Good Work—But Not Enough of It: A Review of the World Bank’s Experience in Nutrition

Richard Heaver

June 2006
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Health, Nutrition and Population (HNP) Discussion Paper

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Abstract:

The World Bank has been a leader in nutrition policy analysis, and many of the nutrition projects it has supported have been innovative and successful. But though the Bank has developed the economic justification for large-scale investment in nutrition, and has the experience needed to scale up, it has failed to do so. Nutrition lending is an insignificant proportion of the Bank’s business, no more than 2.5 per cent of its lending for human development. This level of effort is inconsistent with what the Bank’s analytical work has found—that nutrition lending is one of the best economic investments, and critical to progress toward the Millennium Development Goals.

There are significant institutional constraints to scaling up in nutrition. The paper therefore recommends that, if nutrition is to be put higher on the Bank’s agenda, its top management will need to be involved in changing the institutional signals, through: (i) emphasizing that, as a precondition of faster progress toward the MDGs, improving nutrition is a Bank-wide responsibility, not just the business of health staff; (ii) making ‘improvement in nutritional status’ a key development outcome and measure of poverty reduction; (iii) creating institutional incentives for staff to focus on nutrition; (iv) increasing the Bank’s staff capacity in nutrition; and (v) raising a grant fund to help countries and Bank country departments scale up.

Keywords: Nutrition, World Bank, Development Assistance, Evaluation

Disclaimer: The findings, interpretations and conclusions expressed in the paper are entirely those of the author, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

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ACRONYMS

BCC  behavioral change communication
BINP  Bangladesh Integrated Nutrition Project
CDD  community-driven development
CGIAR Consultative Group on International Agricultural Research
ECD  early childhood development
HD  human development
HIV/AIDS human immunodeficiency virus/acquired immune deficiency syndrome
HNP  health, nutrition, population
ICDS Integrated Child Development Services
ICR implementation completion report
IEC information, education, communication
MDG Millennium Development Goal
NGO non-governmental organization
NNP National Nutrition Project
OED Operations Evaluation Department
OPCS Operations Policy and Country Services
PEM protein-energy malnutrition
PREM poverty reduction and economic management
PRSC poverty reduction strategy credit
PRSP poverty reduction strategy paper
SWAp sector-wide approach
SIL Specific Investment Loan
TTL task team leader
TINP Tamil Nadu Integrated Nutrition Project
TIPs trials of improved practices
UNICEF United Nations Children’s Fund
WCDP Woman and Child Development Project
EXECUTIVE SUMMARY

The Bank’s Experience: Strengths and Weaknesses

The World Bank has been a leader in nutrition policy analysis. It has helped to establish that economic growth alone, while critical to reducing income poverty and to generating the funds for nutrition programs, improves nutrition only slowly: more rapid improvements in nutrition come when growth is coupled with programs that teach mothers better ways to feed and care for children under two; programs that make micronutrient and mineral supplements available to those who need them; and programs that improve the household food security of vulnerable groups. The Bank has also shown that nutrition interventions have high benefit-cost ratios, and should therefore be treated not as social welfare expenditures but as investments with excellent returns in terms of better health, educability, productivity, economic growth, and competitiveness. In short, the Bank has helped show that public policy can solve the problem of malnutrition, and which policies are the best buys.

The Bank has also been the largest source of external financial assistance for nutrition. In the ten years after it began lending for nutrition in 1977, the Bank identified affordable community-based interventions for child growth promotion and micronutrient supplementation, working in Asia and Latin America; and it learned many lessons about how to design the systems—in recruitment, training, supervision and performance monitoring—that are needed to make programs work. Since then, the Bank has extended its experience from Asia and Latin America into Sub-Saharan Africa, and from micronutrient supplementation into food fortification. And it has helped develop strategies for scaling programs up, for example, using public-private partnerships to increase the supply of services, or increasing demand by making access to social safety nets conditional on the use of health and nutrition services.

But though the Bank has developed the justification for large-scale lending in nutrition, and has the experience needed to scale up, it has failed to do so at the global level. More than 60 Bank projects in more than 40 countries include nutrition activities, but most of these are too small to make an impact on the prevalence of malnutrition. Bank-financed interventions have been big enough to make a real difference in only about 20 of the more than 80 countries where malnutrition is a serious problem. Globally, nutrition lending is an insignificant proportion of the Bank’s business, no more than 2.5 per cent of its lending for human development, and less than 0.5% of total Bank lending. This level of effort is inconsistent with what the Bank’s analytical work has found—that nutrition lending is one of the best economic investments, and critical to more rapid progress toward the Millennium Development Goals (MDGs).

The Bank’s experience shows that, where a committed Task Team Leader is backed by a committed Country Director, demand for nutrition lending can be generated, and an impact can be made. But in most countries, the Bank is not engaged as an institution in the evidence-based advocacy that is required to strengthen countries’ commitment to
tackling malnutrition, and that is a precondition of nutrition being treated as an investment priority in Poverty Reduction Strategy Papers (PRSPs) and in Bank country assistance strategies; in most country departments, improving nutrition is seen as the responsibility of the health, nutrition and population staff, rather than a wider, departmental one. The past ten years have shown that the Bank can scale up effectively when it decides to do so—in primary education, in environment, and most recently in HIV/AIDS; the Bank’s top management now needs to send the signals and create the incentives for this in nutrition.

While this is true at the global level, a contrary concern has emerged in South Asia, where the India and Bangladesh Country Departments recognized more than ten years ago that malnutrition was a serious brake on development. In these countries, nutrition has been near the center of the policy dialogue, but lending expanded faster than the countries’ capacity or commitment to use it effectively. In the case of India, after an initial successful nutrition project in one state, the Bank has lent more than six hundred million dollars to the national child development program, which follows a different and less effective nutrition intervention strategy. Little impact has been made on malnutrition. Because India contains almost 40% of the world’s undernourished children, this is a global as well as a country issue.

Looking to the Future

The recognition, in the 2005 Global Monitoring Report, that the world is making inadequate progress toward achieving the MDGs provides an opportunity for the Bank to reevaluate the priority it gives to nutrition, in the context of its centrality to the MDGs, the economic returns to investing in nutrition, and the Bank’s comparative advantage in five areas:

- the track record of analytical work and lending documented in this paper
- its access to country decision-makers and its ability to articulate the evidence for investing in nutrition
- its multi-sectoral role, which positions the Bank to advise countries on where best to invest to make an impact on malnutrition
- the new lending vehicles that can help institutionalize large-scale, long-term financing for nutrition
- the Bank’s ability to help mobilize development assistance in support of large-scale investment programs in nutrition, rather than unsustainable small-scale projects.

But while this paper concludes that the Bank is well placed to help countries tackle malnutrition, it also underlines its significant institutional constraints to scaling up in nutrition. The last review of the Bank’s experience in nutrition, which took place in 1987, already concluded that the Bank knew enough to scale up in nutrition and should do so, but it was not followed by action. This suggests that, if nutrition is to be put higher on the Bank’s agenda, the Bank’s top management will need to be involved in changing the institutional signals, as they were in the case of the Bank’s expansion in primary education, the environment, and HIV/AIDS. The need to build commitment—both Bank and country commitment—is the single biggest issue for the Bank to tackle in nutrition.
Specific recommendations flowing from the analysis in this paper are that:

1. The signal needs to be sent by top management that improving nutrition, as a precondition of faster progress toward the MDGs, is a Bankwide responsibility—the business not only of health and nutrition staff, but of
   • country directors, country economists and PREM staff, who are responsible for incorporating nutrition analysis and lending into the Country Development Framework;
   • social protection staff, who need to help countries design safety nets that reduce malnutrition, as well as income poverty;
   • agriculture staff, who need to incorporate nutrition as well as production considerations into their policy dialogue;
   • CDD staff, who need to encourage communities to make improvement in nutritional status a goal and a measure of progress in community development.

2. In the more than 80 countries where malnutrition is serious, (i) ‘improvement in nutritional status’ needs to be treated as a key development outcome and measure of poverty reduction in Public Expenditure Reviews, Country Economic Memoranda, PRSPs and country assistance strategies, and (ii) nutrition should have a correspondingly important place in economic and poverty analysis. Progress in incorporating nutrition into Country Development Frameworks should be monitored centrally as well as by the Regions. A review has recently been completed of the treatment of nutrition in PRSPs: similar reviews should be undertaken of the treatment of nutrition in other key Bank documents related to the Country Development Framework, so as to provide a baseline for monitoring improvement.

3. Systematic steps should be taken to incorporate nutrition into new forms of lending—PRSCs, SWAps and CDD operations—since these will be the principal future investment vehicles in many countries, and since financing nutrition through sector-wide approaches rather than time-bound projects will help make nutrition investments financially sustainable. However, nutrition should only be incorporated into broader, multisectoral or sector-wide approaches when there is strong country commitment to it, and specific measures should be taken to ensure that the focus on nutrition is not lost, for example through
   • ensuring a substantive allocation for nutrition, since small components tend to get neglected;
   • including key nutrition impact goals as part of the overall program goals, and monitoring key nutrition indicators as part of the program-wide MIS;
   • allocating as much Bank staff supervision time for nutrition as part of a sector or multi-sectoral program, as for nutrition in an SIL.

4. The Bank needs to professionalize its approach to strengthening country commitment to investing in nutrition, since Bank nutrition lending can only increase if there is the demand for it from countries. Commitment-building needs to focus on
   • using state of the art strategic communication techniques and relevant data to tailor evidence-based advocacy to country needs and concerns;
• identifying and supporting country *champions* of nutrition—people with the ear of policy-makers and capable of carrying out evidence-based advocacy;
• building partnerships of individuals and institutions that can influence politicians and implementing agencies to press for increased budgets for nutrition programs.

5. As Bank lending for nutrition scales up, it will be important to *improve the quantity and quality of work in financial and impact analysis and in capacity-building*, areas identified as weak in this review:
• A systematic effort should be made to ensure that the nutrition portfolio is monitored and evaluated using state of the art approaches, and more analytical work on cost-effectiveness and affordability should be done. Particular attention should be paid to evaluating the appropriateness of ECD programs as vehicles for nutrition improvement, in view of their growing importance in the nutrition portfolio;
• the pace of expansion of nutrition programs will need to be carefully matched to country capacity. Since Bank performance in institutional capacity development has been negatively evaluated in health and nutrition, the Bank should develop guidelines for assessing implementation capacity, and a toolkit of approaches for strengthening capacity.

6. *Specific staff capacities in nutrition should be developed.* In addition to hiring additional nutrition staff in the Bank’s regional departments, to generate and service an expanded lending program in nutrition, three nutrition staff should be assigned to focus on the following areas identified in this paper as needing strengthening:
• results monitoring and evaluation;
• strategic communication and commitment-building; and
• capacity-building and governance.
These staff should be positioned so as to be able to provide technical assistance and quality control across Regions.

7. *Institutional incentives for staff to focus on nutrition should be created,* by
• identifying priority countries for reducing undernutrition, micronutrient malnutrition and overnutrition;
• closely monitoring progress in nutrition as a measure of country departments’ achievements; and
• raising a grant assistance fund that task managers and countries can draw on to strengthen commitment to nutrition and initiate action (see below).

