

Imperial College
London

The Partnership for Child Development

ANNUAL REPORT 2012-2013





Contents

Foreword	3
The Partnership for Child Development	4
A Unique Position in Development	4
Our Approach	5
Strengthening the Evidence Base	6
Capacity Building and Technical Assistance	15
Collecting, Sharing and Disseminating Knowledge	20
Supporting and Strengthening Partnerships	26
Countries With Which PCD Works	32
Recent Publications	34
Funding and Resources	37
PCD Organization and Structure	38
Governance	39
Coordinating Centre	40
PCD Country Offices	41
Partners	43

Foreword

With a little over 2 years left to achieve the Education for All (EFA) and Millennium Development Goals (MDGs), and a growing focus on what the post-2015 global development agenda will look like, there is an increasing desire from the international community to identify and replicate the most effective interventions and approaches. As part of this and in response to government demand, The Partnership for Child Development (PCD), together with our partners, strive to identify and replicate the most effective school health and nutrition (SHN) interventions and approaches.

Our approach identifies schools as platforms to provide integrated government-led health programmes. We work cross-sectorally, building the evidence base, strengthening capacity, disseminating knowledge and supporting partnerships to deliver SHN interventions to facilitate governments to meet the educational, health and development gains identified in the EFA and MDGs. The Annual Report provides a brief cross-section of our efforts to support effective SHN programmes in the last year, I would like to highlight below some of our key focus areas.

Within the context of making education a human right for every child a reality, there is the need to focus on reaching the most vulnerable, poorest and marginalized children. With the world's largest minority (estimated at 15%) with a disability, in low-income countries children with disabilities are half as likely to enrol in school as their able bodied peers. To change this, PCD is at the forefront, working with governments and development partners in Africa and Latin America to develop inclusive education programmes in making schools *more* accessible for vulnerable and marginalized children.

Global momentum has also continued to grow for the win-win of government-led school feeding programmes in promoting children's health and educational achievement and strengthening food security and agricultural development. As a result of the ground-breaking United Nations World Food Programme publication *State of School Feeding Worldwide 2013* with support from PCD and the World Bank, the global community are now able to comprehend for the first time the full extent of school feeding. At country-level, key advances have been made in the development of tools such as an innovative electronic menu planning application which allows implementers to develop costed and nutritionally balanced school meal menus.

Since the signing of the *London Declaration on Neglected Tropical Diseases (NTDs)* in 2012, great strides have been made in moving forward towards the control and elimination of NTDs. We are actively engaged with a number of NTD networks and coalitions at both national- and international-levels. A key theme emerging from these fora is the importance of integrating and adopting cross-sectoral approaches in tackling these diseases. In response to this, school-based platforms are a key component and we are continuing to work with multiple countries to support cutting-edge programmes that connect school-based deworming with complementary programmes on school feeding, nutrition and water, sanitation and hygiene.

These achievements would not have been possible without the dedication and support of the PCD team and our many partners. As we move towards the post-2015 global development agenda we look forward to continuing to work collaboratively to ensure that comprehensive SHN remains a crucial resource in ensuring the well-being of all children, particularly the most vulnerable.



Lesley Drake
Executive Director



“...reaching the most vulnerable, poorest and marginalized children.”



The Partnership for Child Development

A Unique Position in Development

School health and nutrition (SHN) programming necessitates working across the education, health and nutrition sectors. The Partnership for Child Development (PCD) adopts a cross-sectoral approach to develop the most effective, scaled and sustainable programmatic solutions to improving the education, health and nutrition of school-age children and youth in low- and middle-income countries.

Critical to PCD's work has been the ability to appreciate the concerns, priorities and cultures of both the education and health sectors and to enable effective partnerships between the two. PCD also promotes a gender-aware life cycle approach and includes programmes on pre-school children, school-age children and youth in its portfolio. Essential to our activities are partnerships formed with many different groups, including governments, bilateral and multilateral agencies, non-governmental organizations (NGOs), communities and schools.

PCD consists of a global consortium of civil society organizations, academic institutions and technical experts with a Coordinating Centre based at Imperial College London. The role of the Centre is not to act as an implementing agency, but to engage specific experts, in specific countries, on specific issues, as and when required. In this way, PCD brings together a distinct combination of academic excellence, technical expertise and high-level networks to governments and international organizations, resident in many different countries.

The work is constantly evolving as PCD examines potential new ways to improve school-age children's education, health and nutrition. PCD is recognized internationally for its focus on quality science in development and its work has shown how simple health and nutrition interventions, implemented through schools, can improve not only children's physical well-being, but also their education and life choices; both in the short- and long-term.

Goal

The goal of PCD is to improve the educational achievement of children, especially girls, through national programmes that enhance the health, nutrition and psychosocial status of children in low- and middle-income countries.

Objectives

To achieve this goal, PCD has identified four key objectives:

1. **To strengthen the evidence base:** Leading to promotion of good practice of cross-sectoral SHN programmes.
2. **To strengthen the capacity of the education sectors in low- and middle-income countries:** Leading to the implementation of large-scale, government-led sustainable programmes.
3. **To improve, collect, share and disseminate knowledge:** Promoting the evidence for cross-sectoral SHN programmes.
4. **To strengthen global, regional, national and local partnerships:** Facilitating consensus and supporting effective programme coordination and implementation.

Our Approach

Rapid and flexible

The combined resources of in-house experience and partner cooperation at all levels enables PCD to respond rapidly to provide considered and robust guidance and support anywhere in the world.

Experienced

PCD is amongst the world's foremost authorities in SHN programming with expertise ranging from design, through implementation to evaluation.

Collaborative

PCD harmonizes the response of all sectors and stakeholders, drawing on the expertise and resources of each, to ensure that the objectives of all are met.



“Academic excellence, technical expertise and high-level networks: a unique partnership in development.”

Strengthening the Evidence Base

PCD was founded, and remains embedded, within the academic environment of Imperial College London, in order to bridge the gap between the latest academic research and the needs of countries standing to benefit from the application of such knowledge. The use of evidence-based approaches ensures that programmes are more likely to succeed. PCD continues to produce high quality research, both academic and operational, in diverse areas informing SHN practice.

Improving Livelihoods by Linking Agriculture, Nutrition and Education

National Governments in sub-Saharan Africa have demonstrated strong leadership in the response to the recent food and financial crises by scaling-up school feeding programmes. Recent studies on the scale-up of programmes, estimate that approximately 30 million school-age children receive school feeding in sub-Saharan Africa. In 2003, African Governments included smallholder sourced school feeding, also known as Home Grown School Feeding (HGSF), as a key intervention in the food security pillar of the Comprehensive Africa Agriculture Development Programme (CAADP) – a continental initiative to eliminate hunger and reduce poverty through agriculture run under the auspices of the African Union's

New Partnership for Africa's Development (NEPAD).

HGSF programmes have the potential to link the increased demand for school feeding goods and services to community-based stakeholders, including smallholder farmers and women groups. To date however, there is little rigorous evidence on the potential of HGSF programmes and its impact on the involvement of agricultural communities.

HGSF framework for analysis

HGSF is a complex system linking agriculture, education, health and nutrition sectors. PCD and our partners have developed a framework the 'HGSF framework for analysis' to understand key elements of the HGSF system which links farms to schools. The HGSF framework for analysis, maps the processes and the potential outcomes and impacts on food security with the aim of providing a standardized and easily reproduced method of assessing the cost-efficiency and cost-effectiveness of the different HGSF programmes.

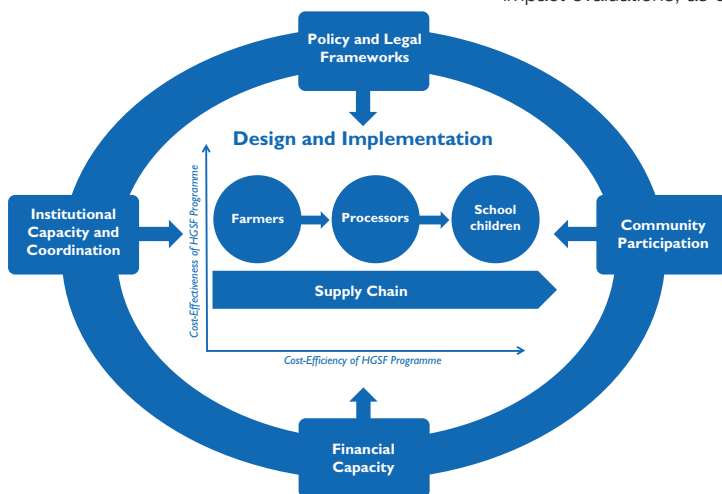
For school feeding programmes, one way of capturing the mapping process and the potential impacts across the agricultural supply chain is by using the five internationally recognized quality Standards that need to be in place for an effective and sustainable HGSF programme: Design and Implementation; Policy and Legal



Frameworks; Institutional Capacity and Coordination; Financial Capacity; and Community Participation. The Design and Implementation Standard is represented schematically below by the supply chain linking food production to consumption by schoolchildren. The supply chain can then be examined across two cross-cutting axes exploring issues on the cost-efficiency and cost-effectiveness of the HGSF programme. Cost-efficiency relates to the processes across the supply chain, whilst cost-effectiveness relates to potential outcomes and impacts on key stakeholders involved in the different processes (in this case farmers, processors and schoolchildren).

In-country assessments undertaken using the HGSF framework for analysis, have identified two key ways in which school feeding programmes can be used to enhance the potential impact on food security:

1. Smallholder farmer involvement in food procurement.
2. Enhancing value chains for nutrition and health.



HGSF framework for analysis: Mapping the process and potential impacts across the agricultural supply chain using the five Standards

Smallholder farmer involvement in food procurement

Linking smallholder farmers to the school feeding market is a potential opportunity to support smallholder livelihoods and to channel investments into food supply technologies. Recent estimates across sub-Saharan Africa suggest that currently, the demand for maize from school feeding is equivalent to approximately 10% of in-country maize production and food supply (a proxy for consumption). Therefore, the demand for maize if school feeding were to be scaled-up to universal programmes would be equivalent to approximately 40% of production and food supply. Currently, the investment in school feeding is estimated at over US\$1.5 billion in 37 countries in sub-Saharan Africa – a clear opportunity for smallholder farmers to be linked to this market. Countries like Brazil have institutionalized this opportunity where 30% of all school food must be procured from smallholder farmers. However, there remains a gap in the evidence base on how linking school feeding with agricultural output translates into improved incomes for smallholder farmers – this gap PCD is seeking to fill through ongoing impact evaluations, as discussed on page 8.

Enhancing value chains for nutrition and health

School feeding programmes are interventions that provide food to schoolchildren. By improving the nutritional quality and quantity of food consumed in schools, children can learn and develop to their full potential, in terms of both physical and psychosocial health. However, the quality of food service delivery can be complex, in terms of food safety, menu composition, balancing nutrient content and costs, and timeliness of delivery. Specific programmatic components can be integrated alongside the food procurement processes in order to enhance the possible impact on nutrition:

- In the *short-term*, programmes can enhance the nutritional quality of school feeding menus by introducing more nutritious foods, whether using local varieties or using fortified products (e.g. micronutrient powders or bio-fortified crops). PCD has developed a menu planning tool to assist countries in enhancing the nutritional component of school meals, and a pre-testing of the menu planning tool has been carried out in Ghana.

“The investment in school feeding is estimated at over US\$1.5 billion in 37 countries in sub-Saharan Africa - a clear opportunity for smallholder farmers to be linked to this market.”



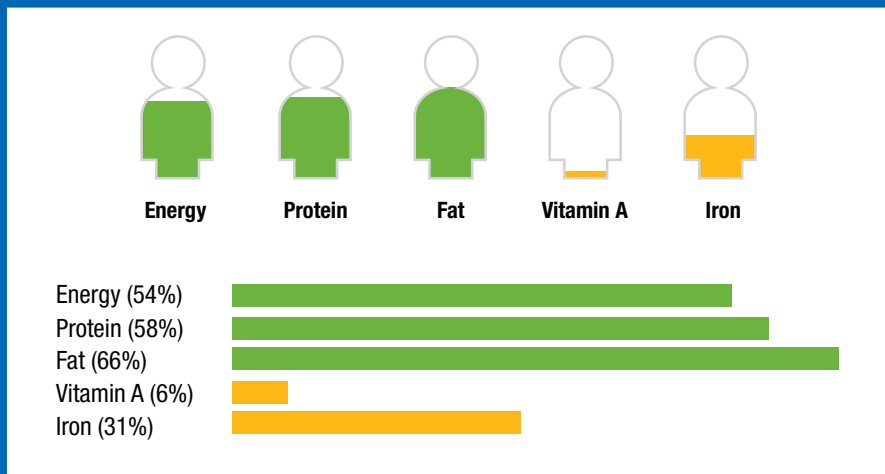
Ethiopian farmers

- In the *medium-term*, alongside menu enhancements, programmes can introduce behaviour change and nutrition education strategies aimed at improving household diets. Countries in Latin America, most notably Brazil and Chile have established these integrated strategies to tackle the increases in childhood obesity – now a common phenomenon observed in countries where issues of undernutrition are being replaced with issues of overweight and obesity.

Ongoing impact evaluations

In measuring the cost-effectiveness of different school feeding methods, PCD and our partners have been supporting governments in Ghana and Mali to pilot innovative HGSF programmes within rigorous impact evaluation frameworks. Alongside assessing the more traditional benefits to schoolchildren's education, health and nutrition, these evaluations are examining the impact of HGSF on smallholder farmer income and the impact of community-level

engagement on HGSF programme performance. The baselines for these evaluations have been completed and follow-up surveys are planned for 2015. In the meantime, cost-efficiency analyses of the different implementation methods are ongoing.



PCD menu planning tool: Gingerbread men representing the average daily nutritional content of two school lunch menus in Côte d'Ivoire's national school feeding programme

Helping to Better Inform Government-Led NTD Control Programming and Policy

On 30th of January 2013, leading figures from the neglected tropical disease (NTD) community came together to celebrate the formal launch of the London Centre for Neglected Tropical Disease Research (LCNTDR), a new research partnership aimed at pooling expertise to improve the lives of the 1.7 billion people who are affected by NTDs.

The Centre's launch marked the first anniversary of the seminal *London Declaration on NTDs* which called on signatories to make concerted efforts to control and eliminate NTDs by 2020. The fact that the Declaration was signed in London is no coincidence, as London is one of the global centres for cutting-edge NTD research, with its universities and laboratories either employing or training many of the leading specialists in the battle against NTDs.

To capture and coordinate the London-based NTD expertise and research, the Centre is a joint initiative of Imperial College London, the London School of Hygiene and Tropical Medicine and the Natural History Museum, which works with its southern and northern partners to conduct innovative research to build the evidence base around the control, mapping and elimination of NTDs.

Speaking at the launch, the Centre's Director Professor Sir Roy Anderson said, "The considerable amount of support and donations which have been made to control and eliminate NTDs have thrown up a number of important research questions and implementation challenges which need to be answered and overcome if we are to meet the 2020 target. The Centre aims to answer these key questions, thereby helping to ensure that investments are used in the most effective way and have the maximum impact."



LONDON CENTRE FOR NEGLECTED TROPICAL DISEASE RESEARCH

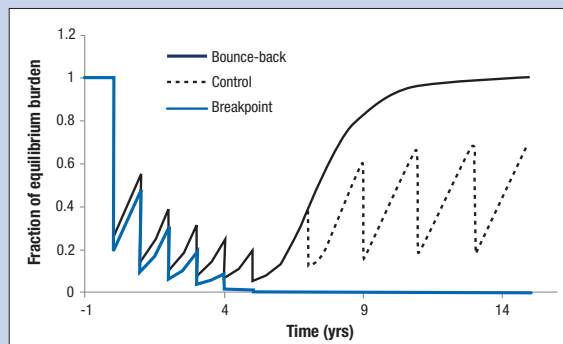
PCD together with the Schistosomiasis Control Initiative (SCI) enable the Centre to provide demand-driven technical advice and support to countries looking to develop and implement government-led NTD control programmes. With the scale up in programme size and changes in transmission dynamics, research questions relating to issues on how and when treatment should be adapted or reduced will have significant impact on programme design. Field data will allow researchers to use the information to empirically validate their projections and recommendations as to how to strengthen government programmes moving forward. The role of PCD in this is to facilitate the links between academia, policy and programming to ensure that governments have access to the best evidence available to strengthen and support their NTD control programmes.

