5) surveys and general economics. Underlying all these themes is an interest in India's economic reform and its impact. The NCAER's continuing market research project on Indian households is especially interesting. An annual survey has been conducted under the project since the mid-1980s. It is based on data collected from 300 000 households. The NCAER sells results from the project at a high price, but it is considered the most reliable source on development of the consumer market of India and its various regions.

The CPR is an independent research institution. Since it is partly funded from public sources, it has the status of a public research institution. The CPR's purpose is to produce information, provide

ideas and training for public administration, and take part in public debate. In this respect it is similar to Sitra.

The IIC produces an annual, independent report on India's economy, which it hopes the central government will use in planning the implementation of economic policy. In recent years, the IIC has also published reports on relations and cooperation between India and Australia and Singapore.

FOREIGN RESEARCH BODIES INTERESTED IN INDIA

There are a large number of research institutions and other organisations outside India that are interested in India's progress. Many of them collaborate with Indian organisations.

The **Brookings Institution** is the best-known think-tank in the USA. It is located in Washington DC. Brookings is similar to Sitra in that it is independent but close to the government and decision-makers. Ideologically, it is close to the Democrats, although it is formally non-partisan. It conducts research and analyses and provides training in economics, foreign policy and administration.

Brookings has more than 140 permanent and temporary researchers at its disposal, producing books, articles and short opinion pieces. They also appear before Congressional committees and take part in numerous public events each year. Brookings is funded by donations and its endowment, and by revenue from training services and publications. It also conducts research on India and collaborates with three key Indian research organisations. They are the **Institute for Peace and Conflict Studies** (an influential NGO in security issues), the **Observer Research Foundation** (a think-tank, in the process of setting up a centre on USA research in India), and the NCAER. In early 2005, Brookings and the NCAER came out with a new annual publication entitled **The India Policy Forum 2004**. It deals with the contemporary Indian economy, its reforms and factors that influence them. Their aim is to form a global network of researchers interested in the progress of India's economy around this publication.

Stephen Cohen is in charge of India activities at Brookings. He has written on India and been involved in forming a network of experts on the country. The Institution's President is Strobe Talbott, who was Secretary of State under Bill Clinton and has made India one of the Institution's principal subjects of research. He published a book entitled *Engaging India* in 2004. It dealt with India's nuclear arms, relations between the USA and India, and Hindu nationalism.

Brookings has started raising funds to continue its activities related to South Asia. It is also looking for international partners. For example, the German Friedrich-Ebert-Stiftung partly funded a dialogue on key issues on South Asia, organised by Stephen Cohen in early 2005 for European and Japanese experts. Cohen has also proposed an India seminar organised jointly by Sitra and Brookings.

The German **Friedrich-Ebert-Stiftung** (FES) operates in more than 100 countries, including India. Ideologically it is affiliated with the Social Democrats and it is a private, non-profit cultural and research organisation. FES' Finnish partners include at least SASK, the Trade Union Solidarity Centre of Finland.

Another international organisation that is similar to FES and plays a visible role in India is the US **Ford Foundation**, which grants funds – 15 million dollars annually in India – for various development projects. The **World Bank** also invests massive sums in such projects. It has a large staff in India and publishes reports on it, too.

In the UK there are several think-thanks that conduct important research on India. There is **Demos**, for example, which has collaborated with Sitra and has just recently started a project on the new geography of science. The purpose of the project is to study the impact of the rise of India and China in particular to the forefront of science and how this will affect Europe. The project director has proposed to Sitra that Demos would prepare a separate report on the project's India section, tailored for Finland and Sitra.

The British **Foreign Policy Centre**, which is somewhat similar to The Finnish Institute of International Affairs (FIIA), started a broad programme on India and globalisation in February 2005, covering research, publications, forums and public debate. The pro-

gramme addresses the social and economic global consequences of India's rise in power.

The **European Institute for Asian Studies** EIAS is a think-tank based in Brussels. It analyses political, economic and security issues between the EU and Asia. India is one of its key subjects and it organises conferences and other events and issues publications dealing with it.

Many European and North American universities also conduct interesting research on South Asia, in which India plays an important role, as one would expect. Important European institutions conducting social studies on India include the **International Institute of Asian Studies** in Leiden in the Netherlands and the **School of Oriental and African Studies** in London. British universities obviously have a historical motivation to conduct South Asian studies, and there is a large network of researchers in the field in the UK. In the Nordic countries, the **Nordic Institute of Asian Studies** in Copenhagen has provided a profitable context for Indian studies. Swedish South Asia scholars have the **Swedish South Asian Studies Network**. No such network exist in Finland yet.

Websites:

British Council India www.britishcouncil.org/india.htm
The Brookings Institute www.brook.edu
Centre for Policy Research, CPR www.cprindia.org
Demos www.demos.co.uk
European Institute for Asian Studies, EIAS www.eias.org
Ford Foundation www.fordfound.org
Foreign Policy Centre www.fpc.org.uk
Friedrich-Ebert-Stiftung India www.fesindia.org
India International Centre, IIC www.iicdelhi.nic.in
Institute for Peace and Conflict Studies www.ipcs.org
International Institute of Asian Studies www.iias.nl
World Bank India www.worldbank.org/in
National Advisory Council, NAC www.nac.nic.in
National Council of Applied Economic Research, NCAER www.ncaer.org
Nordic Institute of Asian Studies www.nias.ku.dk
Observer Research Foundation www.observerindia.com
Planning Commission www.planningcommission.nic.in
School of Oriental and African Studies www.soas.ac.uk
Sweden-India Business Council www.sibc.se
Swedish South Asian Studies Network www.sasnet.lu.se

8 Conclusions

ELINA GRUNDSTRÖM, VESA-MATTI LAHTI

India can best be understood when it is regarded as several different Indias.

Will this really be India's century? Will India overtake China as an economic power? Will India's GDP grow at an average of 6% or 8% annually? Many questions related to the new economic expansion are interesting, but eventually somewhat irrelevant to the problem of what Finns ought to do about India. Why should we know which of the Asian giants will be richer in 2050?