8. *The Bank should adopt a more strategic approach to learning and knowledge management in nutrition,* systematically identifying gaps in its knowledge, deciding which types of learning are most appropriate to fill them, and giving higher priority to dissemination. In addition to learning through studies, the Bank should seek finance to set up a Nutrition Action Fund, to help countries and Bank country departments develop best practices through systematic ‘learning by doing’ in
• strengthening commitment to nutrition and generating demand for lending;
• incorporating nutrition into country development strategies and using new forms of financing;
• assessing and strengthening country capacity in nutrition policy analysis and development, and program design and implementation;
• tackling overnutrition; and
• analyzing the cost-effectiveness and affordability of different approaches to nutrition improvement in different circumstances.
PREFACE

This paper reviews the Bank’s lending and analytical work in nutrition as of October, 2004; looks at the successful strategies and best practices which the Bank has developed in recent years; and identifies problems and issues that need addressing if the Bank wishes to scale up its activity in nutrition from current low levels. The review’s main audience is the Bank’s staff and management; secondary audiences are other development agencies, and countries investing in nutrition.

Readers should note the paper’s limitations. First, it is an informal review, reflecting one perspective rather than the position of the Bank. Second, as a desk study it is ‘Bank-centric’: it does not incorporate clients’ views about the acceptability and quality of project services, or of the Bank’s advice and analytical work. Third, it does not cover the full range of Bank activity in nutrition—for example, it does not review the quantity and quality of the Bank’s human resources in nutrition; the nutrition activities carried out by the World Bank Institute; or the Bank’s support for external partner agencies such as the Global Alliance for Improving Nutrition, the Micronutrient Initiative, or the UN Standing Committee on Nutrition. A further limitation is that the review of analytical work in nutrition covers only studies dealing solely with nutrition, rather than nutrition analysis in broader macro and cross-sectoral work, such as Country Economic Memoranda or Country Assistance Strategies.

Within these limitations, the paper draws on a wide range of Bank documents. It is based on a review of

- the Implementation Completion Reports (and other evaluations, where available) of the 22 projects with nutrition content completed between 1998 and 2003;
- the Project Appraisal Documents for the more than 60 projects with nutrition content which were being implemented as of mid 2004; and
- the more than 50 pieces of analytical work and operational guidelines in nutrition which the Bank produced over the five years to mid 2004.
I. LENDING: Best Practices

**Headlines:** The Bank has helped to develop a variety of strategies for reducing undernutrition and micronutrient malnutrition. Many had already been developed by the end of the 1980s, and Bank-supported projects since then have come up with new ideas, suited to different environments, in service delivery, demand generation, and the management of multi-sector programs. Aside from the problem of over-weight and diet-related non-communicable diseases—a new challenge for which strategies have yet to be developed—it is not uncertainty about how to intervene that is holding the Bank back from investing more in nutrition.

**Early Lessons**

The Bank began work on nutrition with projects in Brazil and Indonesia in 1977, Colombia in 1978, and India (Tamil Nadu state) in 1980. Already by 1987, when the Bank published a book about this experience (Berg, 1987), there were clear lessons not only about how best to intervene against undernutrition, but how to do so at scale, for these were not just pilot projects. The Tamil Nadu project, for example, eventually expanded to 20,000 community nutrition centers covering over 30 million people, more than the population of most African countries.

Among the lessons:

- using community workers is the best way to deliver services, since they are cheap, on the spot, and—unlike doctors and nurses—have no social distance from malnourished clients. Low levels of formal education are not a bar to workers’ effectiveness
- nutrition education works best when targeted on changing specific behaviors. In Indonesia, mothers were segmented according to the age and health of their children and given different messages. Formative research was done on ‘positive deviants’—poor women with well nourished children—to learn what they were doing right
- large-scale food supplementation programs need not be prohibitively costly if they are targeted—for example on pregnant women and malnourished children under three (Tamil Nadu), or geographically on vulnerable populations (food coupons in Brazil)
- paying attention to the detail of project design, for example in recruitment, training, supervision and performance monitoring, is critical to success (Box 1).
Box 1. Attention to Micro-Level Planning—The Tamil Nadu Integrated Nutrition Project (TINP)

Recruitment: Outreach workers not only had to be from their local community: as far as possible, they were chosen from women who were poor but whose children were nevertheless well nourished. Before they even began nutrition counseling, they were proof to the community that poverty need not be a bar to good nutrition.

Taking local custom into account: On-site supplementary feeding was at 8 a.m., before women went to work in the fields. This meant they could more easily bring children under three to the village nutrition center. The food given to children was in snack form, so it was less likely to substitute for a meal at home.

Work Routines: These were clearly defined on a daily, weekly and monthly basis. Growth monitoring, for example, was done on the same three days every month, so women knew when to bring their children to the nutrition center. This cut down the number of home visits workers had to make to monitor children.

MIS: Every month, data showing the proportion of children being weighed and the number malnourished were posted on a chalkboard outside the nutrition center. This helped communities monitor progress. And every month, the data for all the centers were analyzed by computer, and poor-performing centers were identified for special attention by supervisors—‘management by exception’.

Source: Heaver, 2003a

Technical, service delivery and demand generation interventions for tackling undernutrition were already pretty well established by the time these early projects ended. Community workers also dealt successfully with vitamin A and iodine deficiencies, by distributing supplements to affected target groups. Iron deficiency was successfully tackled among plantation workers in Indonesia, where plantation managers, impressed by the productivity gains, paid from their own budgets to extend the intervention’s coverage to 300,000 workers outside the project. However, iron deficiency among pregnant and lactating women and young children has proved harder to deal with.

Since these early projects, the Bank’s experience has expanded from Asia and Latin America into Africa, and from micronutrient supplementation into fortifying food with micronutrients, for example in China, Indonesia and Madagascar. A variety of innovative strategies have been developed, both for delivering services and for generating demand for them. Some of these are summarized below.
Best Practices in Service Delivery

Public-Private Partnerships
In the early projects, the delivery systems were government-run, although they used community workers in the field. Since then, much more use has been made of resources outside government, not only for food fortification, which necessarily involves commercial firms, but also for community nutrition programs. The first significant non-government organization (NGO) experiment was in Madagascar’s Food Security and Nutrition Project, where 50 NGOs were contracted to organize service delivery in the villages, beginning in 1993. From 1995, the same approach was taken in Senegal’s Community Nutrition project and Bangladesh’s Integrated Nutrition Project (BINP).

In these countries, NGOs have been found to be flexible, highly motivated and skilled at working with local communities, where they often have existing relationships through their work in health and education. They have another advantage in the long run: since they are employed on a contract basis, they can be phased out once malnutrition reduces, or communities take over management of the program. Where government field staff are used, this kind of exit strategy can be difficult. The experience with non-government service delivery has been successful enough to be scaled up in follow-on projects in all three countries—although experience has shown that contracting out is no panacea: there are limited numbers of capable NGOs, and managing the relationship with multiple NGOs is a significant challenge for governments with limited management capacity.

Empowering Local Level Stakeholders
The first nutrition projects established the importance of community involvement. Since then, some countries have begun to support community empowerment. For example, in TINP the supplementary food used in the project was factory produced; but in BINP, whose design was otherwise modeled on TINP’s, local communities manufactured the food. This had several benefits. Aside from employment and income generation, which helped empower local women, having project clients make their own weaning food helped reinforce the message that malnutrition could be dealt with using local resources, rather than depending on the government.

Bangladesh’s community empowerment strategy evolved further in the ongoing National Nutrition Project (NNP), the follow-on to BINP. Under this project, each community has formed a Nutrition Monitoring Committee, to monitor the performance of the NGO and community-run activities in the village; the idea is to pave the way for an eventual community takeover of the program. Gradually empowering the community is seen not only as a good in itself, but also as a road to an exit strategy for government, which cannot afford to finance NGO-run nutrition services on a national scale without development assistance.

Though BINP and NNP included strategies to empower clients during project implementation, these projects were designed in an essentially top-down way. The first Senegal Community Nutrition Project tried to go a step further, by involving
communities in designing as well as implementing and managing the nutrition program (Box 2).

**Box 2. Empowering Communities Means Involving Them in the Design, Delivery and Management of Services: The First Senegal Community Nutrition Project**

- Clients helped influence the design of services during a pilot intervention a year before the main project began. They determined what opening hours for the nutrition centers best suited them. They also insisted on more information, education, communication (IEC) sessions and themes than the designers of the pilot had originally planned for.
- The choice of community nutrition workers was approved by local steering committees representing the community, which then met their nutrition workers and their supervisor once a month to review progress.
- Community nutrition workers organized ‘social mobilizations’ once in two months to keep the broader community informed about progress.
- Project clients contributed about 3% of the costs of running the nutrition centers; the amount was nominal, but the principle of user charges made the nutrition services more accountable to the community.
- During the project, communities were encouraged to analyze their local problems and take action to deal with them. One initiative was that day care centers for children were started in 137 nutrition centers, at the request of and financed by the community.

Source: First Senegal Community Nutrition Project Implementation Completion Report

**Managing Multi-agency Activities**

Tackling malnutrition almost always involves multiple implementing agencies. This is true not just for multi-sectoral projects, involving health, social protection or water supply, but even for ‘nutrition-only’ interventions, such as food fortification. The challenge of coordinating and managing multiple implementing agencies will continue, as nutrition is increasingly financed through multi-sectoral PRSCs. Some failed experiences (Box 3) show the importance of having clear organizational structures and responsibilities before the project begins; of making sure that whatever structure is chosen is at a high enough level to exercise effective oversight; and of ensuring that oversight institutions are not given implementation responsibilities. This last lesson is supported by a considerable literature on the failure of finance and planning agencies at running multi-sectoral nutrition programs, a job they were asked to do in several countries in the 1980s.

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1 Indonesia’s Iodine Deficiency Control Project is an example: it involved the following agencies aside from the project implementation unit and a large number of private sector salt producers: Health; Industry and Trade; Home Affairs; Drug and Food Control; Directorate of Community Nutrition; Center for Health Promotion; Directorate of Chemical Based Industries; Directorate of Regional Development Planning; Directorate of Food Inspection and Certification.

2 see Pines, 1982; Field, 1985; Levinson, 1995 for details
Box 3. Managing Multi-Sector Programs: What Not to Do

- No clear arrangements were made for managing multi-sectoral ECD activities in Argentina’s first MCH and Nutrition Project. The ECD centers introduced under this project had strong community support, but no institutional home in the government—neither in the education ministry, whose focus was on schools, nor in the health ministry, which was more concerned with strengthening services in its clinics than with nutrition outreach through pre-school centers. The ICR noted that the sustainability of the ECD centers was therefore in doubt.

- In BINP, the responsibility for multi-sectoral coordination was at too low a level to be effective. It was given to an ‘Inter-Sectoral Nutrition Cell’ in the health ministry’s project management unit, which had little influence over the other participating agencies—the Ministry of Agriculture, and the Ministry of Fisheries and Livestock.

- Rwanda’s Food Security and Social Action Project initially put the finance ministry in charge of the project; it had no experience with program implementation and no presence in the field. Later in the project, inter-sectoral coordination was moved to the Ministry of Local Government, which handled it more successfully.