One approach of the Centre in building the evidence base has been the development of a suite of mathematical models which explore the transmission dynamics and control of worms through mass and targeted distribution of deworming drugs. The mathematical models have also been adapted to include the impact that integrated WASH (water, sanitation and hygiene) initiatives will have on mass drug distribution programmes.

The effect of treatment on the intensity of infection

An example of the mathematical model predictions is shown by the graph below. Treatment for *Ascaris* is introduced for 6-yearly intervals. A programme with a 75% treatment coverage (black line) results in a decrease of the intensity of infection year on year. If treatment is stopped after 5 years the infection rates will return to pre-treatment-levels within 5 years. If this 75% coverage treatment is continued at two-yearly intervals (black dashed line) then the intensity of infection bounces back, but at lower-levels. However, if the treatment coverage is set at 80% (grey line) then the treatment programme can break the cycle of reinfection within the 6 years, after which no further treatment is required.

Mathematical model predictions such as these will significantly improve the ability of in-country programme implementers to design NTD control programmes which are best suited to their local environments.



Mathematical model predictions: The effect of treatment on the intensity of infection

The Centre's latest findings and research can be found at www.londonntd.org. See page 24 for further information on this website.

The Ethiopian Enhanced School Health Initiative

Do complementary school-based interventions such as school feeding, deworming, and WASH services when implemented together provide a cost-effective approach to healthier and better educated children? This is one of the key research questions behind the Enhanced School Health Initiative – a programme that is being piloted for 3 years in 30 primary schools in the Southern Nations, Nationalities, and Peoples' Region (SNNPR) in Ethiopia.

The Enhanced School Health Initiative is a collaboration of: Dubai Cares International; the United Nations World Food Programme (WFP) who are implementing HGFSF in the 30 primary schools; SCI who are deworming the schoolchildren; the Netherlands Development Organization (SNV) who are providing improved WASH services in 15 of the 30 primary schools; and PCD who are coordinating the operational research component.

“The findings of this first, large-scale survey of SHN practices in the region will be used to strengthen and scale-up the Ethiopian Comprehensive SHN Programme.”

The research includes a longitudinal survey, conducted by PCD in collaboration with the Ethiopian Health and Nutrition Research Institute, to investigate the practicalities of HGFSF implementation and the efficiency of integrated SHN approaches. Over the 3-year pilot period, annual surveys will observe changes in knowledge, attitudes and practices of primary school children with regards to school feeding,

educational access and WASH behaviour. Parasitic worm intensity and prevalence will be recorded each year in the 30 primary schools as part of the deworming activities.

Baseline data collection:

In June 2013, baseline data was collected from the 30 primary schools. Investigations included:

- School WASH infrastructure surveys – a total of 30.
- Child individual surveys including blood, stool and urine samples for parasite and haemoglobin testing – a total of 3,700.
- Household water and sanitation surveys – a total of 449.
- Primary school children interviews – a total of 597.
- School feeding and school deworming surveys – a total of 30.
- Preventive deworming treatment with albendazole – a total of 22,258 children treated.

Baseline data results:

- Hookworm and *Ascaris* were present in 19% and 5% respectively of tested schoolchildren.
- Latrines were found in 29 out of 30 primary schools where 63% had separate blocks for boys and girls. Few sanitation facilities offered privacy, with doors missing in girls' toilets in 13 primary schools, and in boys' toilets in 12 primary schools.
- In 9 primary schools, it was reported that children did not wash their hands at all before eating. Only 1 primary school had a specific hand washing area with wash basins.
- School feeding days accounted for 84% of total school days in the current school year.
- Around 43% of schools reported issues with food delivery (including poor road condition,

delay, and overlap with other duties) and food distribution (such as inadequate kitchen, and lack of utensils).

- A school garden was found in 27 out of the 30 primary schools.

The data and findings of this first, large-scale survey of SHN practices in the SNNPR will be used to strengthen and scale-up the Ethiopian Comprehensive SHN Programme, and will contribute both to the Ethiopian National SHN Policy and the National Master Plan for NTDs. The data and findings will further be used to inform the design and implementation of future large-scale SHN interventions within Ethiopia and beyond.



SHN baseline study in SNNPR, Ethiopia: A school student giving a blood sample for a haemoglobin test

Background

- Southern Nations, Nationalities and People's Region of Ethiopia
- 30 Primary schools piloting an integrated school health, nutrition and WASH project
- 597 Primary school children interviewed on WASH behaviour
- 449 Household WASH surveys



WASH in Ethiopia A Baseline Survey

Households

3/10



Houses with evidence of open defecation

27% Houses with no toilet

Of the 73% with a toilet

93%



Had a pit latrine without a washable floor

Schools

13/30

Schools using unsafe water sources (e.g. rivers, lakes, wells, etc.)

Schools with evidence of open defecation
53%

13/30

Schools with toilets that lack doors for boys or girls



Schools with permanent washing areas
4/30

Schools where hand-washing areas had water on the ground, indicating use
40%



1/5

Students felt school latrines were "too dirty"

SHN for All: Making Education Inclusive

Globally there are an estimated 150 million children living with disability, of which 80% are in developing countries. People with disabilities face negative perceptions, and even in many low-income countries these attitudes can act as barriers for disabled children in accessing education and health services.

Governments in low-income countries face difficulties in mainstreaming health and education interventions that include children with disabilities into their national programming, through lack of technical and operational know-how in developing and implementing inclusive education programmes and through lack of reliable data on the number of disabled school-age children, their enrolment and completion in school.

As a result, PCD is working on a number of SHN initiatives across the globe, building this evidence base and supporting government action to ensure that no child is left behind.

Improving vision in Cambodia

Alongside our partners, Sightsavers, the Global Partnership for Education, the Fred Hollows Foundation and the World Bank, PCD supported the Cambodian Ministry of Education, Youth and Sports to conduct a pioneering 6-month vision screening and spectacle provision pilot programme, between June and November 2012. The pilot covered 13,175 school-age children across 56 primary schools and demonstrated that in-school screening by teachers and the provision of glasses to children on the same day is very effective. The final report was submitted in June 2013 where the Cambodian Government is now planning on rolling out the screening scheme as part of its national school-based health programme in 2014. Other governments in the region have expressed an interest in similar pilots.

Increasing inclusivity in Kenya

To further identify opportunities to make SHN programmes more inclusive and accessible to disabled children a consultation was conducted by PCD in Kenya with key Focal Points from government ministries and disability NGOs. The consultation found that access and discrimination were key problems facing children with disabilities trying to obtain an education. One of the main barriers to inclusive education is often poor infrastructure (lack of access to water, transport, and toilets). Those children with a disability that succeed in going to school are often ostracized from school personnel; this seriously limits their opportunity of benefiting from even the basic health and nutrition provided in schools.

“Inclusive SHN programmes are an effective means to enabling families to send their disabled children to school.”



Improving vision in Cambodia: Teacher training on the use of E charts to test poor vision amongst schoolchildren
Image courtesy of Liesbeth Roolvink

Governmental institutions and disability NGOs are increasingly viewing inclusive SHN programmes as a means to enabling and motivating families to send their disabled children to school. “Food will enable parents to release their [disabled] children” said a representative of the Council of Persons with Disability, Kenya.

The outcomes from this consultation will inform a series of papers on inclusive SHN programming as well as PCD’s advocacy work both globally and in Kenya.

PCD is committed to mainstreaming inclusive education within SHN programming globally and will continue to raise awareness and build capacity in this area through practical research and training for government staff in low-income settings.

The widespread perception throughout the disability sectors is that children with disability have minimal access to SHN programmes – a perception PCD is striving to change.

Improving the Lives of Orphans and Vulnerable Children in Sub-Saharan Africa

Globally an estimated 163 million children under the age of 18 years are orphaned and a vast majority of children are vulnerable due to the effects of poverty and illness. Orphanhood seriously impacts on the outcomes of children's development, social integration, health and education. Orphans and vulnerable children (OVC) are amongst those least likely to attend and complete school, yet most likely to contribute to the perpetuation of inter-generational cycles of poverty.

Innovative research programme in Kenya

Using an evidence base approach and with support from the Bill and Melinda Gates Foundation, PCD is contributing to the efforts of target governments to improve the life chances of young marginalized children through innovative research that includes programmes to teach children agricultural skills which can reduce their vulnerabilities and increase their long-term means of income-generation and occupation.

“OVC are amongst those least likely to attend and complete school.”

In Kenya, a 2-year pilot programme is assessing the relationship between the provision of school feeding and vocational training, and the education and agricultural knowledge, attitudes and practices of school-age children. Agricultural training is being offered in eight HGSF schools through co-curricular 4-K Clubs which use many of the lessons and materials from the 'Junior Farmer Field and Life Schools' approach of the Food and Agriculture Organization of the United Nations (FAO). Children in the study schools, especially those

identified as most vulnerable are encouraged to join the 4-K Clubs which teach practical agricultural skills on school garden demonstration plots. Training is provided by 4-K Club teachers in collaboration with locally-based agricultural extension officers. The 800 school-age children who are taking part in the programme are encouraged to practice their skills by planting kitchen gardens at home so they can then use the produce to supplement their home meals and ultimately to improve their nutrition and food security.



Agricultural training in a Kenyan HGSF school: Ministry of Agriculture Official trains teachers on the role 4-K Clubs can play in supporting vulnerable and orphaned children

The study design allows for a comparative analysis of the 600 school-age children who are orphaned and vulnerable with the 200 school-age children who are not, over time. The impact indicators being measured include the children's participation in education, their adoption at home of the skills taught at school, measures of short-term hunger and longer term food security. Oversight is provided by education and agriculture departments at grassroots-level in consultation with regional and national offices.

The study design in Kenya is being adapted for use in Nigeria where plans for a baseline survey and training are underway. Other countries targeted including Ethiopia, Malawi and the United Republic of Tanzania will allow for comparative analysis across countries and sub-regions of sub-Saharan Africa. Experiences from a range of countries will improve the design of ongoing school feeding and vocational training activities for children who are orphaned and vulnerable. This may also provide a powerful argument for the extension and replication of these ongoing school feeding and vocational training activities, as well as their contribution directly towards the countries' achievement of a number of the education Millennium Development Goals.

PCD's work on strengthening the evidence base provides:

- Strong advocacy tools for the impact of SHN on the education sector;
- assessments of new technologies and interventions that can be used to improve the health and nutrition of school-age children around the world;
- the rationale for school feeding models tailored to work within a range of countries and contexts;
- strategies targeting methodologies to improve the scale and sustainability of school-based deworming; and
- the development of education sector policies and plans to accelerate countries' response to HIV.



Capacity Building and Technical Assistance

PCD enhances the education, health and nutrition of children through expert support in government planning for SHN activities. PCD provides high quality training to educationalists and public health professionals and develops tools and resources which empower and enable the participation of new sectors in SHN activities.

Innovative Approaches on Improving the Nutrition in Ghana

With the aims of tackling short-term hunger and malnutrition, increasing school enrolment and enhancing food security, the Ghana School Feeding Programme (GSFP) has, since its launch in 2005, become extremely popular with the Ghanaian public. As a result the government has expanded the GSFP from a pilot of just 10 schools to a national programme that provides 1.6 million schoolchildren in 3,000 primary schools with a cooked school meal made from locally grown food. But whilst this growth has seen programme progress being made into increasing school enrolment and boosting domestic agricultural production, the same inroads were not being made into tackling malnutrition. PCD and its in-country partners are looking at an integrated SHN programme which can support the GSFP to overcome these issues.

In 2010, a national stakeholder workshop held by PCD, noted that child health and nutritional quality of food were areas that needed to be strengthened to enable the GSFP to realize its full potential.

“The 4-year nutrition project takes a holistic approach to integrated SHN programmes.”

To help address these challenges, in 2012 PCD with support from Dubai Cares commenced a 4-year nutrition project that looks to build the capacity of the GSFP to provide healthy nutritious meals to school-age children, with specific aims to:

- Improve the delivery of nutritious meals through the GSFP;
- promote good nutrition and hygiene practices; and
- deworm school-age children.

The evidence for integrating these additional SHN elements into school meal programmes is well-founded, with studies conducted by PCD, WFP and the World Bank showing that school feeding programmes can increase school attendance, cognition and educational achievement, particularly if supported by complementary interventions such as deworming and micronutrient fortification.



A holistic approach to integrated SHN programmes

The 4-year nutrition project takes a holistic approach to integrated SHN programmes by looking at treating:

- **Immediate issues:** Deworming children currently infected with worms.
- **Short-term issues:** The provision of micronutrient powders to deal with micronutrient deficiencies in children.
- **Long-term issues:** The production of menu planning tools and behaviour change communication materials to improve the eating habits and nutritional status of children and the wider community.

Immediate issues: Deworming

It goes without saying that school feeding programmes are intended to feed school-age children and not the parasitic worms in infected school-age children. PCD in collaboration with the School Health Education Programme and the Ghana Health Service have trained over 1,000 government staff, including teachers and health workers to provide deworming treatment to 1.6 million school-age children.

Short-term issues: Provision of micronutrient powders

The 4-year nutrition project is also providing micronutrient powders to 125,000 pupils as part of their school meals programme. The powder sachets contain a mixture of 15 micronutrients including iron, vitamins and iodine. The delivery of the micronutrient powders will be evaluated to generate evidence on its impact in addressing child anaemia.

Long-term issues: Menu planning tool production

To support the GSFP in their efforts to improve the nutritional quality of school meals PCD have developed a state of the art, easy to use, online menu planning tool. School feeding officials are able to select ingredients by nutritional content and/or cost, the menu planning tool then adds

up the ingredients so users can view the full cost of a meal and the complete nutritional content against the latest recommended daily allowance estimates by the World Health Organization (WHO). The menu planning tool contains up-to-date data on nutritional composition and local costs of a wide range of ingredients. To date, over 200 government staff have been trained by PCD to create nutritionally balanced and fully-costed school feeding menus using the menu planning tool.



PCD online menu planning tool: Accessed from www.hgsf-global.org, the tool allows users to cost nutritionally balanced school menus

As well as helping meal planners, support has been provided to school caterers in determining the correct quantities of ingredients needed to serve nutritious school meals on a tight budget. PCD has been conducting research to identify 'handy measures' – a system of using local measurements that can be understood and easily used by school caterers.

The 4-year nutrition project has also supported the development of a Health and Nutrition Manual for School Caterers which has been used to train 1,110 school caterers on food safety and hygiene, cooking practices and basic nutrition.

Long-term issues: Behaviour change communication materials

The family, and by extension, the community are the most important influence on the health and



A GSFP school cook/caterer in Ghana: PCD work with school cooks and caterers to promote food safety and hygiene and to improve cooking practices and basic nutrition

nutrition of a child. To encourage healthy lifestyles in the community, PCD together with the GSFP have developed a series of trainings and promotional materials which aim to promote good health and nutrition practices. Employing messages around the key pillars of SHN (worm prevention, good personal hygiene and sanitation, and healthy eating habits), and creating a range of posters, wall charts and t-shirts, in conjunction with radio jingles, are being used to communicate best practice with target communities. Training is being provided to 1,110 community volunteers on how to engage families to adopt the desired healthy behaviours. Teachers are also using the materials to engage schoolchildren on issues related to their health and nutritional well-being.

