

Facts about and Development in the Rural Education of the PRC

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Educational equality, or equity, has gradually become an important issue for central government officials. Chinese newspapers have been quoting them since spring 2005, as they have been calling for more equal educational opportunities (see C.a., 2/2005, Dok 23; XNA, 8.9.05). Researchers name educational inequality as one of the key problems facing the Chinese education system after twenty years of reform. Educational disparities are not only apparent between eastern and western regions in China, but they clearly exist between rural and urban areas as well.

National and foreign scientists have extensively studied regional and rural-urban disparities as reflected in income inequality in the PRC. Despite a national rise in income levels, these analyses have revealed an increase in income inequality between the provinces of the west and the east and between rural and urban areas within these provinces during the reform period. Less research activity has focused on inequality in education as an important factor influencing the imbalanced socio-economic development, although educational disparity itself causes income gaps, as less well-educated workers have less of a chance to get well-paid jobs than workers with a stronger educational background. In order to reach the medium- and long-term goals of the central government such as the establishment of a national "knowledge society", the attainment of "modest social welfare" (*xiao kang*) for everyone and the upholding of high economic growth rates, investments in human capital (which is defined as the skills of the population) in both rural and urban areas are absolutely essential.

The aim of this article is to take a closer look at the problem of educational inequality in the PRC. Initially the authors shall explain how inequality can be measured and illustrate the results in China's case. In the second part, decentralisation and the financing of education are examined as causes of the gap and as constraints that hinder equality in educational attainment. The third part of the article is concerned with the prospect of educational equity in China in the near future.

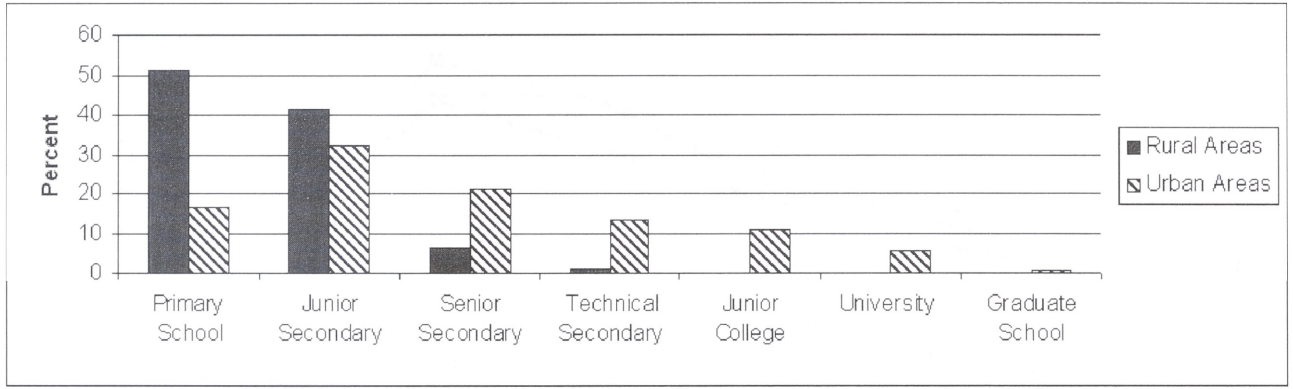
Measuring educational inequality

A number of approaches exist for measuring different aspects of education and each one uses different indicators. As regards measuring the educational gaps that exist between the provinces of western and eastern China and between rural and urban areas, most of the approaches that have been employed to date can be criticised because of their lack of comprehensive information about the stock of human capital available (see Vinod & Wang & Fan 2000: 4ff.). Nevertheless, they are still helpful in demonstrating the outcome of China's educational disparities.

The *average number of years of schooling* and the *degree of educational attainment* are both indicators of the level of human development that has been achieved. Unfortunately, they don't say anything about the quality of a person's education, which is also an aspect of regional and rural/urban educational inequality. An article that appeared in the *China Daily* in February 2005 cited a study conducted by a working group with the title "Research into Equity Issues in Chinese Higher Education", which was written as part of China's Tenth Five-Year Plan concerning national education and science. While focusing on the unequal educational opportunities given to China's rural population in comparison to their urban counterparts in the field of higher education, the data used in this article also reflects the worsening situation in primary and secondary education. It reveals that the gap between rural and urban areas in terms of educational attainment is gradually widening as education levels increase. As a result, the education level of rural people is much lower than that of urban residents (see figure 1) despite the fact that almost 60% of the Chinese population lived in rural areas in 2004 (which accounts for more than 75 million people) (see also C.a., 4/2005, Dok 19).

