## THE ESSENTIAL PACKAGE

Twelve interventions to improve the health and nutrition of school-age children





























#### The challenge

Basic education is one of the most effective investments in improving economies and creating literate, self-reliant and healthy societies. Yet, **100 million children** of primary school age, 97% of them in developing countries, are not in school and of these, two thirds are girls. Of those children who start school, 150 million drop out before completing five years of education, the minimum required for basic literacy. About two thirds of them are girls. Meanwhile, **300 million children** are chronically hungry in the world today. Of these, some 180 million go to school on an empty stomach. In addition, at least 180 million children under the age of 10 are chronically undernourished.

## Education and learning depend on good nutrition and health

Poor nutrition and health among schoolchildren contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and are more likely to repeat grades and to drop out of school than children who are not impaired; they also enroll in school at a later age, if at all, and finish fewer years of schooling. The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance.

Even short-term hunger, common in children who are not fed before going to school, can have an adverse effect on learning. Children who are hungry have more difficulty concentrating and performing complex tasks, even if otherwise well nourished. Research and programme experience show that improving nutrition and health can lead to better performance, fewer repeated grades and reduced drop out. The extra demands on school-age children (to perform chores or walk long distances to school) create a need for energy that is much greater than that of younger children. Indeed available data indicate high levels of protein-energy malnutrition and short-term hunger among school-age children.

It is estimated that 60 million school-age children suffer from iodine deficiency and that another 210 million have iron deficiency anaemia. Iodine deficiency is associated with an average 13.5 point reduction in IQ for a population. Schoolage children living in iodine-deficient areas have lower IQs and poorer cognitive and motor function than children living in iodine-sufficient areas. There is substantial evidence that anaemia in children is associated with decreased physical and mental development, impaired immune function, poor growth, increased fatigue, reduced cognitive abilities and poor school performance.

Parasitic worms that infect the intestines or the blood are a major source of disease and undernutrition in school-age children. An estimated 300 million people are severely ill due to worms and of those at least half are school-age children. These parasites consume nutrients from the children they infect, and so may cause or aggravate malnutrition and retard children's physical development. Studies have shown that worm infections (particularly hookworm) cause anaemia, reduce growth and may negatively affect cognition.









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#### Taking a fresh look at education

In April 2000, recognising the importance and potential of a healthy school setting, WHO, UNESCO, UNICEF and the World Bank – each with decades of specialised experience working through schools to enhance learning and health - agreed upon a shared framework (FRESH) to strengthen school health, hygiene and nutrition programmes.

The FRESH (Focusing Resources on Effective School Health) Framework, an intersectoral initiative, provides the context for effective implementation of access to health and nutrition services within school health programmes. School-based health and nutrition services, such as micronutrient supplementation and deworming, are likely to be most effective where they are supported by other strategies such as policies to provide a nondiscriminatory safe and secure environment, provision of safe water and sanitation, effective referral to external health service providers and links with the community. The FRESH Framework provides this context by positioning access to health and nutrition services among its four core components that should be made available together for all schools:

- Health-related school policies
- Safe water and sanitation
- Skills-based health education
- Access to health and nutrition services

These core components of the FRESH Framework require school-community partnerships as the supporting strategies for the success of school health and nutrition programmes. These include effective partnerships between the health and education sectors, teachers and health workers, schools and community groups and between the pupils and those responsible for implementing school health programmes.

#### Millennium Development Goals related to education

- Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
- Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education no later than 2015.
- Reduce by half the proportion of people without sustainable access to drinking water by 2015.
- Reduce by half the proportion of people without access to adequate sanitation by 2015.
- Ensure that, by 2015, 80% of primary school children are educated about hygiene.



## **Enhancing WFP and UNICEF** partnership

UNICEF and WFP are both committed to the promotion of girls' education to reduce the number of girls out of school, increase access and retention rates, improve the quality of education and ensure progress in learning achievement. Through school feeding efforts and support of basic education activities, WFP and UNICEF share a commitment to helping poor children get an education. Accordingly, WFP entered into partnership with UNICEF in 2002 to collaborate through an integrated package of cost-effective interventions to improve the nutritional status and health of schoolchildren.