Source: Implementation Completion Reports

As the ICRs of Bank-financed nutrition projects show, the oversight function can successfully be located in a variety of places in government. In Burkina Faso, it was the job of the National Food Policy Coordinating Committee, in Madagascar it was in the Prime Minister’s office, in Senegal it was under the President’s office, and in Honduras it was the job of a ministerial-level body in charge of coordinating development-assistance projects. The lesson is perhaps that where the structure is is less important than that it should be at a high level, and that it should be backed by strong government commitment. High-level committees without political commitment serve no purpose: India’s national nutrition committee is chaired by the prime minister, but it did not meet for most of the 1990s.

Senegal’s Community Nutrition Project provides a further lesson: that arrangements for multi-sectoral coordination need to be in place at both a high level in government and locally. Local level steering committees included the local representatives of the ministries of Finance, Social Action, Women Children and Family Affairs, and Health; the project’s executing agency; women’s leaders, leaders of youth clubs and other local associations and NGOs; and local religious leaders. Having all stakeholders involved in regular meetings about the project helped with information exchange, synchronization of activities, and building good inter-personal relations and commitment.

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3 The ICR notes how this committee not only helped synchronize activities across sectors, but also sent the message that health and nutrition issues were viewed as a concern outside the health sector.
Best Practices in Generating Demand

Communicating with Project Clients
Building on the lessons of the initial project in Indonesia, communication now focuses on changing clients’ behavior, not just making them aware of new practices. Successful behavioral change communication (BCC) requires good formative research during project design, to find out what change is feasible, what resistance there is to change, and what communication messages work best. An innovative approach to this is Trials of Improved Practices (TIPs), used in the Peru Basic Health and Nutrition Project, where formative researchers dialogued with mothers about child feeding problems, and negotiated with them what improved practices might be possible. Mothers then tried them out before they were incorporated into the project. The focus on behavioral change, and two-way rather than one-way communication, distinguishes BCC from traditional IEC (information, education, communication).

Country Commitment-Building
In a few countries, cutting-edge BCC techniques have been used not only to communicate with beneficiaries—the traditional role of communication in Bank projects—but to strengthen government commitment to investing in nutrition. BINP showed how important it is to use different types of communication strategies to help convince different stakeholders that investing in nutrition is worthwhile. Working with UNICEF was key to this strategy’s success. UNICEF’s comparative advantages over the Bank included a local field office with specialist nutrition and communication staff; good access to key politicians; and instantly available pre-project grant funds for communication activities.

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4 for details of the TIPs approach, see Dickin et al, 1997
Box 4. Matching Communication to Consumer: the Bangladesh Integrated Nutrition Project

Senior health ministry officials were taken to visit successful nutrition projects in India and Indonesia, to show them there were successful interventions against malnutrition. The Bank staff accompanying them helped explain how the projects were designed, and began a dialogue on how these countries’ experience could be adapted to Bangladesh. For senior finance ministry officials, a computer program called PROFILES was used to show the enormous human, economic and financial benefits of reducing malnutrition in Bangladesh. They particularly appreciated the program’s simulation facility, which allowed them to instantly see the implications for the economy of different levels of achievement in improving nutrition.

For non-technical audiences, a short film was made of an NGO-run pilot of the proposed service delivery intervention. The film conveyed both the suffering due to malnutrition in the villages, and how within a year or two trained and empowered village women could run an effective GMP program. While appealing to all audiences, it was especially effective in engaging the interest of the Prime Minister and other key politicians.

Source: Heaver (2005)

In Bangladesh, government commitment weakened after BINP was scaled up through the National Nutrition Project. By contrast, in Uganda, project staff got technical assistance from the Bank’s Development Communication Unit to involve politicians not only before the project, but during implementation. A Parliamentary Advocacy Committee was formed, and parliamentarians were given on-camera training in how to communicate to the media and other stakeholders about the project. Key members of parliament were invited to visit Kenya’s ECD Project to learn more about what makes projects successful. Throughout implementation, parliamentarians were given updates on communication activities and feedback from the field, including audiotapes of key messages about the project (for details, see Cabanero-Verzosa, 2005).

But commitment-building is not just about communication, as shown by China’s salt iodization program. This was supported by a US$152 million project that introduced new technologies in 200 firms in 31 provinces, and was rated highly satisfactory (Box 5). While public awareness campaigns about the benefits of iodization were important, so also was an environment conducive to industrial reform; a strong legislative and regulatory framework; an appropriate choice of project vehicle; clear implementation responsibilities; effective performance monitoring; and the support of senior Bank management. And this case, like that of BINP, shows how the effectiveness of the Bank can be greatly leveraged if it works closely with other development partners, each contributing according to their comparative advantage.
Box 5. Commitment-Building Is Not Just About Communication: The China Iodine Deficiency Control Project

- Commitment to salt iodization was built before the project began, through informal dialogue with local representatives of UNDP, UNICEF, UNIDO and WHO, before the Bank became involved; and by political leaders’ involvement in international meetings facilitated by the Micronutrient Initiative.

- There was a systematic plan to ensure that high level political commitment was disseminated to stakeholders at all levels. Government allied with civil society, for example the All China Women’s Federation, to run public awareness campaigns on the importance of iodization. In addition
  - a strong legislative framework requiring salt to be iodized, and a strong regulatory framework to ensure that it actually happened, were developed
  - a free-standing project for iodine was carved out of a much larger health sector loan: this helped focus attention on the issue
  - the environment was favorable: a national focus on industrial reform meant that industry saw the project as an opportunity to modernize, through the project’s capacity-building work in management, monitoring, packaging, marketing and quality control. Hence industry and the health ministry had a common goal in successful project implementation
  - a carefully planned implementation management framework was defined, so all stakeholders knew what was expected of them and were monitored
  - senior Bank management expressed strong interest in the project and actively monitored its progress
  - strong coordination between the development partners and regular informal technical assistance from local UN agencies helped sustain commitment
  - there was continuity of both country and Bank project teams.

Source: ICR: China Iodine Deficiency Control Project

Using Conditional Transfers to Increase Demand

The Honduras Nutrition and Health Project is a good example of the integration of multi-sectoral activities in a Bank-financed operation. Approved in 1993, it was the first health project to set nutrition improvement as a primary goal, and where investment in nutrition made up more than half the project amount. As the ICR commented, ‘by including water and sanitation, nutrition and basic health services under one project, the design demonstrated an understanding of the multiple determinants of health’.

This was also the first Bank project to finance conditional transfers. Honduras had just eliminated general food subsidies, and substituted a targeted food coupon scheme. The project’s innovation was to make access to food coupons conditional on targeted families sending their children to school and making use of health and nutrition services, including growth monitoring and nutrition education. The scheme proved highly successful: the government was committed enough to it to continue to finance it after the project ended, by increasing value added tax from 7% to 12%.

Conditional transfers were later replicated in Mexico and Brazil.
Targeted food coupons or cash transfers were originally devised as a way of protecting the poorest from the economic shock of structural adjustment. Making transfers conditional on using health and nutrition services created increased demand for these services, but also by definition increased the pressure on services. The lesson is clear—that conditional transfers work only if simultaneous investment is made in increasing the coverage and quality of services for the poor, so that supply meets demand. Thus in Mexico, where the Bank did not directly finance PROGRESA, the conditional cash transfer program, the Second Basic Health Project did finance the creation of ‘Itinerant Health Teams’ which were able to extend health and nutrition services to 1.5 million poor people, many of them PROGRESA beneficiaries, who had had no previous access to services.

Synthesizing and Disseminating Best Practices

This section has illustrated the Bank’s wide range of successful experience in nutrition, and hence its considerable comparative advantage in carrying out further work in the area. Despite this positive review, the impression should not be given that the evolution in practices was always a coordinated one, or that successful experience was always synthesized and disseminated across the Bank. Although there are a number of instances of this—for example, the Bank’s nutrition ‘toolkit’ includes best practice examples drawn from across regions, and the Madagascar and Senegal projects drew heavily on the TINP experience in India—in several areas there has been insufficient learning from experience and dissemination. For example,

• the South Asia and Africa Regions have both used NGOs to generate demand and deliver services in nutrition, but there has been little sharing of experience and no attempt to identify and address cross-cutting issues. The same goes for their experience in community participation and empowerment;

• there has been no attempt to replicate the successful Latin American experience with conditional transfers in the Africa or South Asia Regions;

• while systematic attention was given to the design of communication strategies in the early projects, the Bank currently has no system for monitoring and quality control to ensure the universal use of best practices in communication, even though behavior change is key to improving nutrition.

The Bank therefore needs to pay more attention to systematically synthesizing and disseminating best practices between countries and Regions, an issue returned to in Section IV.
II. LENDING: Scale, Trends, Performance

**Headlines:** Though the Bank is the biggest external source of finance for nutrition, its nutrition lending is an insignificant proportion of its human development lending, and too small to help make a global impact on malnutrition. Only 11 countries are currently borrowing more than US$10 million for nutrition, while undernutrition or micronutrient malnutrition is a serious problem in more than 80. On the positive side, where Bank projects have had nutrition as their main focus, they have generally performed well, so there is a sound basis for future expansion.

**Scale**

The Bank has been by far the largest source of external finance for nutrition—as opposed to food aid, where the World Food Program and the United States are the largest sources. But the Bank lends far less for nutrition than it does for other forms of development: from 1999 to 2004, lending for new nutrition projects, at about US$400 million, was no more than 2.5 per cent of lending for human development and less than 0.5 per cent of total Bank lending. And looking only at projects which made a direct contribution to improving nutrition⁵, the figure is closer to US$320 million and 1.9% of human development lending. Details of recent nutrition lending by Region and project, and a note on the methodological issues related to estimating lending, can be found in Annex 1.

Lending for nutrition is not only very small, but very ‘lumpy’. As of 2004, over half of total Bank commitments for nutrition, in the more than 60 projects with some nutrition content, went to just three big projects in Bangladesh and India (which has two projects). In only nine other countries was the allocation for direct nutrition interventions US$10 million or more (see Annex 2 for details of these countries/projects). In more than 20 projects, the amount allocated for nutrition was less than two million dollars (i.e., less than US$0.4 million per project year), suggesting that many projects are too small to make a significant impact on under-nutrition.

The Bank is not currently lending to help control undernutrition in two out of the ten countries where 80% of the world’s underweight children live—Pakistan and Vietnam⁶; and in five others of the ten—Congo Dem. Rep., Ethiopia, Indonesia, Nigeria and the Philippines—the Bank’s lending is very modest in comparison to the prevalence of protein-energy malnutrition (PEM). The Bank is lending substantially in the other two, Bangladesh and India. The Bank also lends only modestly for undernutrition in China, but this is justified: while the numbers of malnourished are high because of China’s large population, the prevalence of undernutrition is low.

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⁵ The Bank’s recent sector report on nutrition (World Bank, 2005a) distinguishes between ‘short route’ interventions that have a direct impact on nutrition, and ‘long route’ interventions, for example in increasing agricultural production or social sector expenditures, which have a smaller, more indirect, and longer term impact.