What is important is to understand the great change currently taking place in the world economy. The world is about to become flat. While the annual GDP growth rate in the euro zone is around 2%, India's is 6% if not 8%. And for a long time, China's GDP has been expanding at a rate of some 10% annually.

Since the time of the explorers, we in Europe have been the ones to take action first, leaving reaction to the others. But while Finnish organisations are still mulling over how many people they should send to India to promote exports, the playing field has become much more even, almost without anyone noticing it. Now China and India are taking the initiative and we are the ones that have to react, often in a hurry, too.

Take the city of Tampere, for example, which may well be on its way to becoming a hub of IT service production between India and Finland. The City's management must at some stage have wondered whether it would be good or bad for the region to have the company Wipro establish a unit there to accumulate orders

from Finland and have the work done in India. Should Tampere support this sort of activity or not?

The same applies to the city of Lahti. Finnish trade unions had to react quickly when the Taiwanese company Foxconn acquired a plant in Lahti that makes plastic parts for mobile telephones from Eimo, a Finnish manufacturer, and tried to alter the collective agreements in force at the plant. The Central Organisation of Finnish Trade Unions SAK has had to weigh what action to take when a China phenomenon in reverse may save jobs but weaken the Finnish labour movement.

All this, more than GDP growth, is why Finns should be more active in and concerning India. It is important if 20 Finnish businesses receive effective consultation that helps them do good business in India in the next few years. But it is much more important to learn to work with the Indians and react wisely to Indian initiatives that will become even more frequent than they are now.

While Finns have already accumulated considerable experience on China, the Finnish presence in India is still minute, as we realised while working on this study. There are less than 200 Finns there, student exchange is next to non-existent, and there are only a few students of Indian languages at the University of Helsinki Faculty of Arts. There may in fact be fewer speakers of Indian languages than of Chinese in Finland, despite the fact that the former are easier for us to pronounce. English is good for business negotiations, but to really understand Indian cultures and society we need to speak local languages.

Most important at this stage is to promote contacts between Finns and Indians in general is what is, and business is one of the most important forms of contact. It is essential to go to India and do business to learn how business is done there. We also need student exchange, voluntary work, exchange programmes for skilled workers in different sectors, visits by journalists, and research and training on contemporary India.

From the India phenomenon to India phenomena

Every so often, stories in the media praising the bright future of India's IT service sector cause a sensation of déjà vu. They are reminiscent of glorification of the new economy in the media in the late 1990s and of the Finnish new media bubble that burst soon after.

At present, however, India's progress is at a very promising stage. It is very likely that economic relations between Finland and India are about to take off just like those between Finland and China were 15 years ago. However, there is a lot of exaggeration and misleading simplification in the debate about the India phenomenon. It has been our goal to draw a realistic picture of India because we want to show that there are risks involved, too.

The risks are so serious that it would be very dangerous for every Finnish company to rush to India. Nevertheless, for some businesses well-planned collaboration with the Indians is vital, whether in India, Finland, or somewhere else.

We have also tried to underline that Finnish actions should benefit both Finns and Indians. While short-term advantages to the Finnish export industry are important, what is even more important is to make sure that long-term close collaboration and deep understanding emerge between Finns and Indians. This is the only way we can learn to respond to initiatives that come from India. In this respect it is important to remember that while India's economy is expanding, widespread poverty and serious environmental problems still exist. This is why Finns should engage in business in India that can also help reduce poverty and environmental problems. Sitra could play an important role in developing collaboration of this sort and promoting it.

Recommendations for Sitra's India Programme

Instead of the India phenomenon, the future measures taken under Sitra's India Programme should focus on India phenomena, that is, study and disseminate information on the regions, growth centres, population groups and sectors that are meaningful and interesting to Finns.

These themes and areas could naturally be studied in separate projects, but this could lead to harmful fragmentation. To prevent it, the most important themes from the Finnish perspective should be collected under a single '**Finnish Indias**' project. This project could both satisfy the needs of Finnish businesses and industries and add to general knowledge and educational material on India in Finland.

The objective of the Finnish India project would be to produce a coherent series of small-scale reports that describe the industries that are important to Finns and their business cultures in the relevant Indian states. In addition, the project would generate information on the culture and society of the regions in question. Apart from reports, the material could be used in web publications that would be made available free of charge to schools. A photographic exhibition, for example, could be based on material from the publications for the India summits and exhibitions that will take place in Finland in 2006.

The following is a list of suggested themes for the Finnish Indias project:

- **India of Nokia**: the Chennai area in Tamil Nadu, where Nokia and its subcontractors are about to build a manufacturing centre;
- **India of IT services**: the new growth centres Bangalore and Hyderabad in the states of Karnataka and Andhra Pradesh;
- **India of forests and metal**: West Bengal, possibly a new growth centre, is attracting especially Finnish forestry and metal industry; and
- **Buyer's India**: Mumbai and the states surrounding it, especially Maharashtra, from the viewpoint of Finnish buyers of textiles and other consumer goods.

Other possible Indias are 'The Businessman's India Guidebook', 'Bio sector India' and 'India of Tampere'.

Besides the Finnish Indias project, there are numerous other potential topics for reports. In fact, there are more ideas that can possibly be converted into projects. A criterion for choosing projects could be how well Sitra's other programmes support the theme. Another important criterion could be the relevance of the topic to recent

research on India and the debate in which India is seen as the prime example of the so-called third stage of globalisation. A third criterion could be how well the theme lends itself to reciprocity, that is, how it would support activities that benefit both Indians and Finns.

At least in the environment, innovation and health care synergy could be gained from other Sitra programmes[93]. A **background report** could be drawn up on Sitra's Environmental Programme for collaboration in the **environmental sector**. India faces major environmental problems, but it is also willing to invest in resolving them. Finland, on the other hand, has solutions and environmental competence to offer. The report could investigate the market for environmental technology in India and opportunities for exports. For example, what could Finland and Finnish companies do to alleviate India's water problems? Or what investments in environmental technology manufacturing plants, companies and the public sector in key Indian industries need to make especially in fields where Finnish businesses have competence. A separate study could look into what new opportunities there are for Finnish-Indian cooperation in the emission trade[94]. Now that the Kyoto agreement is in force, this is a very relevant question.