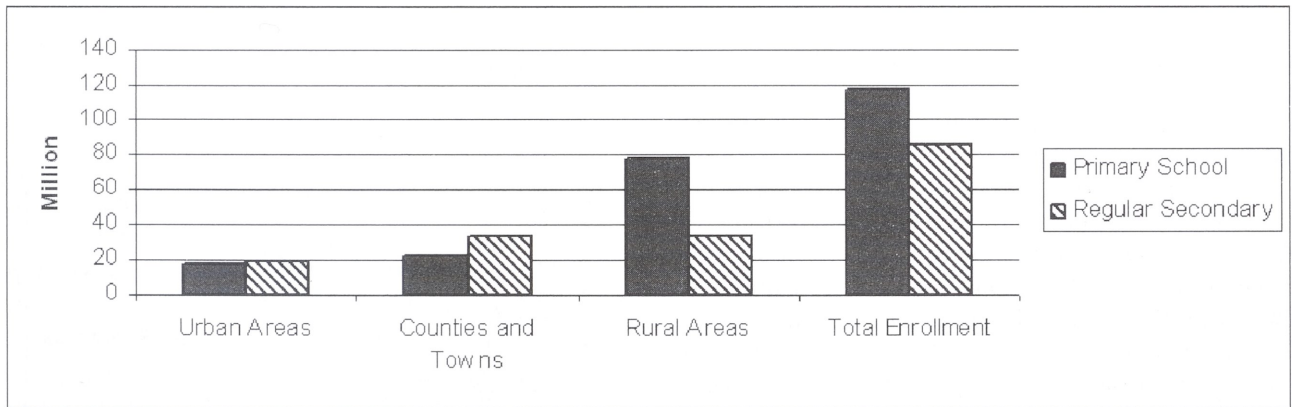
A very high proportion of the rural population (about 93%) only received primary and junior secondary education. In contrast, the educational level of the urban population was much higher. This disparity between rural and urban areas is most obvious in the case of higher education levels, as only 0.2% of the rural population graduated from junior college and no more than 0.02% from university. This contrasts dramatically with

Figure 1: Rural and Urban Educational Attainment in 2004



Source: CD, 14.2.05.

Figure 2: Enrolment ratios in urban and rural areas as well as counties and towns in 2003



Source: SSB 2004.

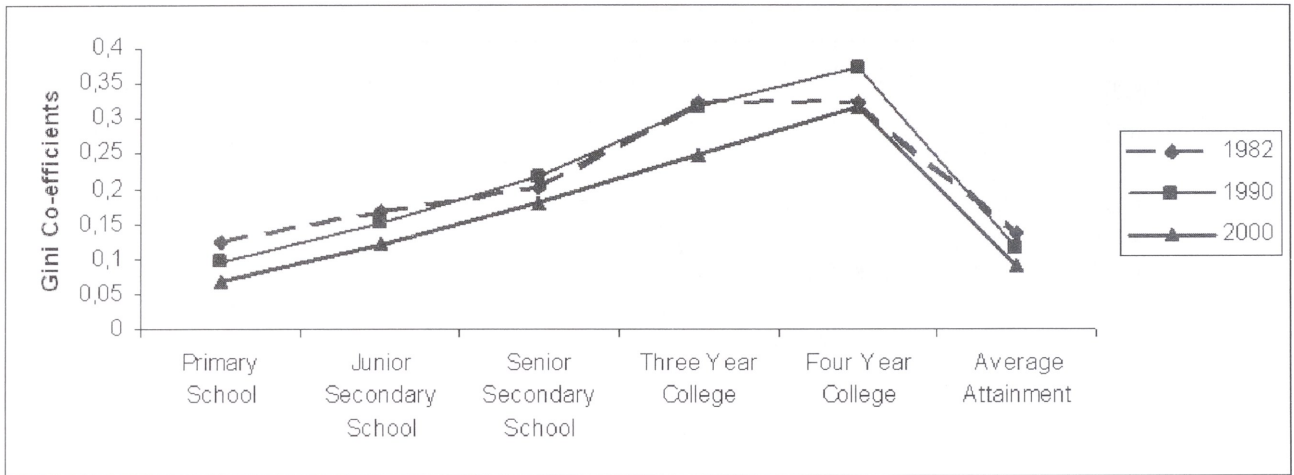
the situation in urban areas, where 11.1% of the population attended junior college and 5.63% of the population had a university education. A further negative implication of the low level of educational attainment in rural China was mentioned by Heckman in his recent study about China’s investment in human capital. He argued that low investment levels may also slow down the urbanisation process because emigrants from rural areas without enough education are simply not qualified for jobs in modern industry sectors. Nevertheless, current Chinese politics tend to promote physical capital investment over human capital investment and tends to invest in education at different rates in different regions (Heckman 2005).