The integrated holistic approach is further mirrored by the collaborative partnerships between PCD, the GSFP, the School Health Education Programme, and the Ghana Health Service (Nutrition Department and the NTDs Control Programme). This collaboration is vital to ensure that the GSFP is able to fully realize its full potential.

Meeting the Global Demand for SHN Training

PCD continually develops and adapts the content and structure of the SHN short course to ensure that it maintains its role as a quality skills- and evidence-based training programme taught by the world's leading SHN experts. Since its inception in 2004, the internationally recognized short course on *Strengthening Contemporary School Health, Nutrition and HIV Prevention Programmes* has contributed to training over 400 SHN and HIV practitioners globally. The demand for this short course continues to grow with expansion to Southeast Asia and Francophone Africa.

The SHN short course is structured around the four pillars of the FRESH (Focusing Resources on Effective School Health) framework: equitable school health policies; safe learning environment; skills-based health education; and school-based health and nutrition services. Within this structure, SHN experts facilitate sessions which guide participants through the processes necessary to develop effective SHN programmes including logical frameworks, project cycle management, and monitoring and evaluation (M&E).

Each year the SHN short course selects an *Issue in Focus* to provide contemporary teachings on emerging issues in school health that equips participants with cutting-edge, practical knowledge and tools.

Africa

Inaugural Francophone African SHN Short Course

October 2013 was an auspicious month in the SHN community as the first ever French language SHN short course was held in Saly, Senegal. This exciting new collaboration between PCD, the Institute of Health and Development and the University of Dakar brought together 35 SHN practitioners from 13 African countries to share experiences and learn practical skills from seasoned SHN professionals.



SHN short course field visit in Southeast Asia: Delegates visited local schools to observe SHN programmes in action

The 10-day course involved practical planning workshops, lectures from SHN experts and visits to local schools where the local context of SHN was emphasized. Course topics included malaria, WASH, girls' education, teacher training for HIV prevention, NTDs and school feeding.

“All SHN professionals should attend this course. Everything was useful, from practical learning to sharing experiences.”

SHN Coordinator, Niger

9th Annual African SHN Short Course

In June 2013, the Government of Ghana hosted the 9th Annual African SHN Short Course where representatives from Ministries of Agriculture, Education, Health, and Gender, Children and Social Protection, along with SHN experts, civil society and academics representing 12 African countries gathered to focus on best practice in SHN interventions.

The SHN short course was opened by a Keynote Panel including Professor Sir Roy Anderson, Director of LCNTDR at Imperial College London and Professor Donald Bundy, Lead Health and Education Specialist at the World Bank.

Asia

2nd Annual Southeast Asian SHN Short Course

Following the success of the inaugural short course in 2012, the SHN short course returned to Asia in Vientiane, Laos in February 2013. Hosted by the Government of Lao with support from PCD, Thailand's Mahidol University and the Japanese Consortium for Global School Health Research, the SHN short course welcomed 40 delegates from 11 Southeast Asian countries.

With an *Issue in Focus* on 'parasite control', a strong emphasis during training was placed on building country capacity and strengthening regional partnering initiatives which seek to harmonize SHN activities. As well as classroom-based learning, the delegates visited local schools and teacher training colleges to observe firsthand integrated SHN activities.

Strategic Grain Reserves

Strategic Grain Reserves (SGR) is a system where national governments maintain grain reserves so as to provide a secure supply of grains in the event of a food crisis. Maintaining SGR involves:

- Buying grains from traders, farmers and/or millers at a pre-determined price;
- processing grains (if required); and
- storing and releasing grains in case of an emergency or for other urgent purposes.

The level and composition of stocks, methods of procurement and conditions for stock release depend on the country-context, institutional design, government policy and specific mandate of the respective SGR.

PCD is providing evidence-based technical assistance through an SGR programme to help improve SGR management in six target countries in sub-Saharan Africa: Ethiopia, Ghana, Kenya, Mali, Nigeria and the Republic of Tanzania.

Given the impact of SGRs on food security and their potential influence on agricultural markets, SGR agencies often face operational and policy challenges. The objective of PCD's SGR programme is to enhance the management of grain reserves in terms of procurement, storage and stock rotation practices and also to facilitate linkages between these grain reserves and HGSF programmes. Grain stocks need to be rotated periodically to maintain quality and prevent wastage. Linking SGR to HGSF programmes provides a useful way to rotate stocks and to sustainably and safely supply food for school feeding programmes.

The PCD-led SGR programme aims to strengthen the SGR systems through four programme pillars:

- Strengthening the knowledge-base around specific SGR themes such as aflatoxin contamination and HGSF linkages;

- building partnerships with the private sector;
- providing technical assistance to SGR agencies; and
- piloting new technology on inventory management and food safety.

Cutting across these programme pillars are a range of activities designed to inform and support government agencies to manage their grain reserves more effectively. These include:

- Developing a stock management policy;
- piloting an information technology system to maintain optimum stock-levels and efficient rotation;
- support to smallholder farmers on procurement methods and pricing guidelines;
- building linkages for HGSF; and
- conducting an evidence-based risk assessment on food safety to understand the prevalence of storage linked contamination.

“Linking SGR to HGSF provides a sustainable and safe supply of food for school feeding programmes.”

To understand the current SGR operations and linkages to HGSF, scoping missions and preliminary situation analyses have been completed for Ghana, Kenya, Nigeria and the Republic of Tanzania while situation analyses for Ethiopia and Mali are expected for completion in early 2014. For the situational analysis in Ghana, this was conducted in close collaboration with the National Food Buffer Stock Company (NAFCO). Following a technical needs assessment, a working group is being created to develop an improved stock management

policy, and as part of this, a pilot web-based inventory management system is in the process of being developed. On the research front, an assessment report was completed in collaboration with the Haas School of Business; the report provides an analysis of NAFCO's operations and assesses its role as a cost-effective means of linking school feeding to agricultural production.

Over the coming months, technical assistance activities and workshops have been planned for Ghana, and based on further in-country consultations for the remaining five target countries, technical assistance plans and research agendas will progressively be developed.



Linking SGR to HGSF programmes: A school feeding grain store at an Ethiopian primary school

Tools to Strengthen Country Programmes

Over the past year, PCD has been integral towards the development progress of M&E assessment tools that will help countries to strengthen their policies and their implementation of school health and school feeding programmes, and to monitor progress towards meeting the FRESH framework 'standards' over time.

In 2013, progress has been made on two of the key M&E assessment tools PCD has been involved in recent years: SABER (Systems Approach for Better Education Results)-School Health and School Feeding; and the FRESH M&E Guidance *Monitoring and Evaluation Guidance for School Health Programs*. Both of these M&E assessment tools are complementary, particularly at national policy-level and were finalized this year by PCD and partners.

SABER-School Health and School Feeding

SABER-School Health and School Feeding includes a set of framework-rubrics that provide standards of good practice for quality school health and school feeding programmes, against which countries can rate themselves and track policy progress over time.

In 2011, the initial development phase of SABER-School Health and School Feeding sub-systems built on existing international consensus to determine "what matters" for these sub-systems. Through a process of consultation and pilot testing with 37 countries drawn from the African and Caribbean SHN Networks, PCD and partners revised and refined the framework-rubrics to incorporate the feedback. A detailed paper was then produced by PCD, WFP and the World Bank articulating the evidence and reasoning behind the framework-rubrics, which underwent official World Bank review in May 2012.

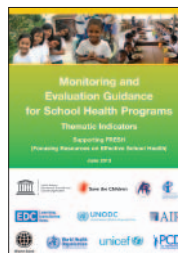
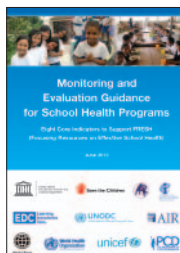
This year, PCD and partners have finalized the data collection tools, developed algorithms as

an objective method of evaluating the questionnaire results, and identified the developmental stages countries are at for each indicator. Next year, work will involve validating the findings with country respondents and producing country reports that outline roadmaps for policy development, to improve national school health and school feeding programmes.

SABER-School Health and School Feeding documentations can be accessed from <http://go.worldbank.org/NMGPDGQBL0>.

FRESH M&E Guidance

The FRESH M&E Guidance *Monitoring and Evaluation Guidance for School Health Programs* is a self-assessment tool to support national governments and organizations in monitoring and evaluating school health programmes.



FRESH M&E Guidance – Core and Thematic Indicators: Supporting national governments and organizations to monitor and evaluate their school health programmes

The FRESH M&E Guidance delves more into implementation across a range of school health thematic areas. With its set of internationally-agreed Core and Thematic Indicators, the FRESH M&E Guidance aims to help programmes in low- and middle-income countries ensure their implementation of school health programmes is more standardized, coordinated and evidence-based.

The FRESH M&E Guidance has been produced by the FRESH partners with the support of numerous individuals and organizations over the past 5 years. It has also been refined based on country-level feedback including pilot testing in El Salvador, Ethiopia, Nepal, and the Philippines.



M&E assessment tools adapted to country contexts: A school teacher in Ethiopia using the tools to carry out SHN assessments in school

Intended as a living document, feedback from further reviews on the FRESH M&E Guidance and implementation would be most welcome.

For further information on the FRESH M&E Guidance and other areas of SHN knowledge, please visit www.schoolsandhealth.org.

PCD's work on capacity building and technical assistance:

- Ensures ownership amongst key leaders, providing logistical and technical support to catalyse sustainable national SHN programmes;
- brings the latest research and mapping techniques to policymakers and programme implementers;
- leverages resources to strengthen cooperation and partnerships between stakeholders; and
- provides learning environments which share good practice across a diverse set of perspectives, for example, from countries to implementation-levels.

Collecting, Sharing and Disseminating Knowledge

PCD uses a wide range of communication avenues to support the development and improvement of school health programmes across the globe. As well as using cutting-edge online and social media platforms we continue to employ traditional media such as the publication and dissemination of hard copy documents including papers, reports and training materials to enable advocacy, policy and planning for SHN practitioners. PCD manages a range of online global resources, including the Schools & Health website and associated sub-sites, the FRESH portal website, and the PCD website, continually tailoring the functionality and accessibility of these resources to meet the information needs of the global SHN community.

The benefits of these HGFSF programmes are equally felt by the schoolchild and smallholder farmer, with schoolchildren receiving free nutritious hot meals and smallholder farmers receiving access to a regular market – providing a win-win for both education and economic development.

The purpose of this visit was for Bill Gates to learn more about how HGFSF programmes work; to see how PCD have been supporting the potential national scale-up of linkages to agriculture that effective HGFSF programmes can provide; and to speak to stakeholders including farmers, caterers, schools and government officials about the opportunities and challenges of HGFSF programmes.

A Day With Bill Gates

In March 2013, Bill Gates used his first ever visit to Ghana to spend the day with PCD to better understand how school feeding can improve the lives of schoolchildren and local smallholder farmers alike.

Through PCD, the Bill and Melinda Gates Foundation have been supporting the development of government-led HGFSF programmes as a 'structured demand' strategy for growing and improving market access for smallholder farmers. These nationally-owned initiatives enable schools to procure the ingredients for their school meals from local smallholder farmers.



Improving the lives of smallholder farmers: Smallholder farmer Jacob Mechi gave a guided tour of his farm to Bill Gates



Opportunities and challenges of HGSP programmes: Bill Gates and PCD West Africa Senior Programmes Manager Daniel Mumuni, speaking with local smallholder farmers in Ghana

By feeding over 1.6 million pre-school and primary school children, the GSFP has become very popular with the Ghanaian public and enjoys solid commitment from the government. With a cost of around US\$50 per child per year and with approximately 70% to 80% of the investment of school feeding reaching the poorest areas, the GSFP has been identified as an effective social safety net.

To see the impact of HGSP on local communities, PCD took Bill Gates to the Kwabenya-Atomic area of Eastern Accra, to meet with local smallholder farmers and representatives of the GSFP to discuss issues including market access, crop storage facilities and the linkages between local smallholder farmers and school caterers.

Bill Gates was given a farm tour by local smallholder farmer Jacob Mechi, who makes his living by selling his crops to GSFP school caterers.

Speaking of the GSFP, Jacob said, “The school feeding programme is very good for me because I can sell my crop direct from my farm without having to spend extra money on transporting it to market” he added, “I am proud that it is my produce that is being used to feed the schoolchildren.”

“Ghana has made an impressive commitment to realize the full benefits of HGSP, and they have a great partner in PCD.”

Bill Gates, Bill and Melinda Gates Foundation

Bill Gates later visited the nearby Kwabenya-Atomic MA3 Primary School to see school feeding firsthand; to speak with the headmistress about the positive effects that school feeding has had on enrolment and pupil attention; and joined in on a lively discussion with the GSFP school caterers who supply cooked food to the schoolchildren.

PCD, together with development partners including the World Bank, WFP and SNV, have been providing technical advice to the GSFP to support the Ghanaian Government’s plans to extend the reach and impact of the programme.

Speaking about his visit, Bill Gates stated that, “Ghana has made an impressive commitment to realize the full benefits of HGSP, and they have a great partner in PCD. While there are challenges, the potential and benefits for farmers and schoolchildren are obvious.”

Strengthening and Sharing Knowledge: School Feeding Publications

A key priority of PCD is to ensure that high quality evidence-based knowledge is made available to country governments to assist them in the development of well-designed SHN programmes. To this end, PCD, in partnership with the World Bank and WFP, have been working with governments and development partners, to develop a series of complementary publications which will provide an unprecedented resource of quality data, research and best practice in the area of school feeding.

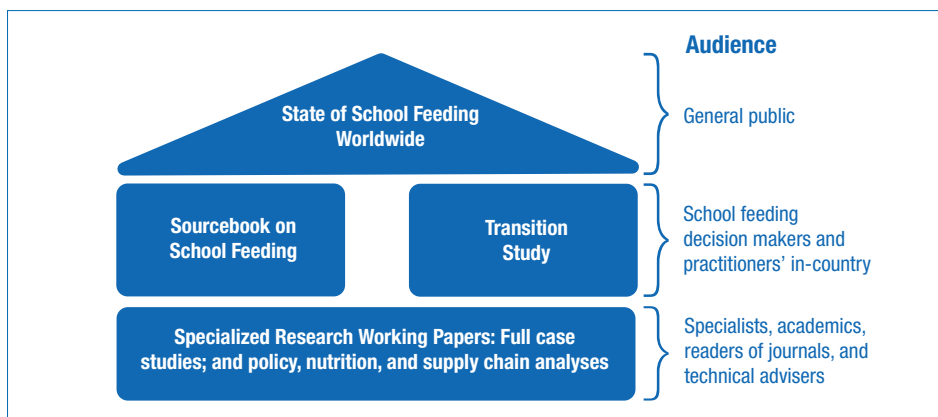
State of School Feeding Worldwide

Launched in Brazil at the Global Child Nutrition Forum 2013, the landmark report *State of School Feeding Worldwide 2013* provides, for the first time, a global picture and analysis of school feeding programmes. Published by WFP with support from PCD and the World Bank, the report is based on a global survey conducted by WFP which showed that school feeding is present in almost every country in the world with approximately 368 million children, about 1 child out of every 5 children, receiving a meal at school every day. The report goes on to show how linking school feeding to agriculture can offer economic and health benefits beyond the classroom.

State of School Feeding Worldwide 2013 acts as the 'umbrella' publication for the subsequent documents in the series, namely the Sourcebook on School Feeding and the Transition Study which both will be published in 2014.

