



CHINA & INDIA

The Social

DIRTY WORK
Last year, 137,000
Chinese perished
on the job



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Starts to Ease

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Both Beijing and New Delhi are
tackling long-standing problems
—and making headway



IDAS CONTRACTOR
High turnover rates
prompted managers to
improve benefits

Waking Up to Their Rights

A grassroots movement of activists and lawyers is helping increasingly assertive workers get their due. **BY DEXTER ROBERTS**



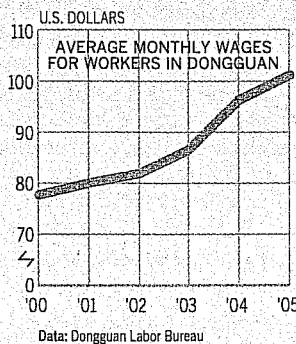
LUO GUANGFU, A SERIOUS 27-YEAR-OLD from the city of Chongqing, spends long nights at the weaving and dyeing machines of a textile factory in the industrial suburb of Panyu just outside Guangzhou. When he finishes his 12-hour shift at 7 a.m., you might expect him to sleep the day away. Instead, he usually grabs just a few hours of shut-eye, then heads for a run-down building surrounded by electronics, toy, and textile factories. ¶ Once there, Luo climbs the stairs to the Panyu Migrant Worker Culture Center, joining dozens of

other migrants in a stuffy room on the second floor. Though the center offers ping-pong, movies, and well-thumbed comic books in its small library, Luo usually opts for classes taught by the center's small volunteer staff—most of them workers themselves. His favorite is a seminar on his rights at the factory. "If a worker doesn't know China's labor law, then he's in big trouble," Luo says.

Luo has put his knowledge to good use. In April he and 300 other workers sent a letter to their factory manager demanding that wages be raised from less than \$60 per month to the legal minimum of \$69. At an earlier job, he joined 1,000 workers in a six-day strike that also successfully led to a wage hike. "If bosses don't pay us enough money, we can use the law and confront them with it," he says.

Luo and migrant workers like him are at the vanguard of a new labor-rights revolution sweeping China. Last year alone some 3 million workers joined a total of 57,000 protests countrywide, according to China Labour Bulletin, a Hong Kong-based rights group. These employees are no longer the docile hero workers of the Communist era, or the eager, exploitable legions who made China a manufacturing powerhouse. Today they're harnessing the power of the Internet and communi-

Getting Better



cating with each other via cell phones to make sure they get their due. From Guangzhou to Zhengzhou, a network of training centers and legal aid clinics are giving workers support and helping them take thousands of their grievances to the courts each year. "It's a de facto labor movement happening in China," says Robin Munro, research director at China Labour Bulletin.

This surge of activism is part of the changing labor math of China. Worker shortages are popping up in the manufacturing strongholds of Guangdong, Fujian, and Zhejiang Provinces. Rising rural incomes mean fewer people are migrating in search of work. The one-child policy has cut population growth, which means there are fewer young people to staff factories. After years of wage stagnation, salaries are starting to creep up. "Workers have more choices than before," says Huang Huiping, deputy chief of the labor bureau in the Pearl River Delta city of Dongguan. She estimates the city's factories have 267,000 unfilled jobs.

If this labor movement is sustained, foreign investors will have to consider their China strategy in a whole new light. China's phenomenal growth has been based on an endless labor supply

A Blacklisted Labor Leader Speaks Out

The Rights Stuff: Yee Cheuk Yan of the Hong Kong Federation of Trade Unions talks about the challenges of protecting workers



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THE SOCIAL AGENDA

and wage rates a fraction of those in the West. But suddenly, China's pool of the willing doesn't look quite so vast. The country's 169 million manufacturing workers are more mobile, and those who are now migrating often do so in search of a specific job, not just whatever work they can round up. That means China's attraction for sweatshop investors will diminish. The country will begin trumpeting its other advantages: new highways, railroads, ports, phone and data networks, pools of hyper-efficient suppliers of everything from hubcaps to hard drives, and perhaps most important, its huge domestic market.

SOCIAL COMPACT

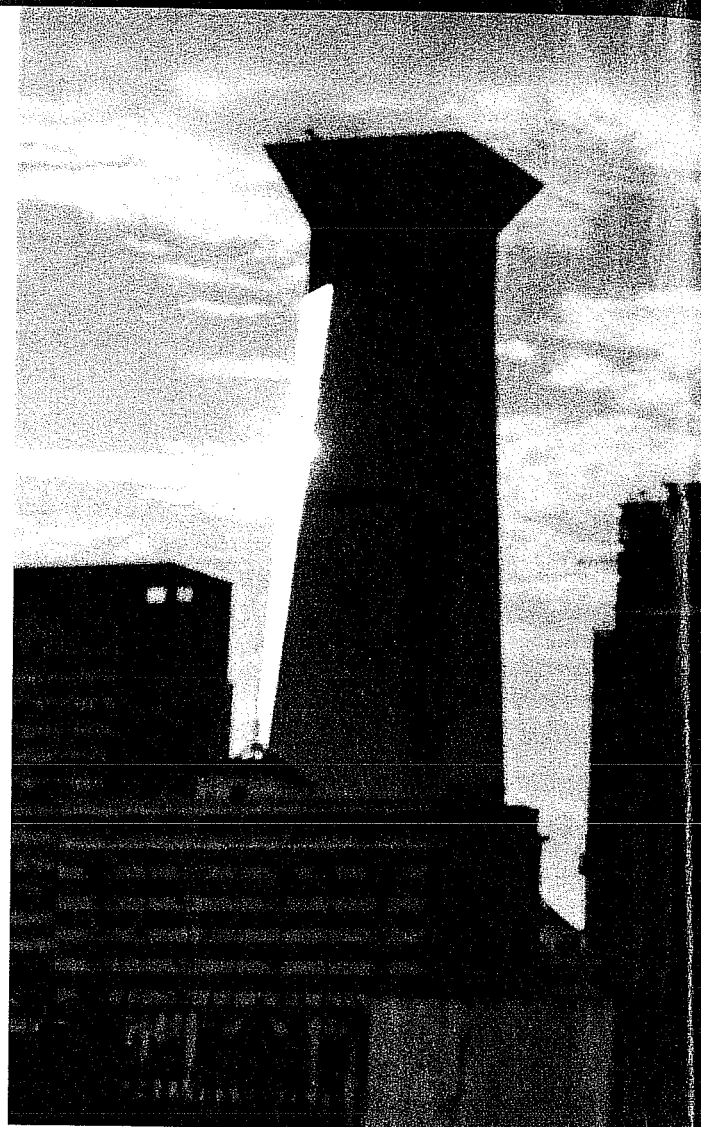
GROWING ACTIVISM HAS SPECIAL significance for the coastal areas where multinational activity is most intense. There are clear signs that many foreign companies and their suppliers are entering into a new social compact with workers in these regions. At the same time, some of the most sophisticated players simply need fewer workers in any given factory. In General Motors Corp.'s most automated mainland plants, for example, labor accounts for less than 10% of the cost of a car produced—lower than many factories in the U.S. and Europe. That means GM can more readily afford the wages and training needed to woo the best workers.

