

The Atlas of Ideas: Science at the bottom of the pyramid

Changing China's Poverty Geography : Science for Survival or Decent Life

Fu Jing



OUTLINE

- Rough picture at bottom of pyramid
- Four groups of the poor and their S&T needs
- One concern: innovation and jobs growth
- One suggestion: time to step out package solution for the poor in China

Uneven anti-Poverty Progress

- 23.65 million live under China's extreme poverty line, 680 yuan, or US\$85, which is just 20 per cent of the average annual per capita income of the country's rural population
- China's poor actually totaled 120 million to 130 million, using the internationally-accepted one US\$ per day guideline
- China has been praised by WB for its China's rural poor decreased dramatically from 250 million in 1978 (30% of the rural population) to 23.65 million in 2005 (3 % of the rural population)

Poverty & Sci-Illiteracy: vicious cycle?

Bigger group: Including urban laid-offs, farmers who lost land and farmers-turned-workers, the number of the vulnerable exceeds 200 million, which is equal to two thirds of US population

Low literacy: Only 2 per cent Chinese meet scientific literacy standards and only 0.7 per cent of rural people meet the standards

China's Poverty Map: how much is green?

China Human Development Map



Rural Safe Drinking Water



Source: UNICEF/UNDP based on provincial statistics bureau reports

Four groups of poor and their needs in science and technology

- The farmers in extreme poverty (23.65 m)
 - A. They live in border region, minorities and mountainous areas, aiming to survive
 - B. Most of the regions are not suitable for development from ecological and diplomatic perspectives
- Needy farmers above extremely poverty (60-80 m): high-tech farming and development, technologies to cope with natural disasters and diseases, infrastructures, public goods, leisure

Four groups of poor and their needs in science and technology

- Urban poor (30 m)
Vocational training, access to more opportunities, leisure
- Poor Migrants (at least half out of 150 m)
Work safety, anti-diseases (HIV&AIDS), equal access to urban public goods, equal employment opportunities, leisure

Innovation creates more jobs?

- Technological progress sometimes can lessen manpower
- Technological change and innovation can improve job requirements and will enlarge the shortage if the labor force is not well prepared for the new technologies.
- In China, strong economic growth has not been matched by equally strong job creation. With a 38.3 per cent GDP growth China has created only 4.3 per cent additional jobs from 1999 to 2003.
- China is suffering from skilled work shortage in its economic powerhouses
- Pro-poor and pro-employment science and innovation are needed

Time to step out cure-for-all strategy for the poor

Science-based innovation strategy, new countryside plan, energy saving, environment protection should be considered together in line with the poor people's needs

The Atlas of Ideas: Science at the bottom of the pyramid

Thank you!

fujing@chinadaily.com.cn