Sourcebook on School Feeding

In response to government demand for information on how other countries are designing and implementing school feeding programmes, PCD and our partners have been compiling a Sourcebook containing a series of case studies, conducted in the field that showcase innovative national school feeding



A series of complementary school feeding publications: Providing quality data, research and best practice in school feeding

programmes in 14 low- and middle-income countries (Brazil, Botswana, Cape Verde, Chile, Côte d'Ivoire, Ecuador, Ghana, Kenya, India, Mali, Mexico, Namibia, Nigeria and South Africa). These 14 country case studies represent a broad range of school feeding programmes, from those in their infancy to those that have been established for many years, providing meals to approximately 180 million school-age children every day. A cross-country analysis of the trade-offs associated with alternative school feeding models is provided, along with key lessons learned and examples of good practices. The Sourcebook is aimed at school feeding decision makers and practitioners.

Leading on from this, PCD are working with WFP and the World Bank to publish further case studies on school feeding in Latin America. Discussions are also underway with colleagues from the Schools for Health in Europe (SHE) Network to document European programmes. A complete compendium of all school feeding case studies is available on

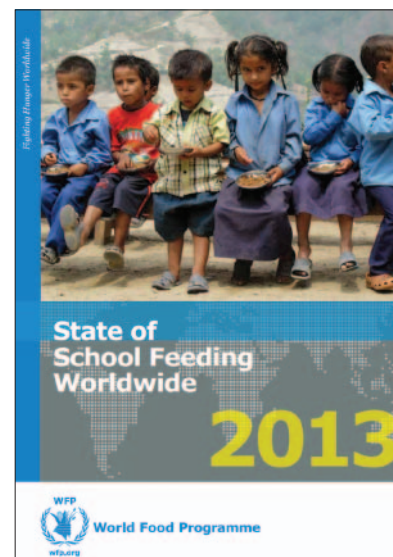
www.hgsf-global.org.

Transition Study

The final publication in this suite of resources explores the transition process of countries as they move from externally-supported to government run school feeding programmes.

The study provides an in-depth analysis of this transition process documenting six country case studies (Botswana, Cape Verde, Dominican Republic, Ecuador, El Salvador and Namibia).

These series of publications are also underpinned by a collection of research working papers, which are aimed at specialists, academics, journal readers and technical advisers.



State of School Feeding Worldwide 2013: Landmark report provides the first global picture and analysis of school feeding

Collecting, Sharing and Disseminating Knowledge Online

In partnership with leading international agencies PCD supports a range of cutting-edge online platforms to aid the dissemination of quality assured information, news and resources on the full range of SHN topics to relevant practitioners and interest groups.

Schools & Health website

The Schools & Health website (www.schoolsandhealth.org) provides a contemporary platform of news, resources and data on the education, health and nutrition of school-age children in low- and middle-income countries.

In 2013, the site had over 20,000 visitors, 74% of which were visiting the site for the first time. The most popular visitor countries being the UK, USA, Philippines, India, Kenya and Nigeria.

To build on and strengthen this growth in users, the Schools & Health website undertook a comprehensive redesign in 2013 with the aim of increasing the accessibility of SHN resources and improving the integration of social media platforms.

Revitalized with a new Documents and Resource Centre, the new website now holds over 620 SHN relevant resources ranging in content including: examples of good policy and programme practice, case studies, technical reviews, toolkits and guidelines, reports, surveys, and international declarations. A selection of the resources is also available in Arabic, Chinese, French, Hindi, Kiswahili, Portuguese, Russian and Spanish.

The re-launched website provides revitalized pages for relevant school health topic areas including: helminth infections, nutrition, HIV and AIDS, WASH, acute respiratory infections, malaria, and PCD's SHN training courses, alongside a new section reflecting PCD's work on inclusive education.

As a portal providing up-to-date SHN material to SHN interest groups, around 180 diverse global and country-specific school health news articles, resulting in an increase of 57% from 2012, are displayed on the website.

Network sub-sites

Schools & Health continues to host the Ministry of Education HIV&AIDS and Schools & Health sub-sites for the Central, East and West Africa Networks, which have been integrated into the website's restyle. The Networks are managed in partnership with PCD, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank.

The FRESH website

The objectives of the FRESH framework are to identify and promote cost-effective activities which can form the basis for intensified and joint action to make schools healthy for children and so contribute to the development of child-friendly schools. PCD has continued to manage the FRESH website (www.freshschools.org) on behalf of the other founding members UNESCO, the United Nations Children's Fund (UNICEF), WHO and the World Bank.

HGSF website

The HGSF website (www.hgsf-global.org) aims to be the world's leading online resource for HGSF news, information and resources. In 2013, the website had over 13,000 visits resulting in an impressive increase of 91% from 2012. Of these visits, 64% were from new visitors with the top visiting countries being the UK, USA followed by Ghana, Nigeria and Kenya.

The website provides a regularly updated and easy to access resource bank of over 350 downloadable documents. This depository contains the latest research, policy papers, toolkits and HGSF working papers, covering all aspects of HGSF from agricultural, educational and health perspectives.



www.schoolsandhealth.org



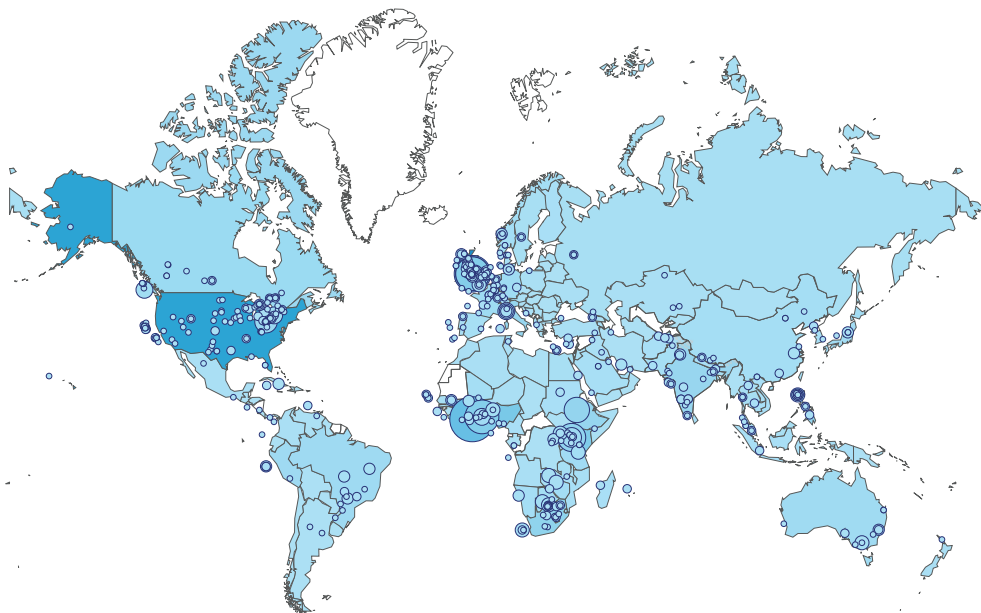
www.londonntd.org



www.thiswormyworld.org



HGSF website www.hgsf-global.org: Users came from 183 countries and 1,348 cities, resulting in a 91% increase in visitors over the last year



The HGSF website also features the latest events and news from the HGSF community. Reorganized to be easily viewed from the HGSF Homepage, the News section includes a range of subject areas covered across the 250 articles currently displayed on the website.

Country sub-sites for Ghana, Kenya and Mali have continued to be housed within the HGSF website, providing country-specific information and news on HGSF activities. Preparations are also underway to launch the country sub-sites for Ethiopia and Nigeria over the coming year.

In 2013, a menu planning tool was added to the HGSF website which enables users to build and create nutritionally balanced school meal menus based on FAO and WHO costing and nutrition data.

London Centre for Neglected Tropical Disease Research website

To showcase the work of the LCNTDR, in 2013 PCD supported the design and development of the Centre's website (www.londonntd.org).

Launched simultaneously with the opening of the Centre in January 2013, the website effectively introduces the Centre explaining its roles, objectives and expected outcomes.

Purposed with disseminating latest NTD research and news to the NTD community, the Centre's website hosts News and Publications sections.

Mapping worm infections through thiswormyworld.org

The website (www.thiswormyworld.org) was launched in 2010 to make information on the global distribution of soil-transmitted helminths, schistosomiasis and lymphatic filariasis readily available to policymakers and managers of public health programmes. Previous to the website's existence many worm surveys had been conducted, but were rarely available in the public domain, particularly in sub-Saharan Africa.

In addition to producing maps based on survey data, to predict risk and guide control planning, this website will also host sub-national maps currently being developed on access to water and sanitation.

The website is a product of the Global Atlas of Helminth Infections, a collaborative venture between PCD and the London School of Hygiene and Tropical Medicine.

PCD, Imperial College London website

The Imperial College London website continues to host the PCD website (www.imperial.ac.uk/pcd), which allows website users to access up-to-date information on 'who we are', 'what we do', and 'where we work'. The PCD website also serves as a gateway for users to find out more on SHN, HGSF and NTDs news and events; with News and Events featured on the PCD website Homepage linked to other PCD managed websites.

Social media: Twitter, YouTube, Flickr and Facebook

During the past year PCD's @HGSFglobal twitter account increased its followers by 350% (237 followers resulting in an increase from 67 followers in 2012) and its @SchoolsHealth twitter account increased followers by 126% (339 followers resulting in an increase from 150 followers in 2012). Both accounts share news amongst the HGSF and SHN online communities, providing daily updates relating to all HGSF and SHN activities and seek to share with the community by linking to resources and

news from across the web, and re-tweeting topical posts. PCD's twitter feeds also cover news and announcements as they happen at high-profile events by live tweeting from event locations.

In 2012, PCD launched its HGSF Facebook account, which disseminates HGSF-related information on a twice-weekly basis. The PCD Facebook account, with 130 members resulting in an increase of 140% from last year, continues to disseminate SHN-related information on a twice-weekly basis. On YouTube, the SchoolsandHealth channel contains trailers for PCD's films (*Courage and Hope, One Childhood, Window of Hope and Home Grown School Feeding*) and numerous news reports from SHN events and presentations.

SchoolHealth Mailing List

PCD administers the *SchoolHealth Mailing List*, (Schoolhealth@imperial.ac.uk) a forum for discussion and sharing for SHN practitioners and interest groups. The Mailing List allows any subscriber to post short extracts with links for readers to find out more. Some of the recent topics posted on the Mailing List have included: global health and nutrition days, school-based deworming, psychosocial support in schools, latest releases of SHN user manuals and toolkits, and SHN webinars and courses. In 2013, the Mailing List had 850 members resulting in an increase of 13% from 2012.

Other Selected PCD Activities on Disseminating Knowledge

Dubai Television Broadcasts the GSFP

In 2013, Emirati filmmakers documented the work of PCD in Ghana for a television series focused on programmes funded by Dubai Cares. Aired in Dubai, in Arabic and English, the programme documented a visit to a school; interviewed school caterers and local smallholder farmers involved in the GSFP to capture how the GSFP assists all three beneficiary groups; and interviewed PCD to understand its role in supporting the programme.

Disease Control Priorities in Developing Countries, 3rd Edition

PCD, the World Bank, the University of Washington, and other partners are contributing to two chapters in *Volume 3: Child and Adolescent Development* of the publication *Disease Control Priorities (DCP) in Developing Countries, 3rd Edition* which aims to collect and produce evidence to guide disease priority settings in developing countries. Volume 3 gives emphasis to the longer run consequences of chronic conditions and brings together issues on a new topic for DCP focusing on how we can best help children who survive to 'develop'. Traditional clinical and health issues as well as economic issues including a new section on education cover childhood chronic illnesses, chronic malnutrition, and cognitive development.

Vicennial Anniversary of PCD

At the end of 2012, PCD celebrated its Vicennial Anniversary at an event which brought together UK parliamentarians, Chief Executive Officers of pharmaceutical companies and SHN experts to revisit the successes of PCD over the past two decades and to discuss future directions. Speaking via video address at the event, Former President of Ghana His Excellency John Kufuor warmly commended the work of PCD.



Emirati filmmakers documentary: Filming PCD's work in supporting the GSFP in Ghana

PCD's work on collecting and disseminating knowledge provides:

- A wide variety of media including film, internet and electronic resources and hard copy documents to disseminate the most up-to-date information on SHN technologies and evidence to thousands of different stakeholders around the world;
- strong advocacy tools for the impact of SHN on the education sector and achievement of the Education for All and the education Millennium Development Goals; and
- cutting-edge websites providing a highly extensive document library, covering all aspects of SHN and HGSF to inform the work and action of various stakeholders including policymakers, researchers and the wider HGSF community.

Supporting and Strengthening Partnerships

Partnerships are essential to PCD's work around the world as we collaborate with governments, multilateral and bilateral agencies and NGOs in many different countries to work towards our goal of improving the health and education of school-age children. Such partnerships take different forms as occasion and tasks demand – from work with individual Ministries of Education to address country-specific activities and needs, to much more complex collaborations that enable global consensus about pressing issues in the field of SHN to be achieved.

The Global Need for Partnerships

PCD's work is based on the belief that successful strategic partnerships develop the most effective, scaled and sustainable programmatic solutions to complex issues. Implementing national SHN programmes requires working across multiple sectors, including education, health and nutrition. These cross-sectoral partnerships are core to the success and sustainability of the programmes. Equally important are regional and global partnerships which support and advocate for SHN programmes and policies.

Global partnerships

Through global partnerships, international alliances and agreed goals, frameworks have been developed under which SHN activities are more effectively carried out.

Recent G8 and G20 meetings have given increased attention to the global issues of food insecurity and malnutrition. This has given incentive to national governments and international stakeholders to explore how the school can be used to address such issues, such as through their school feeding programmes. As part of the dialogue prior to the G8 meetings in London, PCD spoke to the UK Houses of Parliament through a meeting with the *All-Party Parliamentary Group on Agriculture and Food for Development* to present school feeding as part of the global solution to food insecurity and undernutrition of children.

Other international forums, such as: Education First; the Global Partnership for Education; Scaling Up Nutrition Initiative; and the Global Child Nutrition Forum have also brought increased attention and coordination to the health and educational needs of children. The Global Partnership for Education, for example, has provided a clear mechanism for coordination amongst multilateral agencies, donor countries, the private sector, NGOs and countries to allocate resources according to national priorities in education.

Regional partnerships

There have been great efforts to establish coordination mechanisms between partners and countries at regional-level. The regional Networks provide a multisectoral platform through which partners, donors and governments can set policy, agree on action and channel support.



Strengthening country partnerships: SHN programme launch in Ghana with PCD partners Dubai Cares, Bill and Melinda Gates Foundation, GSFP and the Government of Ghana

The African Union initiatives, NEPAD and CAADP, continue to provide the framework for African countries and their strategic partners to invest in HGSF programmes which link school feeding and local agricultural production.

Sub-regional SHN Networks based within the Regional Economic Communities (e.g. the Economic Community of West African States [ECOWAS] and the East African Community [EAC]) have proven key in building capacity and developing consensus around SHN in the various regions. These Networks, consisting of members officially appointed by the different Ministers of Education, meet and communicate regularly and are guided by yearly action plans. Further information is detailed on page 30.

In Latin America, a non-profit organization, the Latin American School Feeding Network (LA-RAE), supports the improvement of school feeding programmes in the region through technical assistance, training, sharing knowledge and learning, and promoting south-south cooperation. LA-RAE has garnered support from the School Nutrition Association of the United States, WFP, PCD and FAO, and is actively promoting south-south cooperation agreements with countries like Brazil, Chile and Mexico which have the capacity to provide

technical assistance and support throughout the region.

In Southeast Asia, the Southeast Asian Ministers of Education Organization has been promoting cross-country learning and networks on school health since 1965. In response to demand from these Southeast Asian Governments, PCD, Mahidol University, the Asian Centre of International Parasite Control, and the Japan Consortium for Global School Health Research, organize annually a short course on SHN in the region. The course brings together government and development partners with the objective of strengthening partnerships within the Southeast Asian SHN community.