Sitra's Innovation Programme is also creating synergy by working with the British think-tank Demos. Demos will soon start a separate project on the **new geography of science** that is very interesting to the India Programme. The topic is also relevant for the objectives of the Innovation Programme. The purpose of the project is to examine what influence will the rise of especially India and China to the forefront of research have and how it will affect Europe. Demos has proposed a separate project to Sitra, which would focus especially on the rise of Indian scientific research and look closer at the effects of the new on Finland. The project would include cooperation between Finnish, British and Indian parties. The Finnish Academy has also shown interest for the topic of this project.

Collaboration with the Health Care Programme could also offer synergy, because Indians are eager to replace their existing health care equipment with up-to-date technology, of which Finnish com-

panies have plenty to offer. Also, 'health tourism' is increasing in India. For example, eye surgery using top-of-the-line techniques is much cheaper there than in the West. Sitra has suggested several ideas for projects that have to do with India's health service systems, such as telemedicine.

In the context of the debate on globalisation, it might be pertinent from Finland's point of view to see India as an example of the latest stage in globalisation by studying the transition from the **China Syndrome to the India phenomenon**. The project would look into how globalisation is changing and what this means to Finland. It would also include a review of economic indicators. Conventional export and import statistics or even statistics on direct foreign investment no longer seem to keep pace with the rapid progress of globalisation.

The best experts on the development of India are the Indians themselves. It is vital that we collaborate with them to find out **what would be the most sensible form of business activity between Finland and India from their point of view**. Where do they consider the best opportunities for Finnish companies or the biggest risks? What are the most promising sectors and how to proceed in them? How to take corporate ethics into account? A cooperative project should be set up to deal with these issues with an Indian research institution. The well-known institution of economics research in New Delhi, the National Council of Applied Economic Research NCAER would be an ideal partner.

In addition to further reports, this study also offers a foundation for examining what further measures Sitra's should take. After all, this question will become timely if Sitra decides to expand its India Programme beyond simple studies and reports. In that case, it would make sense to continue collaboration with both the other Sitra programmes and other Finnish organisations involved with India. Sitra could also assist an exchange of experts between Finland and India and arrange India courses to Finnish decision-makers to help draw up a Finnish India strategy. Furthermore, Sitra could play a role in the important India-related events that will take place in Finland in

2006, including the summits between the EU and India and the major exhibitions organised by the Helsinki City Art Museum and the Museum of Cultures. Sitra could also consider financing businesses that are engaged in collaboration with Indians and related business development. However, no decision has yet been made concerning future expansion of the India Programme.

APPENDIX 1: VISIONS OF INDIA'S FUTURE

Answers to the question: What do you think are the most important changes that will take place in India in the next 5 to 10 years?

"There is nothing mysterious about the Indian economy. Future trends can already be seen, and they will only strengthen. Growth may be as much as 6.5% per year for the next 5 to 10 years. This means that the Indian economy would be one of the fastest growing national economies.

For the last 20 years, every Government has adopted the same economic policy, and this will be the case in the future, too. India must integrate further with the global economy. To do this, it must remove trade barriers and attract foreign investment. It must also invest in health care and education and not try to micro-manage its economy.

The principal risks to India's future are the price of oil and unfavourable monsoons, which could in the worst case cut India's growth to 5% annually.
New sectors of growth will be pharmaceutical products, and chemical and textile industries, with an increasing share of output being exported. However, India will never become a mass manufacturer like China.

Improving infrastructure is another important task, because without a good infrastructure, India will loose international companies to China."

– JAIRAM RAMESH, WELL-KNOWN COLUMNIST AND MP FROM THE CONGRESS PARTY

"I believe that more and more high-tech companies will be set up in India and significant investments in goods manufacture will start flowing in from abroad. But this means that modernisation must be quick, both in terms of infrastructure and governance. The 'IT revolution' may help reduce the differences between the cities and the countryside, but income differences will probably keep growing. The deficit of women, pressure from immigration from Bangladesh, pollution and discrimination based on the caste system are serious causes of social friction. Nevertheless, I do believe that these problems will largely be kept in check. "

– MIKKO PYHÄLÄ, COUNSELLOR, UNIT FOR ASIA AND OCEANIA, MINISTRY FOR FOREIGN AFFAIRS

"The Indian Government will open doors further for globalisation. Services will become an important part of the economy. In industry, the focus will shift to the private sector, while the public sector will concentrate on administration. There will still be corruption, but the justice system will gain a better grip of crime, including corrupt politicians.

Labour legislation will change and all Indians could be provided with minimum social security. More and more work will be done in the unofficial sector, however. The labour movement will loose some of its political clout. The role of NGOs will become bigger. More and more women will work. "

– PRAVIN SINHA, ECONOMICS SCHOLAR SPECIALISING IN WORK LIFE, FRIEDRICH-EBERT-STIFTUNG

”Population growth will be too rapid. With poor literacy, rapid population growth can have unexpected consequences. Another problem is that India has so few natural resources.”

– SEPPO KERÄNEN, DIRECTOR OF FINPRO’S INDIA EXPORT CENTRES

”The consumer class will keep growing and India will become an even better market for companies in the consumer goods sector. India’s infrastructure will improve. There will be lots of new flight connections and international airports. The gap between the poor and the rich will grow wider, and economic expansion will mostly help only those who can benefit from global trade. Inflation will also be a problem, especially locally, as has already happened in Delhi, for example. American culture will have more and more influence. Banking and the investment sector will be opened to foreigners and India will become a major market for them. With the help of telecom, India can become a major power.”

– VIPUL CHAUHAN, FORMER INDIA COUNTRY MANAGER FOR FINPRO

”There will be more companies quoted in stock exchanges. State-owned companies and private and family businesses will be quoted in the Indian stock exchange. Indian companies will acquire foreign ones and expand abroad.