If other companies emulate GM, the low-wage model for China could slowly start to morph into one that depends on higher pay and greater productivity. Other factors—spiraling costs for construction, land, and housing on the coast, as well as the revalued yuan—could help speed this trend. China will have to compete more and more in areas where the stress is on delivering sophisticated, value-added products that depend on state-of-the-art factories and highly skilled labor. The increasing sophistication of Chinese consumers—who now want the best, most advanced products possible—will accelerate the demand for value-added manufacturing.

Employers in the lowest-tech industries, meanwhile, may shift away from China's coastal regions. Guangdong's "factories have been designed with the most cutthroat wage structure," says Judith Banister, a demographer with Beijing's Javelin Investments, a management consulting firm. With wages creeping up, low-end "manufacturing is moving to other countries like Vietnam, India, and Pakistan."

These changes will take years to play out, of course. And for now, the activists are much less concerned about the macroeconomic implications of what they're doing than they are about the day-to-day battle for better wages and working conditions. "A high-growth economy shouldn't be based on violating workers' rights," says Jiang Junlu,

a labor lawyer at King & Wood, China's largest law firm. It's a slow struggle. There's still only sporadic enforcement of rules on everything from overtime pay to child labor and safe working conditions. In China's vast hinterlands you'll find no shortage of workers willing to toil long hours sewing shirts, cutting and polishing the rubies and jade sold in U.S. malls, or digging coal from some of the world's most dangerous mines. Last year more than 137,000 workers were killed on the job. And

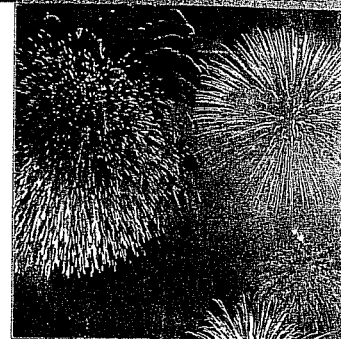


A New Labor Equation

China's workers are starting to demand real reform, and change is slowly happening. Here are the key players bringing about the shift:

WORKERS	ACTIVISTS	COMPANIES	GOVERNMENT
They staged 57,000 strikes and protests last year demanding better wages or improved conditions. Some are also attending classes on labor reform at training centers nationwide.	A new breed of activist has started helping workers get a better deal from employers. Lawyers and law students are holding seminars and arguing labor cases in the Chinese courts.	Foreign enterprises are leading the way, since higher wages and better housing keep workers on the job—which means higher profits. Now, some Chinese companies are following suit.	The leadership under President Hu Jintao has made a public push for better conditions for China's 169 million factory workers. But there are limits: Those who push too hard can be jailed.

Data: China Labour Bulletin



Silicon Valley East

A silk capital has software startups—and scenery

Looking for China's Silicon Valley? Try Hangzhou, a serene lakeside city long noted for its fine silks. Lately, Hangzhou has become a hub of China's Internet business. In all, some 1,800 software companies have set up shop there, drawn both by the verdant setting and the super-smart tech grads from the city's Zhejiang University. **All the business buzz adds up to a real estate boom.** The price of a 1,600-square-foot apartment can top \$400,000, an increase of 30% in the past year. The developer of Shanghai's Xintiandi entertainment district has built a complex of pubs, restaurants, and shops alongside the once-bucolic West Lake, and a string of bars now lines nearby Nanshan Road. If Hangzhou could just manage Silicon Valley-style traffic jams, the metaphor would be complete.

Some factories are taking pains to make sure their laborers stick around. Apache Footwear employs 12,000 people to produce 1.1 million pairs of Adidas shoes a month in the city of Qingyun. With monthly turnover rates of nearly 10% at its original factory in nearby Guangzhou, Apache sought to make the four-year-old Qingyan plant a more inviting place. "Before, you just had to pay workers and that was enough," says Steve Chen, Apache's Taiwanese boss. "Now you really have to take care of them."

Apache started with the living quarters. Rather than house its staff in the concrete-and-steel high-rises that are the norm at most factories, it built a series of one-story, red-brick buildings. The company organizes Saturday night movies and dances. When it hires, Apache gives preference to its employees' relatives. And it is building apartments it plans to sell cheaply to workers with families—a rare benefit in a country where breadwinners often spend most of the year working hundreds of miles from home. Turnover in Qingyan is now about a third the level of the Guangzhou site. "The environment here is much better than at other factories," says 22-year-old Li Linli, who three years ago followed her older sister to Apache from their village in Hunan Province. "She told me the benefits were quite good and that they always pay on time," says Li.