PCD has also been working with the SHE Network, which focuses on supporting the development and sustainability of school health promotion in European countries. The SHE Network provides an important European platform for school health promotion and represents 43 countries in the region.

County partnerships

With the complexity of multisectoral programme and policy implementation, effective coordination for donor and partner inputs is critical at country-level. This is particularly true when each sector involved in SHN, has separate

coordination groups each with their own sector-specific plans or strategies. Mechanisms for alignment are, therefore, needed to ensure effective collaboration and successful programming. In many countries, this is achieved through national SHN strategies.

PCD has been supporting countries to develop these mechanisms for alignment of in-country partners and has seen great success in many countries. For example in **Ethiopia**, PCD played a crucial role in the partnership coordination for the implementation of the first comprehensive HGSF programme in the country. Further information is detailed on page 10.

In response to a request from the **United Republic of Tanzania** for specific support in exploring the HGSF potential, PCD facilitated a ministry-level technical workshop in Zanzibar, bringing together many stakeholders across agriculture, education and health. The success of this workshop spurred a repeat request from the Ministry of Education for Mainland Tanzania. The outcome of this was a national working group focused on implementing HGSF in the United Republic of Tanzania.

Public-Private Partnerships in Nigeria

PCD seeks to develop effective SHN programmatic solutions by building collaborative partnerships which draw together experts with specific skills and resources, best suited to the given context. An example of this is in Osun State, Nigeria, where PCD is building public-private partnerships in which the Osun Elementary School Feeding and Health Programme (O'Meals) is benefitting from both technical expertise and resources by PCD, and the time and skills of a number of Nigerian private sector companies.

Research shows that integrating school health interventions with school feeding programmes can result in improved educational and nutritional outcomes for schoolchildren. In line with this, PCD has been working with the Government in Osun State to develop a comprehensive school feeding programme, for all pupils in public primary schools in Osun State, which seeks to provide free nutritious school meals, prevent parasitic worm infections and improve sanitation practices. As a result, the O'Meals Programme now contains a new component: a SHN programme which includes WASH and deworming activities:

- **WASH activities:** To increase awareness of hand washing and promote behavioural change amongst schoolchildren and their families, the Osun State Government and PCD joined forces with Unilever to launch a SHN programme that coincides annually with the Global Hand Washing Day. During the Global Hand Washing Day, the SHN programme sought to support school feeding, by teaching, in collaboration with the Ministry of Environment and Sanitation, over 81,000 school-age children across 320 public primary schools hand

washing techniques through the use of child-friendly training aides and materials. In addition, local NGOs also held hand washing awareness workshops with rural communities.

- **Deworming activities:** As with any school feeding programme where there is a high prevalence of parasitic worms, it is vital that school meals are feeding children and not the parasitic worms in infected children. To ensure this, and in line with the National NTD Elimination Strategy, a Nigerian drug distribution company, Chi Pharmaceuticals Limited, were engaged to support the Ministry of Health, with the provision of 250,000 albendazole deworming drugs to all public primary schools in Osun State; and in supporting the training of teachers to deliver deworming drugs.

For such partnerships to work it is vital that partners create a shared understanding of each other's objectives and where these differ, to ensure they are complementary.

“Cross-sectoral partnerships are core to the success and sustainability of SHN programmes.”

Public-private partnerships have the ability to deliver improved sustainable SHN at scale, but in order for this to happen the

programmes need to be seen as part of their core business strategy, this in turn requires the private sector to see a clear demand from their consumers.

The comprehensive O'Meals Programme has already had a considerable impact on school enrolment with Osun State experiencing a 40% increase of 97,000 pupils within 15 months of programme inception. Currently, the total number of pupils being fed is over 252,000 – an achievement made possible with support from the private sector.



Strengthening public-private partnerships: Working together to include a SHN programme during Global Hand Washing Day in Osun State

Collaborative Benefits on the Structured Demand of School Feeding

The Bill and Melinda Gates Foundation supports local agricultural production and its links to school feeding through a portfolio of grants that focuses on 'structured demand'. The theory behind structured demand is that large predictable sources of demand for agricultural products, such as school feeding programmes, can be connected to small-scale farmers. This connection to a stable, structured market reduces economic and investment risks, encourages improved food quality and can lead to increased income and reduced poverty for smallholder farmers.

For such demand-based programmes to be successful, significant technical and structural support needs to be provided along the entire supply chain. Within this environment a cluster of organizations, each with their individual areas of expertise and each given a grant by the Bill and Melinda Gates Foundation, are working on increasing the capacity of the structured demand supply chain. This cluster of structured demand grantees includes:

- **Alliance for a Green Revolution in Africa:** Working to improve farmer yields by financing the provision of fertilizers and seeds and increasing access to credit and training schemes.
- **WFP Initiative 'Purchase for Progress':** Working to improve smallholder farmer market access.
- **SNV:** Working to link HGSF procurement mechanisms with smallholder farmers through increased community engagement.
- **PCD:** Working on building the evidence base for cross-sectoral government-led HGSF programmes to provide support on school feeding and on issues related to procurement, governance and research.

The shared objective of strengthening the structured demand of school feeding has had the effect of creating and strengthening grantee collaborations. These partnerships have in turn become increasingly crucial in advancing our understanding of how smallholder farmers can benefit from school feeding programmes. The benefits of these collaborations have been felt both at global- and country-levels.

“The benefits of these collaborations have been felt both at global- and country-levels.”

- **Global-level:** These partnerships have been able to leverage additional resources and international commitment to support small-scale farmers through structured demand projects. Multilateral development organizations are increasingly recognizing the role that structured demand school feeding programmes can play on increasing agricultural development and on improving educational outcomes. For example, FAO on increasing their focus on school feeding

have joined PCD, the World Bank and WFP in the development of a HGSF Sourcebook that documents national school feeding programmes in low- and middle-income countries from around the world (outlined on page 22).

- **Country-level:** These partnerships in collaboration with other in-country stakeholders are bearing the most fruit. In **Ghana** and **Kenya**, the structured demand grantees have been supporting national governments in updating their current national M&E systems for school feeding to better meet the needs of the programmes. In **Mali**, through the development of a technical assistance framework and in response to a request for further technical support by the Malian Government, partners have supported the drafting of a Law on School Feeding Orientation.

However, the challenges faced by small-scale farmers are vast, and no one institution will find the solution. Through collaborative endeavours between organizations, such as those undertaken by the structured demand grantees and our extended partners, solutions are being identified. Jointly, new ways are being found to maximize agricultural development impact and to enable small-scale farmers to access stable and reliable markets.



Structured demand: Benefits to school feeding in a nutshell

Other Selected PCD Activities on Supporting and Strengthening Partnerships

Partnership with The John A. Kufuor Foundation

In 2013, His Excellency John Kufuor formalized his collaboration with PCD by inviting PCD Executive Director Dr. Lesley Drake to sit on the Board of The John A. Kufuor (JAK) Foundation. The JAK Foundation and PCD are working to strengthen the leadership capacity of African Governments to implement sustainable and effective school feeding programmes. The partnership capitalizes on His Excellency John Kufuor's status as a global advocate of school feeding and agricultural development and PCD's knowledge and expertise in HGFSF to increase global awareness of effective SHN interventions and to improve programme implementation.



Strengthening partnerships: PCD Executive Director Dr. Lesley Drake accepting His Excellency John Kufuor's invitation to sit on the Board of The JAK Foundation

Partnership with the UK Coalition against Neglected Tropical Diseases

In 2013, PCD as an active member of the UK Coalition against NTDs became Chair of the Coalition's Communications Group in addition to sitting as a member of the Consortium's Influencing Group. Both of these roles play a critical part in advocating for government programmes to control and eliminate NTDs

globally. The Coalition is a collaborative partnership between UK organizations engaged in the implementation, capacity building and research of NTD control on a global scale.

Partnership with WFP

In October 2013, PCD Executive Director Dr. Lesley Drake was asked to participate in a consultation with the WFP Executive Board to review their *Revised School Feeding Policy*. Dr. Lesley Drake represented PCD as a member of the tripartite partnership between the World Bank, WFP and PCD. *The Revised School Feeding Policy* supersedes the 2009 *WFP School Feeding Policy* and increases its alignment with the *Draft WFP Strategic Plan (2014-2017)*. The tripartite partnership presented the new publication, *State of School Feeding Worldwide 2013* to the WFP Executive Board, and took the opportunity to discuss the tripartite partnership's strategic direction with WFP Executive Director Ertharin Cousin.

Global Partnerships and Initiatives

PCD continues to be a member of the following global partnerships and initiatives:

- FRESH.
- FRESH partners' SHN Monitoring Panel.
- Partners for Parasite Control.
- United Nations System Standing Committee on Nutrition Working Group on Nutrition of School-Age Children (co-Chair).
- International School Health Network.
- Neglected Tropical Disease Organization.
- London Centre for Neglected Tropical Disease Research.

Please refer to page 43 for a more comprehensive list of partners.

Working with the Ministry of Education Focal Point Networks, under the auspices of the Regional Economic Communities

PCD provides demand-driven support to Regional and inter-Regional Networks and the

Regional Economic Communities within which they operate. PCD currently supports: the Southern African Development Community; ECOWAS; Economic Community of Central African States; and the Caribbean (Commonwealth Secretariat [COMSEC]) in collaboration with the Education Development Center, Incorporated. PCD also provides support to the Southeast Asian Ministers of Education Organization/Association of Southeast Asian Nations Network, and the Lusophone Sub-Saharan African Network of the Community of Portuguese Language Countries.

In June 2013, PCD supported the *6th Annual Meeting of the ECOWAS Network of Education Sector SHN Focal Points* held in The Gambia. The 3-day meeting discussed the current state of SHN within the region as well as the Network's future activities and was attended by Focal Points from Burkina Faso, Cape Verde, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Nigeria, Senegal, Sierra Leone and Togo.

PCD's work on supporting and strengthening partnerships enables:

- The support of effective programme coordination and implementation;
- sharing of ideas, innovations and experiences on SHN amongst programme managers, policymakers and planners;
- formulating international consensus around pressing SHN issues; and
- cross-country coordination and communication of SHN approaches.



Countries With Which PCD Works

Outlined below is a selection of the capacity building activities that PCD carried out in 2012-2013.

Sub-Saharan Africa



United Republic of Tanzania

Stakeholder meetings to identify current needs and to explore opportunities for the implementation of HGSF programmes have been held both in Tanzania Mainland and Zanzibar in 2013. The Mainland convening was the first of its kind and a precursor to a larger stakeholder meeting focused on initiating the design of a national HGSF programme. Following the meeting in Zanzibar, PCD supported the government to conduct a situation analysis and business plan for the implementation of a pilot HGSF programme which will address the needs of Zanzibar's 5,250 school-age children.



Côte d'Ivoire

To facilitate south-south school feeding learning experiences PCD supported the Malian National School Feeding Centre to undertake a HGSF knowledge exchange visit to Côte d'Ivoire in 2013. Learning focused on Côte d'Ivoire's experience in maintaining and implementing HGSF programmes in periods of crisis.



Botswana

The Government of Botswana with support from PCD and NEPAD developed a Technical Development Plan for the country's HGSF programme. This Plan was formally launched in 2013 at a meeting attended by representatives from Ministries of Agriculture, Education, Health, and Local Government and Rural Development.



Madagascar

The Government of Madagascar with support from PCD, the World Bank and WFP have initiated the process of advancing school feeding delivery in some of the most food insecure regions in Madagascar. This has seen the design of a pilot programme to inform a sustainable national school feeding programme which will benefit up to 180,000 school-age children in need.



South Africa

A new case study on the National School Nutrition Programme has been submitted for final government sign-off. Developed with the support of PCD, the case study is designed to strengthen the evidence base on school feeding and was commissioned in partnership with NEPAD and produced by the University of Pretoria.



Sub-Saharan Africa

Angola
Benin
Botswana
Burkina Faso
Cape Verde
Comoros
Côte d'Ivoire
Ethiopia
Gabon
Gambia

Ghana
Guinea
Kenya
Liberia
Madagascar
Malawi
Mali
Mozambique
Namibia
Niger
Nigeria
Senegal

Sierra Leone
Somalia
South Africa
Tanzania
Togo
Uganda
Zambia
Zanzibar

Asia

Bangladesh
Brunei Darussalam

Cambodia
China
India
Indonesia
Japan
Lao PDR
Myanmar
Nepal
Phillipines
Samoa
Singapore
Sri Lanka

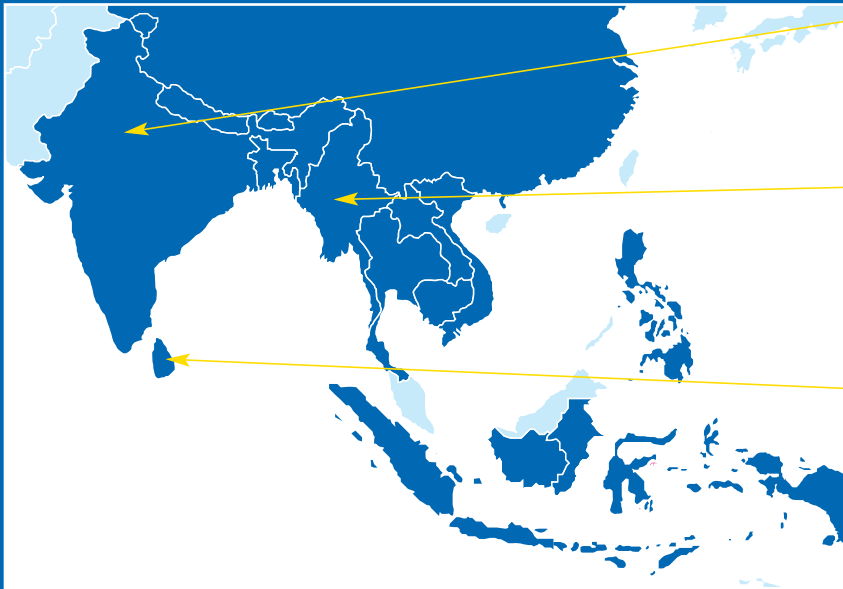
Thailand
Vietnam

Central America

Mexico

South America

Brazil
Chile
Ecuador
Uruguay



Asia

India



A situation analysis, supported by PCD, was conducted in 2012 on the SHN status in four Indian States: Andhra Pradesh, Delhi, Gujarat and Tamil Nadu. This situation analysis can be used to aid partners in India on the strategic planning and development of SHN programmes and activities.

Myanmar



The LCNTDR, supported by PCD convened a meeting in 2013 attended by the Myanmar Ministry of Health, WHO, the UK Department for International Development and two leading Myanmar public health universities on the prevalence of NTDs in Myanmar and the potential for future research collaborations.

Sri Lanka



PCD supported the training and use of the Information Management System of Sri Lanka's School Health Promotion Programmes with the aim to capture real-time data on students' health, attendance, performance and SHN practices to support M&E activities in Sri Lanka. The system has successfully been extended across all nine provinces in Sri Lanka and has captured 1,696 school-level records on key health and education outcomes.



South America

Brazil



At the 15th Annual Global Child Nutrition Forum held in Brazil in 2013, PCD presented the importance of assuring government ownership for the long-term sustainability of national school feeding programmes. The Forum brought together 240 experts and practitioners, including 23 Ministers from Agriculture, Education and Health from low- and middle-income countries to affirm school feeding as a national investment.

Uruguay



PCD supports the work of the Inter-American Institute on Disability and Inclusive Development (iiDi) to increase the access of children and adolescents with disabilities to health information, education and communication resources. During the 2013 National Research and Innovation Awards held in Montevideo, Uruguay, iiDi received a special mention for their sex education materials that were developed with deaf adolescents. For the first time, Uruguayan Sign Language now includes signs for 'sexual abuse' and 'health promotion'. At the same time, iiDi continues to develop its partnerships with disability organizations in South America including the training of health educators from the community on participative methodologies and mainstreaming inclusive approaches in SHN programmes.

