



## **The World Bank's Assistance to China's Health Sector**

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## Acronyms

|        |                                                          |
|--------|----------------------------------------------------------|
| AIDS   | Acquired Immune Deficiency Syndrome                      |
| CAPM   | Chinese Academy for Preventive Medicine                  |
| CAS    | Country Assistance Strategy                              |
| CAE    | Country Assistance Evaluation                            |
| CMS    | Cooperative Medical System                               |
| DFID   | Department for International Development, United Kingdom |
| DOTS   | Directly Observed Treatment, Short-Course                |
| ESW    | Economic and Sector Work                                 |
| HIV    | Human Immunodeficiency Virus                             |
| HNP    | Health, Nutrition, and Population                        |
| IBRD   | International Bank for Reconstruction and Development    |
| IDA    | International Development Association                    |
| IEC    | Information, Education and Communication                 |
| IMR    | Infant Mortality Rate                                    |
| MCH    | Maternal and Child Health                                |
| MDR    | Multidrug-resistance                                     |
| MIS    | Management Information System                            |
| MMR    | Maternal Mortality Ratio                                 |
| MOF    | Ministry of Finance                                      |
| MOH    | Ministry of Health                                       |
| NCD    | Noninfectious Chronic Diseases                           |
| NTP    | National Tuberculosis Control Program                    |
| OED    | Operations Evaluation Department, World Bank.            |
| PER    | Public Expenditure Review                                |
| PPAR   | Project Performance Assessment Report                    |
| SDPC   | State Development and Planning Commission                |
| SOE    | State Owned Enterprise                                   |
| SPS    | Senior Policy Seminars                                   |
| STD    | Sexually Transmitted Disease                             |
| TB     | Tuberculosis                                             |
| TCM    | Traditional Chinese Medicine                             |
| U5MR   | Under Five Mortality Rate                                |
| UNICEF | United Nations Children's Fund                           |
| WBI    | World Bank Institute                                     |
| WHO    | World Health Organization                                |



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## 1. Overview

1.1 For its level of socioeconomic development, China has widely been perceived as a country with an enviable record in public health. While this was true through the 1980s, the country's recent transition to a socialist market economy and its concurrent decentralization policies have resulted in system breakdowns and contradictions that have negatively affected health outcomes, particularly among the poor and in economically lagging and rural areas. The national government now supports only 3 percent of health expenditures and has handed over funding responsibility for health care to the sub-national levels, many of which cannot afford it.

1.2 At the same time, the move to market mechanisms has not been accompanied by adequate regulation. Ironically, price regulations, lack of subsidies, and financial constraints, particularly at the provider level, make basic healthcare uneconomical. Providers pursue inappropriate health practices that extend to public health services, system supervision, and referral. The era of the legendary and effective barefoot doctors has been replaced by one of profiteering in an unregulated rush to provide expensive procedures and impractical regimens of prescriptions to people who can't afford them and often don't need them. China's focus on cost-recovery further hampers efforts to reestablish effective public health services where they are most needed (an issue of competing bureaucratic values which has the health ministry at an extreme disadvantage). And there is a significant imbalance between health care in urban versus rural areas, and between workers who are insured, especially government workers, and those who are not.

1.3 Recently, there are encouraging signs that health has become an important priority in the government's agenda, bringing multiple government agencies into a more cooperative relationship, and providing the Bank greater opportunity to engage the country in policy dialogues to more effectively improve health outcomes and financing in a more equitable and sustainable way.

## 2. A Profile of China's Health Sector

2.1 China's gross health and nutrition indicators have always been impressive. The country is ranked 61 out of 191 countries in overall quality of health by the WHO report of 2000. From the 1950s through the 1970s, China achieved unprecedented gains in reduction of IMR, U5MR, child malnutrition and life expectancy, due to major improvements in broad public health measures including the draining of swamps, eradication of pests, improved nutrition, water supplies, hygiene, sanitation and near universal access to basic health services. In the last 2 decades as the country adopted wide ranging economic reforms, growth and prosperity continue to pull up its health and nutrition indicators, but wide regional variations and rural/urban differences have appeared, as inequalities in development and access to care have grown.<sup>1</sup>

2.2 Disaggregated data show that gains in combating infectious diseases have slowed and in some areas regressed. The rate of immunization has gone down<sup>2</sup> and there have been unexpected outbreaks of immunizable diseases. IMR has leveled out at 32 deaths per 1000<sup>3</sup> while a Study of 30 Poor Counties in 1996 showed an increase in median IMR from 50 to 72 deaths per 1000 in the late 1970s to late 1980s. Under 5MR, which had been declining in excess of 6 percent per year during 1960s to 1980s, slowed in 1983 and actually increased slightly from 1985-90. Surveys in 9 provinces also showed that the percentage of malnourished children (height for age) increased in rural areas between 1987-1992, while urban malnutrition dropped sharply in the same period.

2.3 Meanwhile, TB and HIV/AIDS infection rates have grown exponentially. For both diseases, China is a country of global strategic importance. More Chinese die from TB than from any other single source of disease. Current official estimates for HIV are between 850,000 to 1,000,000 cases while reported cases of STDs are 859,000 (unofficial estimates are significantly higher). Both HIV/AIDS and TB infect people during their most productive years.

2.4 Noninfectious chronic diseases (NCDs), injuries and suicides have been the leading causes of death since 1980, accounting for 72 percent of all mortality. In 1986, China had a chronic disease mortality burden (adjusted for age) similar to that of the US. By 1990, the annual probability of death from an infectious disease for an adult in China was just over 1 percent.