In part, multinationals like Adidas have spurred such changes. Foreign companies face pressure from consumers and shareholders at home who are concerned about corporate social responsibility. The multinationals are targeted more often for workplace investigations by Chinese officials, so they're better at complying with China's labor law, say labor analysts. And as the multinationals compete for increasingly scarce workers, some of their labor practices are being picked up by Chinese rivals. Haier, for instance, has established a 24-hour phone hotline and a support group to help employees cope with emergencies.

The more important agents of change, though, are the workers themselves and the labor organizations that support them. The Migrant Workers Community College in Shenzhen's grubby

Western retailers and marketers that buy the bulk of China's exports apply relentless pressure on manufacturers to cut costs, so plant managers are loath to raise wages.

Even as workers on the coast demand better wages and benefits, the Rust Belt is being largely left behind. Nationwide unemployment is only 4.2%, but in the northeastern provinces focused on heavy industries, official joblessness runs up to 18%. "Look at the industrial history of England, Japan, and Germany," says Arthur Kroeber, editor of Hong Kong-based *China Economic Quarterly*. "It's a span of decades before workers are able to really organize for higher wages."

Nevertheless, what's happening in China these days is truly revolutionary. The epicenter of the revolution is Guangdong Province north of Hong Kong. China's export base, the region has thousands of factories making everything from motherboards to Barbie dolls. It's home to 7 million migrant workers—and provincial officials estimate local factories need another 2 million. "Anyplace in China that traditionally relies on migrant workers is now suffering shortages," says Wang Guanyu, director of the Guangdong labor and employment service and administration center. The shortfall has driven average wages up 30%, to roughly \$97 per month, in the past year.

GUIDING HAND Liu teaches companies to be socially responsible

Cheongmiao district—home to scores of garment and chemical factories and dorms housing 200,000 workers—provides free or nearly free training in everything from computers to AIDS prevention. The center works with the likes of Nokia, Adidas, and all their suppliers to ensure they meet Chinese labor standards. Now the center is in talks with domestic tech power Huawei, too. “We want to let companies learn how to expand their business through being responsible corporations,” says former teacher and journalist Liu Kaiping, who founded the center.

Students, too, are playing a role. Law students from Tsinghua University in Beijing and Sun Yat-sen University in Guangzhou run seminars on factory floors, and some do much more. Wen He, a 23-year-old student at Sun Yat-sen, is representing four workers in Dongguan who caught a potentially fatal respiratory disease called silicosis after working long hours without protective face masks in a poorly ventilated jewelry factory. “I decided to go to law school because I saw how poorly migrant workers are treated,” says Wen.

Even Beijing is lending a hand—up to a point. Under President Hu Jintao, the government has ordered local labor bureaus to ensure that work sites are safe and that migrants get paid fairly and on time. Migrant worker detention centers—de facto jails where authorities locked up migrants without residence papers—were banned in 2003. That’s when Guangzhou-based daily *Nanfang Dushi Bao* wrote about a 27-year-old

FOREIGN CORPORATIONS WORRY ABOUT SHAREHOLDERS AT HOME AND ARE BETTER AT COMPLYING WITH LABOR LAWS THAN LOCAL COMPANIES

graphic designer who was beaten to death in such a center.

Beijing’s tolerance, though, has its limits. The law requires companies to allow a union to organize if just 25 workers ask for one—but that only applies to the official All-China Federation of Trade Unions. Woe to those who try to set up their own unions or push too strongly for workers’ rights. In 2002 two organizers of protests against unpaid wages and pensions at a ferro alloy plant in the northeast city of Liaoyang were sentenced to seven- and four-year sentences, respectively, on charges of “subversion.” “The Chinese regime is very much worried about the Solidarity experience in Poland coming to China,” says Lee Cheuk Yan, head of the Hong Kong Confederation of Trade Unions.

Chinese authorities will also let the press go only so far. Indeed, Hu’s administration is proving less tolerant than its predecessor. The government routinely shuts down papers, magazines, and Web sites and currently has more than 40 reporters in jail for reporting on issues such as labor rights and corruption. Cheng Yizhong, the muckraking editor of *Nanfang Dushi Bao* was arrested on trumped-up corruption charges last year. He was released but remains barred from working as an editor.

But the workers keep asserting themselves. Back in grimy Panyu, Luo Guangfu still isn’t satisfied, even following the latest wage hike. He is considering farming rice and sweet corn as his parents have long done, a more attractive proposition after Beijing cut taxes and hiked subsidies for rural regions. With workers like Luo free to make such choices, China’s factories will soon need to do far more to keep workers happy and on the job. The revolution is quiet, but it’s real and growing. China’s workers—as well as corporations and consumers worldwide—will be feeling its consequences. ■

A Big, Dirty Growth Engine

Pollution still chokes China, but green technology is starting to emerge.