Recent Publications

WFP. (2013) *State of school feeding worldwide 2013*. Rome, United Nations World Food Programme. (PCD authors responsible for part of this publication were: D.A.P. Bundy, L.J. Drake and A. Gelli).

FRESH Partners (2013) *Monitoring and evaluation guidance for school health programs: thematic indicators. Supporting FRESH*. Paris, UNAIDS IATT on Education, UNESCO.

FRESH Partners. (2013) *Monitoring and evaluation guidance for school health programs: thematic indicators. Supporting FRESH*. Paris, UNAIDS IATT on Education, UNESCO.

Book chapters

Boily, M.-C., Brisson, M., Masse, B. & Anderson, R.M. (2012) *The role of mathematical models in vaccine development and public health decision making*. Chapter 32. In: W.J.W. Morrow, N.A. Sheikh, C.S. Schmidt & D.H. Davies eds. *Vaccinology: Principles and Practice*. Oxford, Blackwell Publishing Ltd.

Brooker, S.J. & Pullan, R.L. (2013) *Ascaris lumbricoides and ascariasis: estimating numbers infected and burden of disease*. Chapter 13. In: C. Holland eds. *Ascaris: the neglected parasite*. Waltham, MA, Elsevier Incorporated.

Brooker, S.J. & Bundy, D.A.P. (2013 in press) *Soil-transmitted helminths (geohelminths)*. Chapter 55. In: J. Farrar, P.J. Hotez, T. Junghanss, G. Kang, D. Lalloo & N. White eds. *Manson's Tropical Diseases, 23rd Edition*. Waltham, MA, Elsevier Incorporated.

Brown, M., Bundy, D.A.P. & Brooker, S.J. (2013) *Intestinal helminths*. Chapter 46. In: D. Mabey, G. Gill, E. Parry, M.W. Weber & C.J.M. Whitty eds. *Principles of medicine in Africa, 4th edition*. Cambridge, Cambridge University Press.

Bundy, D.A.P., Burbano, C. & Drake, L.J. (2013) *Child development in China: an international perspective*. Pp. 407 – 413. In: Wang Mengkui eds. *Poverty alleviation and child development in China*. Beijing, CDRF, China Development Press.

Bundy, D.A.P., Cooper, E.S. & Brooker, S.J. (2013) *Nematodes limited to the intestinal tract (Enterobius vermicularis, Trichuris trichiura, Capillaria philippinensis and Trichostrongylus spp.)*. Chapter 107. In: A.J. Magill, E.T. Ryan, D.R. Hill & T. Solomon eds. *Hunter's tropical medicine and emerging infectious diseases, 9th edition*. Waltham, MA, Elsevier Incorporated.

Bundy, D.A.P., de Silva, N. & Brooker, S.J. (2013) *Intestinal nematodes: Ascariasis*. Chapter 108. In: A.J. Magill, E.T. Ryan, D.R. Hill & T. Solomon eds. *Hunter's tropical medicine and emerging infectious diseases, 9th edition*. Waltham, MA, Elsevier Incorporated.

Dekumyoy, P., Yoonuan, T. & Waikagul, J. (2013) *Gnathostoma*. Chapter 54. In: D. Liu eds. *Molecular detection of human parasitic pathogens*. Florida, CRC Press/Taylor and Francis Group, LLC.

Hollingsworth, T.D., Truscott, J.E. & Anderson R.M. (2013) *Transmission dynamics of Ascaris lumbricoides: theory and observation*. Chapter 9. In: C. Holland eds. *Ascaris: the Neglected Parasite*. Waltham, MA, Elsevier Incorporated.

Muita, W. & Khamasi, J.W. (2013) *Maternal sexuality socialization of Kenyan daughters*. In: J.W. Khamasi, C. Longman & M. VanHaegendoren eds. *Gender, sexuality and the media. A question of accountability*. Nairobi, Moi University Press.

Thaenkham, U. & Waikagul, J. (2013) *Haplorchis*. Chapter 34. In: D. Liu eds. *Molecular detection of human parasitic pathogens*. Florida, CRC Press/Taylor and Francis Group, LLC.

Peer reviewed publications

Akiyama, T., Win, T., Maung, C., Ray, P., Kajj, A., Tanabe, A., Jimba, M. & Kobayashi, J. (2013) Making schools healthy among Burmese migrants in Thailand. *Health Promotion International*, 28(2) 223–232.

Akiyama, T., Win, T., Maung, C., Ray, P., Sakisaka, K., Tanabe, A., Kobayashi, J. & Jimba, M. (2013) Mental health status among Burmese adolescent students living in boarding houses in Thailand: a cross-sectional study. *BMC Public Health*, 13(337) 1–12.

Anderson, R.M., Hollingsworth, T.D. & Truscott, J.E. (2012 in press) What determines the frequency of drug use for the community-based control of soil-transmitted helminths. *PLoS Neglected Tropical Diseases*. (Submitted for publication).

Anderson, R.M., Truscott, J.E. & Hollingsworth, T.D. (2013 in press) The control of helminth infections by mass chemotherapy. *Phil Trans R Soc Ser B* (Submitted for publication).

Anderson, R.M., Truscott, J.E., Pullan, R.L., Brooker, S.J. & Hollingsworth, T.D. (2013) How effective is school-based deworming for the community-wide control of soil-transmitted helminths? *PLoS NTDs*, 7(2) e2027.

Awasthi, S., Peto, R., Read, S., Clark, S., Pande, V., Bundy, D.A.P. & DEVTA (Deworming and Enhanced Vitamin A) team. (2013) Vitamin A supplementation every 6 months with retinol in 1 million pre-school children in north India: DEVTA, a cluster-randomised trial. *Lancet*, 381(9876), 1469–1477.

Awasthi, S., Peto, R., Read, S., Richards, S.M., Pande, V., Bundy, D.A.P. & DEVTA (Deworming and Enhanced Vitamin A) team. (2013) Population deworming every 6 months with albendazole in 1 million pre-school children in north India: DEVTA, a cluster-randomised trial. *Lancet*, 381(9876), 1478–1486.

Baggaley, R., Hensen, B., Ajose, O., Grabbe, K.L., Wong, V.J., Schilsky, A., Lo, Y.-R., Lule, F., Granich, R. & Hargreaves, J.R. (2012) From caution to urgency: the evolution of HIV testing and counselling in Africa. *Bulletin of the World Health Organization*, 90, 652–658B.

Boccia, D., Hargreaves, J.R., Howe, L.D., De Stavola, B.L., Fielding, K., Ayles, H. & Godfrey-Faussett, P. (2013) The measurement of household socio-economic position in tuberculosis prevalence surveys: a sensitivity analysis. *International Journal of Tuberculosis and Lung Disease*, 17(1), 39–45.

Bundy, D.A.P., Drake, L.J. & Burbano, C. (2013) School food, politics and child health. *Public Health and Nutrition*, 16(6), 1012–1019.

Bundy, D.A.P., Watson, J.L. & Watkins, K.L. (2013) Worms, wisdom and wealth: why deworming can make economic sense. *Trends in Parasitology*, 29(3), 142–148.

Cowan, F.M., Mtetwa, S., Davey, C., Fearon, E., Dirawo, J., Wong-Gruenwald, R., Ndikudze, T., Chidiya, S., Benedikt, C., Busza, J. & Hargreaves, J.R. (2013 in press) Engagement with HIV prevention treatment and care among female sex workers in Zimbabwe: a respondent driven sampling survey. *PLoS One*. (Submitted for publication).

- de Silva, N. & Jayawickrama, H. (2012) Can we eliminate soil-transmitted helminth infections in Sri Lanka? *Ceylon Medical Journal*, 57(1), 1–4.
- Dung, D.T., Hop N.T., Thaenkham, U. & Waikagul, J. (2013) Genetic differences among Vietnamese *Haploporchis taichui* populations using the COI genetic marker. *Journal of Helminthology*, 87(1), 66–70.
- Ebenezer, R., Gunawardena, K., Kumarendran, B., Pathmeswaran, A., Jukes M.C.H., Drake, L.J. & de Silva, N. (2013) Cluster-randomised trial of the impact of school-based deworming and iron supplementation on the cognitive abilities of schoolchildren in Sri Lanka's plantation sector. *Tropical Medicine & International Health*, 18(8), 942–951.
- Freeman, M.C., Clasen, T., Brooker, S.J., Akoko, D.O. & Rheingans, R. (2013) The impact of a school-based hygiene, water quality and sanitation intervention on soil-transmitted helminth reinfection: a cluster-randomized trial. [Electronic publication ahead of print]. *American Journal of Tropical Medicine and Hygiene*, 13(0237).
- Gelli, A. & Daryanani, R. (2013) Are school feeding programmes in low-income settings sustainable? Insights on the costs of school feeding compared with investments in primary education. *Food and Nutrition Bulletin*, 34(3), 310–317.
- Gitonga, C.W., Kihara, J.H., Njenga, S.M., Awuondo, K., Noor, A.M., Snow, R.W. & Brooker, S.J. (2012) Use of rapid diagnostic tests in malaria school surveys in Kenya: does their under-performance matter for planning malaria control? *American Journal of Tropical Medicine and Hygiene*, 87(6), 1004–1011.
- Hargreaves, J.R., Davey, C. & White, R.G. (2013) Does the 'inverse equity hypothesis' explain how both poverty and wealth can be associated with HIV prevalence in sub-Saharan Africa? *Journal of Epidemiology and Community Health*, 67(6), 526–529.
- Hargreaves, J.R., Slaymaker, E., Fearon, E. & Howe, L.D. (2012) Changes over time in sexual behaviour among young people with different levels of educational attainment in Tanzania. *Journal of the International AIDS Society*, 15(Suppl 1) 1–7.
- Hensen, B., Baggaley, R., Wong, V.J., Grabbe, K.L., Shaffer, N., Lo, Y.-R.J. & Hargreaves, J.R. (2012) Universal voluntary HIV testing in antenatal care settings: a review of the contribution of provider-initiated testing and counselling. *Tropical Medicine and International Health*, 17(1), 59–70.
- Hickson, F., Bonell, C., Hargreaves, J.R., Reid, D. & Weatherburn, P. (2013) HIV testing and HIV serostatus-specific sexual risk behaviour among men who have sex with men living in England and recruited through the internet in 2001 and 2008. *Sexuality Research and Social Policy*, 10(1), 15–23.
- Howe, L.D., Galobardes, B., Matijasevich, A., Gordon, D., Johnston, D., Onwujekwe, O., Patel, R., Web, E.A., Lawlor, D.A. & Hargreaves, J.R. (2012) Measuring socio-economic position for epidemiological studies in low- and middle-income countries: a methods of measurement in epidemiology paper. *International Journal of Epidemiology*, 41(3), 871–886.
- Khalifeh, H., Hargreaves, J.R., Howard, L.M. & Birthistle, I. (2013) Intimate partner violence and socioeconomic deprivation in England: findings from a national cross-sectional survey. *American Journal of Public Health*, 103(3), 462–472.
- Kunnuji, M.O.N. & Esiet, U. (2013) Predictors and reproductive health implications of knowledge of HIV/AIDS among female out-of-school adolescents in Iwaya community, Lagos State. *Journal of Women's Health Issues and Care*, 2(3), 1–17.
- Masset, E. & Gelli, A. (2013) Improving community development by linking agriculture, nutrition and education: design of a randomised trial of "home-grown" school feeding in Mali. *Trials*, 14(55), 1–23.
- Mwandawiro, C.S., Nikolay, B., Kihara, J.H., Ozier, O., Mukoko, D.A., Mwanje, M.T., Hakobyan, A., Pullan, R.L., Brooker, S.J. & Njenga S.M. (2013) Monitoring and evaluating the impact of national school-based deworming in Kenya: study design and baseline results. *Parasites and Vectors*, 6(198), 1–14.
- Nankabirwa, J., Wandera, B., Kiwanuka, N., Staedke, S.G., Kanya, M.R. & Brooker S.J. (2013) Asymptomatic *Plasmodium* infection and cognition among primary schoolchildren in a high malaria transmission setting in Uganda. *American Journal of Tropical Medicine and Hygiene*, 88(6), 1102–1108.
- Nonaka, D., Jimba, M., Mizoue, T., Kobayashi, J., Yasuoka, J., Ayi, I., Jayatilleke, A.C., Shrestha, S., Kikuchi, K., Haque, S.E. & Yi, S. (2012) Content analysis of primary and secondary school textbooks regarding malaria control: a multi-country study. *PLoS ONE*, 7(5), e36629.
- Okello, G., Jones, C., Bonareri, M., Ndegwa, S.N., Mcharo, C., Kengo, J., Kinyua, K., Dubeck, M.M., Halliday, K.E., Jukes, M.C.H., Molyneux, S. & Brooker, S.J. (2013) Challenges for consent and community engagement in the conduct of cluster randomized trial among school children in low income settings: experiences from Kenya. *Trials*, 14(142), 1–11.
- Pascoe, S.J.S., Hargreaves, J.R., Langhaug, L.F., Hayes, R.J. & Cowan, F.M. (2013) 'How poor are you?' – A comparison of four questionnaire delivery modes for assessing socio-economic position in rural Zimbabwe. *PLoS ONE*, 8(9), e74977.
- Pullan, R.L., Gitonga, C.W., Mwandawiro, C., Snow, R.W. & Brooker, S.J. (2013) Estimating the relative contribution of parasitic infections and nutrition for anaemia among school-aged children in Kenya: a subnational geostatistical analysis. *BMJ Open*, 3(2), e001936.
- Risley, C.L., Drake, L.J., Bundy, D.A.P. (2012) Economic impact of HIV and antiretroviral therapy on education supply in high prevalence regions. *PLoS ONE*, 7(11), e42909.
- Saito, J., Nonaka, D., Mizoue, T., Kobayashi, J., Jayatilleke, A.C., Shrestha, S., Kikuchi, K., Haque, S.E., Yi, S., Ayi, I. & Jimba, M. (2013) Limited potential of school textbooks to prevent tobacco use among students grade 1-9 across multiple developing countries: a content analysis study. *BMJ Open*, 3(2), e002340.
- Saito, J., Yasuoka, J., Poudel, K.C., Fong, L., Vilaysom, S. & Jimba, M. (2012) Receptivity to tobacco marketing and susceptibility to smoking among non-smoking male students in an urban setting in Lao PDR. [Electronic publication ahead of print]. *Tobacco Control*.
- Seddoh, A., Onyeze, A., Gyapong, J.O, Holt, J. & Bundy, D.A.P (2013) Towards an investment case for neglected tropical diseases: including new analysis of the cost of intervening against preventable NTDs in sub-Saharan Africa. [Draft] *Lancet Commission on Investing in Health Working Paper*.
- Sturrock, H.J.W., Pullan, R.L., Kihara, J.H., Mwandawiro, C. & Brooker, S.J. (2013) The use of bivariate spatial modeling of questionnaire and parasitology data to predict the distribution of *Schistosoma haematobium* in coastal Kenya. *PLoS Neglected Tropical Diseases*, 7(1), e2016.
- Tomokawa, S., Kobayashi, T., Pongvongsa, T., Nisayngang, B., Kaneda, E., Honda, S., Moji, K. & Boupha, B. (2012) Risk factors for *Opisthorchis viverrini* infection among schoolchildren in Lao PDR. *Southeast Asian Journal of Tropical Medicine and Public Health*, 43(3), 574–585.
- Truscott, J.E., Hollingsworth, T.D. & Anderson, R.M. (2013 in press) The interruption of the transmission of soil-transmitted helminths by repeated mass chemotherapy of school-aged children: transmission thresholds and the significance of non-random contact with infective stages. *PNAS*. (Submitted for publication).