2.5 At times data itself can be misleading. The number of physicians per 100,000 population in China is estimated at 162 against India's 48, but only a small proportion of rural "doctors" in China have actually been to college. Waste and inefficiency characterize many of China's multiple systems of health services delivery. Funding of public sector facilities is based on numbers of beds, encouraging their "increase" by facility managers to tap national allocations, regardless of need. The uninsured majority cannot afford the comparatively high costs of care

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<sup>1</sup> Government data report IMR in 1999 at 11 per 1,000 live births in Jiangsu and 50.5 per 1,000 in Guizhou. Similarly national MMR was reported at 56 per 100,000, with 25 per 100,000 in Guangdong and close to 450 per 100,000 in Xinjiang.

<sup>2</sup> In 1993, measles coverage of 53 percent and 49 percent in rural Guizhou and Shanxi respectively were no better than coverage rates in sub-Saharan countries. National coverage rate for China was 85 percent

<sup>3</sup> Sri Lanka, a country in conflict for 18 years at a time when China enjoyed growth rates of 7 percent, has an IMR of 16 per 1000, half that of China's



charged at these facilities, compounding the tragedy that scarce resources are spent on underutilized facilities to which the poor do not have access.

**Box 2.1: State Health Service Delivery Systems**

There are 3 different state sponsored health service systems:

- Fully MOH government operated,
- Operated by state owned enterprises (SOE)
- MOH operated based on traditional Chinese medicine (TCM).

These 3 systems are present at the higher administrative levels in the urban areas, and to a lesser extent at the lower levels. There is therefore considerable overlapping of services and resources, inefficiency and waste. Some facilities are overburdened and some have excess capacity or are under-utilized. At the lower administrative levels, overlapping also occurs as MCH centers, family planning services, township health centers and epidemic prevention stations compete with one another.

2.6 Gross health statistics have masked the near crisis in the poorer rural areas. Devolution of financial responsibilities as part of the fiscal reforms accompanying the transition to the market economy has been a major factor. Without external infusion of funds, these lagging regions are too poor to provide adequate levels of essential health services and preventative care. In terms of fairness in financial contributions to health care, WHO Report 2000 ranked China 188 of 191 countries.

**Health Finance Issues**

2.7 Fiscal decentralization and the country's transition to a market economy has led to a marked reduction of public financing of health care and services.

2.8 More than any other sector in China, regardless of their fiscal situation, the major share of public expenditure for health is borne at the subnational levels. Close to 60 percent of total budgetary expenditure for health is the responsibility of counties and townships. Given that most subsidies go towards infrastructure costs and staff salaries, little money is left to cover services. Cost recovery is therefore required for most health services and preventative care becomes neglected. The situation is compounded by the unequal subsidy of urban areas that receive 80 percent of total public spending, while 20 percent goes to the rural areas where 70 percent of the population lives.

2.9 Much of the urban subsidies go to the health systems of government and state owned enterprise (SOE), whose staff enjoy close to full health insurance. Conversely, more than 80 percent of the rural population pay out of pocket for health services. Some estimates put close to 50 percent of 60 million poor Chinese became indebted due to borrowing for health and medical reasons. Prior to the transition, rural Chinese were served by a Cooperative Medical System<sup>4</sup>

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<sup>4</sup> China operated under the agricultural commune system where all farm revenues were pooled and then redistributed to individuals on the basis of work points. In this way the CMS was financed by the village's communal welfare fund.

(CMS). Its “barefoot doctors” delivered free preventive and primary care services. Beyond basic services, patients paid extra through a coinsurance fee for drugs, hospitalization and inpatient services. In this way, more than 80 percent of the population had access to reasonable quality care and some protection against catastrophic expenses.

**Table 2.1: Public Expenditures on Health as a Percentage of Total Health Expenditures in Selected Countries**

|                          | 1978 | 1993 | 1999  |
|--------------------------|------|------|-------|
| China                    | 28   | 14   | 11    |
| India                    |      |      | 13    |
| Pakistan                 |      |      | 23    |
| United States            |      |      | 44    |
| Brazil                   |      |      | 49    |
| Argentina                |      |      | 58    |
| OECD Countries (average) |      |      | 72-80 |

2.10 CMS programs were dropped and eventually abolished in the mid 80s, but were not replaced by an alternative health financing system. In the laissez-faire policy environment that ensued, most communities fell back on a fee for service system. More recently in 1994, the State Council encouraged the reinstatement of the CMS, but there has been wide variation in the interpretation of the policy in different provinces. A separate policy under the Ministry of Agriculture requires reducing the overall tax burden of farmers and therefore constrains the implementation of the CMS. Such non-health sector policies from diverse government agencies further complicate rational health finance.

### **Impact of Other Sectors on Health Policy and Finance**

2.11 There are four main institutions deciding on policy matters that affect health: the State Development and Planning Commission (SDPC), Ministry of Finance (MOF), Ministry of Health (MOH) and the State Council (the highest organ of government). With decentralization, provincial governments exert even more influence than national institutions. Directives and guidelines from the Center are often not definitive. Provincial governments have latitude to interpret policies in different ways and even then may be unwilling or incapable of complying. The considerable autonomy exercised by provincial governments in implementing both directives and projects can compromise the intent and objectives of policies and projects. This is reflected in inadequate funding for the central MOH’s supervisory and technical inputs to the provinces, which have been widely curtailed, compromising quality assurance. Analytical work in tobacco control has also shown that vested interests of provincial governments may run counter to central government directives.