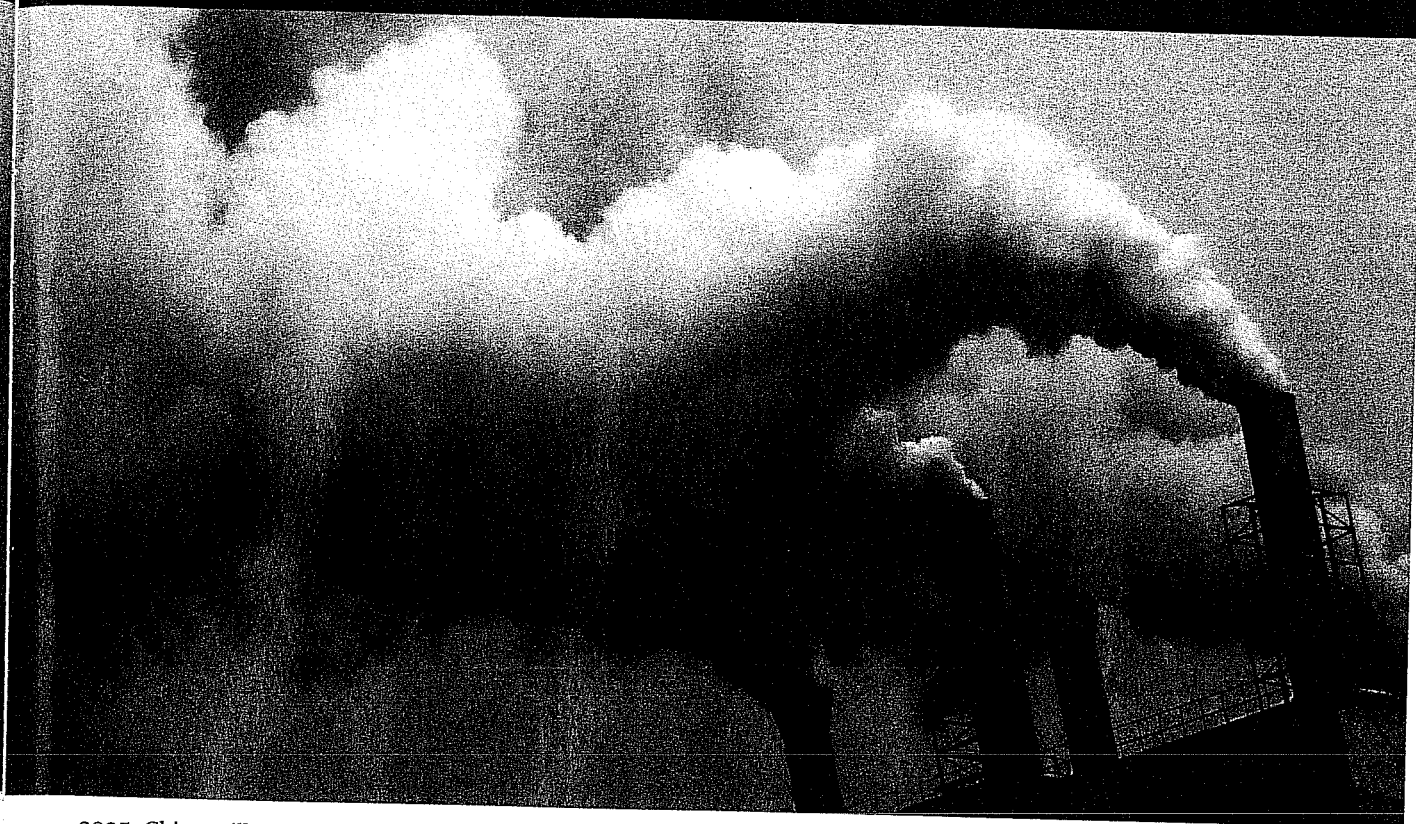


THE 2008 BEIJING OLYMPICS don’t look like much today. At most of the sites around the city, ground has barely been broken. But look a little closer and you’ll find that the games have already had a dramatic impact in the form of a thorough pollution clean-up. ¶ China’s leadership knows the Olympics may define the country’s international image

for decades. So officials have spared nothing in their efforts to show how green they can be. On clear days it’s now possible to look down Changan Avenue and see the peaks of the Western Hills, which had been obscured for years. Most homes and businesses have converted from coal heat to natural gas, many diesel-belching tractors and trucks have been banned from city streets, and 58% of sewage is treated. Beijing has moved nearly 130 factories out of the city and is building cleaner, gas-fueled power stations while installing scrubbers in older ones. It’s even putting up wind turbines to help power the Olympic village. When the Games start three years from now, the city and its residents will have spent \$13 billion on the transformation. By the time the Olympic torch is passed, a sparkling Beijing may well wow the world.

And the world will be misled. The reality is that despite all the effort spent on cleaning up the capital and a handful of other big cities, China is at best at a standstill in its fight against environmental degradation. For all its efforts, China’s unrestrained growth makes it one of the world’s worst polluters. Most of the nation is still reeling from the devastation wrought by three decades of communist industrial development and the subsequent 25 years of quasi-capitalism. In

(TOP TO BOTTOM) PHOTOGRAPHS BY DONG NG/EYEPRESS; IMAGINECHINA.COM



2025, China will consume 14.2% of the world's energy, compared with 9.8% in 2001. Because most of China's electricity comes from power plants that burn high-sulphur coal but lack effective emissions controls, acid rain falls on one-third of the country. And 70% of its lakes and rivers are heavily polluted, largely because more than 80% of China's sewage flows untreated into waterways. Six of the world's 10 most-polluted cities are in China, according to the World Bank, which estimates that pollution costs China more than \$54 billion a year in environmental damage and health problems.

China's soaring energy use and resulting pollution are a serious threat to the country's continued prosperity and growth, not to mention the well-being of its citizens. China has spent more than \$85 billion on environmental cleanup in the last five years and could shell out \$380 billion—4% of gross domestic product—between now and 2010. But even those outlays aren't enough to offset the pollution generated by the country's annual growth rate of more than 8%. The problems are compounded

by China's inefficient use of electricity, oil, and coal. China consumes nearly five times as much energy as the U.S. to produce each dollar of GDP—and almost 12 times as much as Japan. Alarming, the nation is getting less efficient, not more. After making steady progress in energy efficiency for two decades, China has been consuming energy at a rate faster than its GDP since 2002.

SMOKE SCREEN
Job creation trumps environmental concerns

PAINFULLY UNDERSTAFFED

IN MOST OF THE COUNTRY, enforcement of environmental regulations is lax. The State Environmental Protection Administration (SEPA), which oversees the environment nationally, is woefully understaffed, with a workforce of just 300 in Beijing and only 100 more for the rest of the country. That means monitoring and enforcement generally fall to local officials, or even factory managers—whose first priority is to create jobs, whatever the environmental cost.

A chromium factory was ordered to close in May, 2004, after dumping toxins into a river for five years. But just two months later the local environmental protection bureau let the plant begin producing again even though no new environmental protection measures had been installed, the state-controlled *China Youth Daily* reported. "The environmental bureaus of local governments would rather develop GDP than perform their role" as pollution watchdog, says Zhao Jian Ping, senior energy specialist at the World Bank in Beijing.