Truscott, J.E., Hollingsworth, T.D., Brooker, S.J. & Anderson, R.M. (2013 in press) Can chemotherapy alone eliminate the transmission of soil-transmitted helminths? *Science*. (Submitted for publication).

Wattanakuppanich, D., Pongvongsa, T., Sanguankiat, S., Nuamtanong, S., Maipanich, W., Yoonuan, T., Phuphisut, O., Boupha, B., Moji, K., Sato, M. & Waikagul, J. (2013) Prevalence and clinical aspects of human *Trichostrongylus colubriformis* infection in Lao PDR. *Acta Tropica*, 126(1), 37–42.

Yamane, K., Yanagida, T., Li, T.Y., Chen, X.W., Dekumyoy, P., Waikagul, J., Nkouawa, A., Nakao, M., Sako Y., Ito, A., Sato, H. & Okamoto, M. (2013 in press) Genotypic relationships between *Taenia saginata*, *Taenia asiatica* and their hybrids. *Parasitology*. (Accepted for publication).

HGSF Working Papers

Gelli, A. & Suwa, Y. (2013) Examining the costs and cost-efficiency of the Dubai Cares GAIN-Assisted School Nutrition Project in Bangladesh. [Draft] *HGSF working paper*. London, PCD.

Watkins, K.L., Gelli, A., Hamdani, S., Masset, E., Mersch, C., Nadazdin, N. & Vanhees J. (2013) Sensitive to nutrition? A literature review of school feeding effects in the child development lifecycle. *HGSF working paper*, London, PCD.

Parish, A. & Gelli, A. (2013) What's actually on the plate? A review of the nutritional value of school meals in Western Africa and a linear modeling analysis of school meal menus in Ghana. *HGSF working paper*, London, PCD.

Johnson, C. & Janoch, E. (2013) *Engaging communities: evaluating social accountability in school feeding programmes*. London, PCD.

Brandileone, G., Bennett, N., Yokomoto, S. & Balter, S. (2013) *Ghana School Feeding Programme: re-evaluating the role of buffer stocks in school feeding*. London, PCD.

Reports

Assima, A. (2013) *Rapport d'enquête de base: alimentation scolaire à base de produits locaux (HGSF) au Mali*. [Draft] Bamako, PCD-Mali.

Chereni, A., Mahati, S., Kiamba, J. & Muita, W. (2013) *A situation analysis of South Africa's response to orphaned and vulnerable children*. [Draft] London, PCD.

Dembele, K.E., Diallo, A.S. & Sidibé, P. (2013) *Stratégie Nationale de Suivi-Évaluation (2013-2017)*. Programme National d'Alimentation Scolaire. Bamako, CNCS/PCD/PAM/SNV.

Diallo, A.S. & Guindo, A. (2013) *Stratégie de Pérennisation de l'Alimentation Scolaire au Mali*. Bamako, CNCS/PCD/PAM.

Mbaye, A. & Dibba, S.O.M. (2013) *Communication strategy for promotion of HIV/AIDS preventive behaviour and positive living among teachers in The Gambia*.

Mbaye, A., Jallow, M.B.S., Kaba, A. & Ugwunz, G. (2012) Public health, environment and sustainable development. Education for a culture of peace, human rights, citizenship, democracy and regional integration. *ECOWAS Reference Manual*, Module 7, 102–11.

Ministère de l'Éducation Nationale, République du Sénégal, USAID, RTI & PEPAM (2013) *Guide de l'enseignement moyen sur l'eau, l'hygiène et l'assainissement*. Sénégal, l'USAID/PEPAM.

Ministère de l'Éducation Nationale, Le Ministère de la Santé et de l'Action Sociale, République du Sénégal & PNLP (2013) *Guide sur le paludisme destiné à l'enseignant*. Sénégal, le PNLP.

NEPAD, PCD & University of Pretoria. (2013) *Report on the one-day workshop on responses to orphans and vulnerable children in South Africa*. Held 19 July, 2013. South Africa, University of Pretoria.

PCD. (2013) *The second South East Asia annual short course report on strengthening contemporary school health, nutrition and HIV prevention programmes*. Held 12-20 February, 2013, National University of Laos, Vientiane, Lao PDR. London, PCD.

PCD. (2013) *The ninth annual short course report on strengthening contemporary school health, nutrition and HIV prevention programmes*. [Draft] Held 10-20 June, 2013, Cape Coast, Ghana. London, PCD.

PCD. (2012) *The eighth annual short course report on strengthening contemporary school health, nutrition and HIV prevention programmes*. Held 19-28 June, 2012, Kilifi, Kenya. London, PCD.

Blogs

Broyd, C. & Peel, F.E. (2013) *School meals can do more than just feed children*. Global Food for Thought: The Global Agricultural Development Initiative. Weblog. [Online] 18 October. Chicago, the Chicago Council on Global Affairs. Available from: <http://globalfoodforthought.typepad.com/global-food-for-thought/2013/10/commentary-school-meals-can-do-more-than-just-feed-children.html>

Bundy, D.A.P. (2013) *Neglected diseases of neglected people: the case for investing in neglected tropical diseases*. World Bank Blogs: Investing in Health. Weblog. [Online] 14 February. Washington D.C., The World Bank Group. Available from: <http://blogs.worldbank.org/health/neglected-diseases-of-neglected-people-the-case-for-investing-in-neglected-tropical-diseases>

Bundy, D.A.P. & Burbano, C. (2013) *School meals benefit women and girls around the world*. World Bank Blogs: Investing in Health. Weblog. [Online] 7 March. Washington D.C., The World Bank Group. Available from: <http://blogs.worldbank.org/health/school-meals-benefit-women-and-girls-around-the-world>

Peel, F.E. & Drake, L.J. (2013) *School meals – as good for farmers as they are for children?* Guardian Professional: Global Development Professionals Network. Weblog. [Online] 15 March. London, Guardian News and Media Limited. Available from: www.theguardian.com/global-development-professionals-network/2013/mar/15/school-meals-day-food-security-africa

Takeuchi, T. & Arzú Irigoyen, A. (2013) *An example to follow: Japan's historic commitment to infectious disease control*. Huff Post: The Big Push. Weblog. [Online] 11 June. Washington D.C., TheHuffingtonPost.com, Incorporated. Available from: www.huffingtonpost.com/tsutomu-takeuchi/post_4951_b_3417989.html

Funding and Resources

Fund Flow Statement (2011 – 2012)

Income

	2011-2012
	£
	(000s)
Charitable Trusts/Foundations	1,352
State Governments and Agencies	0
Private Research Institutions/Centres	0
Academic Institutions	8
International and Multilateral Donors	939
Non-Profit Research Institutes/Centres	0
TOTAL	2,299

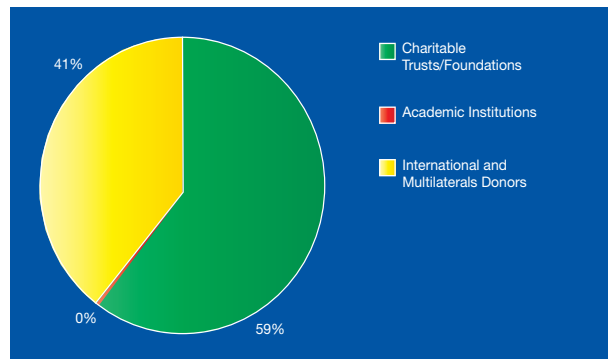


Figure 1: Income (£ 000s).

Direct Expenditure – by Objective

	2011-2012
	£
	(000s)
Strengthening the Evidence Base	661
Capacity Building and Technical Assistance	690
Collecting and Disseminating Knowledge	402
Supporting and Strengthening Partnerships	316
Administration	230
TOTAL	2,299

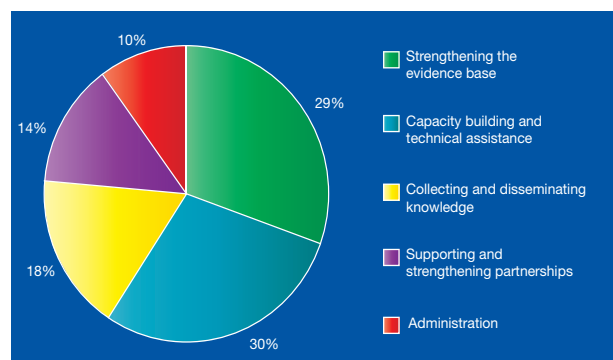


Figure 2: Direct Expenditure By Objective (£ 000s).

Direct Expenditure – by Region

	2011-2012
	£
	(000s)
Globally	230
Sub-Saharan Africa	1,609
South Asia	230
East Asia and Pacific	138
Latin America and Caribbean	92
Europe and Central Asia	0
Middle East and North Africa	0
TOTAL	2,299

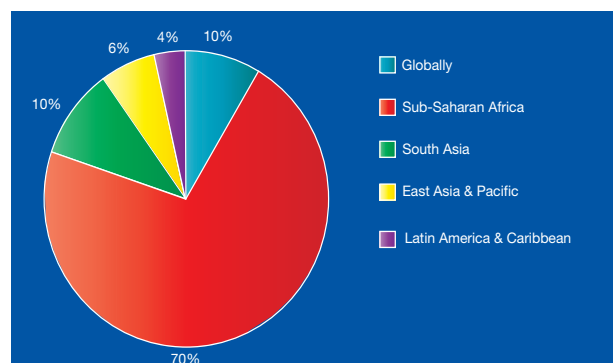


Figure 3: Direct Expenditure By Region (£ 000s).

Accounts audited through Imperial College London's audit procedures.



Imperial College London

Imperial College London was regularly ranked amongst the top ten universities in the world. The Times Higher Education World University Rankings for 2012-2013 rated Imperial College London as the eighth best university in the world.

When broken down, the Times rankings saw by Region Imperial College London rated as third best university in Europe and by Subject Imperial College London ranked fifth in the world for 'Clinical, Pre-clinical and Health' and tenth in the world for 'Engineering & Technology'.

www.imperial.ac.uk

PCD Organization and Structure

PCD is based within the Department of Infectious Disease Epidemiology which is part of the School of Public Health, Imperial College London.

School of Public Health

The School of Public Health, directed by Professor Elio Riboli, is unique in combining world-class research at local-, national- and international-level translating science and epidemiology into health education, policy and primary care.

Infectious and parasitic diseases, obesity, cancer, heart disease and dementia and are amongst the major global public health challenges in the 21st Century. Together with its research, teaching and evidence-led policy work, the School of Public Health aims to address these challenges through:

- **Strengthening** the public health science base;
- **training** the next generation of public health leaders; and
- **influencing** health policies and programmes around the world.

Research from the School scored in the top two epidemiology and public health submissions to the UK's 2009 Research Assessment Exercise. The School of Public Health has a significant research portfolio with research grants and contracts in excess of £25 million per year.

www1.imperial.ac.uk/publichealth/

Department of Infectious Disease Epidemiology

The Department of Infectious Disease Epidemiology, headed by Professor Neil M. Ferguson, carries out world class research into a wide variety of infectious diseases and pathogens which includes: AIDS and HIV, SARS (Severe Acute Respiratory Syndrome) and pandemic influenza, drug-resistant bacteria (e.g. MRSA [Methicillin-Resistant *Staphylococcus Aureus*]) and parasites, childhood viral and bacterial diseases, parasitic helminth infections and bioterrorism.

The Department also hosts the:

London Centre for Neglected Tropical Disease Research

Director Professor Sir Roy Anderson

www.londonntd.org

MRC Centre for Outbreak Analysis and Modelling

Director Professor Neil M. Ferguson

www1.imperial.ac.uk/medicine/about/institutes/outbreaks/

Schistosomiasis Control Initiative

Director Professor Alan Fenwick

www.sci-ntds.org

Imperial College London – *A World Class Learning Institute*

Governance

International Advisory Board

The International Advisory Board provides PCD with guidance and oversight about its policy direction and strategy. The International Advisory Board is comprised of members who come from a range of different organizational backgrounds and geographical regions and who bring to PCD a variety of skills.



Prof. Nianthi de Silva
Senior Professor of Parasitology
Head of Medical Education Centre
Faculty of Medicine
University of Kelaniya
Sri Lanka



Prof. Donald Bundy
Lead Health and Education Specialist
Human Development Network
Africa Region
The World Bank
USA



Dr. Uwemedimo Uko Esiet
Convener for African Federation for
Sexual Health and Rights
Co-Founder/Director
Action Health Incorporated
Nigeria



Mr. Aggrey David Kibenge
Under-Secretary of Finance and
Administration
Office of the Prime Minister
Uganda



Mrs. Amicoleh Mbaye
Director of Basic and Secondary
Education
HIV Focal Point Member
Representative of the ECOWAS
and Mauritania Network
Ministry of Basic and Secondary
Education
The Gambia



Prof. Sir Roy Anderson
Director
London Centre for Neglected Tropical
Disease Research
UK



Prof. Tsutomu Takeuchi
Senior Visiting Scientist
Global Security Research Institute
Keio University
Japan



Professor Sir Gordon Conway
Professor of International
Development
Director, Agriculture for Impact
Centre for Environmental Policy
Faculty of Natural Sciences
Imperial College London
UK

Technical Advisors

The Technical Advisors provide PCD with regular guidance about: its operational support to countries; its identification of research and programmatic areas; and its design of studies on technical and scientific innovations. The Technical Advisors are a group of technical experts invited to join PCD for their experience, insight and connections with countries around the world.



Prof. Jitra Waikagul
Associate Professor of Helminthology
Head of School Health Promotion Unit
Faculty of Tropical Medicine,
Mahidol University
Thailand



Prof. Malick Sembene
Director of SHN
Ministry of Education
HIV Focal Point of All Education Sectors
Member Representative of
All African Networks
Senegal



Prof. Simon Brooker
Professor of Epidemiology
Wellcome Trust Senior Research Fellow
Deputy Editor of PLoS Neglected Tropical Diseases
Faculty of Infectious and Tropical Diseases
London School of Hygiene and Tropical Medicine
UK



Dr. Amaya Gillespie
Global Manager
AIDS Advocacy Unit
HIV Section, Programme Division
UNICEF
USA



Dr. Aulo Gelli
Senior Scientist
Poverty, Health, and Nutrition Division
International Food Policy
Research Institute
USA



Prof. Jun Kobayashi
Professor of Global Health
School of Global Sciences
Faculty of Medicine
University of the Ryukyus
Japan



Dr. James Hargreaves
Senior Lecturer in Social Epidemiology and
Public Health Evaluation
Director of the Centre for Evaluation
Faculty of Epidemiology and
Public Health
London School of Hygiene and Tropical Medicine
UK



Rev. Dr. Michael Beasley
Former Director of PCD
Oxford Diocesan Director of Mission
Oxford Diocesan
UK



Mr. Peter Rodrigues
Head of School Feeding and
Hunger Unit
Policy, Planning and Strategy Division
United Nations World Food Programme
Italy



Ms. Carmen Burbano
Policy Officer
School Feeding Specialist
School Feeding Unit
Policy, Planning and Innovation Division
United Nations World Food Programme
Italy



Ms. Boitshupo Bibi Giyose
Senior Food & Nutrition Security Advisor
New Partnership for Africa's Development
South Africa



Dr. Charles Mwandawiro
Assistant Director
Chief Research Officer
Partnership and Collaboration
Kenya Medical Research Institute
Kenya

Coordinating Centre

PCD Staff



Lesley Drake, PhD
Executive Director



Jane Lillywhite, MSc
Managing Director



Abigail Deamer, MSc
Operations Manager



Iain Gardiner, MSc
Senior Programmes Manager
– East Africa



Brie McMahon, MEdEd
Senior Partnerships Manager



Daniel Mumuni, MSc, LLM
Senior Programmes Manager
– West Africa



Francis Peel, BA
Senior Communications Manager



Alice Woolnough, MSc, DLSTHM
Senior Programmes Manager



Josephine Kiamba, PhD
HGSF Senior Technical Advisor,
Southern Africa



Salha Hamdani, MA
Senior Nutrition Advisor



Samrat Singh, B.A,LLB
Food Policy Consultant



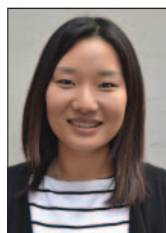
Sumit Bagree, MSc
Advocacy Manager



Elodie Yard, MSc
Programmes Manager – East Africa



Cai Heath, MSc
SHN Programme Manager



Jane Kwon, MSc
Programme Manager
(Networks and Training)



Edna Kalima, MSc
HGSF Technical Advisor,
Southern Africa



Charlotte Broyd, MSc
Communications Officer



Mahesh Singh, MTech
Financial Systems Manager



Christina Spencer Drake, MA
Operations Officer



Kristie Watkins, BSc
Research Assistant/Doctoral Student



Anastasia Said, MSc, DLSTHM
Editor



Ed Cooper, FRCP
Clinical Consultant



Dan Ochieng, MPH
M&E Consultant, Management and
Planning Consultant



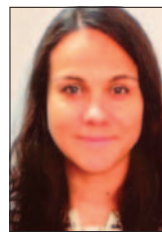
Jimmy Kihara, PhD
Parasitology Consultant



Sergio Moresman, MComMH
Inclusive Education Consultant



Bachir Sarr, PhD
West Africa Programmes Advisor



Natasha Graham, MPA
Disability Consultant



Jack Grimes
PhD Candidate

PCD Country Offices

Regional and country offices in Ghana, Kenya, Mali and Nigeria, in addition to an established presence in Ethiopia and Southern Africa allows PCD to deliver technical assistance that is context-specific and tailored to the SHN requirements of the given country.