Enrolment ratios for different levels of schooling can be used as an indicator of human development. As a flow variable, enrolment ratios only indicate the flow of the population’s education or access to education, but not the cumulated educational attainment or the stock of human capital available. The data for China as illustrated in figure 2 shows that the enrolment rate in secondary schools in rural areas was much lower than for primary schools in 2003, whereas in urban areas and counties and towns the ratio of secondary school enrolment was equal or higher than that for primary schools.

The *quality of schooling* in terms of the amount of resources spent on education can be measured using either an input or an output approach. In the input approach the student-teacher ratio, expenditure on teachers’ wages or the amount of spending on learning materials are analysed for a comparison between urban and rural areas. The difficulty of taking this approach is that a high volume of input doesn’t necessarily yield high quality and that input for schools also depends on income. The student-teacher ratios in urban and rural primary and junior secondary schools in China show the gap between both areas as illustrated in figures 3 and 4. Both figures confirm that the numbers of primary and junior secondary school pupils taught by one teacher in rural areas were higher than those in urban areas between 1996 and 2001. In terms of evaluating the quality of schooling, the quality of rural primary and junior secondary schools therefore seems to be lower than in their urban counterparts because of the higher student-teacher ratio.

The output approach, which measures the achievements of schooling by comparing the scores of cognitive performance in an international test, has only been available for industrialised countries so far. It is therefore impossible to illustrate the rural/urban educational

Figure 5: Regional Gini Co-efficients of Educational Attainment between 1982 and 2000



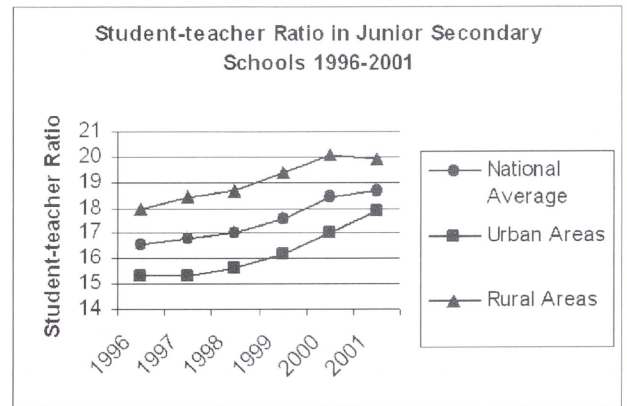
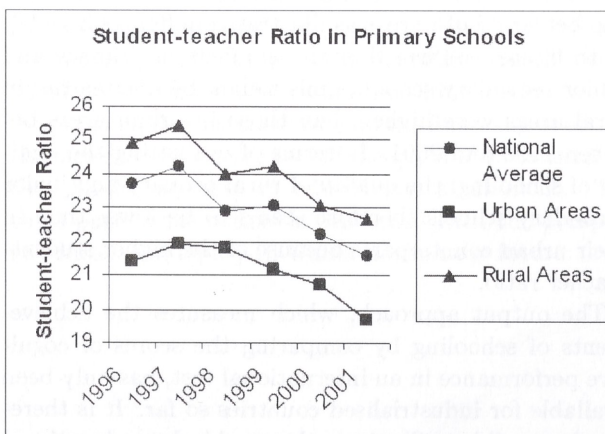
Source: Shah & Zhang & Zou 2005: 33.

gap in China regarding the quality of schooling using this approach at present.