⁶ Though there have been strenuous but unsuccessful efforts to develop lending in Vietnam.
Malnutrition is either not improving or is actually worsening in much of Sub-Saharan Africa. Table 1 therefore looks at the volume of lending per child in 30 countries with more than 3 million population in Sub-Saharan Africa; in all these countries, 20% or more of young children are underweight or stunted. (The country-by-country analysis on which the table is based can be found in Annex 3.) Bearing in mind that successful PEM control interventions are reckoned to cost of the order of US$5 per child per year (Mason et al, forthcoming), and also bearing in mind that there is little other investment in PEM control from domestic sources or development assistance in these countries, Table 1 suggests that Bank support has not been enough to make a major impact on PEM in at least 20 of the countries.

Table 1. Approximate Annual Bank Lending per Child 0-24 Months in Africa

| U.S.$4.5-US$9.5 | Burundi, Eritrea, Madagascar, Mauritania, Senegal, Zambia |
| U.S.$0.9-US$2.5 | Burkina Faso, Chad, Malawi, Uganda |
| U.S.$0.2-US$0.8 | Congo Dem. Rep, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Mali, Nigeria, Tanzania |
| No Lending | Angola, Benin, Cameroon, Central African Republic, Republic of Congo, Mozambique, Niger, Rwanda, Sierra Leone, South Africa, Zimbabwe |

The adequacy of lending for micronutrient malnutrition is harder to assess at the country level, since micronutrient programs are cheaper than PEM programs and there are other significant financiers, such as the Canadian International Development Agency, UNICEF and the Micronutrient Initiative. Therefore, if a country has small or no Bank lending for micronutrient malnutrition, this does not mean that the problem is not being addressed. Nevertheless, continuing high levels of vitamin A and iron deficiencies in more than 80 countries in all six regions (see Annex 4) show that, globally, not nearly enough is being invested. Furthermore, much of the finance for micronutrients is from time-bound, grant-aided projects, which may well not be sustained through incorporation into government budgets.

Trends

Trends in Nutrition Activity

The Bank’s lending for nutrition is not only inadequate in scale, it has been declining in financial terms. However, total lending volume is not a good measure of trend in nutrition activity when the portfolio is so lumpy—the timing of a few large projects can change the trend for the entire portfolio, in terms of total lending amount. Nor is trend in the total number of projects with nutrition content a good measure, when so much lending is too small to make a difference. An alternative measure is trend in the number of countries with ‘substantial’ nutrition lending, defined here as over ten million dollars, or for smaller countries where amounts of less than US$10 million can nevertheless be substantial, over US$1 per child under two.

By this measure, substantial lending has been increasing. In the following countries where there was substantial lending for nutrition ten years ago, there is substantial
follow-on lending today: Bangladesh and India in South Asia; Burkina Faso, Madagascar and Senegal in Africa; and Argentina in Latin America. There is also substantial new lending in six African countries--Burundi, Eritrea, Ethiopia, Mauritania, Uganda and Zambia; and in five other countries—Iran and Yemen in the Middle East, and Dominican Republic, El Salvador and Nicaragua in Latin America. Thus, substantial lending has increased significantly in Sub-Saharan Africa and modestly elsewhere—even though the number of substantial projects remains far less than the number of needy countries.\(^7\)

**Trends in Project Type**

*Recently completed projects.* Of the 22 projects with nutrition content that were completed in the period 1998-2003, eight were projects where the majority of investment went for nutrition. Three of the 22 supported early childhood development (ECD), aiming to integrate investment in health, nutrition and early education. The remaining 11 were projects where nutrition was a small part of a health sector project, with spending on nutrition in the range of US$2-5 million a project. Annex 5 gives details of the 22 projects.

Of the eight projects where the majority of investment went for nutrition, two dealt only with salt iodization; the other six dealt with both micro-nutrient malnutrition and PEM. In addition to direct approaches\(^8\), each of these six projects also included at least one indirect approach to reducing PEM, including water and sanitation (in Ecuador, Honduras and Senegal); agriculture (Bangladesh); micro-credit/income generation programs (in Burkina Faso, Malawi and Rwanda); food or cash for work programs (in Burkina Faso, Madagascar and Rwanda); and conditional cash transfers (in Honduras and Mexico)—see Annex 6.

*Current projects.* There is a different mix of project types in the 41 projects with significant nutrition investment (defined as more than a million dollars to be spent on nutrition) that are currently being implemented. Details of these projects are in Annexes 7 and 8. Projects focused mainly on nutrition have declined. Health projects with nutrition components are also declining; they made up half the recently completed projects, but are only a quarter of the current projects with nutrition over a million dollars.

By contrast, nutrition is now more commonly financed in ECD, education and other types of project. Only three of the recently completed projects were ECD projects, but there are nine in the current (2004) portfolio, representing over 20% of the projects with nutrition over a million dollars. Because of the size of the two India projects, ECD projects now make up nearly half of all nutrition lending by value. There were no education projects with nutrition content in the recently completed project sample, but there are five among the current projects with nutrition over a million dollars; Malawi Education is an example of a state of the art approach.

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\(^7\) Note, however, that this conclusion relates only to the quantity of lending. An issue needing further analysis is whether the project content is appropriate, where nutrition is part of loans with broader goals, such as poverty reduction (e.g. in Burundi), or health sector support (e.g. in Nicaragua).

\(^8\) Micro-nutrient supplementation or fortification; growth monitoring and nutrition education.
Nutrition is also a significant activity in several Poverty Reduction Support Credits (PRSCs); two poverty reduction projects (Ghana and Nigeria); a food security project, and a social rehabilitation and development project (Ethiopia); a social fund project (Malawi); two drought recovery projects (Ethiopia and Zambia); a health and emergency reconstruction project (El Salvador); an HIV/AIDS disaster response project (Kenya); and a regional HIV/AIDS project for Africa.

**Changing Project Vehicles**

Specific Investment Loans (SILs) have been the main vehicle for nutrition lending until now. But in the near future, two other vehicles will become increasingly important: large-scale assistance for Sector-Wide Approaches (SWAs) in health, which provide budget support for sectoral reform efforts; and multi-sectoral PRSCs. In some Sub-Saharan African countries, where the capacity to prepare and manage large numbers of projects is weak, the future lending program may consist mainly or only of a series of PRSCs and Community Driven Development (CDD) projects, into which the various sectoral development activities will be incorporated.

The new lending vehicles present opportunities to scale up and mainstream the Bank’s nutrition lending. Bangladesh, for example, believes that incorporating its nutrition program, previously financed through two SILs, into the recently appraised sector-wide Health, Population and Nutrition Sector Program Loan will make the nutrition program more sustainable financially, and help integrate nutrition and health activities. PRSCs, and the process of preparing the Poverty Reduction Strategy Papers on which PRSCs are based, offer a different kind of opportunity—to negotiate a mix of investments in different sectors that will make maximum impact on nutrition. CDD projects present an opportunity for nutrition that the Bank has so far failed to exploit. Especially in Sub-Saharan Africa, where human and financial resources are scarce, it makes sense to try and build nutrition outreach efforts onto existing community development institutions, rather than create separate service delivery systems.

The new lending vehicles also present risks: for example, that nutrition will be marginalized in multi-sector investment programs with multiple goals, or in sector-wide health programs whose main focus is sectoral reform (as has been the case in Tanzania); or that nutrition will simply not be chosen as an investment priority by the communities driving a CDD project. Issues that need addressing if nutrition is to take advantage of the new lending vehicles are discussed in Section III.
Performance

Evidence about the health of the nutrition portfolio comes from two sources: ratings made in the Implementation Completion Reports (ICRs) of recently completed projects, and ratings in the Project Supervision Reports of projects currently being implemented.

The Completed Projects
Of the 22 recently completed projects, only one (Bolivia ECD) has been externally evaluated. The other performance ratings come from ICRs prepared by the Bank’s country departments; the Madagascar community nutrition project and the China and Indonesia salt iodization projects were also evaluated by the Bank’s Operations Evaluation Department. Since many of the projects lack good objective indicators of impact (an issue discussed in Section III), there is the possibility of bias in some of the ICRs. The extent of bias, if any, cannot be assessed without independent evaluation; the direction of bias, if any, is likely to be to overstate performance.

The findings are as follows:
1. 7 out of 8 projects where nutrition was the primary focus were rated satisfactory in terms of achieving their development objectives and likely to be sustained. In one case, China Iodine Deficiency Control, the rating was highly satisfactory.

2. The nutrition activities in the three projects that supported ECD (Argentina, Bolivia, and India) were all unsatisfactory. The reasons for this are discussed in Section III.

3. The picture is harder to determine for the other 11 projects, where nutrition was a small part of a health operation, but it is clearly mixed:
   • in three cases, the ICRs state that the nutrition activities were satisfactory, and in two further cases, it can be inferred from positive descriptions in the text that the nutrition activities were satisfactory
   • in three cases, there is not enough detail on nutrition in the ICRs to determine whether nutrition was satisfactory or not
   • in another three cases, the nutrition activities were unsatisfactory.

Of the three projects where nutrition activities were rated as unsatisfactory, in two cases (Cameroon Health, Fertility and Nutrition, and Philippines Urban Health and Nutrition), the planned activities never happened, because the projects as a whole had serious management problems and were unsuccessful. In the case of the third project (Burkina Faso Health and Nutrition), the project was rated satisfactory, but the nutrition activity—a micronutrient intervention—was unsuccessful due to lack of interest in it on the part of the implementing agency, the Ministry of Health.

The Current Projects
Of the 12 projects in the supervision portfolio that contain direct nutrition lending of over US$10 million, six are rated as satisfactory both in terms of current implementation status and in terms of the probability of their achieving their development objectives. Two (Bangladesh National Nutrition and India Woman and Child Development) are rated as
unsatisfactory and unlikely to achieve their development objectives; the reasons for this are discussed in Section III. Implementation of the other four projects (see Annex 2 for details) was unsatisfactory as of late 2004, but these projects may still ultimately achieve their development objectives.
III. LENDING: Issues and Recommendations

**Headlines:** The Bank already has effective strategies for reducing undernutrition and micronutrient malnutrition. The immediate issues are how to get nutrition incorporated more centrally in countries’ development strategies and stimulate country demand for nutrition investment; and how to increase commitment to nutrition within the Bank. Three other key issues will also need addressing, if lending scales up: ensuring that Bank assistance for nutrition is as cost-effective as possible; that lending scales up in line with countries’ implementation capacity; and that appropriate strategies are chosen for strengthening country capacity. The need to reform India’s ineffective community nutrition program is a country issue that is also a concern at the global level, since this program serves nearly 40% of the world’s malnourished children.

**Incorporating Nutrition into Development Strategies**

**The Current Situation**
Constituencies for nutrition are weak in most countries, for a variety of reasons (see Annex 9 for a summary of these). As a result, action to improve nutrition is seldom identified as central to countries’ development strategies. A recent study (Shekar and Lee, 2005) looks at how well nutrition is integrated into PRSPs and PRSCs in 36 countries where child under-nutrition is serious. More than 70% of the PRSPs reviewed identify malnutrition as a development problem and indicator of poverty; but only 35% allocated budget resources for specific actions to address malnutrition. Of the five current PRSCs in Africa with nutrition content, only one (Madagascar) quantifies the expected outcome of the investment.