Outsourcing from abroad to India will continue (IT, car components, pharmaceutical research). Foreign companies will transfer manufacturing activities to India (cars, mechanical engineering, IT and pharmaceuticals). India will start marketing its own pharmaceutical products (as opposed to generic ones). The middle-class will continue to grow. Economic growth will be 7% to 8% annually. Agriculture will contribute a decreasing and services an increasing share of GDP.”

– TAINA ERÄJUURI, PORTFOLIO MANAGER OF FIM INDIA

”Improving infrastructure will be the most important task in the near future. The current Government talks about developing rural areas, but it has received little attention compared to urban development. The problem is that no one knows where to start.”

– DEBASHISH MAZUMDAR, DIRECTOR, WÄRTSILÄ NORTH INDIA

”There is a larger share of young people in India than anywhere else in the world: 60% of the population is under 25 years old. This group will be the source of all major changes because it is so much more global than its predecessors.

Large differences in the standard of living are a serious problem. There are some who have a lot and others who have next to nothing. The Government must make it possible for the rural population to join in the economic expansion. Currently, there are too few new jobs, especially because of poor infrastructure. I doubt that industrial production will put the country side on a growth track, but industrialising agriculture will.”

– ANAND K. SETHI, FINNFUND’S ADVISER IN INDIA

"Indian's will raise their voices. New population groups will voice their opinions. For instance, in the last three elections no party gained a simple majority.

India is on the verge of a process of urbanisation that will be like the ones that took place in France and the UK in the late 19th and early 20th centuries. However, most of the people moving to cities from the countryside will not have any of the skills needed in the global market. This may cause a political crisis.

The fate of the environment is also worrying. Will our environment survive the strain it will be subjected to for the next 500 years after all, that is as far ahead we must think, at the least, as responsible people."

– SURESH SHARMA, DIRECTOR, CENTRE FOR THE STUDY OF DEVELOPING SOCIETIES (CSDS)

"The agribusiness could be the next boom sector, With the right technology and better marketing skills, we could get more out of agriculture than we are currently getting.

Retail trade will also expand. My father's generation could invest 15,000 rupees to buy a television set every ten years. Now, people put the same sum into a new mobile phone every year. In the trade sector companies will grow bigger because there are very few chains in India at present. I also believe in the growth of the service sector because young people are using more services than their parents."

– PRASHANT SHANI, THE YOUNG MANAGING DIRECTOR OF TECNOVATE,
WHICH PRODUCES SERVICES FOR EBOOKERS

"Telecoms will consolidate. While there are 6 to 7 major players in India at present, there will only be 4 to 5 in 2 or 3 years. Equipment manufacturers may also merge or at least cooperate much more closely.

Urban populations and the middle-class will continue to grow and most middle-class people will be young. These factors will have a strong impact on the economy.

Now is the time to invest in India. The fact that for the first time last year, the steel industry and infrastructure investments grew significantly is a sign that growth has really picked up."

– SHIV BAGRODIA, DIRECTOR IN CHARGE OF EXPANDING NOKIA NETWORK BUSINESS IN SOUTH ASIA

"I hope that infrastructure will be much better. We have poor roads and awful congestion. Ports should also be improved. India has no deep harbour, for example. We hope to have one in 4 to 5 years.

I also hope and believe that the Government will adopt policies that are more favourable to businesses, and that the textile industry will get foreign investments. The State should invest in training engineers."

– GAUTAM NAIR, MANAGING DIRECTOR AND OWNER OF MATRIX CLOTHING

"6.5% annual growth is possible, but industrial production must grow even faster or we will be in trouble. However, we can benefit from cheap labour.

If things go well, poverty could decrease significantly. A positive outlook also includes a lot better infrastructure and a more open economy and better-educated population."

– RAJESH CHADHA, SHASHANKA BHIDE, SUMAN K. BERY, RESEARCHERS AT NATIONAL COUNCIL OF APPLIED
ECONOMIC RESEARCHIN (NCAER)

Answers to the question: What role could Finland play in India's change?

"Finns – get to work! For years and years Nokia has been promising that they will come In addition to IT, the paper industry and environmental technology are sectors that would suit Finnish companies."

– JAIRAM RAMESH, MP FROM THE CONGRESS PARTY.

"It would be especially promising to link Finnish design with Indian production but it would require good planning and a focused effort. Outsourcing will increase exponentially and benefit both parties. In biotechnology, nanotechnology, biomechanics and top-level health-care technology Finnish-Indian collaboration could gain a very good status worldwide. India will eventually have to start developing more sustainably, which will offer opportunities to many techniques developed in Finland. As a small economy, Finland must work hard to gain a footing in India's international economic relations."

– MIKKO PYHÄLÄ MINISTRY FOR FOREIGN AFFAIRS

"Finland will benefit from the fact that it has never been a colonial power. We Indians are not afraid that you will take advantage of us. This will open many opportunities to you.

Finns must also make sure that they get enough publicity. Of course, it is important to consider carefully which projects could benefit from publicity."

– PRAVIN SINHA, FRIEDRICH-EBERT-STIFTUNG

"Finns must have a presence here. They need to set up production. I doubt Finnish businesses can be successful if they only import from Finland."

– SEPPO KERÄNEN, FINPRO

"Finns have to be quick because the Indian market changes rapidly. Americans are quick to act and that is why they have been successful. Small Finnish companies expect too much even if all those who have invested here have seen that it is profitable.

India required more management competence. In Finland, companies do not hire thousands of people for their factories.

The Americans have been successful because they have adapted to local conditions. In contrast, Vodafone and British Telecom have had to back out of India. What is essential is to help local employees improve to the level of those coming from abroad. Think globally – act locally."

– VIPUL CHAUHAN, FINPRO

"Then setting up in India, foreign companies need a detailed business plan. Their business must offer added value to the locals to be successful. A good Indian partner can help smaller companies gain a market footing. Mechanical engineering and technology products interest the Indians."

- TAINA ERÄJUURI, FIM

”Taking part in infrastructure investments would benefit India more than anything else. Better connections are a necessity for rural development. This would bring political and financial benefits.