### **The Contradictions of Cost Recovery**

2.12 The health finance devolution policy affects subnational levels regardless of their prosperity or poverty. Consequently, poor counties and townships can only afford poor health facilities and services that fail to meet the needs of an already compromised subset of the

population. Such counties would be logical targets for Bank assistance to health. However due to the Chinese policy governing use of external finances and the onlending requirements passed on from national to provincial and subsequently to more local levels, the participation of communities most in need is severely limited.

2.13 The bulk of project activities take place at county levels and below, obligating participating counties to bear the repayment costs of the credit. Poor counties cannot participate because they lack the means to provide counterpart funds and to repay the credit with interest. Ironically these counties had poor health because they had lacked the financial and manpower resources to provide what was needed in the first place. In Guizhou,<sup>5</sup> some counties have pulled out from participating in subsequent Bank projects because the provincial government reduced their allocated county budgets in order to service the debt of an unrelated completed Bank project. Reimbursement of county expenditures have not been honored by the provincial government because those funds have also been transferred to the debt service.

2.14 The above has affected Bank assistance in the sector. With a total of 11 projects since China joined the Bank, lending for health averaged less than 6 percent of the total number of Bank projects in all sectors. Onlending does not limit the participation of the productive sectors, which are able to improve their efficiencies, increase profits and service their debts.

2.15 When the State Council endorsed increased public funding of rural health in 1997, it advocated that the increased allocation to health be equivalent to the increase in local growth revenue. However, local governments enjoy considerable autonomy and leeway to interpret and execute national directives, and budget adjustments are always subject to extensive debate with inputs from other sectors. It is likely there will be a wide variation in outcomes.

### **Disincentives and Inappropriate Health Practices**

2.16 When public funding for health was curtailed dramatically in the early 80s, health facilities and providers in the public sector became very revenue motivated, for reasons of economic survival, cost-recovery, or because opportunities for tremendous profits opened up. The factors that have led to the reversal of public health gains and the inequalities in terms of access to vital health services include:

- The government's price regulation of basic or preventive health care set prices below the cost of providing the services, consequently providers are avoiding those services. Instead and contrary to good health practices, inappropriate drugs and services are prescribed, including the requirement for long hospital stays and expensive, usually unnecessary diagnostic tests. Many who were ill became unable or reluctant to seek care or to complete their health treatment.
- Facilities began to purchase expensive equipment in order to charge high fees for their use. To finance their capital investments, staff would pool their resources and negotiate joint ventures with local businesses or borrow from banks and equipment suppliers. Even

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<sup>5</sup> UNDP Health Risk Index 2000 ranked Guizhou province as third highest for overall health risk in China

when their utilization and occupancy rates fall, some facilities continue to purchase sophisticated equipment such as CAT scans.

- The system of cooperation, supervision and referral has broken down. Because facilities compete for paying clients, they resist referring patients to other providers. Higher-level providers have no incentive to train or develop capacity of the lower levels, and actually try to acquire their patients.
- Essential public health services such as immunization are drastically reduced. Unable to profit from the low prices of essential goods and services fixed by the State, and under-compensated by the State for discharging the service, providers either opt not to immunize or compromise on the quality and safety of the cold chain and sterilization process.

**Box 2.2: Tuberculosis**

The privatization of Chinese public health services is contributing to the transmission of highly infectious diseases such as TB. China has among the highest rates of multidrug resistant TB in the world due to poorly managed TB programs. An estimated of 400 million Chinese, almost a third of the population, are infected by the TB bacilli and 5 million have active TB. Each year an additional 1.3 million people develop active TB.

Exorbitant costs, long treatment regimen, and inappropriate provider behavior in tending for TB patients have all contributed to increases in multi-drug resistant TB throughout China. Due to the costs, many infected Chinese choose not to be treated or quit midway. The government's National TB Survey of 2000 showed a 37 percent increase in TB patients who delayed care for economic reasons, up from 26 percent in 1990. 90 percent of all TB patients surveyed had no medical coverage, 80 percent of all patients had intermittent treatment, and 45 percent either interrupted or stopped treatment for economic reasons. The prevalence of acquired drug resistant cases of TB has also doubled to 30 percent in 2000 from 15 percent in 1985.

Bank assisted TB projects provide free diagnosis and treatment, given that TB is a disease of such social consequence. The national Chinese program is gradually adopting the same approach. While cost effectiveness and efficacy of the appropriate treatment and control regimen are very high and treatment costs are a mere fraction of the alternative, where the patient does not get cured and infects another. Government commitments to TB control are at its highest now with representation of MOF and SDPC in the National Coordination Committee of the National TB Control Program, chaired by the Vice Minister of Health.

2.17 This revenue maximizing behavior among health providers has pushed up the overall costs of health care. China's health system experienced problems of coverage, utilization, quality, efficiency, supervision and referral as costs spiraled upward from 3.0 percent of GDP in 1981 to 5.0 percent in 2001 and as public expenditure as dropped from 28 percent of total health costs in 1978 to 11 percent in 1999.

### 3. The World Bank's Program in China

3.1 Since China became a member in 1980, the World Bank's program of assistance for health has consisted of 11 projects (involving commitments of \$808 million of IDA credits and \$139 million of IBRD loans) and 3 economic and sector work reviews (ESW). This was complemented by the China Network for Training and Research<sup>6</sup> in Health Economics and Health Financing set up in 1991, and jointly funded by the Chinese Government and World Bank Institute (WBI). There have also been various initiatives supported by the Health Anchor some of which include tobacco control, tuberculosis control and indoor air pollution. A number of projects in the country program targeted at poverty alleviation and water and sanitation also support health subcomponents and activities.