One problem, therefore, is that undernutrition is being identified as a development issue in the PRSP, but not being followed up through investment and monitorable action plans in PRSCs—as in Benin, Burkina Faso and Vietnam, for example. A second issue is that in some cases where PRSPs do identify nutrition actions, the chosen activities do not have a high pay-off: for example, the Nepal and Pakistan PRSPs present school feeding as a nutrition intervention, whereas under-nutrition in these countries most affects children under three (Shekar and Lee, op.cit.).

Nutrition is also poorly incorporated into the development strategies of middle and higher income countries. In many of these countries, especially in Latin America, Eastern Europe, East Asia and parts of the Middle East, poor diets and sedentary lifestyles have led to high rates of diabetes and heart disease, and spiraling medical costs. Without exception, country policies and budgets focus on curative care for these diseases, rather than much more cost-effective preventive actions to encourage people to eat better and take more exercise. The Bank therefore needs to focus on overnutrition, as well as undernutrition, as a development issue.
Making Nutrition a Central Part of the Country Development Framework

In the more than 80 countries where malnutrition is serious, ‘improvement in nutritional status needs to be treated as a key development outcome and measure of poverty reduction in in Public Expenditure Reviews, Country Economic Memoranda, PRSPs and country assistance strategies, and nutrition should have a correspondingly important place in economic and poverty analysis. Progress in incorporating nutrition into Country Development Frameworks should be monitored by the HNP and OPCS departments as well as by the Regions. A review has recently been completed of the treatment of nutrition in PRSPs: similar reviews should be undertaken of the treatment of nutrition in other key Bank documents related to the Country Development Framework, so as to provide a baseline for monitoring improvement.

Systematic efforts should also be made to incorporate nutrition into new forms of lending—PRSCs, SWApzs and CDD operations. These are likely to be important vehicles for nutrition activities in the future, for several reasons:

- In some smaller countries, for example in Sub-Saharan Africa, the trend is away from large numbers of sector-specific projects, which have proved unmanageable, toward a few multisectoral operations—in this context, standalone nutrition projects may not be feasible;
- nutrition anyway lends itself to support through multisector lending vehicles, since nutrition activities need to take place in a variety of sectors, such as health, education, agriculture and social protection;
- financing nutrition through sector-wide approaches, rather than through time-bound projects, helps make nutrition programs financially sustainable as part of the regular spending of governments.

Specific measures are likely to be needed to ensure that the focus on nutrition is not lost as nutrition becomes a smaller part of a bigger picture. Nutrition should only be incorporated into multisectoral loans when there is strong country commitment, and where this is the case, a focus on nutrition might be maintained by ensuring that

- there is a substantial allocation for nutrition, since small components tend to get neglected
- key nutrition impact goals are included as part of the overall program goals, and key nutrition indicators are monitored as part of the program-wide MIS
- as much Bank staff supervision time is allocated for nutrition as part of a sector-wide or multi-sectoral, as for nutrition in an SIL.

Stimulating Commitment to Invest

Since under-investment in nutrition is holding back countries’ progress toward the MDGs, the need to build commitment—both Bank and country commitment—to making nutrition central to development strategies is the single biggest issue for the Bank to tackle.
Generating Borrower Demand for Investment

There are various ways to strengthen country commitment to nutrition (see Heaver, 2005), including:

- identifying ‘champions’ for nutrition—people who have the ear of policy-makers, who are capable of carrying out evidence-based advocacy, and who can build partnerships of individuals and institutions that can influence politicians and implementing agencies to press for increased budgets for nutrition programs
- ensuring that the most appropriate arguments and communication channels are used to reach different stakeholders, so that each understands that investing in nutrition will further their own goals
- working to get nutritional status accepted as an outcome measure of poverty reduction in the country’s development strategy, and to get ‘contribution to nutritional status improvement’ used as a criterion for prioritizing investment
- improving the consensus in the international nutrition community about how best to reduce malnutrition.

The Bank could play a lead role in all of the above areas, but is currently doing so in only a few countries. It is well placed to champion nutrition—it has the ear of policy-makers, it is has a strong track record of evidence-based advocacy, it is deeply involved in the design of country poverty reduction strategies, and it has the capacity to build pro-nutrition partnerships both in the countries it assists and in the donor community. When the Bank has committed to new priorities in the past (Education For All, the environment, HIV/AIDS), it has stimulated substantial new investment. For the reasons in Annex 9, most countries will continue to under-invest in nutrition. The immediate issue is therefore: what will it take to ensure that the Bank plays a proactive role in strengthening country commitment to nutrition?

Strengthening Commitment to Nutrition in the Bank

The recognition, in the 2005 Global Monitoring Report, that the world is making inadequate progress toward achieving the MDGs provides an opportunity for the Bank to reevaluate the priority it gives to nutrition, in the context of its centrality to the MDGs, the economic returns to investing in nutrition, and the Bank’s experience and comparative advantage in nutrition.

In those countries where the Bank has perceived that investing in nutrition is central to its goals and has succeeded in stimulating new nutrition lending, two factors have been critical:

1. A task manager who is convinced of the importance of improving nutrition, who is capable of making the economic arguments for investing in nutrition, and who has networking skills and an entrepreneurial approach
2. A country director and country economists who are convinced (or have been convinced by the task manager) of nutrition’s importance to overall development outcomes, and who are therefore prepared to give nutrition a more central role in the country policy dialogue, in the Country Economic Memorandum, and in discussions with countries about public expenditure, PRSPs and Country Assistance Strategies.
The success of initiatives to stimulate substantial nutrition lending in a few countries—Madagascar and Senegal are good examples—shows what can be done by a few committed staff. But the small number of substantial initiatives (Section II) also points to systemic constraints on replication:

- where key staff are not personally committed to do more in nutrition, there have been few institutional incentives to encourage them.
- the number of staff working full time on nutrition has declined, as experienced staff retired or left the Bank and have not been replaced.
- most other staff lack professional expertise in nutrition, and have been understandably reluctant to work in an unfamiliar field, especially one unlikely to bring career rewards.
- improving nutrition has been viewed as the primary responsibility of human resource divisions, rather than of the country team as a whole, including staff involved in poverty reduction, social protection and agriculture, as well as health.
- most important of all, and despite its position as Millennium Development Goal (MDG) target no. 1, improved nutrition is not in practice viewed by many country departments as a key development outcome, determining the priorities for investment in country poverty reduction strategies.

Similar systemic constraints were identified 19 years ago: ‘Although there are exceptions, by and large the efforts to add a nutrition dimension to activities of the World Bank in other sectors have not been as successful as they might have been. It … reflects … the way the Bank is structured and staffed along sectoral lines—nutrition cuts across sectors—and the nature of the Bank’s system for assessing and rewarding staff’ (Berg, 1987). It is sobering that the situation has not changed significantly since. Given this context, if the Bank wishes to do more in nutrition, its internal institutional constraints will need systematic attention. An effective package of measures to ‘change the signals’ in nutrition might include the following:

1. Through policy statements and through meetings across Bank departments, the signal needs to be sent by top management that improving nutrition, as a precondition of faster progress toward the MDGs, is a Bankwide responsibility—the business not only of health and nutrition staff, but of
   - country directors, country economists and PREM staff, who need to treat ‘improvement in nutritional status’ as a key development outcome and measure of poverty reduction in Public Expenditure Reviews, Country Economic Memoranda, PRSPs and country assistance strategies, in the more than 80 countries where malnutrition is serious.
   - social protection staff, who need to help countries design safety nets that reduce malnutrition, as well as income poverty.
   - agriculture staff, who need to incorporate nutrition as well as production considerations into their policy dialogue.
   - CDD staff, who need to encourage communities to make improvement in nutritional status a goal, and a measure of progress, in community development.

2. Institutional incentives for staff to focus on nutrition should be created, by
• identifying priority countries for reducing undernutrition, micronutrient malnutrition and overnutrition
• closely monitoring progress in nutrition as a measure of country departments’ achievements
• raising a grant assistance fund that task managers and countries can draw on to strengthen commitment to nutrition and initiate action (see Section 4 for further details of this proposal).

3. The Bank’s staff capacity in nutrition should be increased by hiring new staff with nutrition skills into the Bank’s regional departments, and by providing training and advocacy materials tailor-made to help staff at different levels and in different sectors incorporate nutrition considerations into their policy dialogue. Also, to help the Regions improve their effectiveness in communication and commitment-building in nutrition, the Bank should recruit a staff member to lead work in this area. Such a staff member might most effectively work out of the Bank’s Development Communication Unit, where there is existing expertise on strategic communication that could help make the case for nutrition to become more central to Bank and country development programs.

**Measuring Impact, Cost-Effectiveness and Affordability**

To justify increasing and sustaining investment in nutrition, the Bank and its Borrowers will need to be sure they are getting the most impact for the money they spend. They will need to pay more attention to issues of impact, cost-effectiveness and affordability.

**Assessing Impact**

Review of the recently completed nutrition projects shows that the Bank has not been doing an adequate job of measuring project impact (although it should be noted that the standard of evaluation in nutrition is no worse than in other areas of human development). For example, in the ICRs of three of the six projects where nutrition was the main focus, the conclusion that the projects were satisfactory (Section II) was based on service statistics or other data, rather than impact data based on malnutrition prevalence.

The situation was worse, where nutrition was a component of a larger health project: less than half the ICRs for these projects had an impact indicator for nutrition, and of those that did not, only one project provided a good set of output indicators instead. Details of how performance was measured in the 22 ICRs can be found in Annex 10.

It is also disturbing that, when OED evaluated the three Bank-supported salt iodization projects (Goh, 2001), it confirmed the effectiveness of the interventions in China and Madagascar, but concluded that the project in Indonesia was unsatisfactory—contrary to the Country Department’s finding in the ICR.

Most of the projects for which there are ICRs were prepared before the Bank made the logframe a mandatory part of the Project Appraisal Document. The current generation of projects therefore has a much more complete set of impact and output indicators. But the...
existence of appropriate indicators is not sufficient for effective impact evaluation. In light of the inadequacies in evaluation of the last generation of nutrition projects, it would be useful to review the current projects, to see whether

- good baseline studies of the key impact and quality indicators exist
- controls are being evaluated, to distinguish project effect from secular trend
- service quality as well as impact is being monitored and evaluated.

**Assessing Cost-Effectiveness**

A nutrition strategy can be effective, without being the most cost-effective way to achieve a given impact. Though the literature provides clear evidence that the direct nutrition interventions (micronutrient supplementation, food fortification, growth monitoring and promotion, and deworming) are cost-effective, there have been few attempts to measure the relative cost-effectiveness of the particular strategies used to deliver these interventions in Bank-supported projects (for the few exceptions, see Section 4). The Bank should therefore develop a work program on cost-effectiveness analysis, addressing the following issues, as a priority:

1. **Alternative approaches to service delivery.** The Bank and its Borrowers need to know more about what strategies give the best bang for the buck in different circumstances. The most urgent priority for investigation is ECD. The Bank now invests more money in nutrition through this form of service delivery than any other (Section II). However, the three ECD projects for which the Bank so far has ICRs or evaluations have all proved either not to be cost-effective, or to have an adequate cost-benefit ratio but not to be affordable at scale. At this point, it is unclear whether cost and effectiveness problems are systemic in the current portfolio of ECD projects: the Bank should investigate this.

