

Milk and honey

Rural Kenya is abuzz. Thanks to microloans, small farmers across the country are turning to beekeeping to supplement their income – with golden results.

Honey Care Africa, founded in 2000, is a business that provides amateur beekeepers with financing, training and access to commercial markets. Its 'Money for Honey' programme guarantees a fair price for the honey, which is then sold in local supermarkets. Beekeeping is an efficient use of land, as well as being profitable – and the bees pollinate food crops on neighbouring farms, increasing their yields.

Microcredit programmes like these are gaining popularity all over the globe: indeed 2005 has been designated the International Year of Microcredit. They involve lending often minute sums of money to poor people to set up or expand small businesses – something regular banks are often reluctant to do. Along with savings, insurance and asset transfer schemes, they are part of a growing mix of financial instruments aimed at the poor, known collectively as microfinance.

More than half the work force in many developing countries is self-employed. For the 500 million micro-entrepreneurs that run

their own businesses, small loans can make the difference between bankruptcy and turning a tidy profit. When well managed, these small sums can catapult businesses into commercial successes that lift entire families – or whole communities – out of poverty.

In Andhra Pradesh, one of India's poorest states, the average worker earns \$1.20 per day. Rural villagers often make less. For many years Gonuguntla Mariamma, born poor and married at age ten, hired herself and her children out as labourers in other people's fields, while the family's own 0.8 hectares of land could not be cultivated because she could not afford seeds or irrigation.

Then the Society for Helping to Awaken Rural Poor through Education (SHARE) came to her village. Gonuguntla borrowed money to buy a buffalo and sold its milk for profit. She took out a second loan and bought another. With the income from the milk sales, she revived the family plot and planted a grove of orange trees. What was once a dry wasteland now flows with milk and freshly squeezed orange juice.

Bag of corn: \$1.40
Griddle for frying tortillas: \$3.00
Monthly permit fee for roadside stall: \$5.50
Cooking one's way out of poverty: Priceless



photo: S. Ndwiga, courtesy of Photoshare

Bundle of scrap cloth: \$2.50
Thread, needles and pins: \$1.40
Donkey for transport: \$12
Embroidering one's way out of poverty: Priceless



photo: Population Services International, courtesy of Photoshare

Fighting disease it's only cents

A \$3 insecticide-treated bed net may be the best present Mustapha Dageni's two children have ever received. Since the Tanzanian Government distributed the nets as part of an anti-malarial campaign, they have been gloriously fever free for more than a year.

At any given moment, around half the population of the developing world suffers from malaria, dysentery, diarrhoea, typhoid, cholera or other

diseases that are almost non-existent in developed countries. Ninety-five per cent of the 39.4 million people living with HIV/AIDS are in the developing world, 65 per cent in sub-Saharan Africa alone. Unsanitary living conditions, poor medical supplies and lack of public awareness and education facilitate the spread and severity of disease.

UNEP's GEO Yearbook 2004/05 highlights how rising global temperatures and human encroachment into natural reserves are also altering habitats, allowing deadly viruses to thrive. Competition for scarce resources often forces animals and humans into

close proximity, inviting the rapid spread of infection across species.

Tiny sums per person can mean the difference between life and death; it costs less than 10 cents for oral rehydration



photo: J. Stipe/Lutheran World Relief, courtesy of Photostare

Making it work

Most of the world's 14 million microborrowers (mostly women) have proved repeatedly that they can create stable sources of income, and repay their loans. Combinations of peer pressure and future incentives seem to do the trick, as popularized by organizations like the Grameen Bank in Bangladesh and Acción International in Latin America.

In many closely knit rural areas, groups of neighbours guarantee each other's loans: only when the first member repays can the next borrow. In urban areas where community identities are not as strong, 'stepped lending' – matching borrowers' own investments and gradually increasing credit with each repayment – often works better.

salts to cure diarrhoea, roughly 2 cents for vitamin A pills to relieve malnutrition and 14 cents per condom to protect against HIV/AIDS. Yet these are often unavailable to the world's poorest – who need them most.

Malaria, eradicated throughout most of the world in the 1950s, still kills 3,000 African children each day, most under the age of five. Bed nets sprayed with insecticide, costing just \$3 or less, can reduce infections by up to 50 per cent. Sadly, less than 2 per cent of the continent's children sleep, like the Dangenis, under nightly protection.



Out of the back seat

By Yu Kuai

When a developing country has been prospering full steam ahead for the past 20 years – as China has – there can be a danger that environmental issues take a back seat to economic growth. Indeed, some Chinese people see industrial pollution as a necessary by-product of the country's rapid economic development and increased prosperity. To them, environmental protection is costly and time consuming, with no readily apparent reward.

But, as environmental problems grow, Chinese young people are increasingly taking a stand. Two of them are Yan Xiaowei, 19, of East China College of Law in Shanghai, and Wang Lei, 21, of Nankai University. Both have undertaken projects to get their communities involved in environmental sustainability, through the Bayer Young Environmental Envoy programme, which fosters dialogue on sustainable development among talented Asian, Latin American and Eastern European youth.

With Bayer's help, Yan developed a plan to train passionate, capable leaders to motivate their communities to take action on ecological issues. In her outline for Community Power Releasing Programmes, she recommends that youth envoys cooperate with neighbourhood committees and local businesses to devise customized environmental protection activities for their communities, explaining that 'kids, retirees and adults can be very good teammates'.

Lei directed his energies towards tackling environmental challenges of urban life on his campus and in his hometown of Tianjin. As head of his university's environmental protection association, Nankai Green Group, he has led fellow students in promoting schemes to plant trees, collect refuse and protect birds. He keeps a 50-cm-high iron glass lantern – rescued from a rubbish dump during the annual Environmental Envoys' field trip to Germany – in his room to remind him that 'waste is raw material in the wrong place'.

Rampant materialism and public apathy about the environment particularly concern young Chinese environmental leaders. But they do not believe that environmental protection and economic development are mutually exclusive. 'If the importance of environmental protection can be rooted in everyone's minds,' says Yan, 'we can all live healthier and more comfortable lives'.

Yu Kuai, 21, a Bayer Young Environmental Envoy from Beijing's Tsinghua University, started a campaign to reduce the number of plastic bags handed out by campus supermarkets. The drive, titled 'Green U, Green Life', encouraged students to put small purchases in their backpacks and handed out reusable cotton shopping bags for larger items.

photo: Yu Kuai