# Improving Education by Improving Health and Nutrition in Rural China: The "Best Buy" Toolkit for Solving the Greatest Needs of Poor Students

Multivitamins	→ Eliminate Anemia	→ \$4/semester
Eyeglasses	→ Correct Nearsightedness	<b>→</b> \$8/year
Boarding School Mgt. Training	→ Improve Sanitation/Living Conditions	s→ \$3/student
Deworming Tablets (twice/year)	→ Eliminate intestinal worms	<b>→</b> \$0.3/year
Nutritional Training for Parents	→ Raise nutritional status of children	→ \$2/family

Healthy, well-nourished child that feels better and performs better in school .... **PRICELESS** 

## Problem/Challenge

Alarming disparities persist between the academic performance of rural and urban students in China. Less than 1 in 4 poor, rural students complete high school. Only 3% go to college. In large cities, 4 of every 5 students finish high school. 50% go to college.

Poor health and nutrition is a widespread and significant challenge to rural students. Recent work by REAP shows that 34% of children are anemic (and have poor nutrition); 10% of students are near sighted (and do not have glasses); more than 40% of students in many areas are infected with intestinal worms (and do not receive deworming tablets).

These nutrition and health problems have all been shown, in China and internationally (by REAP and others), to substantially contribute to the poor academic performance of rural students. Fortunately, there are a number of simple, low-cost treatments, which are effective and available. Further, the educational outcomes of many of these health interventions have been shown to be greater than or similar to other more expensive options for improving education (e.g., reducing class size, teacher training, etc.).

Despite these treatments being EFFECTIVE and INEXPENSIVE, surprisingly, there are few widespread efforts being implemented at the school-level to improve the health and nutrition of rural students in China's poor areas.

There also are few efforts looking at the overall impact of taking a comprehensive tool kit of these low-cost interventions into schools to improve health, nutrition and educational performance.

Given the absence of comprehensive school-level efforts, there has been little opportunity to engage policy makers to achieve the large, sustained scale up of health and education interventions needed to reach the mass numbers of rural poor students in China.

#### **GOALS**

• **Better Understand the Problem**: Accurately identify and assess which health and nutrition risks are currently prevalent in which poor rural areas and schools.

- **Solve the Problem:** Create a program that contains the comprehensive tools to address these key risks and issues for students in *dozens of schools*.
- **Scale Up the Solution:** Provide local and provincial policy makers with the empirical evidence of success that they need to be able to move forward and scale up the program to reach students in *thousands of schools*.

#### **SOLUTION**

REAP will employ the proven "Best Buy" Tools for Health and Nutrition and, for the first time, do so comprehensively (as the "Best Buy Toolkit"). In reaching more than 6,000 students in 24 poor, rural schools in Western China we will:

- **Provide health checkups and tests** to rigorously measure the initial health, nutrition and educational performance levels of students in our program schools (and in a set of comparison schools).
- Treat the health and nutrition problems in the program schools by employing the tools in our Best Buy Tool Kit—multivitamins; eyeglasses; boarding school management, deworming medications; and nutrition training for parents.
- Measure final levels of health, nutrition and education, comparing improvements between program schools and comparison schools.
- Put the evidence on what works well and what does not in creating a widespread, comprehensive health and nutrition program into the hands of policy makers capable of scaling the program up to thousands of additional schools.

### ABOUT REAP

The Rural Education Action Project (REAP) has run numerous programs in hundreds of schools in Western China in the areas of Health, Nutrition and Education, Technology and Education, and Access to High School Education and Beyond. We integrate impact evaluation into each program to be able to report back on the effectiveness of our approaches. By involving policy makers from the beginning and then by sharing our results, we have successfully scaled up our programs at the county and provincial levels. (In Shaanxi Province, for example, one REAP-originated program now reaches 5,000 elementary schools, following provincial scale up.)

**FUNDING NEEDS: \$75,000**