2. **Supplementary feeding.** This intervention can make up as much as half the cost of a community nutrition program, but its cost-effectiveness is controversial, e.g.:

- the ICRs of projects in Madagascar and India (Integrated Child Development Services II) suggest that supplementing children can send wrong signals, undercutting the importance of educating families to use their own food resources better
- there is debate in the academic community about whether supplementing pregnant women is as cost-effective as supplementing malnourished children
- in Bangladesh, on the other hand, the ICR notes that supplementing food-insecure pregnant women was an effective intervention, with a significant impact on pregnancy weight gain and birth weights.

The cost-effectiveness of supplementation is likely to vary in different country circumstances, depending on the severity and causes of PEM. Since the Bank is the biggest external investor in PEM control programs, and since supplementation is so costly, it should fund research on what circumstances make supplementation a good investment.

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9 In Argentina, the problem was that no effective system was developed for nutrition outreach; in Bolivia, the model chosen had a satisfactory cost-benefit ratio, but was too costly for government to scale up; in India, there have been a variety of design and implementation difficulties, see below.
3. *Indirect approaches to reducing PEM.* The Bank continues to invest in indirect as well as direct approaches to reducing PEM. These include water and sanitation, food and cash for work programs, social funds, and micro credit/income generation schemes (Annex 8). The issue is how cost-effective these strategies are as ways to reduce PEM, compared to the direct interventions, and to each other. Are they justified only in terms of the employment and income generation they bring—i.e. for reducing income poverty? Or are they also justified in terms of improving nutrition? As with food supplementation, the relative cost-effectiveness of these strategies is likely to vary in different country circumstances. The Bank should therefore build systematic evaluation of this into its project work (see Section IV for further details).

**Assessing Affordability**

Just as interventions may be effective without being cost-effective, so they may be cost-effective without being affordable at scale. If countries cannot afford to scale up the full range of interventions, which should they drop, cut back, or more tightly target? Expensive indirect interventions, such as food for work schemes, or water and sanitation? Or costly food supplementation programs? Or should governments cut back on pre-school education, leaving it to the private sector, while concentrating government funds on nutrition and early stimulation for children under three?

Such questions need addressing by a combination of relative cost-effectiveness analysis and affordability analysis. The need for such work is particularly pressing for Sub-Saharan Africa and South Asia, where malnutrition is concentrated, and government budgets are especially tight.

Since high quality Bank work on impact, cost-effectiveness and affordability will be critical to justifying sustained investment in nutrition, it is recommended that a staff member with evaluation expertise be focused on developing a program of evaluation work in nutrition; providing the Regions with technical assistance on state of the art approaches; and monitoring the quality of Regional evaluation work.

**Matching Scale to Capacity**

Globally, the Bank has lent too little for nutrition (Section II). But in some countries where the Bank has been heavily involved in nutrition, it has lent more money than the countries could spend well. If the Bank scales up its lending for nutrition, this risk will arise elsewhere, since most countries where malnutrition is high also have weak implementation capacity.

**Scaling Up Too Fast in India**

Following the initial success with the Tamil Nadu Nutrition Project (Section I), the Bank scaled up its support for nutrition in India by financing three projects supporting the Integrated Child Development Services (ICDS), India’s national nutrition program and the largest community nutrition program in the world. The first project, ICDS I, in two eastern states, ran from 1991 to 1997. The ICR rated the project as unsatisfactory. The
Bank moved ahead with ICDS II in two other states in 1993, before ICDS I was half way through, and with the ongoing Woman and Child Development Project (WCDP, also supporting ICDS) in an additional five states in 1998, before ICDS II had been completed. Like ICDS I, ICDS II received an unsatisfactory ICR rating, and the latest supervision reports for WCDP indicate that it too is unlikely to achieve its development objectives.

The three projects have helped to gradually improve the quality of ICDS services, WCDP being particularly successful in increasing the quality and quantity of training. Also, because they focused on poor areas of poor states, they contributed to reducing the geographical disparities in access to ICDS services for the poor. But despite more than US$670 million of Bank assistance, evaluations show that ICDS has not substantially improved child undernutrition, indicating that more radical reform of the program is required, rather than further gradualist change.

ICDS’ limited impact has three causes. One is that the program has expanded inequitably: spending and coverage are lower in states and villages with worse malnutrition, than in better-off ones (World Bank, 2005b). A second is the program’s technical design; issues related to this are reviewed later in this section. The third is weak implementation capacity. In some ICDS II project areas, for example, the ICR notes that only half the planned number of supervisors was recruited, while in one ICDS II state less than half the community nutrition centers had both a scale and growth charts, making quality services impossible. Even though ICDS II was extended into a seventh year, the states proved quite unable to spend the US$248 million allocated; a total of US$95 million had to be reprogrammed elsewhere.

Why did the Bank continue with lending for ICDS on such a large scale, when there were no signs that the program was delivering? The ICR for ICDS II concludes simply that the Bank failed to adequately assess and strengthen implementation capacity. While this was true, the Bank was nevertheless well aware that implementation capacity was weak in the concerned states when it appraised ICDS II. The following additional factors also appear to have played a role:

- the Indian Government was keen to expand ICDS, and was pressing the Bank for large scale financing to help it do so
- the Bank wished to expand its social sector lending, and India was expected to make a big contribution to the global total
- the Bank felt that, unless it supported ICDS on a substantial scale, the Bank would not merit ‘a seat at the table’ in terms of negotiating the reforms and building the additional capacity that it knew were needed in the program
- the Bank hoped that incremental efforts to change ICDS through innovations in successive projects might cumulatively amount to the needed reform.

**Scaling Up Too Fast in Bangladesh**

Pressure to lend has also been significant in Bangladesh. BINP’s initial success prompted a meeting between the Prime Minister and the Bank President, that led to a government request for a loan of no less than a billion dollars to scale BINP up nationwide. This
commitment to nutrition at the highest levels, hailed at the time as a breakthrough, in fact had two perverse effects. First, the Bank team helping prepare NNP spent much time trying to negotiate a smaller, implementable project. The final result was a US$124 million compromise—much smaller than the government wanted, but still beyond its capacity to implement.

Second, pressure to scale up, coming from the highest level in the government, meant that NNP was started before BINP was completed. Knowing the BINP project office lacked the capacity to complete BINP and initiate NNP at the same time, a separate management unit was created for the new project, a second-best solution that succeeded in protecting BINP, but made it difficult for NNP to learn from and build on BINP’s experience, or integrate into the parent ministry.

By mid-term, NNP was a problem project, because the NNP project office was staffed late, and then failed to follow the agreed procurement and financial management procedures for NGO contracting. In late 2004, after four years of implementation, less than 40% of the loan had been disbursed. Thus, while Bangladesh’s NGOs may have the capacity to deliver nutrition services on a nationwide scale, weak managerial capacity and commitment in the government have constrained both how fast contracting out can take place, and how willing some NGOs are to scale up their participation in the nutrition program.

Lessons
The experience with these large-scale South Asian projects underlines that:
• while the commitment of politicians and Bank management is key to nutrition programs’ success, both country policy-makers and Bank managers need to temper the pressure to scale up, to countries’ capacity to implement
• the Bank needs to pay more attention to assessing and strengthening implementation capacity. Guidelines for this would help to ensure that institutional assessments are done consistently and professionally across countries, and are taken into account when decisions about project size and phasing are made.

Strengthening Capacity

If one side of the coin is the need to match the scale of lending to country capacity, the other is the need to strengthen country capacity to implement nutrition programs effectively. This is likely to be a particular challenge when lending for nutrition is as a component of a larger health SWAp, or a multi-sectoral project.

Appropriate Capacity Development Interventions
Orbach and Nkojo (1999) reviewed the content of institutional development interventions in a sample of HNP projects in the Africa Region. They noted that, of the following list of interventions, Bank projects tend to focus on the first three or four, at the expense of the others:
1. adding staff and physical and financial inputs
2. providing training and technical assistance
3. introducing new technologies
4. changing coordination mechanisms
5. increasing particular stakeholders’ voice in planning and implementation
6. altering the balance between public and private sectors in service delivery
7. reforming specific organizational systems
8. changing or enforcing laws, rules, or regulations
9. changing attitudes, values, organizational cultures, or incentives
10. providing information; and increasing accountability.

The shortage of trained human resources, especially in Sub-Saharan Africa, means that the traditional institutional development interventions will remain important. But equally salient in Africa, as well as in much of Asia, are issues of weak governance and widespread corruption. While the ICRs of the Bank-financed nutrition projects are largely silent on these issues, Bank-supported nutrition programs have suffered, at different times and in different places, from attempts to
- use political influence to hire community workers who do not meet program recruitment criteria (e.g., who are resident outside the community)
- demand kickbacks from community workers as the price of recruitment, and from NGOs as the price of prompt processing of expenditure claims
- fix the bid prices of supplementary food and drugs at higher than market levels
- supply low quality weighing scales, utensils or food supplements, permitting contractors to finance kickbacks from the excess profits and
- divert food supplements before or after they reach the villages.

Now that the Bank is prepared to deal frontally with governance and corruption issues, nutrition programs, in common with other Bank-financed programs, will need to focus more on items 5-10 of the list of capacity development interventions, which are likely to be more appropriate responses to these issues than traditional training-centered interventions.

In view of the Bank’s relatively poor performance in supporting institutional development in its health, nutrition and population portfolio, the need to widen the range of capacity development interventions as noted above, and the special institutional challenges of incorporating nutrition programs into multiple sectoral programs across government, it is recommended that the Bank designate a staff member to lead work on capacity-building and governance in nutrition.

Appropriate Vehicles and Project Designs
SILs have proved well suited to developing capacity—at least when improving nutrition was the primary goal of a project where half of more of the funding went to nutrition, as

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10 See, for example, the negative findings of a review by the Bank’s evaluation department (World Bank, 1999)
in TINP and BINP in Asia, in Madagascar and Senegal in Africa, and in Honduras in Latin America (Section II). They had several advantages. Enough money was spent on nutrition to make an impact. Enough technical resources could be put in for effective systems development and ‘learning-by-doing’. And managers had a strong incentive to focus on nutrition outcomes, as the primary project goal.

These conditions will not automatically hold good, when nutrition is incorporated into a broader health SWAp, or into a multi-sectoral PRSC. Specific measures are likely to be needed to ensure that the focus on nutrition capacity-building is not lost as nutrition becomes a smaller part of a bigger picture. A focus on nutrition capacity-building might be maintained by

- clearly defining whose capacities and which systems need to be strengthened to counter specific implementation problems, and developing specific goals, indicators and strategies for this
- designing a technical assistance loan or institutional development facility in parallel to a SWAp or PRSC, to ensure that sufficient resources are available for capacity-building.

A different set of issues will arise in countries which lack a tried and tested nutrition outreach system\(^{11}\), and where the Bank has not yet lent for nutrition. What vehicle or vehicles will be best suited to testing nutrition service strategies, and strengthening capacity to the point where scaling up in the context of a PRSC or SWAp is possible? And what role should the Bank play in capacity strengthening, when its own resources for this are limited? Options here might include

- using a Learning and Innovation Loan, an institutional development grant, or a project financed by a grant donor to finance systems development activities, and working closely with grant donors or NGOs who can provide capacity-building support to these
- including earmarked funds for nutrition in a CDD project, which would allow special attention to be paid to it (nutrition has not yet been financed as part of a CDD project: the advantages and disadvantages are discussed in Heaver, 2003b)
- financing an SIL in nutrition before moving to a SWAp or multi-sectoral vehicle.