Working responsively and collaboratively is core to PCD's ability to effectively support governments and development partners in low- and middle-income countries. The country offices play a vital role in directing PCD's policy through feedback from in-country programme implementers and beneficiaries.

Ghana Country Office



Getrude O. Ananse-Baiden, MPH
Programmes Manager



Lutuf Abdul-Rahman, MSc, DTMH
Nutrition Programme Manager



Abigail Bondzie, BA
Programmes Assistant

PCD supports the Ghanaian Government to undertake a comprehensive approach to SHN programmes that deliver a range of SHN activities to improve the education, health and nutrition of school-age children in Ghana.

This comprehensive approach is in part guided by the Dubai Cares funded 4-year nutrition project which provides complementary deworming, hygiene and nutritional interventions in support of the GSFP.

Through this nutrition project, PCD's technical assistance resulted in over 1.5 million primary school children being dewormed as part of Ghana's NTDs and School Health Education Programmes. In the nutrition component of the GSFP, PCD supported the development and roll out of an online menu planning tool. This online application displays nutritional values, recommended daily allowances of food commodities and food costings so that cost-effective nutritious meals using local produce can be more easily planned (outlined on page 16).

As part of broader work in supporting the GSFP, PCD completed a baseline study for a HGSP impact evaluation and are also currently analysing data from a national GSFP baseline study. These studies assess the impact of the GSFP on local agriculture, community participation, school enrolment, and the nutritional status of school-age children.

On a fact finding mission to find out more about HGSP, Bill Gates planned a first ever visit to Ghana in 2013. PCD was privileged to host this visit where Bill Gates met with local smallholder farmers and representatives of the GSFP to discuss market access, crop storage facilities and linkages between farmers and school caterers (outlined on pages 20 and 21).

In June 2013, PCD supported the Government of Ghana to host the 9th Annual African SHN Short Course held in Cape Coast where SHN practitioners, representing 12 African countries, gathered for 10 days to focus on SHN best practice.

Kenya Country Office



Wairimu Muita, PhD
Senior Advisor
Orphans and Vulnerable Children
Research Programme



Angela Gituara, MSc
Programmes Manager



Damaris Mulewa, BSc,
Programmes Associate



Jenny Maina, MSc
Programmes Associate

In line with our objectives the key focus of PCD's work in Kenya has been to build the evidence base and strengthen the capacity of government run SHN programmes.

PCD has conducted a school-level baseline survey of 96 primary schools (48 school feeding and 48 non-school feeding) to measure the impact of school feeding on educational outcomes and access amongst Kenyan schoolchildren. Two follow-up surveys are planned over the next 2 years.

In collaboration with the Kenyan Ministries of Agriculture and Education and their development partners, PCD conducted a supply chain analysis in Ganze District to better understand local procurement benefits and to develop better linkages between local farmers and schools. The target farmers will be observed as part of a longitudinal study over the next 2 years.

To build government capacity and strengthen programme implementation PCD supported a series of county-level awareness raising training workshops for the staff of Kenya's Home Grown School Meal's Programme (HGSMMP). The workshops provided training to 345 County department heads and directors from agriculture, education and health and over 3,000 staff from 1,770 primary schools. The training workshops focused on enhancing the capacity of implementers to manage the food supply and better understand the structure of the HGSMMP.

Mali Country Office



Amadou Diallo, MSc
Programmes Manager



Amidou Assima, MSc
Projects Associate

Guided by an evidenced-based approach and multisectoral collaboration, PCD provide quality technical assistance and expertise to the Malian Ministries of Agriculture and Education for the effective design and implementation of its government SHN interventions.

PCD has continued to work on Mali's HGSF impact evaluation which is seeking to analyse school feeding impacts on agriculture, education, health and nutrition outcomes. PCD is also currently conducting a market study in collaboration with the Regional Agricultural Departments which aims to understand market and price trends as well as potential implications on the marketing capacity of smallholder farmers.

In collaboration with the Malian Government, PCD developed a Sustainable School Feeding Strategy which provides clear guidance for the successful transitioning of HGSF to a nationally-owned and community integrated programme. The adoption of the Strategy in November 2012 is a clear manifestation of the Malian Government's commitment to school feeding.

PCD also supported the Malian Government to develop and validate a comprehensive National M&E Strategy for school feeding. This Strategy includes an M&E toolbox alongside a 5-year Action Plan on the institutional organization, management, operation and data collection. In addition, PCD supported training for staff at the National School Feeding Centre on the use of the M&E tools.

Over the past year, several training activities and exchange visits of relevant SHN government staff were facilitated by PCD, these included: a HGSF mission to Côte d'Ivoire; attendance on the 6th Annual ECOWAS Workshop in The Gambia; and attendance on the 1st Francophone SHN Short Course in Senegal.

Nigeria Country Office



Abimbola Adesanmi, MSc
Programmes Manager



Boluwatito Fasesin, MPH
Programmes Associate



Yinka Badejo, BTech
Project Officer

PCD supports the Osun State Government to improve and strengthen its comprehensive SHN programmes. In 2013, on seeing the results of this engagement the Federal Government of Nigeria requested the support of PCD for its national school feeding programme.

In November 2012, the Osun State Government validated the Technical Assistance Plan for the Osun State school feeding programme (O'Meals). The Technical Assistance Plan, supported by PCD identifies and highlights key actions needed to combat current challenges in programme implementation in Osun State. Following on from this, the Federal Government of Nigeria requested PCD to support the M&E and capacity building components of its national school feeding programme. Additional requests were made by Kano and Ekiti State Governments to PCD for technical support for the development of their HGSF programmes.

In support of the Osun State O'Meals Programme, PCD conducted an Impact Assessment Study which assessed the hygiene, oral health and nutrition habits of primary school children.

To further improve the development, health and nutrition of schoolchildren in Osun State through deworming, PCD in collaboration with Chi Pharmaceuticals Limited delivered 250,000 albendazole deworming drugs to all public primary schools in Osun State. Support was also provided to the Nigerian Federal Ministry of Health's Master Plan on NTDs which identifies necessary actions for the eradication of 10 NTDs over the next 5 years and which aims to treat annually over 60 million Nigerian people.



Partners

Our sincere appreciation and gratitude extends to the many partners who have helped, guided, advised and supported our work.

United Nations

Food and Agriculture Organization of the United Nations (FAO); International Fund for Agricultural Development (IFAD); International Labour Organisation (ILO); Joint United Nations Programme on HIV/AIDS (UNAIDS); UNAIDS Inter-Agency Task Team (IATT) on Education; United Nations Children's Fund (UNICEF); United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO); UNESCO-BREDA; UNESCO-International Bureau of Education (UNESCO-IBE); UNESCO International Institute for Educational Planning (UNESCO-IIEP); United Nations Girls' Education Initiative (UNGEI); United Nations Office on Drugs and Crime (UNODC); United Nations Population Fund (UNFPA); United Nations System Standing Committee on Nutrition (UNSCN); United Nations World Food Programme (WFP); The World Bank; and World Health Organization (WHO).

Bilateral Agencies

Canadian International Development Agency (CIDA); Danish International Development Agency (DANIDA); Department for International Development (DFID); Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); Dubai Cares; Embassy of Luxembourg in London; Japan International Cooperation Agency (JICA); Norwegian Agency for Development Cooperation (NORAD); Swedish International Development Cooperation Agency (SIDA); United States Agency for International Development (USAID); and Welthungerhilfe.

Intergovernmental Organizations

African Networks of Ministry of Education HIV&AIDS Focal Points; Association of Southeast Asian Nations (ASEAN); Caribbean Community (CARICOM); Caribbean Education Sector HIV and AIDS Coordinator Network (EduCan); Commonwealth Secretariat (ComSec); Communauté Économique des États d'Afrique Centrale (CEEAC); Communauté Économique et Monétaire de l'Afrique Centrale (CEMAC); East African Community (EAC); Economic Community of Central African States (ECCAS); Economic Community of West African States (ECOWAS); African Union Commission; The New Partnership for Africa's Development (NEPAD); Países Africanos de Língua Oficial Portuguesa (PALOP); and the Southeast Asian Ministers of Education Organization (SEAMEO).

Civil Society Organizations, Institutions and Networks

Abdul Latif Jameel Poverty Action Lab (J-PAL); Academy for Educational Development (AED); Action for Global Health; Action Health Incorporated, Nigeria (AHI-Nigeria); ActionAid International; Africa Regional Sexuality Resource Centre; Agriculture for Impact; All India Institute of Medical Sciences (AIIMS); Alliance for a Green Revolution in Africa (AGRA); Alwaleed Bin Talal Foundation; American Institutes for Research (AIR); American Peanut Council; AMPATH; Asian Center of International Parasite Control (ACIPAC); Asociación Brasileña de Salud y Alimentación Escolar (ABRAE); Association for the Development of Education in Africa (ADEA); Association for the Physically Disabled of Kenya (APDK); Association of African Universities (AAU); Bill & Melinda Gates Foundation; Biomedical Research and Training Institute (BRTI); Blair Research Institute – Zimbabwe; CARE International UK; Catholic Relief Services (CRS); Center for Effective Global Action (CEGA); Centre for Neglected Tropical Diseases (CNTD) – Liverpool School of Tropical Medicine; Centre for Vision in the Developing World (CVDW); Centro de Promoção da Saúde (CEDAPS); Cereal Growers Association (CGA); Child-to-Child Trust (CtC); Children Without

Worms (CWW); Children's Investment Fund Foundation (CIFF); China Development Research Foundation (CDRF); Columbia University; Communauté Baptiste au Centre de L'Afrique (CBCA); Deaf Aid Kenya; Deworm the World (DtW); Eastern Africa Grain Council (EAGC); Eastern Africa National Networks of AIDS Service Organizations (EANNASO); Eastern and Southern Africa Centre of International Parasite Control (ESACIPAC); Ecumenical Association for Sustainable Agriculture and Rural Development (ECASARD); Education Development Center, Incorporated (EDC); Education International (EI); Equal Access; Farm Concern International (FCI); Farm Radio International, Ghana; Feed The Children (FTC); Feed, Uplift, Educate, Love (FUEL) Trust; Ethiopian Agricultural Transformation Agency (ATA); Ethiopian Health and Nutrition Research Institute (EHNRI); Flemish Association for Development Cooperation and Technical Assistance (WVOB); Focus on Vision; Focusing Resources on Effective School Health (FRESH) partners; Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN); The Fred Hollows Foundation; The George Washington University; Global Alliance for Improved Nutrition (GAIN); Global Atlas of Helminth Infections (GAHI); Global Campaign for Education (GCE); Global Child Nutrition Foundation (GCNF); Global Health Strategies (GHS); Global Network for Neglected Tropical Diseases (GNNTD); Global Partnership for Education (GPE); Harvard Graduate School of Education (HGSE); Harvard University Department of Economics; Head-Heart-Hands-Health 4H Ghana; Helen Keller International (HKI); Innovations for Poverty Action (IPA); Institute of Development Studies (IDS); Institute of Health and Development (ISED); Cheikh Anta Diop University; Institute of Statistical, Social and Economic Research (ISSER) – University of Ghana; Inter-American Institute on Disability and Inclusive Development (IID); International Agency for the Prevention of Blindness (IAPB); International Disability and Development Consortium (IDDC); International Food Policy Research Institute (IFPRI); International School Health Network (ISHN); Japan Consortium for Global School Health Research (JC-GSHR); The John A. Kufuor Foundation (JAK Foundation); Joint Aid Management International (JAM); Keio University; Kenya Agricultural Research Institute (KARI); Kenyan-Heart National Foundation; Kenya Institute of Special Education (KISE); Kenya Medical Research Institute (KEMRI); Kenya Network of HIV-Positive Teachers (KENEPOTE); La Red de Alimentación Escolar para América Latina y el Caribe (LA-RAE); Leonard Cheshire Disability International; London Centre for Neglected Tropical Disease Research (LCNTDR); London School of Hygiene and Tropical Medicine (LSHTM); Mahidol University; Malaria Consortium; Marie Stopes International; Mary's Meals; Massachusetts Institute of Technology (MIT); McGill University; Michael and Susan Dell Foundation (MSDF); Michigan State University (MSU); Millennium Promise; M S Swaminathan Research Foundation (MSSRF); Neglected Tropical Disease NGO Network; Neglected Tropical Disease Organization (NGTDO); New England College of Optometry (NECO); Noguchi Memorial Institute for Medical Research (NIMMR), University of Ghana, Legon; Osun State University; Program for Appropriate Technology in Health (PATH); Purchase for Progress (P4P); Purdue University; Right To Play; Sabin Vaccine Institute; Save the Children; Schistosomiasis Control Initiative (SCI); Schools for Health in Europe (SHE) Network; Sightsavers; SNV Netherlands Development Organisation; Social Enterprise Development Foundation (SEND-Ghana); Table for Two; UK All-Party Parliamentary Group (APPG) on Agriculture and Food for Development; UK All-Party Parliamentary Group on Malaria and Neglected Tropical Diseases (APPGM); UK Coalition against Neglected Tropical Diseases; UK Consortium on AIDS and International Development; UK Food Group; University of California, Berkeley; University of College London (UCL) Institute of Child Health (ICH); University of Kelaniya; University of Ottawa; University of Oxford; University of Pretoria; University of Washington; Value Development Initiatives Ltd (VDI); VSO Jitolee; WaterAid; Wellcome Trust; West African Centre for International Parasite Control (WACIPAC); and World Vision.

Private Sector

Adaptive Eyewear; Baney Media; Chi Pharmaceuticals Limited, Nigeria; Cole Ghana Limited; DSM Nutritional Products South Africa (Pty) Limited; GlaxoSmithKline (GSK); iCRE8 Design; Johnson & Johnson; Merck; Tiger Brands; Unilever, Nigeria; and Vitol.



The Partnership for Child Development

Sharing Ideas Guiding Change

The Partnership for Child Development
School of Public Health
Imperial College London
Faculty of Medicine
Norfolk Place
London W2 1PG

Tel: +44 (0)20 7594 1941
Fax: +44 (0)20 7262 7912
Email: pcd@imperial.ac.uk



www.child-development.org