A new WFP/UNICEF global Memorandum of Understanding has been signed to reflect more accurately the current joint work and to ensure that it provides a framework within which to operate. Enhanced partnership between UNICEF and WFP in improving the health and nutrition of schoolchildren provides an opportunity to contribute to the implementation of the FRESH Framework and to fulfill children's right to education.

#### The Essential Package

In 40 countries UNICEF and WFP Country Offices have committed themselves to working closely to support the implementation of the Essential Package interventions. Some countries have signed Letters of Understanding for joint WFP-UNICEF programming for the implementation of the Package in schools. In others, UNICEF and WFP have prepared joint project proposals to obtain funds to support the implementation of the Package. The goal is to have the Essential Package implemented in all countries with the WFP-assisted Food for Education (FFE) programme.

#### The benefits of the Essential Package

#### It is highly cost effective

The Package helps link the resources of the health, education, nutrition, and sanitation sectors in an existing infrastructure, the school. While the school system in developing countries is rarely universal, coverage is generally superior to health systems and there is an extensive skilled workforce (teachers and administrators) that already works with the local community.

### It increases the efficacy of other investments in child development

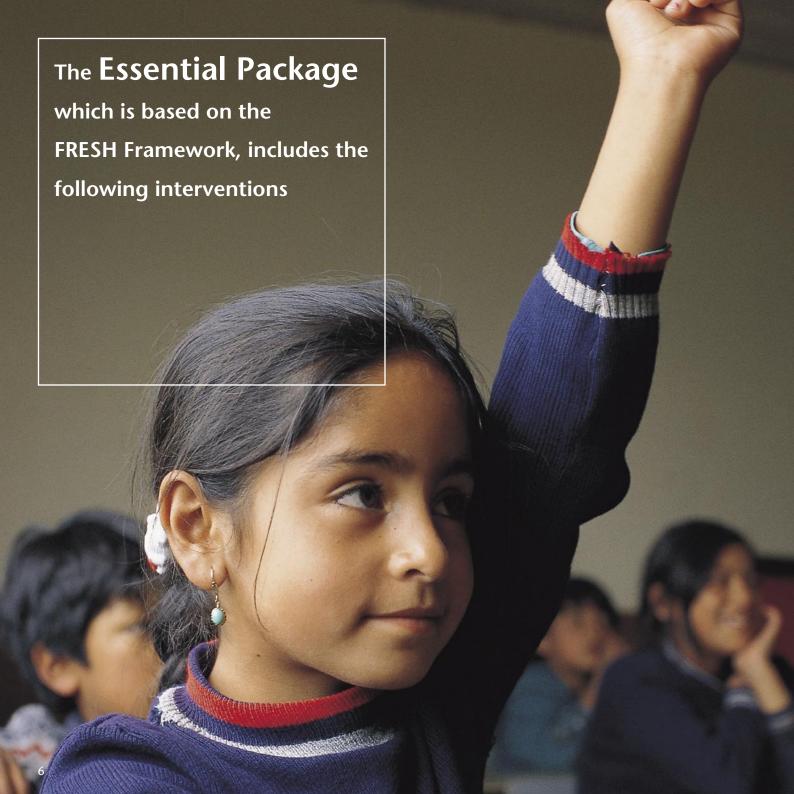
The Package is the essential sequel and complement to early child care and development programmes. Continuing good health at school age is essential if children are to sustain the advantages of a healthy early childhood and take full advantage of what may be their only opportunity for formal learning.

#### Ensures better educational outcomes

Ensuring good health at school age can boost school enrollment and attendance, reduce the need for repetition, and increase educational attainment. Good health practices can promote reproductive health and help avoid HIV and AIDS. It is estimated that the burden of disease for school-age children 5 to 14 years old is 11% of the total global burden of disease.

#### It improves social equity

As a result of universal basic education strategies, some of the most disadvantaged children – girls, poor rural children and children with disabilities – have access to school for the first time. But their ability to attend school and to learn whilst there is compromised by poor health. These are the children who will benefit most from health interventions, since they are likely to show the greatest improvements in attendance and learning achievement.