What's more, even where waste-

Breathtaking Damage

China's industrial development is taking its toll on the nation's air, water, and economy:



- Six of the world's 10 most polluted cities are in China
- Acid rain falls on one-third of the mainland
- 80% of China's sewage flows untreated into its waterways
- Contaminated water kills more than 30,000 children annually
- Pollution costs China more than \$54 billion a year

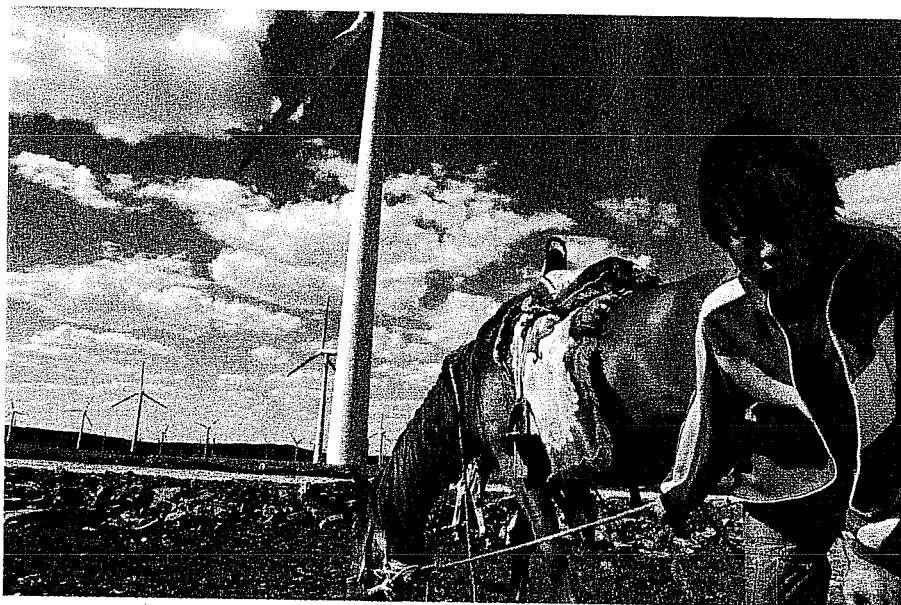
Data: World Bank

treatment gear is installed, some Chinese companies opt to pay fines rather than operate expensive equipment. The cost of cleaning up wastewater from a yeast plant can reach \$610 per 1,000 cubic meters, while the penalties are just \$490 per 1,000 cubic meters. Furthermore, noncompliance is preferred by local officials, since fines shore up budgets. SEPA says that while most major industrial plants have water-treatment facilities, one-third don't operate them at all and another third only use them occasionally.

CHEAP AND SOOTY

COAL MAY BE THE BIGGEST culprit. China has tens of thousands of small mines that pay scant attention to environmental concerns or safety. Such neglect helps keep costs down, making coal the preferred source of energy. Even though the price of Chinese coal has jumped 29% in the past three years, that's far below the 79% increase globally. So coal-based electricity generation costs a fraction of alternative energy sources. In Inner Mongolia, for example, wind power costs about 6¢ per kilowatt hour, more than twice the price of coal power.

The good news is that plenty of companies selling green technology are sensing an opportunity in China. Chinese enterprises are buying everything from scrubbers for coal-fired



power plants to alternative power sources such as wind turbines and methane gas from decomposing solid waste. China will invest \$61 billion in city wastewater treatment facilities between now and 2010. Scrubber sales could reach \$1 billion a year. "China is at a crossroads, shifting from a focus on buildup of capacity to more environment-friendly and energy-conserving technologies," says Steven Fludder, chief executive of GE Power China, which has sold more than \$1 billion worth of natural gas and wind turbines to the country since 2003.

GE isn't the only foreigner helping out. Some 400 non-Chinese companies now sell pollution-control equipment in the country. A joint venture between Westport Innovations of Vancouver, B.C., and Cummins Inc. has equipped more than 2,500 buses in Beijing with engines powered by natural gas at a total cost of \$26 million. Veolia Environnement of France has invested \$800 million in 10 water-treatment projects—some under contracts that stretch to 20 and 50 years and offer a 12% rate of return—and two facilities that generate power with methane gas released from sol-

FOREIGN COMPANIES THAT SELL POLLUTION-CONTROL EQUIPMENT IN CHINA ARE FACING INCREASINGLY STIFF LOCAL COMPETITION

id waste. Sweden's Purac Environmental System has sold equipment to dozens of companies in China. Its biggest customer, state-owned Huatai Paper in Shandong Province, has spent nearly \$7 million to clean up effluent that looked like "thick, cloudy Guinness beer" flowing into the river, says Purac China chief Lennart Huss. Those foreigners are facing increased local competition. Beijing Monitor Environment Technology Co. last year saw revenues of \$3.1 million selling emissions-monitoring equipment to power and petrochemical plants. Beijing-based Golden State Environment Corp. had sales of \$60 million last year and has worked on more than 2,000 water-treatment plants and landfills in some 250 cities. And Anhui Guozhen Environmental Protection Science & Technology Co. says it has won five contracts worth \$13 million annually to build and operate water-treatment plants for cities around the country.