Since SILs have proved effective vehicles for strengthening capacity, the traditional approach may still be justified in countries where malnutrition is a serious problem, as a bridge between pilot test and large-scale program.

**Reforming India’s Community Nutrition Program**

The poor performance of India’s community nutrition program is more than a country level concern. Since India has nearly 40% of the world’s malnourished children, the Bank cannot hope to see a satisfactory global improvement in nutrition, without a substantial improvement in India.

\(^{11}\) The gap is typically in outreach; there is almost always a clinic-based health system onto which clinic-based nutrition services can be grafted.
The Historical Context: TINP and ICDS

The Bank financed TINP in Tamil Nadu state (Box 1), before its support for the ICDS program began. The Bank’s Operations Evaluation Department assessed the decline in malnutrition under TINP as ‘unprecedented in other parts of India and elsewhere in the world where large-scale nutrition interventions have been implemented’ (World Bank, 1994). However, many of TINP’s key design features were not replicated in the ICDS (Box 6)—a fact that helps to explain ICDS’ relatively poor performance.

Box 6. Failing to Learn from Experience: ICDS and TINP

- TINP had separate workers to look after the nutrition of 0-3 year olds, and to give pre-school education to 4-6 year olds. ICDS has one worker to handle both (plus, in both programs, a helper assists with food preparation and cleaning)
- In TINP, workers systematically home visited those who didn’t come for growth monitoring, to weigh the children and provide nutrition education. In ICDS, workers busy with pre-school have little time for home visits
- In TINP, food supplements were given early morning, a time when poor, working mothers could bring their young children before they left for work. In ICDS, feeding is at lunchtime: this suits older children, who can walk to morning pre-school and stay for lunch, but malnourished children under three—the most vulnerable—are often taken to work with their mothers, and miss out
- TINP served children a slightly sweetened snack food, which was seen as a supplement, rather than a meal. ICDS often serves children a meal (the type of food varies from state to state), which is more likely to substitute for a meal at home
- TINP supplemented only children who were malnourished or whose growth was faltering; they ‘graduated’ from supplementation when their growth was back on track. ICDS feeds a specific number of children every day, who may or may not be malnourished or growth faltering. Since the same children are fed every day, food is seen as an entitlement, rather than a temporary supplement designed to get the child back on track and to show mothers how they can prevent or treat malnutrition at home by feeding small, affordable amounts of extra food.

Source: Author’s experience

TINP’s positive features were not picked up by the national program, because

- the Bank failed to engage national policy-makers in the implementation of TINP, a ‘state-sponsored scheme’. TINP came to be seen by the central government as a State- and Bank-driven competitor to ICDS
- as a consequence, the government was reluctant even to experiment in ICDS I with TINP’s targeted food supplementation approach, even though TINP’s approach had been evaluated as cheaper and more effective than ICDS’ ‘universal feeding’\(^\text{12}\)—and experimenting with it was made a project condition

\(^{12}\) One of the few project cost-effectiveness analyses carried out by the Bank indicated that TINP was twice as effective in reducing malnutrition as ICDS, for half the cost (Dapice, 1986).
• ICDS officials were preoccupied with scaling ICDS up during the 1990s, rather than with improving its quality. Admitting to ICDS’ cost and effectiveness problems might have jeopardized domestic financing for expanding the program.

The TINP and ICDS experience has three corresponding lessons:
• projects, however effective, do not scale up to national programs unless national policy-makers own them, and are in the driving seat from the beginning
• governments need to be convinced about the merits of strategy changes if they are to adopt them or experiment with them; conditionality in the absence of commitment does not work
• the Bank should make sure that the Government’s nutrition strategy is effective before scaling up its lending—rather than hoping that large-scale lending will give it the leverage to change ineffective strategies.

Current Issues
India and the Bank have now forged a closer partnership at the national level. The challenge of reforming ICDS remains. The core issues are, as they were 15 years ago when ICDS I began,
• how to get services to the under threes, who suffer most from malnutrition, and whom ICDS by and large does not reach
• what can be done to reduce ICDS’ continuing strong emphasis on feeding children, which has undermined attention to educating parents how to improve nutrition using the family food budget
• whether it is feasible for one community worker to handle both nutrition services and pre-school education effectively.

Recent analytical work (World Bank, 2004) concludes that, even with an improved ICDS, India will not meet the MDGs in nutrition without investing more in indirect interventions, such as women’s education, and water and sanitation. Other issues are therefore: what is the most cost-effective and affordable combination of direct and indirect interventions to reduce malnutrition, in the differing circumstances of India’s 14 major states? And, once agreement on strategies for reforming ICDS and investing in indirect nutrition interventions is reached, how can capacity be strengthened, so that the agreed strategies can be effectively implemented in the low-governance states where much of India’s malnutrition is concentrated?
IV. ANALYTICAL WORK AND OPERATIONAL SUPPORT

**Headlines:** The Bank has a solid track record of analytical work in nutrition, which has contributed to understanding the links between malnutrition and poverty, how nutrition improves, and the economic benefits of investing in nutrition. However, the Bank needs to develop a more strategic approach to learning, systematically identifying the gaps in its knowledge and how best to fill them. In addition to learning through studies, it should do more ‘learning by doing’, through action research in the context of Bank operations. And it should give more attention to dissemination, using a strategic communication approach to get the right information to the right audience.

As noted in the Preface, this review is limited to Bank analytical work dealing solely with nutrition: that is, it does not cover the analysis of nutrition in macro and cross-sectoral work, such as Country Economic Memoranda, Public Expenditure Reviews, Medium Term Economic Frameworks, or Country Assistance Strategies. This is an important limitation, since it is these analyses that determine how central a place nutrition gets in the Country Development Framework. Unsystematic review suggests that nutrition is poorly incorporated into most of these analyses and strategies—a finding consistent with that of the recent review of PRSPs (Shekar and Lee, op.cit.), and with nutrition’s marginal place in the Bank’s lending program in most countries.

**The Range of Analytical Work**

The Bank’s analytical work in nutrition has made a major contribution at the international level to understanding of:

- the linkages between malnutrition and poverty—for example, the third World Development Report (World Bank, 1980) made a seminal contribution on the interactions between poor health, nutrition and income poverty
- how nutrition improves—for example, recent work showing that economic growth is not the fastest way to improve child malnutrition (Haddad et al, 2003)
- the economic benefits of improving nutrition—for example, the evidence of high returns to investing in nutrition (Behrman et al, 2004) that was contributed to the ‘Copenhagen Consensus’, in which leading economists, including several Nobel Laureates, ranked the global benefits of different development interventions.

The Bank has published more than 50 pieces of analytical work and operational guidelines on nutrition over the five years to late 2004 (see Annex 11 for details). These fall into five main bodies of work, as follows.

**Analysis of the Policy Process**

In 2001, the Bank joined with UNICEF in a major review of the two institutions’ work in nutrition (Gillespie et al, 2003). This focused on how policy changes, and the lessons from both positive and negative experience for making a faster impact on malnutrition. The analysis indicated that progress was being held back by three constraints, among others: weak commitment to nutrition compared to other areas of development;
inadequate information on program impact at the country level, which is one reason policymakers are reluctant to invest in nutrition; and weak institutional capacity to design and implement nutrition programs, related in part to the lack of an organizational ‘home’ for nutrition in many governments.

These findings led to the start of three corresponding Bank work programs: (i) a study of the reasons for weak country commitment to nutrition and what can be done to strengthen it, the first in international nutrition to address this issue; (ii) a workshop and working paper on how to strengthen monitoring and evaluation in the Bank’s nutrition portfolio; and (iii) a working paper identifying issues in management and capacity development in nutrition, together with two case studies of nutrition programs that have successfully built capacity.

In the last few years, the international development community has placed much greater emphasis on poverty reduction, and on more integrated, multisectoral approaches to this. PRSPs, which have now been prepared by more than 55 poor countries, have emerged as the main tools for ensuring that poverty reduction gets due attention in the policy process. The importance of PRSPs, both as a resource allocation tool for countries and as a determinant of Bank country assistance strategies, led the Bank to carry out the review of nutrition’s treatment in PRSPs and PRSCs, whose findings were summarized in Section III.

**Analysis of ‘What Works’**
The Bank’s new emphasis on poverty reduction has also led to a large and valuable body of analytical work from its recently created social protection department. Some of this work focuses on how social safety nets can reduce malnutrition, as well as income poverty: for example, reviews of the effectiveness of subsidies as a social safety net (Alderman, 2002); of food-based safety nets and related programs (Rogers and Coates, 2002); of the role of safety net transfers in very low income countries (Smith and Subbarao, 2003); and of the Latin American experience with conditional cash transfer programs (Rawlings, 2004). Aside from the work on social protection, a particularly important contribution, in the context of the high global costs of anemia and the poor performance of anemia programs, has been a review funded by the Bank and six other development partners of what works in anemia prevention and control (Galloway, 2003).

**Operational Support and Guidance**
During the 1980s and early 1990s, a Nutrition Advisory Service in the central Health, Nutrition and Population (HNP) department provided a range of operational support to the Bank’s Regional departments, including

- technical advice on the treatment of nutrition in country assistance strategies and project designs
- training courses in ‘nutrition for non-nutritionists’
- establishing an informal community of practice called the ‘friends of nutrition’ and later ‘friends of food policy’
- identifying, financing and supervising high quality consultants to assist the operational departments
• publishing a newsletter called ‘New and Noteworthy in Nutrition’.

Since 1996, the Bank has been working on a practical and useful ‘Nutrition Toolkit’ for program designers and managers in countries and development assistance agencies. It has so far produced nine of a planned total of 12 booklets on different subjects: the three broadest cover incorporating nutrition into project design, economic analysis, and monitoring and evaluation; the others focus on specific interventions, such as communication for behavior change, child growth promotion and food supplementation (see Annex 11.3 for a full list of items in the toolkit).

**Regional and Country Studies**

Although malnutrition is a serious problem in more than 80 countries, the Bank has produced only a dozen regional and country sector studies on nutrition over the past five years. This is a consequence partly of the limited importance the Bank gives to nutrition in most country development strategies, and partly of declining resources allocated to formal analytical work Bank-wide.

In terms of regional work, the Middle East/North Africa and the Eastern Europe/Central Asia Regions have produced reports on the importance and prospects of improving nutrition, and the Africa Region is currently working on a nutrition strategy for Sub-Saharan Africa. The largest share of country analytical work has been produced by the India Country Department. Following an earlier, broad analysis of the crisis of malnutrition in India (World Bank, 1998), it has produced four more detailed studies on food and nutrition security, on what India will need to do to reach the MDGs in nutrition and other areas, on the national ECD/nutrition program, and on child malnutrition.

Most country studies have looked at nutrition in a broader context, for example nutrition and poverty, nutrition and maternal and child health, or nutrition and child welfare. The 1998 study on malnutrition in India and a study on poverty and nutrition in Bolivia (World Bank, 2002) are examples of best practice. They stand out for their balanced coverage of epidemiology, program options, targeting, cost and financing, commitment and capacity; and because—in contrast to many Bank reports—their brevity and lack of jargon make them suitable reading for policymakers, not just technicians.