# WFP/Ecuador-0005-SF/Rhodri Jones

#### **Basic education**

100 million children of primary school age, 97% of them in developing countries, are not in school. Two thirds of them are girls. Of those children who start school, 150 million drop out before completing five years of education, the minimum required for basic literacy. About two thirds of them are girls.

Basic education is one of the most effective investments in improving economies and creating literate, self-reliant and healthy societies.



Basic education includes teacher training, salaries, provision of school supplies, curriculum development, and classroom construction. The major responsibility lies with the government who must ensure policies that favour education of boys and girls, teacher salaries, and also work with donors to prioritize education activities.

UNICEF supports activities that ensure quality, equity and relevance of education.

#### These include:

- Improvement of infrastructure construction of schools and rehabilitation of classrooms; and improvement of management and record keeping in schools.
- Curriculum development, training of teachers and provision of school supplies and materials.
- Advocacy for policies that make basic education a national priority; advocacy for free and compulsory primary education, which offers some of the most promising policy interventions to promote girls' education.
- Programme communication and public information at community level, to encourage families to send their children, particularly girls, to school.

WFP could complement with Food for Work activities where appropriate. Aspects of basic education that might benefit from WFP food aid include: teacher training and increasing access to education (Food for Work can be used to help with construction of schools and school facilities, and roads to schools).

UNICEF and WFP seek to contribute to the achievement of the Millennium Development Goals on education by enabling access to and improving the quality of basic education for all schoolchildren living in rural areas.



- Motivate parents to enrol their children in school and have them attend more regularly. When school feeding effectively reduces absenteeism and increases the duration of schooling, educational outcomes (performance, drop-out, and repetition) also improve.
- Increase community involvement in schools, particularly
  where programmes depend on the community for preparing
  and serving meals to children. Schools with their communities
  behind them are more effective than those with less community
  involvement.

In 2003, WFP provided food to schools in 70 countries, accounting for more than 16 million children. WFP aspires to feed 50 million schoolchildren by 2007, and to have the Essential Package in every school that implements FFE.

Among possible FFE interventions are take-home rations targeted to girls, orphans and other vulnerable children who attend school regularly; in-school meals or snacks to reduce short-term hunger along with associated cognitive impediments; and Food for Work targeted to teachers or parents engaged in activities to improve schooling outcomes. FFE also serves as an excellent platform for interventions that improve schools and keep children healthy.

WFP works with governments to support school FFE programmes in food-insecure areas. In those targeted areas, WFP secures food supplies and transport, and works with governments and other partners to ensure delivery and distribution.

#### FFE programmes can:

 Alleviate short-term hunger in malnourished or otherwise well-nourished school children. Doing so helps to increase the attention span and concentration of students, producing a gain in cognitive function and learning.

#### **Food for Education**

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There are 300 million chronically hungry children in the world today.

Of these, some 180 million go to school on an empty stomach. In addition, at least 180 million children under the age of 10 are chronically undernourished.

Food for Education (FFE) includes a significantly broad array of interventions designed to improve school enrolment, attendance, community-school linkages, and learning.

#### **Promotion of** girls' education

Globally, there were 115 million children out of school in 2001/2002. Some 53% of these (61.6 million) were girls. Two thirds of the world's illiterate adults are women.

Educating girls is one of the most important investments any country can make in its own future. Education has a profound effect on girls' and women's ability to claim other rights and achieve status in society, such as economic independence and political representation. Having an education can make an enormous difference to a woman's chances of finding wellpaid work, raising a healthy family and preventing the spread of diseases such as HIV.

- Take-home rations for girls, provided by WFP to motivate parents to release their daughters from household responsibilities, and allow them to attend school.
- Improved and separate school sanitary facilities for girls, training of more teachers (especially more female teachers) to be role models and equitable in their treatment of girls, and curriculum development to ensure its appropriateness and applicability for female students, all supported by UNICEF.
- Joint advocacy efforts and programme communication involving both agencies in support of girls' education and behaviour change activities to promote girls' education, which is likely to have more impact than separate advocacy activities.