One promising development occurred on Feb. 1, when the Kyoto Protocol on greenhouse gases took effect. The accord allows companies in developed countries to purchase gas emission "credits" from enterprises in developing nations. Effectively, corporations in Japan and the West buy the right to keep emitting carbon dioxide pollution. But under the terms of the protocol, the companies that sell their emission credits then have to reduce their pollution levels, the cost of which is presumably covered by the proceeds of the trade. Such deals in essence subsidize the sale of pollution-control equipment in the developing world, where it's often cheaper to make bigger gains in emissions reduction. Three Chinese projects are benefiting from the trade in credits: a wind farm on the grasslands of Inner Mongolia, a power station fueled by methane released during coal mining in Shanxi Province, and a power-generation project using methane produced by solid waste in Anding, south of Beijing. "This is the beginning of a market that has vast potential," says Andres Lieben-

MONGOLIA Wind power is more than twice as expensive as coal

thal, head of environment and social development for China at the World Bank's Beijing office. Clean air is a commodity China desperately needs. ■

China's Dirty Big Secret

The Dark Side of Growth: Increased pollution is a byproduct of China's economic boom

Harnessing the Wind: For Inner Mongolia, windfarms have meant clean, cheap energy—and a better way of life for locals

BusinessWeek online

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India's Untold Story

For those at the bottom, standards of living are inching higher. **BY MANJEET KRIPALANI**



THE ROAD TO THE REMOTE VIL-lage of Kharonda winds around the gentle slopes of the Sahayadri hills in the western Indian state of Maharashtra. Most of the road is well-paved, a black ribbon wrapped around hills washed a brilliant green by the abundant rainfall this year. Along the way, other small hamlets peep out of the misty hillsides, their red-tiled

roofs flashing in the sun. The people of Kharonda and the other villages have a lot invested in this road. Through the seasons, even during the fierce monsoons, they use it to send the mangoes, guavas, and cashews they grow into nearby towns and distant cities for sale. They've got a new commercial activity, too, selling grafts of their flourishing mango trees to other communities in Maharashtra and the neighboring state of Gujarat.

Just a few years ago, Kharonda and the Jawhar district of which it is part were typical of the rural villages where 650 million of India's 1 billion people live. There was no road, and there were no orchards. There was only grinding poverty. In one particularly bad year, 1993, 45 children in Jawhar died of malnutrition in one week. Today the district's transformation proves what can be done, even with limited funds, to combat the poverty that many have thought would always be the fate of most Indians.



Yes, poverty is still a scourge in India. At least 200 million people earn less than \$1 a day, when they can find work. Their sense that their problems were being ignored helped the Congress party and its allies unseat the center-right government of Prime Minister Atal Bihari Vajpayee in May, 2004. Congress has since made poverty reduction a big focus, introducing a raft of programs aimed at the urban poor and rural areas like Jawhar. Yet a 2005 study by New Delhi economists Surjit Bhalla and Nirtha Das, who evaluated several anti-poverty programs over the last 30 years, found that less than 27¢ of every dollar allocated actually reaches the poor. The rest is misappropriated and misdirected by local politicians and bureaucrats, the study says.

SWEET HARVEST

STILL, PROGRESS, OFTEN THROUGH self-help, has been made. Indian government census statistics show the number of those living on less than \$1 a day has dropped from 26% of the population in 1999 to an estimated 20% today. A combination of projects by nongovernmental organizations, local villagers' efforts, and grants from the government has made the difference, as has the beneficial effect of 7% annual economic growth in recent years. "The big unsung story about India is the rapid strides it has made in poverty reduction, though many challenges remain," Michael F. Carter, World Bank head for India, told an audience of Indian industrial leaders last year.

Dhavalu Mahale of Kharonda is one of those unsung heroes. A tall, wiry man, Mahale, like other Jawhar residents, was a textbook example of extreme poverty 10 years ago. He cultivat-



BEARING FRUIT

Mahale and his wife are now the richest in their village

ing seed and fertilizer with them. They helped the farmers plant saplings and fruit grafts on the hillsides. They taught them to level the small patches of land and harvest rainwater by building

small stone dams at the front edge of each patch. In the first year, 90% of the mango and other trees planted survived. Until the trees could bear fruit—it takes four years—the foundation taught farmers modern farming practices for the millet they were still sowing. When the trees finally bore fruit, each participating family netted an average of \$35—way over the \$7 savings they generally had upon returning from the city, recalls Sudhir Wagle, BAIF's chief program coordinator in Jawhar, who helped initiate the project.

NEW BRICK HOMES

MAHALE SOON ASKED THE BAIF workers for help. Wagle set Mahale to work planting fruit trees and developing land and water resources. And he planted high-value crops like watermelons until the mango trees bore fruit. His neighbors smirked. Who would buy the watermelons? How would they be transported? There were no roads. But Mahale persisted and managed to get his first crop to the nearest town. It earned him a princely \$115—more than he had ever earned in a year.

Meanwhile the government's Tribal Affairs Ministry pitched in. (Jawhar is populated by "tribals"—indigenous people with special rights whose roots on their land go back millennia.) The Ministry gave cash grants to individual farmers of \$115 over five years to buy seeds and fertilizer, gave Kharonda a grant to repair and chlorinate the village well, and provided motors and pipes to help bring the water up the hillside to the land and into homes. Within five years, Kharonda and surrounding villages were producing tons of nuts, fruits, and other produce.

Today, villagers like Mahale are local role models. Mahale owns the largest house in the village of Kharonda: an eight-room structure with brick walls and a red-tiled roof. Inside, the house boasts electricity, running water drawn by motor from the local well, satellite TV, a sofa set, and a large bed in the master bedroom. Last month, Mahale bought himself a motorcycle with one of the consumer loans so easily available in India these days. His wife, Sintar, a stately woman with a confident smile, helps her husband. Their income is now nearly \$4,000 a year, the fruit of the 20 mango trees, 40 cashew trees, and a stand of eucalyptus, plus the 6,000 mango-sapling grafts they sell annually.

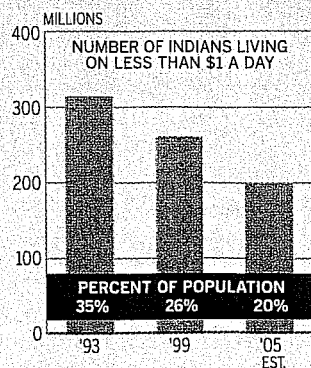
In fact, the income of the entire district has increased. The grass huts typical of less prosperous times are gradually being replaced by brick homes. Vans fly up and down the hill carrying sapling grafts, produce, and supplies. The successful program in Kharonda shows that, in its fight against poverty, "the government has kept space for human, social interventions—more in India than anywhere else," says BAIF Executive Vice-President Girish G. Sohani. The program "catapults people from poverty right into the market economy," he adds. It's a model that is giving the abject poor of India hope, and could do the same for others who live in poverty around the world. ■■

ed finger millet, a rough crop used by tribals for their daily bread, on a denuded hillside inherited from his father. When the growing season was over, he and his family moved to the shanties of Bombay, where he did building and road construction. "I didn't like it, but there was nothing in the village," he recalls. Even with construction work, the total annual income for the family of five was \$80. Life was so hard that three of their five children died of malnutrition, and Mahale was desperate for a new chance. In 1995 he approached workers of BAIF Development Research Foundation, a private group in Pune.