Finnish businesses also have competence in bio oils, bio diesel and small hydropower stations, coal storage, reuse of water and the paper industry. Pollution control is becoming a major business. Many Finnish companies want to operate on the soft side only, as experts and consultants, but the demand for hardware is much, much bigger.

– DEBASHISH MAZUMDAR, W RTSIL INDIA

”For Finns, the most fruitful sectors are telecommunications, the paper industry, health care, environmental technology and the energy sector, especially converting biomass into energy. Finland benefits from the fact that it was never a colonial power in India. However, it must invest in raising awareness about itself in India. People do not know Finland well enough.

– ANAND K. SETHI, FINNFUND

”Finns can still remember what was it like to live in a rural society. This will make easier to understand India.

– SURESH SHARMA, CSDS

”Cooperation in music and art, for example, might be a good idea. Finland could offer training in these fields. More business delegations would also be a good thing. We Indians are very unfortunately little interested in the outside world. Indian students abroad spend their time together. Finns are much more open. We also need help in industrial design and clothes design. We used to be good at them but not anymore.

– PRASHANT SHANI, TECNOVATE

Interviews

Javed M. Ansari, Senior Assistant Editor, The Hindu. Journalist, joined the BBC in London in February 2005.

Shiv Bagrodia, Business Development Manager South Asia, Nokia Networks. In charge of expanding Nokia's network business in South Asia.

Jay Vikram Bakshi, Head Corporate Communications, Nokia India Private Limited. Head of communications for Nokia in India.

Suman K. Bery, Director General, National Council of Applied Economic Research (NCAER). Director of NCAER.

Shashanka Bhide, Dr., Senior Research Counsellor, NCAER. In charge of research administration.

Rajesh Chadha, PhD., Chief Economist, Chief Economist, NCAER. Chief economist.

Vipul Chauhan, Country Manager, Finpro India. Former director of Finpro in India.

Taina Eräjuuri, Investment Manager, FIM. FIM Portfolio manager of the FIM India fund.

Om Prakash Gupta, Finnish Ambassador to India.

Anna-Kaisa Heikkinen, attache, Finnish Embassy, New Delhi.

Seppo Keränen, director of Finpro's export centres in India (as of 19 January 2005).

Matti Kerppola, senior investment manager, Finnfund. In charge of, for example, India projects.

Petteri Kostermaa, director in charge of network strategies, Finnair.

Ashok Malik, Senior Editor, The Indian Express. Senior editor.

Debashish Mazumdar, Head Northern Region and Utility Business Group, Wärtsilä India. Director for North India and utility business in India.

Gautam Nair, Managing Director, Matrix Clothing. Heads a plant that makes shirts for US brands.

Morna Nance, Dr., Deputy Director, British Council India. Assistant director for BC in India.

Jairam Ramesh, MP, Congress Party.

Chandrika Grover Ralleigh, Manager, British Council. Head of art and cultural affairs for North India.

Anshumali Saxena, Sr. Manager Business Development, Tecnovate. Tecnovate provides services to eBookers.

Prashant Shani, CEO, Tecnovate. Tecnovate provides services to eBookers.

Suresh Sharma, Sr. Fellow Director, Centre for the Study of Developing Societies (CSDS). Director.

Anand K. Sethi, PhD., Advisor, Finnfund. Advisor for Finnfund in India.

Pravin Sinha, PhD., Senior Project Advisor, Friedrich-Ebert-Stiftung. Economics researcher, specialising in working life.

Tea Westerlund, leader of the Finland team at Tecnovate, which provides services for eBookers.

Bibliography

1. The India Phenomenon

Das, Gurcharan: India Unbound. Penguin Books India. 2002.

Friedman, Thomas L.: It's a Flat World, After All. New York Times Magazine3.4.2005.

Friedman, Thomas L.: The World is Flat: A Brief History of the Twenty-First Century. Farrar, Straus & Giroux. 2005.

Government of India (2003). Task Force on Meeting the Human Resources Challenge for IT and IT-enabled Services Report and Recommendations. New-Delhi: Department of Information Technology, Ministry of Communications and IT.

Governmet on India 2002. Report of the Committee on India Vision 2020, Plan ning Commission, Government of India 2002: http://planningcommission.nic.in/plans/planrel/pl_vsn2020.pdf

Helsingin Sanomat 11.10.2004. Jyri Raivio: Teollisuusmaiden G7 vanhenee tulevaisuus on maakvartetin.

Helsingin Sanomat 7.4.2005. Susanna Niinivaara: Nokian kymmenes kännykkätehdas nousee Etelä-Intian Chennaihin.

Helsingin Sanomat 17.11.2004. Sami Sillanpää: Kiina ei ole kultakaivos.

Hämeenniemi, Eero: Missä sade leikkii. Basam Books 2004.

IBM Business Consulting Services. Global Investment Report 2004. GILD, Global Investment Locations Database.

It-viikko 2.12.2004. Perttu Pitkänen: Intia-ilmiö leviää ohjelmistotestaukseen.

Kauppalehti Online 23.12.2004: Andritz rakentaa Intian suurimman sellutehtaan.

Kauppapolitiikka 2/2005: Theme issue: Intia – mahdollisuuksia maa.

Kauppapolitiikka 4/2004. Mikko Pyhälä: Intian talous ripeässä kasvussa Intia haastamassa Kiinan.

Kumppani 4/2005. Mikael Vehkaoja: Limujätit rellestävät Intiassa.

Prahalad, C.K.: The Fortune at The Bottom of the Pyramid. Eradicating Poverty Through Profits. Wharton and Pearson Education. 2005.

Sharma, Alak N. Sharma Rajeev and Raj, Nikhil: Child Labour in Carpet Industry. Impact of Social Labelling in India. Institute for Human Development, Delhi.2004.

Talouselämä 14.1.2005. Sami Rainisto: Luonto kurittaa taloutta.

Taloussanomat 11.12.2004. Matti Remes: Intia-ilmiö antaa vielä odottaa itseään.

Taloussanomat 27.11.2004. Elina Grundström: Paluu paratiisisaarelle.

Tamminen, Tapio: Uusi Hindustan intialainen nationalismi. In Pakkasvirta ja Saukkonen (eds.) Nationalismit. WSOY 2005.