3.2 Bank assistance has depended largely on the demonstration value of projects to pursue high level dialogue on health related policy reforms, health systems performance, and financing. Health outcomes for the very poor are determined by access to essential services and to care for catastrophic illnesses/events. Since the mid 1990s, projects have provided for experimentation with rural insurance models and CMS type schemes using demand side mechanisms to improve access for the poor. Results have been mixed.

3.3 Attempts to increase budget allocations to counties and townships to improve health systems performance are now being pursued more aggressively by the Bank. Project preparation now includes intensive dialogue with MOH, MOF, SDPC, their subnational equivalents, and provincial governments, but progress has been slow.

#### Project Lending

3.4 Because of cost-recovery policies, project assistance has been compromised by the inability of many eligible communities to participate, leading to hesitation by the country to borrow for health. By Bank standards, China's portfolio of eleven projects is small. For the same period 1983 - present, there were 17 projects in Indonesia with 2 in the pipeline and 26 projects in India with another 2-4 under preparation. As a share of commitments, the Bank's assistance for health and social services has been significantly smaller in China than in other large comparator countries, and has fallen over time (see Table 2). China's graduation from IDA to IBRD in 1998/9 has made it even more difficult for poorer counties to borrow. Collaboration with DFID and the use of DFID/IBRD blend funds to support the social sectors in China has proven to be a good short term arrangement. Nevertheless discontinuation of IDA funding raises questions about the future and integrity of the lending program for health.

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<sup>6</sup> The latter aimed at developing greater capability in health policy formulation that would be guided by policy research and a good understanding of health financing issues.

**Table 3.1: Health/Social Services as Percentage of Total Lending in Selected Countries**

| Country                                                     | FY93–97               |                      | FY98–02               |                      |
|-------------------------------------------------------------|-----------------------|----------------------|-----------------------|----------------------|
|                                                             | By number of projects | By commitment amount | By number of projects | By commitment amount |
| <i>Investment lending only</i>                              |                       |                      |                       |                      |
| Bangladesh                                                  | 8                     | 5                    | 18                    | 18                   |
| Brazil                                                      | 13                    | 14                   | 17                    | 19                   |
| <b>China</b>                                                | <b>5</b>              | <b>3</b>             | <b>6</b>              | <b>3</b>             |
| India                                                       | 22                    | 20                   | 19                    | 15                   |
| Indonesia                                                   | 10                    | 6                    | 23                    | 21                   |
| Mexico                                                      | 7                     | 10                   | 16                    | 13                   |
| Africa                                                      | 13                    | 12                   | 21                    | 21                   |
| East Asia and Pacific                                       | 10                    | 4                    | 11                    | 7                    |
| Europe and Central Asia                                     | 9                     | 8                    | 13                    | 8                    |
| Latin America and Caribbean                                 | 13                    | 13                   | 17                    | 19                   |
| Middle East and North Africa                                | 11                    | 8                    | 19                    | 17                   |
| South Asia                                                  | 18                    | 16                   | 15                    | 14                   |
| Bankwide                                                    | 12                    | 10                   | 18                    | 10                   |
| <i>All IBD/IDA lending<br/>(including adjustment loans)</i> |                       |                      |                       |                      |
| Bangladesh                                                  | 7                     | 5                    | 18                    | 18                   |
| Brazil                                                      | 13                    | 14                   | 16                    | 11                   |
| <b>China</b>                                                | <b>5</b>              | <b>3</b>             | <b>6</b>              | <b>3</b>             |
| India                                                       | 22                    | 22                   | 17                    | 14                   |
| Indonesia                                                   | 10                    | 6                    | 23                    | 21                   |
| Mexico                                                      | 6                     | 8                    | 15                    | 16                   |
| Africa                                                      | 12                    | 10                   | 19                    | 15                   |
| East Asia and Pacific                                       | 9                     | 5                    | 11                    | 7                    |
| Europe and Central Asia                                     | 8                     | 7                    | 12                    | 8                    |
| Latin America and Caribbean                                 | 12                    | 10                   | 17                    | 15                   |
| Middle East and North Africa                                | 10                    | 8                    | 16                    | 12                   |
| South Asia                                                  | 18                    | 18                   | 14                    | 13                   |
| Bankwide                                                    | 11                    | 9                    | 15                    | 11                   |

Source: Business Warehouse

3.5 China's lending portfolio has focused on rural health issues, but most projects have been disease-oriented with fewer projects dedicated to addressing health systems performance and reforms. Maternal and child health issues and infectious diseases control including TB have received good support. Project assistance for HIV/AIDS has been increasing and is expected to be sustained. NCDs and injuries which are the leading causes of death in China, accounting for an estimated 72 percent of mortality in 1990, have received a much smaller share of overall aid, as subcomponents of other projects. Table 3 provides an overview of Bank-assisted projects.