The foundation had started a program in Gujarat, in which it worked with impoverished villagers to diversify their farming by combining agriculture with horticulture and forestry on fallow land. Maharashtra authorities had asked BAIF to replicate the program in the Jawhar district. It targeted 10 mountain villages, including Kharonda, where 1,000 families lived. The problems were enormous. There were no roads leading to the villages; deforestation and erosion were severe. And the locals were suspicious of the outsiders. But the staff persuaded some of the families to visit their projects in Gujarat. That helped, and in the first year, 67 families signed up.

BAIF workers found their way into the pathless mountains on motorcycles, carry-

Not So Many Of the Ultra-Poor



Data: Planning Commission of India, *BusinessWeek*



FALLOUT Knight, laid off from a Hoover plant in Ohio, blames consumers like herself for wanting cheap foreign goods

Asian Competition: Is the Cup Half Empty—or Half Full?

How America could beat the gloomy projections. **BY PETER COY**

TAKE A RULER OUT OF YOUR DESK drawer, lay it down on top of some economic trend graphs, and extend the lines out to 2015. What you're seeing is one vision of what lies ahead for the U.S. as China and India rise, and it ain't pretty. Three million U.S. manufacturing jobs have been lost in the past half-decade, so by the ruler method 6 million more will go poof in the coming 10 years. The U.S. merchandise trade deficit with China has been growing 20% a year, so the ruler says it should surpass a trillion bucks by 2015. By straight-line projection, China stands to trounce Detroit in autos and Silicon Valley in infotech, while India captures software and high finance. That would leave Americans to export raw materials, colony-style, and give each other haircuts. No wonder Paul Craig Roberts, a senior fellow at the conservative Hoover Institution, says that the U.S. is heading toward becoming a "Third World country."

Now put away the ruler, because real life rarely goes in straight lines for long. Remember the predictions about Japan's coming dominance in the 1980s? Or how Britain was called the sick man of Europe in the 1970s? Again today, the world economy may be on the verge of changes

that will twist current patterns beyond recognition.

The rise of China and India will be better for the U.S. than the direst predictions hold—yet worse than the Panglossian projections of boosters in America and Asia. On the upside, American consumers will clearly benefit from the availability of inexpensive goods and services. American shareholders of well-positioned multinationals will enjoy higher profits. And Americans employed in successful U.S. export sectors will benefit because China and India will buy more Western-style goods and services—from cosmetics to jets to banking—as they

BRUCE ZAKE

get richer and increase their consumption.

On the downside, life will be tough for those who are less skilled, less educated, and less able to adapt as the world changes around them. Even many highly skilled American service workers, from programmers to financial analysts, will suffer as low-cost Asian giants target U.S.-dominated businesses. "The individuals who are able to take advantage of the new opportunities do extremely well. Those who are poorly situated get hammered," sums up Gordon H. Hanson, an economist at the University of California at San Diego.

While it's impossible to say exactly who will feel the blow, it would be a mistake to assume that the trends of recent years will persist unchanged. For one thing, the U.S. won't keep producing less than it consumes forever. The winds of change blew this spring when the U.S. trade deficit shrank in the April-June quarter. That boosted GDP growth by 1.6 percentage points, trade's biggest contribution to economic growth since 1996. In coming years, India and China will consume more goods and services from the U.S. and elsewhere—both because they will be richer and because they will shift somewhat from export-led growth toward meeting serious domestic needs (chart). In China, the shift will mean more money for health care, housing, and the environment, and less for steel and chemical plants. China's health-care spending per dollar of GDP is only one-third that of the U.S., so there's lots of room for improvement. India, too, will divert more of its newfound wealth toward uplifting its poor. This will create opportunities to sell American products and services.

The beginnings of the new Asian opportunities are already apparent. As China modernizes, it needs more of the high-tech stuff the U.S. specializes in. Tech accounted for 22% of U.S. exports to China last year, up from 14% a decade earlier. American culture is a highly successful export to Asia. Such icons as *Baywatch*, *The Apprentice*, and *American Idol* have been licensed to satellite broadcasters in China and India. And America's financial giants like American Express Co. are positioning themselves to provide sophisticated products and advice ranging from mortgages to brokerage accounts to retirement planning. Deals of this kind benefit American workers indirectly by creating a bigger market for products and services developed in the U.S.

American farmers are some of the clearest beneficiaries. U.S. agricultural exports to China tripled from 2000 to 2004, to \$5.5 billion. Exports to India are also up. Mohnish Seth immigrated with his family from New Delhi to Chico, Calif., in 1990 to grow almonds for customers back home. Now family-owned Farmers International Inc. has thousands of acres of almonds and employs



A COUNTRY'S SHARE OF GLOBAL BUYING POWER MAY DEPEND ON ITS GLOBAL OUTPUT—AND AMERICA'S SHARE IS SHRINKING

around 70 people, half of them fulltime. Says Seth: "This market is going to grow further because of the rising purchasing power in Asia."

There will also be plenty of jobs for Americans in meshing the U.S. economy with those of China and India. Tom Manning, a part-time resident of Hillsborough, Calif., has carved out a niche as a board director for Chinese companies that need American representation. He speaks fluent Mandarin, has lived in Hong Kong most of the time since 1995, and ran

the Asian operations of several U.S. outfits. He and some partners even created a company called China Board Directors LLC. Participating in China's development miracle, Manning says, "has been a phenomenally supercharged growth experience."