The *standard deviation* of schooling measures the absolute dispersion distribution of assets. This statistical method has been successfully used to show educational inequality in absolute terms. As a substitute, the *Gini co-efficient*, which is widely used to measure income or wealth distributions, seems to be suitable for measuring the relative inequality of schooling distribution. Like other Gini co-efficients, the educational Gini factor ranges from 0, which represents absolute equality, to 1, which represents absolute inequality. Enrolment, financing and attainment rates can be used to calculate educational Gini co-efficients. In the case of school attainment data the educational Gini factor can be said to

measure the ratio to the mean (average years of schooling) of half of the average schooling deviations between all possible pairs of people. (Vinod & Wang & Fan 2000: 7)

Figures 3 and 4: Student-teacher Ratios in Urban and Rural Primary and Junior Secondary Schools between 1996 and 2001



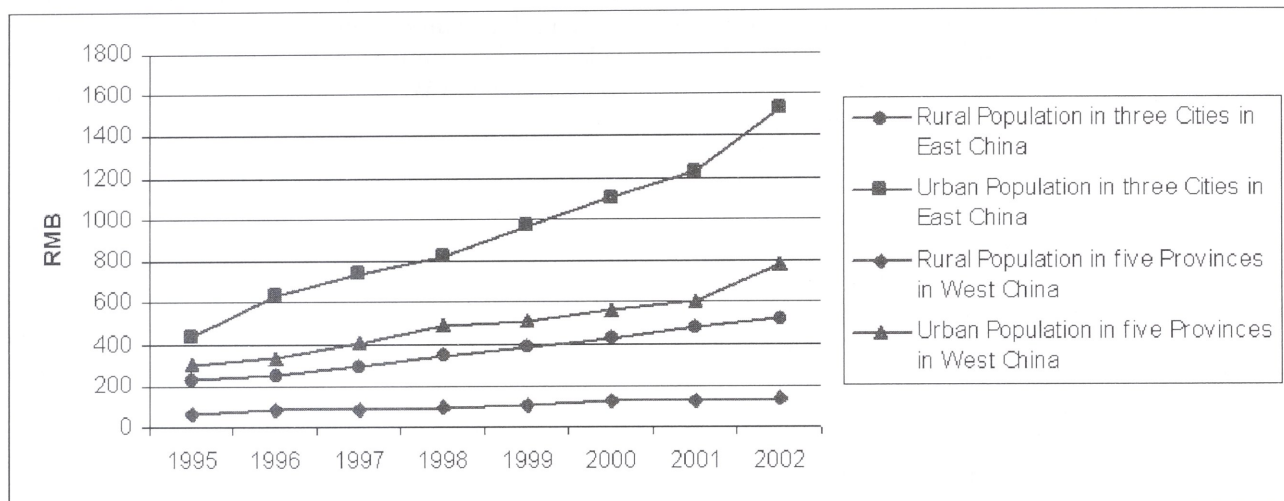
Source: Wang 2003: 8.

Figure 5 shows that regional inequality in China rises as the education level increases and it declines for lower levels of education (primary and junior secondary) over the years. Regional inequality at higher levels of education (i.e. senior secondary and college) increased from 1982 to 1990, but decreased from 1990 to 2000. This could be due to the expansion of college admission since the mid-1990s. Regional inequality is remarkably high at the four-year college level.