The Economist 21.2.2004: A Survey of India.
The Economist 13.11.2004. The Survey of Outsourcing.
The Economist 5.3.2005. The Survey of India and China.
The Economist 9.4.2005: Globalization with a third world face.
The Times of India 11.2.2005. FDI in India to treble to 15 Bn.
UNDP Human Development Report 2003: India. http://hdr.undp.org/statistics/data/cty/cty_f_IND.html

2. India in the World Economy

Complete sources can be found in the following report which was the basis of chapter 2: Ali-Yrkkö Jyrki - de Carvalho Anthony - Suni Paavo (2005), Intia maailmantaloudessa. ETLA, Discussion papers 977. The report is available at www.etla.fi.

Ali-Yrkkö, J. & Jain, M. Offshoring Software Development – Case of Indian Firms in Finland. ETLA Discussion Papers 971/2005.

Ayilavarapu Dinkar (2004 November). VAT, or something like it. India together. Bosworth, B. & Collins, S. (2003). The Empirics of Growth: An Update. Brookings Papers on Economic Activity.

Cassen, R.H. & McNay, K. (2004). The Condition of the People. In Dyson, T., Cassen, R.H. and Visaria, L. (Eds.), Twenty-First Century India, Population, Economy, Human Development and the Environment. Oxford: University Press.

Chaube, K. (2005, January 18). India's experimentation with Value Added Tax (VAT). Indian Daily. Digi (2005, January 19). DigiTimes daily IT news.

IEA (2002). Electricity in India Providing Power for Millions. Paris: International Energy Association.

IEA (2003). India-IEA Joint Conference on Coal and Electricity in India. Conference held on September 22-23, 2003 in New Delhi, India. Government of India (2004a). Annual report. New Delhi: Department of Information Technology, Ministry of Communications & Information Technology.

Government of India (2003). Task Force on Meeting the Human Resources Challenge for IT and IT-enabled Services Report and Recommendations. New Delhi: Department of Information Technology, Ministry of Communications and IT.

Government of India (2004). Union Budget 2004-2005. New Delhi: Ministry of Finance.

IMF (2004). World Economic Outlook. Washington, D.C.: International Monetary Fund.

ITFacts Itfacts.biz. (n.d.). Retrieved Jan. 10, 2005, from http://www.itfacts.biz/index.php?id=C25_4_1.

Padhi A., Pauwels, G. & and Taylor, C. (2004). Freeing India's textile industry. The McKinsey Quarterly Special Edition: What global executives think.

Panagariya, A. (2004). India in the 1980s and 1990s: A Triumph of Reforms. Columbia University unpublished manuscript.

Rodrik D. & Subramanian A. (2004). From "Hindu Growth" to Productivity Surge: The Mystery of the Indian Growth Transition. NBER Working Paper No.w10376.

Rodrik D. & Subramanian A. (2004a). Why India Can Grow at 7 Percent a Year or More: Projections and Reflections. IMF WB/04/118.

Rajan, R. (2005). India A Hub for Globalisation. The Pravasi Bharati Divas Conference. New Delhi January 2005.

Suni, P. (2004). Kiina maailmantaloudessa Globaalitalouden kasvu ja työnjaonmuutos. ETLA Discussion papers 924/2004.

World Bank (2005). Global Economic Prospects. Washington, D.C.: World Bank.

4. Makers of the India Phenomenon

Arunachalam, V S. 2003: Home Improvement: An Indian Tale. Foreign Policy July/August 2003, 79-81.

Bloom D, & Williamson J. (1998). Demographic transitions and economic miracles in emerging Asia. The World Bank Economic Review, 12(3), 419-55.

Confederation of Indian Industry 2004: India's remittance income from the US rising: CII study (26 Jul, 2004), reported at http://www.indiapost.com/members/story.php?story_id=3409, read on 20 February 2005.

Dyson, Tim 2004: India's population: the future. In Twenty-first Century India. Population, Economy, Human Development, and the Environment. Eds .Tim Dyson, Robert Cassen and Leela Visaria. Oxford University Press, Oxford, pp. 74-107.

FINPRO 2004: Intia: IT-aloja uhkaa pula osaavasta työvoimasta. http://www.finpro.fi/markkinatieto/countryfiles.asp?Section=52&Country=129&Item=105761, read on 20 February 2005. Government of India 1998: Attending an Educational Institutions in India: Its level, nature and cost. NSS 52. round, July 1995-1996. National Sample Survey Organization, Department of Statistics. Report no 439.

Government of India 2002: Selected socio-economic statistics. Statistical Organization, Ministry of Statistics and Programme Implementation, New Delhi.

Government of India 2003: Statistical abstract of India. Statistical Organization, Ministry of Statistics and Programme Implementation, New Delhi. Kingdon, Geeta,Cassen Robert, McNay, Kirsty and Visaria, Leela 2004: Education and literacy. In Twenty-first Century India. Population, Economy, Human Development, and the Environment. Eds. Tim Dyson, Robert Cassen and Leela Visaria. Oxford University Press, Oxford, pp. 130-157.

Ministry of Education, website http://www.education.nic.in/htmlweb/unhighedu.htm, visited on 14 February 2005.

Ravi Kumar, T. and Sharma Vijender 2003: Downsizing Higher Education: An Emergent Crisis. Economic and Political Weekly, February 15.

Sheth, D. L. 1999: Caste and class: social reality and political representations. In V.A Pai Pandiker and Ashish Nandy (eds.), Contemporary India, New Delhi, Tata McGraw-Hill Publishing, pp. 337-363.

Singh, Amrik 2003: Academic Standards in Indian Universities: Ravages of Affiliation. Economic and Political Weekly, July 26, 2003.

Varma, Pavan K. 1998: The Great Indian Middle Class. Penguin Books, New Delhi.

Wood, Adrian and Calandrino, Michele 2000: When other giant awakens: Trade and human resources in India. Economic and Political Weekly Dec 30.

World Bank 2004: South Asia: Private Capital Flows Return To A Few Developing Countries As Aid Flows To Poorest Rise Only.Slightly. www.worldbank.org

Harris, Jerry 2005: Emerging Third World Powers: China, India and Brazil. Race & Class 46(3): 7-27.