But while China and India are opportunities, they are also threats. In Forest Grove, Ore., the library's budget had to be cut recently after one local electronics plant closed and another cut jobs under competition from Asia. In Casey County, Ky., the Economic Development Authority has stopped trying to attract call centers because it cannot match the low wages of rival operations in India. In North Canton, Ohio, Maytag Corp.'s Hoover vacuum cleaner factory is laying people off under pressure from cheap Chinese vacuum cleaners. Melissa Knight, 28, a single mother, was laid off in June from a \$15-an-hour job at the Hoover plant. She's collecting unemployment while hoping to be rehired. "It's all our fault," she says. "The American economy wants cheaper things. . . . I'm guilty of this, too."

"TRADABLE" OCCUPATIONS

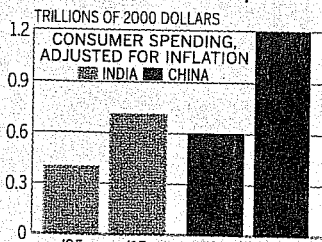
FACTORY WORKERS HAVE been fully exposed to low-wage competition for years. Service-sector workers are just waking up to the threat. J. Bradford Jensen and Lori G. Kletzer, economists at the Institute for International Economics in Washington, say other economists have vastly underestimated the number of U.S. service jobs that could—at least in theory—be performed overseas. In new, little-noticed research, Jensen and Kletzer calculate how many people in the U.S. work at a distance from their customers, figuring that if their jobs can be done, say, 200 miles from the customer, they could almost as easily be done half a

world away by people in Shanghai or Bangalore. By the distance criterion, they calculate that half of U.S. jobs are in occupations or industries that are "tradable."

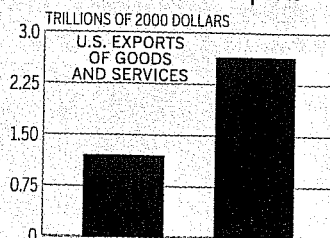
Sure, not all "tradable" jobs will go offshore. But under pressure to increase profits, American companies from General Electric Co. to IBM are changing their business processes so they can take advantage of cheaper foreign labor wherever it is

The Impact of India and China

As they get richer, they'll increase consumption...



...contributing to growth in overall U.S. exports



Data: Global Insight Inc.



NICE NICHE California's Manning serves on several Chinese boards

possible. Because their high salaries make a fat target, certain skilled employees can be highly vulnerable. Says Allen L. Weinberg, a McKinsey & Co. principal: "We are seeing a surprising amount of activity for some higher-end functions" that are easy to carve out and send offshore, including equity research and credit-card fraud detection. For Americans, offshoring of such jobs knocks out the lower rungs on the career ladder.

Among economists, the mainstream view continues to be that the full entry of China and India into the global economy is a plus for the U.S. as a whole, while producing some individual losers. A 2004 study that economic researcher Global Insight Inc. of Lexington, Mass., conducted for the Information Technology Assn. concluded that offshoring of computer software and services would add \$124 billion to U.S. gross domestic product by 2008 by lowering inflation and interest rates and by increasing productivity and economic activity. And McKinsey Global Institute estimated that America gains \$1.14 for each dollar of output that it sends offshore.

But those studies have come under criticism for being too optimistic. In a briefing paper this month, L. Josh Bivens, an economist with the Economic Policy Institute, says that the Global Insight study overestimates how much offshoring will reduce the cost of software in the U.S. The study by McKinsey, Bivens writes, incorrectly assumes that what's good for individual outsourcers is equally good for the American economy as a whole.

The U.S. benefits the most from trade when it and its partners specialize in

very different things. The problem is that China and India are concentrating their efforts on the same areas that the U.S. already specializes in, like high tech, says New York University economist William J. Baumol.

It could get worse, according to a collaborator of Baumol, mathematician Ralph E. Gomory, president of the Alfred P. Sloan Foundation, who is a former chief scientist for IBM. Using linear programming, Gomory demonstrated that a rich country like the U.S. can in certain circumstances lose from outsourcing industries to a poor but rising country like China or India. Gomory's work is built on the common-sense notion that a country's share of global buying power depends on its share of global output—and America's share of output is shrinking. Says Gomory: "If your trading partner is sufficiently underdeveloped, then if you lose industries to it, it's good for them and it's good for you. As the other country becomes more developed, the situation starts to turn around." While that's still a minority view, economists are beginning to grasp the possibility.

INNOVATION TRUMPS BRAWN

THE GOOD NEWS? Even Gomory and Baumol say that the U.S. can still thrive if it invents new industries to stay one step ahead. So far, the surprise is not that China and India are pressuring American workers. The surprise is that the pressure hasn't been worse. Over the past two years, the U.S. has added 3.7 million jobs. Some of the fields most vulnerable to foreign competition have seen healthy gains because demand growth has more than offset the effects of offshoring. The number of jobs in computer systems design rose 6.9% from July, 2003, through July, 2005, the government says. In the graduating class of '05, the average salary offer this spring for computer science majors was nearly \$51,000, up 2.3% from a year earlier and among the highest for any major, says the National Association of Colleges & Employers.

Even manufacturing is doing better than one might expect. Although the field continues to lose jobs, pay for those who remain is rising—in part because workers are earning higher pay through higher productivity. Wages and benefits for blue-collar workers in manufacturing rose 3.7% over the past two years after adjusting for inflation.

Many Indians and Chinese are more confident about Americans' future than Americans are themselves. "By focusing on innovation rather than brawn, and ensuring labor and regulatory conditions are attractive... the U.S. will continue to attract and retain the best and brightest," says Manoj Singh, the Hong Kong-based chief executive of Deloitte Asia Pacific. Singh participated in a recent BusinessWeek Online roundtable of international experts on India and China, which is posted at businessweek.com/go/china-india/.

China and India are undeniably on the rise. Whether the U.S. can match Asia's dynamism is in America's own hands. ■

—With Michael Arndt in Chicago



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