**Table 3.2: China Health Projects**

| Title/Year                                              | Objectives/ Description                                                                                                                                                                                                                                                                                                                          | Comments                                                                                                                                                            |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rural Health and Medical Education 1983–93              | The project addressed systemic issues – strengthening manpower, medical institutions, surveillance skills, national capacity and rural health. Very important in re-establishing links between China and international health community.                                                                                                         | This project was not previously reviewed by OED, but this assessment rates it highly satisfactory.                                                                  |
| Rural Health and Preventive Medicine 1986–99            | This was targeted towards immunization, and infant/child mortality; Vaccine production was for internal country needs, the economic goal was- to make China a global vaccine manufacturer.3 vaccine plants were in Shanghai, Yunnan and Jilin                                                                                                    | OED rated the outcome moderately unsatisfactory. Relevance was modest for vaccine production. Targets not met. Cost recovery not possible; sustainability unlikely. |
| Integrated Regional Health Development 1990–98          | Policy reform oriented, dealing with systemic issues; health policy and planning; build capacity to manage growth and changes in demand for health services. Regional health planning became adopted into Health Policy- Shaanxi was a project province                                                                                          | OED – highly satisfactory. Results quickly debated and adopted nationally.                                                                                          |
| Infectious and Endemic Disease Prevention, 1991-2002    | The two main diseases were TB and Schistosomiasis in a rural health context. TB diagnosis/ treatment was free leading to fully finished treatment and elimination of carriers/ disease transmission. Notable for shift from environmental controls to cure for schistosomiasis, responding to changing trends in epidemiology and snail habitat. | Apparently successful especially TB component but not deemed sustainable because of the costs – Has led to second TB project with more funds for TB control.        |
| Rural Health Workers Development 1993-2001              | Health manpower pre-service and in-service training. Changes in manpower policies resulted in too many students, this was at odds with the project objective of increasing numbers. Depended on expanded funding that did not materialize.                                                                                                       | 2002 PAR by OED – moderately satisfactory rating; sustainability unlikely, modest IDI                                                                               |
| Comprehensive Maternal and Child Health (MCH) 1994-2002 | Addressed manpower issues for the MCH system and piloted a MCH poverty fund. The project was fashioned after the MCH program of UNICEF/UNFPA /WHO, for 300 counties in 27 provinces. The Bank loan enabled an additional 300 counties in 8 poor provinces, including Shaanxi.                                                                    | ....                                                                                                                                                                |
| Disease Prevention 1996-                                | The main project objective was strengthening the cold chain - system. NCDs, STDs and HIV/AIDS were secondary objectives. Use of Mass communications for awareness building, trial poverty fund were innovative..                                                                                                                                 |                                                                                                                                                                     |
| Iodine Deficiency Disease 1995-2001                     | The provision of salt iodization equipment for all 31 provinces. Project worked with salt associations, not the MOH. Close collaboration with UNICEF/WHO/UNIDO                                                                                                                                                                                   | Highly satisfactory rating by OED – achieved all physical targets.                                                                                                  |
| Basic Health Services 1998-                             | Comprehensive attempt at institutional development/policy reform and piloting rural health financing schemes                                                                                                                                                                                                                                     | This project applies lessons from all prior projects .                                                                                                              |
| MCH and HIV/AIDS 1999-                                  | 2 components: MCH program incorporating integrated management of childhood illnesses, early childhood development and a comprehensive HIV/AIDS component                                                                                                                                                                                         | -                                                                                                                                                                   |
| TB Control 2002-                                        | National TB program with special targeting of 16 poor provinces. Follow up from previous TB project (Includes Liaoning, Shaanxi.) This project is also being funded by a DFID grant.                                                                                                                                                             | -                                                                                                                                                                   |

3.6 Of 11 projects only five have closed and been rated. OED has rated two projects highly satisfactory, one moderately satisfactory, and another moderately unsatisfactory. The earliest project to be completed was not rated by OED, but is rated by this review as satisfactory to highly satisfactory. Two others have closed and are in the process of submitting completion reports.

3.7 Portfolio quality is generally high reflecting best practices for the sector. Projects have been complex, ambitious and aimed at high institutional impact. Some have been highly innovative especially in the Chinese context, such as the change of paradigm from health propaganda to health promotion based on behavioral sciences and social marketing in support of tobacco control interventions; the maintenance of anonymity in surveillance and treatment of HIV/AIDS; and the increasing use of social assessment instruments in project designs.

3.8 The impact of projects targeted at systems reform and policy can have far reaching results as is evidenced by the Integrated Regional Health Development project of 1990-98. A systematic approach to health planning was successfully introduced. Requiring close institutional coordination by regional level health facilities in the planning, management and delivery of health services, it reduced duplication in China's multi-program health service provision and improved efficiency. Use of demographic data was enhanced which led to better delineation of health plans/programs based on population requirements. Lessons learned from the successful project and the "regional health planning" strategy were widely disseminated, culminating in its adoption by the State Council as a key strategy for health sector reform. The full impact of this project is not known, country-wide, after its adoption as national strategy, including the extent to which rationalizing of underutilized health facilities has been carried out, cost savings and efficiencies achieved, and the downstream impact on redundant facilities, services and personnel.

3.9 An example of a project designed to address important constraints in finance, incentives, and competencies/capacities is the Basic Health Services project of 1998. Primarily targeting systems reform, it faces very difficult and politically sensitive issues, including:

- Personnel management
- Provider related behavior to drug prescription
- Increased budgetary allocations to health at county level
- Provincial-county relations.

3.10 The project introduced innovative mechanisms to fund and monitor priority and cost-effective health interventions for the very poor, and hopes to demonstrate convincingly that fiscal transfers to the very poor areas will pay off. Involvement of finance and planning officials is high in order to maximize internalization of innovations. But the project will have to overcome political interference and loopholes by those who stand to lose from project innovations.



3.11 Other achievements include the establishment and continual strengthening of important institutions such as the Chinese Academy of Preventive Medicine CAPM (now called the Center for Disease Control) and the National Statistics Bureau; and the institutional strengthening of disease surveillance and monitoring capacities at all levels. Projects have also assisted in major expansions of capacity as in the control of TB (using the Directly Observed Short-Course Chemotherapy) and iodine deficiency diseases (making iodized salt accessible to nearly all parts of China). Bank assistance in HIV/AIDS has included innovative programs on typically taboo topics such as outreach to sex workers/drug users, condom marketing and sex education in schools ; improved management of blood products/policies to rationalize their use in health care and abandonment of paid donor supplies. High political commitment facilitated the establishment of a National AIDS Reference Laboratory with significant national funding.