Causes of educational inequality

Reasons for today's educational inequality, which has been examined in the fields of educational attainment, student-teacher ratios and education Gini, can be divided into a political will of favouring urban areas instead of rural areas on the one hand and as an outcome of the administrative and fiscal decentralisation policy on the other. A reform of the educational system was initiated to speed up the development of education at the beginning of the overall reform era in 1978. Thus the strategy of revitalising the nation through developing education was implemented. These reforms emphasized the quality of education. Hence the rebuilding of

Figure 6: Average Spending on Education for the Rural and Urban Population in Eastern and Western China between 1995 and 2002



Source: PEP 2005: 47.

higher level education and college-preparatory key point schools at primary and secondary levels were particularly conducted in urban areas. As a result of the re-concentration of resources, “urban schools became the chief beneficiaries of China’s post-1976 reforms“ (Pepper 2000: 1). At the same time the rural areas were confronted with the de-collectivisation of agriculture and the introduction of a household responsibility system. In this newly created rural economic climate, immediate material gain was seen as being more important than education. The negative consequences of both the preference of urban areas and the new incentives for rural households were increasing student drop-out rates in the countryside along with an increasing rate of illiteracy.

Being aware of the newly caused problems in education in the countryside, the central government introduced the Compulsory Education Law in 1986, a further step in reforming the educational system. This law brought about a shift towards a new management system characterised by a central leadership, local responsibility and management at various levels. These general policies initiated a process of educational decentralisation as part of broader economic liberalisation during the reform period. Since then, the central government has been responsible for planning national educational policy and strategies, implementing nine-year compulsory education in poverty-stricken areas, and promoting higher education together with the governments of provinces, municipalities and autonomous regions. Provincial governments have to manage the province-wide introduction of nine-year compulsory education through supervision of counties and cities and provide any financial support deemed necessary. Local governments at county, township and village levels were given the responsibility for planning and financing basic education, which forces villages to pay for school facilities as well as teaching and learning materials, teaching staff or school properties. The local financial situation

therefore influences the quality and quantity of local education systems. As urban areas were still financed by the central government, the new responsibility system affected rural areas much more, as they received less state support than before.

Apart from the decentralisation of responsibilities, fiscal decentralisation led to the devolution of responsibilities for both revenue collection and public expenditure to lower levels of government. On the one hand this improved incentives to generate revenue and take responsibility for local needs, but on the other it actually impeded efforts to reach distributional equality. As a result of the fiscal decentralisation reform, two taxation systems have been adopted to collect central and local taxes, a budget system has been established at various levels, and tax-return and expenditure transfer systems between the central government and local governments have been set up to ensure balanced revenues and expenditures at various levels on the part of the government. But while the central government’s revenues grew rapidly, local government revenues increased moderately, which changed the pattern of financial allocation fundamentally. The financial power of townships was gradually weakened as the central government increased its share of the total revenue and transferred less revenue to lower government levels.

Another part of the educational reform included the diversification of educational financing, which allowed local governments to mobilise non-state financial resources.

This resulted in a much more modified funding structure for education using local taxes, tuition, overseas donations, local fundraising, income from enterprises, and modest subsidies to fill in the gaps left by central government. (Hawkins 2000: 8)

As the central government cut school subsidies, the share of non-governmental sources rose, increasing from

19% in 1993 to 24% in 2000 (Hawkins 2000: 10). To compensate the lack of state revenues, villages and townships raised student fees and additional taxes. But because of the lower income level and the weaker economic force in the countryside, rural education suffered from the new freedom much more than urban education. The differences in the average amount of spending on education that took place in rural and urban areas between 1995 and 2002 are shown in figure 6. This diagram illustrates the average spending on education per year in three of the richest cities in the eastern part of China – Tianjin, Beijing and Shanghai – and in five of the poorest provinces and autonomous regions in western China, namely Guangxi, Guizhou, Yunnan, Gansu and Qinghai. The rural and urban situations are examined separately in each case.

First of all, the data indicates that the average spending of the urban population is higher than that of the rural population and that this difference has increased in the course of time. Secondly, due to their income, urban residents living in eastern China are capable of spending much more money on education than comparable people in western China. Thirdly, the average spending by the rural population in western China is below the average spending of its eastern counterpart; while it grew slightly in both regions, the difference between the eastern and western rural population steadily increased during the seven-year period.

The lower revenues of the local governments strongly influence the quality of education in a number of ways. Full-time teachers' wages, for example, have been cut. Well-qualified full-time teachers are therefore hardly to attract, which is also partly due to the worsening teaching facilities in rural areas. Thus substitute teachers have to be hired, which leads to lower education quality. The financial burdens shouldered by the rural population, poor learning conditions and a lack of teaching materials and teachers result in high drop-out rates and prevent rural schoolchildren from staying in education for longer than the nine years of compulsory education.