Opportunities for increasing the complementary actions of the two agencies include:

• The 25 by 2005 Girls' Education campaign, launched by UNICEF to accelerate its ongoing efforts towards the world's commitment of educating every child. The campaign focuses on getting girls into school in 25 countries where an extra effort is needed to meet the 2005 MDG of gender parity in education. 25 by 2005 targets partners such as governments and donors who make some of the key policy and resource decisions affecting the education of girls. UNICEF Go Girls! Education for Every Child campaign is about raising awareness, generating public support and mobilizing resources for 25 by 2005. These campaigns provide opportunities for enhancing collaboration with a wide range of partners – from WFP and other UN agencies, children and teachers, to religious leaders – and popular sports such as soccer and cricket.





#### Potable water and sanitary latrines

Many schools in developing countries have appalling sanitary conditions, contributing to sickness and disease in students. Schools are often hazardous to children's health.

Poor sanitation has led to the infection of nearly a billion people – largely children – with a variety of worm infections, with corresponding costs in health and energy. In addition, the lack of adequate, separate sanitary facilities in schools is one of the main factors preventing girls from attending school.

Access to sanitation facilities is a fundamental right that safeguards health and dignity.

The objective is to provide each school with a clean water supply. This could be hand pumps or protected wells as is appropriate. Community participation is solicited whenever possible.

Each school needs to be equipped with two separate latrine blocks to ensure separate facilities for boys and girls, and ensure girls' privacy. The technical choices are made according to local conditions, the total number of schoolchildren, and the maintenance potential. Washstands are installed near the sanitary blocks.

UNICEF provides supplies and equipment for potable water and latrines including installation cost. Potentially WFP Food for Work could be used to support installation of hand pumps and latrines.

The goal is for every primary school in the world to be equipped with separate sanitary facilities for boys and girls, and to have a source of clean and safe drinking water.

## Health, nutrition and hygiene education

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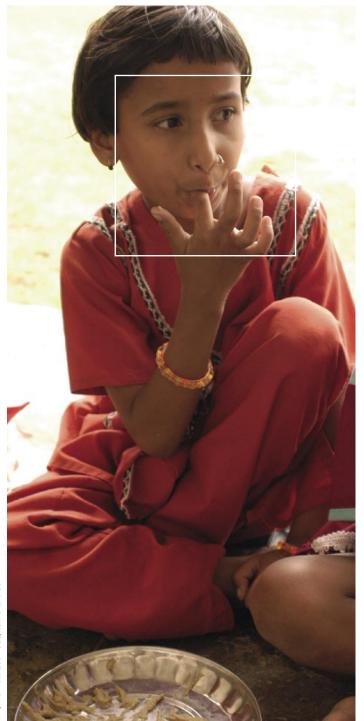
Despite all the progress reported worldwide in recent decades, more than 2.3 billion people still live without access to sanitation facilities and are unable to practice such basic hygiene as washing their hands with soap and water.

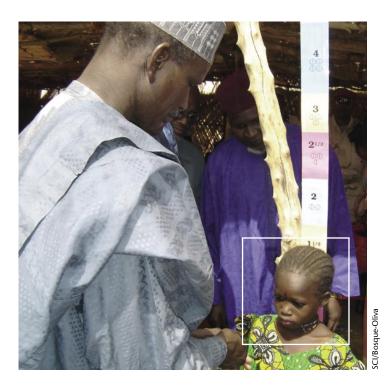
While the impact of poor sanitation and hygiene is known to be disastrous for infants and young children, it also has an important impact on the health of school-age children, including adolescents.

Hygiene promotion is now seen as an intrinsic element of any water and sanitation initiative and, in the context of school health, is now a central focus for school sanitation and hygiene programmes. There is increasing recognition of the importance of promoting safe hygiene behaviour among schoolchildren, not simply because of its importance in the immediate school environment, but also because of the opportunities it offers for communication and potential influence on the family and future families.

Health and nutrition education focuses on the development of the knowledge, attitudes, values, and life skills needed to make the most appropriate and positive health-related decisions.

UNICEF supports these activities. School feeding also lends itself very well to practical lessons in these topics.