3.12 The Bank has introduced various community health financing and other public subsidy schemes in project lending, or supported them through operational research, to improve access by the very poor and to protect against catastrophic hardships. But it has not successfully addressed systemic issues of lack of financing and the disincentives against good provider behavior. Resource allocations for rural and essential services have not improved. Scarce public resources continue to favor tertiary care, personnel costs, and expansion of facilities, while perverse incentives continue to promote expensive curative care at the expense of public health services.

3.13 In general the lending program has made significant contributions to the health sector. Projects have had substantial to high institutional development impact, introduced state of the art concepts and technology, and contributed to building technical capability and competencies. However, there can be very large variations in achievements and outcomes in different counties within any one project. For the majority of project achievements, sustainability is likely provided continued funding is available. Sustainability of initiatives in poorer counties therefore are at risk.

3.14 Cumulative experience from projects indicates that counterparts can internalize project lessons very quickly. Results are disseminated to/copied by non-project sites. However, replication and quality of outcome of replication depend much on the technical competency and financial capability of the adoptee region. It remains to be seen to what extent under-resourced regions have benefited from the innovations/best practices introduced by projects and other Bank assistance.

### **Analytical Work**

3.15 High quality ESW has supported Bank assistance in the sector. *China: Long Term Issues and Options in the Health Transition* of 1990 described the un-preparedness of the Chinese in dealing with non communicable diseases (NCDs); how public health programs focused on the first 10 percent of the average life span while the remaining 90 percent were left to market forces and personal wealth. It called for urgent investments to improve the management of the epidemiological and demographic transition. *Issues and*

*Options of Health Financing* (1996) advocated a substantial increase of funding for public health programs, reforms to prices of health goods and services, and risk pooling among the broader population against catastrophic health expenses. Dialogue on tobacco policies has been initiated by the Health Anchor, based on significant analytical work carried out in the country.

3.16 The *Provincial Public Expenditure Review (PER)* of 2002 provides the most updated and in-depth analysis of financing /expenditure data for health, at all tiers of government. Carried out by the region's Poverty Reduction and Economic Management Unit, health and education sectors were selected for the analysis because compared to other vital public services, sub-national governments had to bear the highest shares of public expenses for these 2 sectors. On average, 60 percent of health costs are borne by the county/township levels. Linkages were made between the availability of essential health services at community levels with the fiscal policies and budgetary management practices of the country at large. The PER recommended the expansion of health budgets at county and lower levels through fiscal support by the national and provincial levels; distribution of fiscal resources more equitably; and a comprehensive reform of the intergovernmental fiscal system. The report also showed health care to be a "growth" public industry with substantial increases in the workforce, despite shrinking budgets and declining utilization rates. In places where health facilities were seen to be profitable, they provided a means to absorb public servants, arbitrarily assigned, and at times without appropriate training.

### **Country-Level Dialogue**

3.17 Because the non-health sectors in China have become more influential than forces within health, progress is slow when interventions take place only within the health sector. Project level initiatives which vigorously pursued changes in resource allocations and fiscal transfers during project preparation and execution may yield results for the individual project but as budgetary allocations and management do not fall under the purview of Health authorities, sustained reforms are less likely. Projects have brought the issues to greater scrutiny and debate among policy makers, as has the WBI/China Network elevated the issue of health financing to senior finance, planning and state council officials. The need remains to link them more closely with the larger issues of national budgetary management and public expenditure allocations.

3.18 Use of non-project and non-health avenues for health outcomes has not been fully exploited by the Bank and there is need to closely integrate health issues with the broader country level dialogue. A Bankwide OED study *Investing in Health – 1999* found that health workforce issues were a dominant constraint in the Health sector. Bank efforts to overcome the problem within the Health sector had limited success because many of the causes were related to health provider incentives that were determined by finance ministries or public service commissions. In such instances HNP concerns needed to be elevated and included in the larger macroeconomic dialogue with the country. The same report also found that issues of equity, efficiency and government health expenditures were not adequately addressed in Country Assistance Strategies or macroeconomic discussions, and concluded that the Bank had a fundamental responsibility to more

effectively link its macroeconomic dialogue with sector dialogue particularly on issues of health financing, the health work force and civil service reform.

3.19 Although not formally part of the country program, the WBI/China Network can greatly facilitate health finance reform. Established in 1991 at the request of MOH when non-health forces increasingly determine health policy and financing, the Network has made a good start towards exposing senior level officials from MOF, SDPC and provincial governments to the complex problems faced by the health sector. A critical mass of officials from the different sectors and tiers of government has to be developed before change can be expected in the budgetary allocations for health. The Senior Policy Seminars (SPS) of this network has reached only the entities within SDPC, MOF and State Council with oversight for health. But there has not been good follow up on the results or outcomes of policy issues debated at the SPS.

3.20 It will be more critical to reach the decision makers within these institutions who wield greater influence on broader fiscal and economic policies, and to demonstrate to them the critical contributions of health to China's long-term productivity and growth. Closer collaboration between WBI/China Network and Country Program will be highly beneficial as the Network offers good access to senior decision makers in health, finance and planning.