The central government has launched a number of recentralisation measures since 1995 in order to reduce the burden on rural governments and improve the difficult situation facing rural schoolchildren. By virtue of the Education Law of 1995, young people from poverty-stricken areas received remission from school fees, for example. Investigations still verify the high impact that low incomes have on higher education opportunities, though, as student fees and the cost of living in general are hardly affordable for rural students. A recent study by the Jilin Provincial Government Research Center calculated that a university student in Jilin requires a net income equivalent to what four rural peasants earn (ESWN 2005).

Empirical analyses of the nature of disparities in educational spending and equality in rural China have shown that decentralisation and diversification resulted in increasing non-budgetary revenue sources and greater spending on operational expenses from 1993 to 1997. This trend was completely reversed by 2000, how-

ever, as the central government increased its share of within-budget finance. Still, local sources of educational finance are causing more inequality than government budgetary contributions. As Park and his colleagues have stated, "extra-budgetary finance exacerbates rather than ameliorates the inequality problem" (Park & Li & Wang 2003: 4ff.).

Prospects

Currently, Chinese education policy promotes inequality, as a child's place of birth determines the level of education it can attain. In turn, this educational inequality influences the person's income level, as well-paid jobs are hardly obtainable with a low level of education. The rural/urban education gap may well get smaller if the central government takes certain steps, however: first of all, it needs to financially support local governments to ensure that children get primary and secondary education – especially those in poorer regions; secondly, it must provide financial support to rural students to give them a chance to go on to higher education.

Documents and statements made by the central government of the PRC reflect that it is now well aware of the importance rural education has with respect to national development as a whole. The State Council gave top priority to rural education in 2003 as well as in the education plan promulgated at the beginning of 2005, and this prioritisation will certainly continue in the long-term development plan for education valid until 2020 (see C.a., 2003/9, Ü 13; 2004/12, Ü 14; 2/2005, Dok 21; XNA, 13.3.05). The following recent policies introduced by the central government aim to solve the problem of educational inequality in different ways:

1. In August 2005 the Vice-Minister of Education announced the government would start to adopt a system of free nine-year compulsory education for the country's rural children at the beginning of the 11th Five-Year Plan (2006-2011), which means it will cover all educational fees for rural children in primary and middle schools (XNA, 31.8.05). In May this year the *China Daily* announced that the system was going to be introduced as early as 2005 for the 592 poorest counties (CD, 31.5.05).
2. The central government is currently promoting the further opening of state schools to migrant children living in cities; it introduced a regulation in September 2004 that is now forcing primary and middle schools to stop charging extra fees to migrant children who don't have a permanent residence permit (XNA, 15.6.05).
3. The "Green Passage" programme, which gives poor students the possibility to defer tuition payment, is being repeated this year. This scheme enables such students to register for college enrolment despite their difficult financial situation.
4. In August 2005 the Ministry of Education announced it would offer poor college students special state grants valued at 800 million Yuan per year.

The grant, which is a monthly subsidy of 150 Yuan, is intended to cover basic living expenses (RMRB website, 30.8.05).

5. The central government is to promote the development of modern distance learning for rural primary and secondary schools by means of the "China Agricultural Broadcast and Television School", which uses radio, television, satellite, computer, audio and video materials to teach children and young people living in remote areas.
6. In order to raise the quality of education and to lower the student-teacher ratio in rural schools, the central government is encouraging graduates from teacher-training colleges and teachers in urban areas to work at schools in the countryside (RMRB, 10.9.05).

All these measures are expected to have a positive influence on educational development in rural areas, thus reducing the level of inequality in the course of time. Nevertheless, the total amount of governmental spending on education, which was 3.41% of GDP in 2004, will have to rise to at least the average level of industrialised western countries in order to be really effective, i.e. 5% of GDP. Furthermore, the increased education expenditure will have to be channelled towards rural primary and secondary education if the overall long-term objective is to be reached, namely narrowing the education gap. In view of the deeply rooted causes of educational inequality in the PRC, positive effects can only be expected in the medium term.

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