Systematic deworming

Worm infections cause anaemia, poor physical growth, poor intellectual development and impaired cognitive function. They do so at a critical time in life: infection reaches maximum intensity in the age range of 5 to 14 years.

Studies have shown clearly the detrimental effects of infection on educational performance and school attendance, as well as the significant improvements in language and memory development that can be realized following treatment.

School-based deworming has its full impact when delivered within an integrated school health programme that includes the following key elements of the Essential Package and the FRESH Framework:

- Health policies in schools that advocate the role of teachers in health promotion and delivery.
- Adequate sanitation and access to safe water to reduce worm transmission in the school environment.
- Skills-based health education that promotes good hygiene to avoid worm infection.
- Basic health and nutrition services that include school meals and deworming.

WFP collaborates with WHO, the World Bank, and Canadian International Development Assistance to implement deworming (and related hygiene education) in WFP-assisted schools. WHO links to the Ministries of Health to conduct studies to determine the types of parasites and appropriate drugs for controlling them. WHO, the World Bank and WFP have trained teams of representatives of each participating WFP Country Office, Ministry of Health and Ministry of Education in how to plan and carry out a deworming campaign.

In some countries, UNICEF supports deworming campaigns in WFP-assisted schools. WFP's goal is to expand deworming activities to include all its school-feeding and maternal/child nutrition programmes worldwide (where intestinal parasites are a serious problem).

#### Micronutrient supplementation

School-age children, like most populations in the developing world, suffer from multiple micronutrient deficiencies.

Data are not available on the extent of the problem in school-age children. However, 13 to 27% of pre-school children are estimated to have two or more micronutrient deficiencies, suggesting that 100 million pre-school children are affected. Single micronutrient deficiencies seldom occur in isolation. Rather they tend to cluster, for example, iron deficiency and vitamin A deficiency often coexist in the same populations.

to iron supplementation alone, multiple micronutrient supplementation would be a cost-effective strategy to address multiple nutrient deficiencies in the school-age population. Because of this, through the FFE programme, WFP provides foods fortified with micronutrients to improve the nutritional status of micronutrient-deficient schoolchildren.

Micronutrient deficiencies can negatively affect the mental development and learning ability of children and their resistance to infection. Deficiencies of iron and iodine are among the most harmful types of malnutrition with regard to cognition. Iron deficiency renders children listless, inattentive and uninterested in learning. Research literature suggests a causal link between iron deficiency anaemia and less than optimal behaviour for learning. Poor performance on a wide range of achievement tests among iron-deficient children in school has been consistently documented. Meeting the iron and iodine needs of school-age children can translate into better school performance.

Close WFP-UNICEF cooperation in micronutrient fortification exists in a few countries, but much more needs to be done. Given the overlap and clustering of nutrient deficiencies in deficient populations, for example anaemia is more effectively treated with vitamin A and iron supplementation compared



#### **HIV and AIDS education**

AIDS undermines efforts to educate the current generation and robs nations of the benefit of education provided to members of the generation before.

respond to the challenges of the negative impacts of an essential role to play in reversing the very pandemic that threatens them. Research shows that sexual and reproductive health education is likely to be more effective if started before children become sexually active and have acquired attitudes and practices that are often counterproductive to positive sexual behaviours and attitudes.

Young people, especially those between 6 and 14 years, offer a window of hope in stopping the spread of HIV and AIDS if life skills programmes have reached them. They need support and skills to postpone starting sexual activity. In the absence of a cure, the best way to deal with HIV and AIDS is through prevention by developing and/or changing behaviour and attitudes. Life skills programmes are one way to offer the information and skills that young people need to protect themselves.

Life skills programmes aim to foster positive behaviours across a range of psychosocial skills and to change unacceptable behaviours learned earlier which may translate into inappropriate and risky behaviours at a later stage. Life skills programmes are one way of helping children and youth and teachers to respond to situations requiring decisions which may affect their lives.

UNICEF and its partners support these activities. WFP's Food for Training is used to support training activities.



#### **Psychosocial support**

Traumatic events rob individuals of a sense of control, possibly resulting in deep feelings of insecurity.