3.21 Since the 1990s there has been a gradual build up of activities conveying to China the urgent need to deal with the issues of "lack of access and inequity". In 1993, on the Tenth Year Anniversary of Bank--China Collaboration in Health, a speech by a Bank VP addressed to the State Councilor for Health, strongly advocated that strategic changes be made in the allocation of financial resources to health and for major reforms in the health system.<sup>7</sup> As noted earlier, Bank ESW has increasingly been directed toward analysis of health finance.

3.22 There is little consensus among task managers about the effectiveness of efforts at dialogue outside of the project framework. Nevertheless removing the constraints of lack of financing and disincentives requires a much more highly coordinated and sustained effort at dialogue, including interventions beyond the health sector. Such efforts are also important for removing obstacles against project lending and the participation in projects by the poor.

## **Partnerships**

3.23 The Bank has worked well with other development counterparts in China, notably WHO, UNICEF and UNDP through effective sharing of information and consultation and the Bank's putting to scale smaller initiatives that had been supported successfully by the others. For the most part, the different organizations complement one another. Some of the studies/concepts developed by UNICEF/WHO were expanded by the client with the use of Bank funds and its geographical reach. WHO/UNICEF have provided strong

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<sup>7</sup> In 1999 although not related to health financing, a letter from the Bank's President was addressed to the Prime Minister of China called for strong borrower commitment to combating HIV/AIDS, which has facilitated HIV/AIDS work.

technical support to Bank projects such as Iodine Deficiency Diseases (IDD) and the Rural Health and Preventive Medicine, while other Bank projects have been fashioned from UNICEF/WHO ones such as Health 6-MCH from the UNICEF MCH project in 300 counties. UNDP has supported the technical assistance for project preparation in the Rural Health Manpower Development project. Compared to the Bank, the lack of capacity in covering large areas/numbers of sites potentially constrains the efficacy of other agency project inputs. This also applies to the comparative advantage the Bank has in the breadth and scope of ESW work. Overall the Bank is the most influential international player in health, in both lending/non-lending operations and policy. Other organizations (UNDP and UNICEF) have the advantage of their operations being programmed for longer term and of their continued in-country presence. More recently DFID has become the Bank's closest collaborator in Health, and through the IBRD/DFID blending in projects, the loan burden for poor communities has been lessened.

## 4. Lessons Learned: Strengths and Weaknesses

4.1 From this complex set of policy and operational variables, there have emerged three avenues the Bank can use to influence and improve outcomes:

- *Financial support.* The Bank could provide loans to compensate for the lack of public expenditure on health, especially that made available to the county/township levels and below. This was determined by supply factors such as the availability of IDA funding and SDPC allocation decisions, and on the demand side by the debt service capacities of lower level governments such as counties, and provincial policies on social service provision.
- *Improving regulation and governance in the health sector.* Bank projects could address the system wide disincentives/incentives such as pricing and treatment protocols, which discourage good health practices, and weaken accountability for health outcomes.
- *Capacity building.* Bank projects could improve the varying competencies and capabilities of the different communities in China to operationalize health programs.

The first two are core systemic problems that MOH can only influence marginally – the financial, regulatory, and governance frameworks are dictated by policies set above the central line agencies authority. Bank-China health cooperation has achieved a significant impact with modest resources relative to the vast problems. Bank activities contributed positively to improved health outcomes, but overall, the performance of the rural health sector was weak.

### Strengths

4.2 Most of the strengths of the Bank's health work in China have been summarized in earlier sections:

- *Bank-funded projects have introduced state of the art concepts and technology, and contributed to building technical capability and competencies. There has been a high level of innovative leveraging of limited resources to provide high quality services to the Ministry of Health.*
- *Projects have brought greater scrutiny of health issues and debate among policy makers. The Bank has had a good relationship with the MOH, MOF, SCDP and provincial entities in promoting and managing health projects which address major components of disease burden.*
- *Cumulative experience from Bank projects indicates that MOH can internalize project lessons very quickly and transfer the needed capacities to provincial and lower level agencies. Thus the results of project level initiatives can be replicated if funding is available.*
- *The Bank rightly focused on rural health issues where the deficiencies in existing prevention and treatment levels are greatest.*
- *Continuing engagement on policy. Policies adopted since 1996 have been not been fully implemented. The Bank and other multilateral and bilateral donors such as ADB and DFID have influenced policy but implementation is difficult. In the present political environment there should be greater opportunity to engage the country more effectively in improving health outcomes in a more equitable and sustainable way*

### **Weaknesses**

- *Although the Bank and MOH have campaigned strongly for increased public health spending through fiscal transfers, it has not been forthcoming from central government. Health care expenditure have fallen by 60 percent since 1980. Many policy reforms have been approved but are still largely not unimplemented for lack of finance.*
- *Overall expenditure trends show that scarce public resources continue to favor tertiary care, personnel costs and expansion of facilities, while perverse incentives promote expensive curative care at the expense of public health services. Although NCDs account for most of the disease burden there are multiple risk factors requiring changes in lifestyle. These changes are multi-sectoral in nature, and involve education, agriculture, food industries, occupational health and safety. China is not prepared for the development of chronic care infrastructure (e.g. rehabilitation and physical therapy).*
- *“Environmental Health” is inadequately addressed in the institutional framework of China and the Bank. There are many public good/ externality issues that have a major impact on health outcomes, but require cross-sectoral interventions. Public goods will be underproduced unless financed from the general government revenue and not user fees, which are related to user rather than social benefits.*