Huang, Yasheng & Khanna, Tarun 2003: Can India overtake China? Foreign Policy Jul/August 2003, 74-79.

Statistics Finland 2005. http://www.stat.fi/tup/maanum/hakemisto/html , updated 27 May 2004.

UNCTAD 2004. World Investment Report. The shift towards services. United Nations, New York

1 The India Phenomenon

[1] There recently appeared an excellent cultural guide for visitors to Chennai, Eero Hämeenniemi's *Missä sade leikkii (Where the Rain Plays),* Basam Books 2004.

[2] According to Sethi, one of the reasons for the increased recognition of Finns in India is use of the Linux operating system. Articles have appeared in the press explaining that Linus Torvalds, the developer of the system, is a Finn.

[3] *Kauppapolitiikka* 2/2005.

[4] Inflation has been pushed down to 5.5%, and the currency reserves are at an unprecedented USD 133 billion. (*Kauppapolitiikka* 2/2005).

[5] VAT was enacted on 1 April 2005, but it was not yet adopted in all the states at the end of April. VAT also fluctuated somewhat from state to state in contradiction to the spirit of the Act.

[6] FDI to India was USD 5.6 billion in the fiscal year 1003/04.

[7] *The Times of India* 11 February 2005, *The Economist* 5 March 2005.

[8] IBM Business Consulting Services. Global Investment Trends 2004. GILD, Global Investment Locations Database.

[9] E.g. *IT-viikko* 2 December 2004, *Taloussanomat* 11 December 2004, *Helsingin Sanomat* 7 April 2005.

[10] In the context of white-collar revolution in India, English texts often distinguish between IT services and BPO. In this report IT services are used as the umbrella term whenever possible.

[11] At the moment about 16% of world IT service production, 6% of software production and only one per cent of bank services are provided by offshore companies situated far away from the place where they are used. According to an estimate by *The Economist*, up to one half of such services can be outsourced easily. (*The Economist* 21 December 2004.)

[12] UNDP Human Development Report 2003.

[13] National Association of Software and Service Companies, Nasscom, is the interest organisation of Indian IT service companies.

[14] A Survey of India, *The Economist* 21 February 2004; interview with Pravin Sinha 14 February 2005.

[15] *The Economist* 21.2.2004.

[16] Finnish Board of Customs 2004, Statistics Sweden 2004.

[17] IBM Business Consulting Services. Global Investment Trends 2004. GILD, Global Investment Locations Database.

[18] *The Economist* 9 April 2005.

[19] *Helsingin Sanomat* 11 October 2004.

[20] *Taloussanomat* 27 November 2004; *Talouselämä* 14 January 2005.

[21] *Helsingin Sanomat* 17 November 2004.

[22] Tapio Tamminen 2005.

[23] UNDP Human Development Report 2003. http://hdr.undp.org/statistics/data/cty/cty_f_IND.html

[24] *Kumppani* 4/2005. Mikael Vehkaoja: 'Limujätit rellestävät Intiassa'.

[25] Sharma, Alak N. et al. 2004.

[26] The latest policy is to accept development aid only from the G8 countries, the EU Commission and those EU member states whose annual development aid contribution is over USD 25 million,

[27] http://www.demokratiafoorumi.fi/Hind_Swaraj_suomennos_050408.htm

[28] *The Economist* 5 February 2005.

2. India in the World Economy

[29] Cassen and McNay (2004).

[30] E.g. Government of India 2004a, Suni 2004.

[31] Panagariya 2004.

[32] Rajan 2005.

[33] Rodrik et al 2004.

[34] *The Economist* 5 March 2005.

[35] IEA 2002, IEA 2003.

[36] Government of India 2004.

[37] ITFacts 2004, Digi 2005.

[38] National Association of Software and Service Companies, Nasscom, is the interest organisation of Indian IT service companies.

[39] Government 2003.

[40] Chaube 2005, Ayilavarapu 2004.

[41] Padhi, Pauwels, and Taylor 2004.

[42] E.g. Bosworth and Collins 2004 and Rodrik and Subramanian 2004a.

[43] Rodrik and Subramanian 2004.

3. The India Phenomenon and Finnish Companies

[44] The basic information regarding the Indian economy in this chapter is taken from the background survey commissioned by ETLA for this report: Ali-Yrkkö Jyrki, de Carvalho Anthony, SuniPaavo (2005): Intia maailmantaloudessa. ETLA, Discussion papers 977, accessible at www.etla.fi. The chapter also uses information from unpublished background articles by Heikki Korhonen, Intia-ohjelma 1 and 2. (30.1.2005).

[45] National Board of Customs, 2005.

[46] *Kauppapolitiikka* 2/2005.

[47] http://www.india-cellular.com/ (17 February 2005: Government expects $800m investment from foreign telecom companies.)

[48] *Talouselämä* 4/2005.

[49] The figures are based on the interview with Debashish Mazumdar and information reported by the company.

[50] http://dipp.nic.in/industry/ind_plcy_03/paper.htm.

[51] *The Times of India*, Kolkata, 3 March 2004.

[52] http://dipp.nic.in/globalrep/Final_9092002.pdf.

[53] Anna-Liisa Lilius: 'Intia on rohkeiden maa.' *Talouselämä* 9/2005.

[54] Finnish business Metso to ramp up operations. *Business Standard* 4 March 2005.

[55] Interview by Heikki Korhonen. Unpublished background paper. Intia-ohjelma 1. (30.1.2005).

[56] Aaron Berstein: 'Shaking up trade theory.' *Business Week*, 6 December 2004.

[57] Government of India: Annual report. New Delhi: Department of Information Technology, Ministry of Communications & Information Technology.

[58] Pravin Sinha: Dilemma of organising it workers. Friedrich-Ebert-Stiftung 2004.

[59] Calculation by Professor Michael Dertouzos, MIT, in Sinha: Dilemma of organising IT-workers.

[60] Pravin Sinha: Dilemma of organising IT-workers. Friedrich-Ebert-Stiftung 2004.