For example, orphans and children affected by armed conflict are amongst the most vulnerable people in society. They run a greater risk of becoming stunted and malnourished and are often the first to be denied schooling, due to lack of funds. Orphans also suffer the trauma of seeing one or both parents becoming ill and dying.

- Views the provision of creative opportunities as important.
- Prevents physical punishment, bullying, harassment and violence, by encouraging the development of procedures and policies that do not support physical punishment and that promote non-violent interaction on the playground, in class and among staff and students.
- Promotes the right of boys and girls through equal opportunities and democratic procedures.

A healthy psychosocial environment provides support to teachers, students and their families simultaneously. As a result, a positive, supportive climate at school can make a critical contribution to academic achievement. UNICEF supports psychosocial activities including training of volunteers, psychosocial counseling, and provision of recreational kits.

The psychosocial dimensions of schools have sparked the interest of a growing number of researchers concerned with school effectiveness and the emotional well-being of young people, because of the amount of time most children spend at school.

A child cannot be physically healthy without also being psychologically secure. Hence, psychosocial support interventions recognise that growing children need more than just basic material provision (food, shelter, and clothing). They also need social stimulation and support, nurturing, affection, opportunities for rest and recreation, and guidance from stable, caring adults.

A school's environment can enhance social and emotional wellbeing and learning when it:

- Is warm, friendly and rewards learning.
- Promotes cooperation rather than competition.
- Facilitates supportive, open communications.



#### Malaria prevention

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Globally the malaria situation is serious and worsening, with mortality ranging between 1.5 and 2.7 million, and morbidity 300 and 500 million annually.

Although malaria affects 40% of the world's population, 90% of the burden is in sub-Saharan Africa, where it is estimated that it will kill one in twenty children under five years of age. There is also evidence that cerebral malaria in early childhood can have an effect on a child's cognitive and learning ability.

In school-age children, malaria is estimated to account for between 10 to 20% of mortality and is an important cause of morbidity.

Of preventable medical causes of school absenteeism, malaria accounts for an estimated 13 to 50% school days missed per annum. Malaria can cause iron deficiency and anaemia.

School-based malaria prevention programmes are a good example of how schools can make a contribution to community health. Children can be important for change in malaria control programmes. Skills-based health education can give children the ability to recognize the signs and symptoms of malaria and to recognize the need to seek treatment.

Skills-based health education through schools can also help promote a community-wide understanding of malaria with particular emphasis on the need for community-based control measures such as the use of impregnated bed nets. UNICEF will provide impregnated treated nets (ITNs), and support skills-based health education activities in schools. WFP will use its network of logistics to distribute ITNs to schools.





School gardens

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School gardens are cultivation areas or 'school laboratories' around or near to schools. They may include small-scale animal husbandry and fishery, bee keeping, fruit tree planting, greening, 'flowering' and shading, and sometimes staple food production.

There is reason to believe that school gardening can provide agricultural knowledge and skills, and make the teaching of science and environmental education more relevant and effective. It may therefore benefit pupils, and especially girls, by giving them skills as future food producers, as well as by providing them with more immediate nutritional support.

School gardening is considered an important complement to school feeding programmes for the learning opportunities it offers and its production function (generally, school feeding programmes do not provide fresh, perishable vegetables and fruits, but rather staple, dried, and canned food).

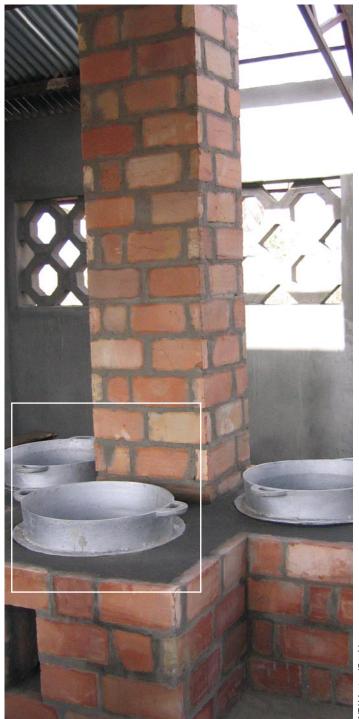
School gardening programmes can be an excellent means of introducing new ideas about gardening and a useful channel for reaching others in the community, as children tend to be more open than adults to the adoption of new ideas.