- *Chronic financing problems keep the most needy counties from participating in Bank projects.* For instance the 592 poverty counties lack the revenue base to adopt Bank supported innovations. Even the sustainability of established projects is hostage to ongoing budgetary support or subsidy from provincial and/or central government.
- *There was no consensus among China task managers as to how persistent, effective, or adequate policy dialogue efforts were.* Critics suggest that the Bank did not try sufficiently hard to influence policy through ESW/AAA and country dialogue. There certainly could have been a greater Bank follow-up on the results/outcome of policy issues debated at the SPS. While the borrower is sensitive about sovereignty and the Bank cannot push its own policies very hard, a follow up and progress report on how far reforms advocated by the Bank have been implemented, could have been neutral about timing and hence acceptable to the borrower. The critical mass of officials from the different sectors and tiers of government still has to be developed before change can be expected in the budgetary allocations funding of public health. The 2002 PER has somewhat belatedly demonstrated how the lack of health funding and perverse incentives in the health system have been the direct result of inadequate fiscal and budgetary policies.
- *Successful health and education components of Bank poverty reduction projects have been dropped.* Health components were initially an essential component of anti-poverty Projects. The Region considered these health components successful, but provincial borrowers were not persuaded that basic preventative and curative health services are an essential part of a poverty alleviation strategy. For example the Qinba Mountains Poverty Reduction Project has dropped health and education components, housing them instead in other multi-province dedicated health and education projects.
- *The bias has been to disease-oriented projects* with fewer dedicated to addressing what the Bank considers priorities - health system performance, reforms and NCDs.

## 5. Conclusions and Recommendations

5.1 There is a wide consensus that over the period of Bank assistance, China's health system deteriorated in critical areas – it may serve much of the majority but it clearly fails to supply a social safety net to the poorest. The problems are direct consequences of government policy, not only for health policy but also the implicit relative weighting of economic goals versus social and equity goals. The deficiency in direct poverty alleviation has been partially offset by projects which both targeted the poor and used well tested and proven cost effective interventions and treatment protocols. Preventive measures such as immunization have had an impact on the poorer areas as this level of targeting was incorporated in the project design.

5.2 The Bank's projects were complex, usually containing multiple components, and address a wide range of relevant health issues. Some focused on specific diseases, others on institutions and management, most projects combined them. Portfolio quality was generally high reflecting best practices for the sector even if overall sector performance was lackluster.

5.3 The poor equity and social performance at country level was due to:

- Structural features of the old public health system
- Withdrawal of central government subsidies
- Rapidly changing demographic and epidemiological trends.

5.4 The State Council partially reversed its earlier pro-market policy in 1997, recognizing that the health of the poorest had been blighted and was a major social and political issue. The influence of dissatisfied sub-national governments and citizens was a more important factor than the Bank's non-lending ESW and project loan agreements. The degree of reach of the Bank's assistance for health was compromised by the inability of many eligible poor communities to participate, leading to hesitation by the country to borrow for health.

- *The Bank should be more involved with upstream policy advice and reaching the decision-makers who control broader fiscal and economic policies.* This is particularly appropriate when the funding of new projects has become so problematic – the use of blended IBRD and bilateral grants (DFID) are not a long-term solution. Partnership and the Bank's health priority compromise the Bank's ability to follow its own health mission. The new leadership has to be convinced of the critical contributions of health to China's long term productivity and growth.
- *Health concerns should be elevated and included in a country level and macroeconomic dialogue with China.* Opportunities exist for the integration of health issues within overall development policy. The Bank had a fundamental responsibility to link its macroeconomic dialogue more effectively with sector dialogue, particularly on issues of health financing, the health work force and civil service reform.
- *A health sector review for China is long overdue.* Although the Bank has been working in the health sector in China for 18 years, the first PPAR was part of an 8-project cluster (Rural Health Workers Project, 2002.) The Bank has not evaluated the extent to which other poorer regions have benefited from the innovations/best practices introduced by Bank projects and other assistance. . An independent evaluation would have to include the extent to which rationalization of underutilized health facilities has been carried out, cost savings and efficiencies achieved, and the downstream impact on redundant facilities, services and personnel.

- *Non-project and non-health sector avenues for influencing health outcomes should be exploited more.* Changes in other sectors will impact the health sector. Urban health insurance has been delegated to the Ministry of Welfare and Social Security, which has initiated reforms in urban health financing. Other changes are also taking place related to personnel matters (manpower rationalization) in the health sector. SDPC has been commissioned by the State Council to study/evaluate the effectiveness and outcomes of “Regional Health Planning.” The country is poised to undertake more health-related policies and reforms that will exert additional pressure on the health system and its policy makers. In order to be part of this process the Bank’s Health program must engage with these other sectors and entities. Many of the challenges will test the limits of Bank expertise, capability and experience.
- *The Bank should follow up on its Provincial Public Expenditure Review 2002 to bring health issues to the forefront, with a target audience of very senior country-level decision makers from the Bank and Borrower.*
- *Collaboration between the various channels for Bank interventions in health should be increased through ESW, Anchor work, WBI/China Network and project lending.* In order to achieve a sustained and well directed effort for addressing policy and reforms, the inputs of these different channels have to be better coordinated as part of a common strategy for health in China.
- Regulation of the private sector is overdue. changes to the rules of the game for public-private provision of health care are needed. Regulations for the private sector have to take into account not only domestic suppliers, but international competitors ready to enter the affluent coastal cities. Regulations also have to be consistent with WTO rules. Opening up of the western regions and meeting the needs of migrants working in unregulated hazardous industries there, will require engaging the environment, labor and industry agencies responsible for environmental, occupational health and safety issues. In the past Health programs will have to make strategic choices as to its future role in China.