[61] The initial salaries in the IT sector have come down quite a lot. Finpro 31 March 2005 according to *The Economic Times*.

[62] Information about the operations of Indian IT businesses in Finland are based on the study by Ali-Yrkk and Jain (forthcoming) and a phone conversation with Vesa Kaasalainen, director of Tampere International Business Office.

[63] Anna-Liisa Lilius: 'Intia kasvoi Nokian avainmarkkinaksi.' *Talouselämä* 4/2005.

[64] Statistical information about the textile and clothing industry 2004. The Federation of Finnish Textile and Clothing Industries.

[65] http://yaleglobal.yale.edu/display.article?id=4808.

[66] http://www.equitymaster.com/budget0506/sectors/pharma.asp.

[67] *Kauppapolitiikka* 2/2005.

[68] Eeva Nuutinen Finpro, *Kauppapolitiikka* 2/2005.

4. Makers of the India Phenomenon

[69] Dyson 2004. http://esa.un.org/unpp/p2k0data.asp.

[70] Based on the average number of children women give birth to.

[71] Bloom and Williamson 1998.

[72] Dyson 2004.

[73] Kingdon et al. 2004.

[74] 27% 5 24 year-olds had never been to school according to the 1996 survey.

[75] Government of India 1998.

[76] 13.7% in 1997 (Kumar & Sharma 2003).

[77] Ministry of Education, website visited on 14 February 2005.

[78] Wood & Calandrino 2000, Ministry of Education, website visited on 14 February 2005, Government of India 2002.

[79] E.g. FINPRO 2004.

[80] Government of India 2003.

[81] Wood & Calandrino 2000.

[82] Sheth 1999.

[83] Verma 1998.

[84] Hancock 1999: 63.

[85] World Bank 2004; Confederation of Indian Industry 2004.

[86] Arunachalam 2003: 80.

5. Finnish Indias

[87] Association of Finnish Travel Agents, 2005.

[88] Kauppapolitiikka 2/2005.

[89] Ali-Yrkkö Jyrki - de Carvalho Anthony - Suni Paavo (2005), Intia maailman taloudessa. ETLA, Discussion papers 977.

[90] Maailman kasvumarkkinat. Valtioneuvoston kanslian julkaisusarja 22/2004. http://www.suomimaailmantaloudessa.fi/data/VNK22_2004.pdf

7. International Organisations

[91] See e.g. Anna-Lee Saxenian: Silicon Valley's New Immigrant Entrepreneurs, Working Paper No. 15, Center for Comparative Immigration Studies, University of California (2000).

[92] Sengupta, Snigdha: The Second Coming, Businessworld vol. 24, issue 39, 30 36 (2005).

8. Conclusions

[93] Information on Sitra's other programmes can be found on its website www.sitra.fi.

[94] A survey of certified Indian emission reductions could possibly be carried out in collaboration by the Finnish Environment Institute and Tekes, which is currently conducting a technology programme entitled ClimBus on the business opportunities offered by curbing climate change.

AUTHORS

Jyrki Ali-Yrkkö, Lic.Sc.(Econ.), research manager at Etlatieto Ltd. Ali-Yrkkö has published several research papers on internationalisation, Nokia's role in the Finnish economy, networking and corporate R&D. He has previously worked as a programmer and programming designer in several small enterprises.

Anthony de Carvalho, Ph.D, researcher, ETLA, specialises in employment and international economic trends.

Elina Grundström, M.Sc.(Soc.Sc.), journalist, did the research on her master's in Calcutta. She has worked for several Finnish newspapers and magazines, including *Ylioppilaslehti*, *Hiidenkivi* and *Markkinointi&Mainonta*, and written the book *Alkuperämaa tuntematon* (Tammi 2002) and edited the book *Globalisaation portinvartijat* (Sitra and Edita 2004). She has received the Finnish State Prize for Journalism twice. In 2005, she received the prize for her work on global issues.

Vesa-Matti Lahti, Dr.(Soc.Sc.), research manager, heads Sitra's India Programme and headed a research project on the concrete effects of globalisation that ended in 2004. He received his doctorate from the University of Helsinki in sociology, has worked, for example, in the Directorate-General of Research of the European Commission, the Academy of Finland and as a journalist at the *Helsingin Sanomat,* and written the book *Riskiyhteiskunta vesilasissa* (Yliopistopaino 1998). He was one of the authors of *Maailman tila ja Suomi* (Gaudeamus 1999, State of the world and Finland), which received the Tieto Finlandia prize in 2000.

Matias Möttölä, M.Sc.(Soc.Sc.), journalist, has worked as a financial journalist at *Helsingin Sanomat* and contributed to various magazines, newspapers and journals, including *Image, Ylioppilaslehti* and *Ulkopolitiikka*, and written two books on sports. He is one of the authors of *Globalisaation portinvartijat* (Sitra and Edita 2004).

Paavo Suni, M.Sc.(Econ.), is a researcher at ETLA, specialising in world economy, its monitoring and forecasting. He is the editor-in-chief of *Kansainväliset suhdanteet* and member of the Euroframe network of European economics research institutions. He has written numerous articles on international economic trends, on the imbalance of the world economy, economic development of China, Asia and the euro zone and the development of the price of crude oil..

Minna Säävälä, M.Sc.(Soc.Sc.), Ph.D., social anthropologist, University of Helsinki, received her doctorate from the University of Amsterdam. Her topic was Indian family relations and population issues. She is currently working on a paper on India's new middle-class and its relationship with western values with funding from the Academy of Finland.

SITRA
REPORTS
SERIES
56

India's economy is expanding so rapidly that the financial press is talking about an 'India phenomenon'. Finnish companies are taking action, like companies around the world. But the Indian economy is not another opening to the world like the Chinese economy. It is not based on the export industry, but on IT services and other white-collar work.

This study examines the India phenomenon and the opportunities it has to offer to Finns. It is also a background report for and the launch of Sitra's (The Finnish National Fund for Research and Development) India Programme.

SITRA

ISBN 951-37-4531-7
ISSN 1457-571X