The objectives of promoting school gardens are:

- Educational Giving pupils knowledge and skills for better agricultural productivity and sustainable agricultural practices; giving environmental education a sustainable and practical dimension; changing attitudes towards agriculture and rural life; and increasing school attendance.
- Economic Lowering the costs of schooling and school feeding and creating income.
- Nutritional Improving food diversity to combat micronutrient deficiencies among schoolchildren and improving overall food security.

At global level, a new partnership has been forged between governments, FAO and WFP to link school gardens with Food for Education programmes, to build on synergies resulting from the two agencies' capacities and comparative advantages.

In southern Africa a second partnership has been developed that involves governments, FAO, UNICEF and WFP and is being implemented initially in two countries with high levels of HIV – Malawi and Lesotho. Based on the outcomes and lessons learned, the project will be expanded and replicated in Swaziland and Zambia. The objective of the project is to protect and improve the food and nutrition security of orphans, and HIV and AIDS-affected children.



#### Improved stoves

The impact of large-scale school feeding programmes on forest resources used as fuel wood is of concern to national governments and their partners.

WFP regards environmental interventions in schools as a longterm investment in local food security. Inefficient wood stoves used in school kitchens affect both children's and teachers' health and cause negative environmental impacts.

These problems can only be alleviated by adopting short and medium-term measures to increase the efficiency with which fuels are utilised. Such measures include the installation of energy-efficient kitchen stoves in schools, training on their management and maintenance, establishment of wood lots and development of appropriate waste disposal systems in schools. WFP will support these activities, where appropriate. ■

#### The future is essential today

Children in Nicaragua are benefiting from the implementation of the Healthy and Friendly Schools Initiative, which is in line with the Essential Package.

The Initiative defines 'school' as a place where children and adolescents build, practice and develop knowledge, abilities and life skills, in a healthy, safe, comprehensive, protective environment where differences and cultural diversity are respected, with the active involvement of children, adolescents, educators, parents and the community.

The Healthy and Friendly Schools Initiative was developed out of the integrated School Sanitation and Hygiene Education (SSHE) approach. Its objective is to improve the school environment by dealing with issues such as health, school hygiene, environmental sanitation and human rights in a comprehensive way.

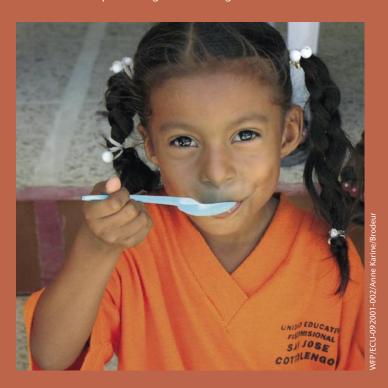
The Healthy and Friendly Schools Initiative has created a rich inter-sectoral collaboration among the UN agencies – UNICEF, WHO and WFP – the government including the Ministries of Health, Education and Environment, as well as local health systems, the national and regional offices of the water authority, municipalities, Municipal Youth Commissions and local NGOs.

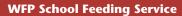
At the start, the Initiative was meant to respond to the needs of 200 schools, but it is spreading very rapidly through the involvement of other actors. The final goal is to have the elements of the Initiative incorporated in a national policy and implemented in all schools in Nicaragua.

The main components of the Initiative are:

- quality, warm and successful learning
- friendly and safe physical conditions
- water, school sanitation and hygiene education
- health and nutrition
- rights, duties and participation.

The Initiative also includes a sensitisation campaign targeting communities and special groups (such as mothers' clubs). Without heightened awareness of the merits of education, sanitation and hygiene, progress and achievements would not be sustained. UNICEF's awareness campaigns make creative use of local folklore, traditional singers and PTAs. These groups, together with school feeding cooks, are educated about the importance of micronutrients in foods and how to preserve them during meal preparation. The interventions have reduced child illnesses and empowered girls in Nicaraqua.





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