**Agricultural Research**

The Bank-funded Consultative Group on International Agricultural Research (CGIAR) helped develop high-yielding crop varieties that contributed to the green revolution. Since many of the early varieties depended on expensive inputs (pesticides, fertilizer, irrigation) for their high yields, CGIAR turned its attention to developing varieties that are disease-resistant or suited to non-irrigable areas. This has contributed to the food security of farming families that have little cash to spend on inputs, or live in marginal farming areas. A new CGIAR program, ‘Harvest Plus’, is now developing micronutrient-rich crop varieties, as a complement to existing efforts to fortify foods post-harvest, and to distribute micronutrient supplements to vulnerable groups.
Gaps That Need Filling

The list of work in Annex 11, together with the issues identified in Section III, provide a framework for assessing gaps in the Bank’s analytical work on nutrition.

Policy Analysis and Development

Priorities for further work on policy analysis and development include

- policy options and service delivery strategies for tackling overnutrition. These need to follow up on the results of an initial consultation on the potential of food policy interventions (World Health Organization and World Bank, 2002); and to broaden into consideration of policies and strategies for changing eating and exercising behavior, by means of BCC through the health and school systems and the media;
- policy options and service delivery strategies for adolescent nutrition, building on the results of another consultation (Elder, 2004), and of action research currently being carried out by the International Council for Research on Women;
- guidelines for incorporating nutrition considerations into agricultural policy, which remains production oriented, despite the important impact on nutrition of crop and food pricing policies; of policy decisions to promote export, cash crop or subsistence agriculture; and of policy choices that affect whether additional agricultural income goes to women or to men;
- guidelines for coordinating interventions against malnutrition and HIV/AIDS, which are a devastating combination in much of Sub-Saharan Africa (Gillespie and Kadiyala, 2005). Here, the Bank should use its social protection expertise to help countries and development partners target food aid, and other nutrition and health interventions, on those who need them most;
- guidelines for developing the institutional capacity needed to support policy analysis and development, and guidelines for organizing the process of policy change, including the strengthening of commitment and the choice of a mix of nutrition policies and interventions that appropriately balances direct and indirect interventions.

With regard to the last bullet, the recent study on commitment-building (Heaver, 2005) provides a framework for assessing and strengthening commitment to nutrition, as a starting-point for initiating the process of policy change, and the recent study showing nutrition’s marginal place in most PRSPs (Shekar and Lee, 2005) identifies the issues relating to this key part of the policy process. Rather than further studies in these areas, next steps should be to work with selected countries to develop best practices.

13 The issue was identified in the review of the Bank’s experience in nutrition carried out 19 years ago, but has still not been adequately addressed: ‘Agriculture specialists…have often assumed that the way to address malnutrition is to increase food supply… though malnutrition is sometimes used to justify agriculture projects, nutrition goals are rarely included explicitly’ (Berg, 1987).

14 The interaction is a two-way one: on the one hand, malnutrition makes HIV-positive people more likely to develop TB and other diseases, hastens the onset of full-blown AIDS, and makes it harder for AIDS-sufferers to tolerate retroviral drugs. On the other hand, AIDS increases malnutrition by diverting the family budget from food to health care, by killing bread-winning adult family members, and by leaving orphans without adequate care.
Measuring Impact, Quality, Cost-effectiveness and Affordability

The review of ICRs of recently completed nutrition projects (Section III) identified a general concern about the adequacy of impact evaluation, and a particular concern that all three recently completed projects which attempted to improve nutrition through ECD programs were evaluated as unsatisfactory. These findings point to the need for ‘diagnostic reviews’ of a) the soundness of the quality control and evaluation arrangements for the current generation of projects, and b) the design and performance of the nine ECD/nutrition projects that are currently being implemented.

For the 22 recently completed nutrition projects, the country departments concerned carried out only one cost-effectiveness analysis (Senegal Community Nutrition, which failed for technical reasons) and one cost-benefit analysis (Indonesia Iodine Deficiency Control). No ICR attempted an analysis of affordability, and there was little discussion of service quality. A useful study of costs (but not cost-effectiveness) in the Honduras community nutrition program provides templates for conducting cost analyses in other countries (Fiedler, 2003). In addition, the Bank’s research department has carried out or commissioned impact/cost-benefit reviews of ECD projects in Bolivia and Uganda, and has work in progress on others in Madagascar, Senegal and the Philippines, in conjunction with the country departments.

More systematic work is needed in the above areas. It should focus on the relative cost-effectiveness and affordability of different approaches to service delivery for the direct nutrition interventions; and on analysis of the relative costs and benefits of different indirect interventions. At present, the Bank has little information on the latter. A meta-analysis of water and sanitation programs (Fewtrell and Colford, 2004) has looked at their impact on diarrhea, but not nutrition. Recent ICRs have measured the benefits of food and cash for work programs in terms of days of employment created, but not their effects on nutrition. Similarly, the success of micro credit and income generation schemes has been measured in terms of micro project profitability and loan repayment rates, but not in terms of nutritional impact15.

Matching Scale to Capacity, and Strengthening Capacity

The Nutrition Toolkit module on management and supervision (which would be better titled ‘Assessing and Strengthening Capacity’) has not yet been developed. As a first step toward this, the Bank has identified issues to be looked at in assessing and strengthening capacity (Heaver, 2002). This initial analysis gives insufficient weight to two important issues: the development of leadership and the strengthening of governance, which are both weak in many of the Sub-Saharan and South Asian countries where malnutrition is most serious. Recent Bank work on education in Africa points to the very high returns that improvements in the governance of social services can yield, in environments where corruption is institutionalized (Reinikka and Svensson, 2004).

15 The best evaluation was in the Burkina Faso Food Security and Nutrition Project. It showed that 90% of the chosen activities were profitable; that micro credit repayment rates were a highly satisfactory 95%; and that between 22% and 34% of the profits were used by the women involved for nutrition and education. This still leaves unclear whether there was a satisfactory impact on nutrition.
Next steps would be to (i) prepare draft operational guidelines for assessing and strengthening management capacity, based on the issues already identified, and drawing on the guidelines for institutional assessment already used by the Bank in the education sector (Orbach, 2004); and (ii) test and refine these guidelines through analytical work assessing country capacity, and in the course of identifying and preparing some best practice nutrition operations. The results of this process would provide a basis for filling this gap in the Nutrition Toolkit.

**Operational Support and Guidance**

From the late 1990s, the HNP department’s operational support role in nutrition diminished. In late 2004, the HNP department’s nutrition budget was cut, leaving only one staff post for nutrition. If nutrition lending is to scale up, and in the context of the Regions’ limited staff capacity in nutrition, a strategy for developing the Bank’s capacity in nutrition will be needed. The HNP department should logically play a role in this, but cannot provide adequate support to operations with its current resources.

While work has continued on the Nutrition Toolkit, the planned modules on management and capacity development, on policy analysis and development, and on nutrition in child development, remain to be developed. Several toolkit modules also need updating, for example

- the module on communication (Favin and Griffiths, 1999) focuses only on BCC for clients, but needs to give equal importance to BCC for politicians, bureaucrats, the public and the development partners, for purposes of nutrition commitment-building
- the module on food stamps and related nutritional safety nets (Castaneda, 2000) is too limited in its coverage, and needs to reflect the full range of recent work in social protection (see above—‘Analysis of What Works’)
- the module on nutrition for school-age children (Del Rosso, 1999) focuses only on school feeding, and needs to be broadened to cover nutrition education, micronutrient supplementation and deworming.

More generally, a participative evaluation needs to be done of who is using the toolkit and how, and how it could be improved to better meet the needs of clients.

**Improving the Balance of Country Analytical Work**

Unsurprisingly, the gaps identified in the Bank’s centrally-sponsored analytical work are also reflected in country studies on nutrition. These usually do a good job of identifying epidemiological needs and corresponding policies and strategies, but a poor one of analyzing government commitment and capacity. Bangladesh and Yemen, countries where more than 40% of children are underweight, are examples of sector work that did not discuss these issues, though they are key constraints. Lack of attention to commitment and capacity likely reflects their sensitivity, as well lack of expertise in these areas. Yet, as the Bank found in the years before it decided to deal frontally with corruption, dealing with sensitive issues only through informal dialogue leads at best to inadequate analysis of issues and options, at worst to tacit agreement to leave them on the back burner.
Toward a More Strategic Approach to Learning

While substantial and useful, the Bank’s analytical work in nutrition is the product of a variety of initiatives by several Bank departments, without a coherent overall strategy. It would benefit from more strategic direction in three dimensions:

- identifying and prioritizing gaps that need filling (the above attempt at this needs reviewing and refining, through a participative process of discussion among nutrition stakeholders throughout the Bank)
- decision-making on the appropriate learning approach to fill each gap
- feeding the results into operations through a more systematic dissemination process.

Learning Approaches
The range of approaches for learning includes formal research; formal country studies and sector reports; informal analytical studies; needs assessments; and systematic learning by doing in the context of Bank operations. To date, the Bank’s approaches to learning have focused more on the first three than the last two.

Needs assessments. Quick and cheap diagnostic studies should be used to define gaps in knowledge or quality, which may need filling through more time-consuming and expensive learning approaches. Diagnostic studies would help answer the following questions:

- do the current nutrition projects include adequate measures to monitor and evaluate quality and impact?
- do the current projects incorporate best practices in BCC?
- are the current ECD/nutrition projects better designed and better-performing than the three unsatisfactory, recently completed projects of this type?
- how far does the Bank’s policy analysis work in food and agriculture take nutritional considerations into account?

Systematic learning by doing. Learning by doing in the context of Bank operations is likely to be the best approach for developing best practices in the following ‘gap’ areas:

- generating demand for nutrition lending, and commitment to quality implementation of nutrition programs
- incorporating nutrition into country development strategies and using the new lending approaches
- assessing and strengthening country capacity in nutrition policy analysis and development, and program design and implementation
- developing strategies for tackling overnutrition
- analyzing the cost-effectiveness/affordability in different circumstances of alternative service delivery approaches for direct nutrition interventions

Currently, operational research priorities are mainly determined at the country level, and operational research is mainly financed from project funds. There are three problems with the current approach. First, individual countries and Bank country departments may not
see the global picture well enough to determine what learning by doing is highest priority. Second, they may not have the expertise to design operational research well enough for the results to stand up to international scrutiny. Third, many Borrowers are reluctant to use loan funds to finance technical assistance, when this is needed to ensure that research designs are appropriate.

An alternative approach would be for central and regional units of the Bank to work with countries to (i) define a global program of action research, (ii) identify appropriate countries and projects to pursue each element of the program, and (iii) ensure that learning by doing in different countries follows consistent methodologies, so results can be compared and used at the global level. The action research program might focus on both
- ‘best practice countries’, where an effort would be made to develop an integrated approach to commitment-building, incorporating nutrition into development planning, capacity strengthening, program implementation and evaluation; and
- ‘best practice interventions’, where a particular intervention—food supplementation, for example—would be carefully evaluated across the Bank portfolio, using consistent methodologies, so that cross-country comparisons could later be made.

Most countries would be unwilling to use loan funds for the above purposes, and country department budgets are too small to finance systematic learning by doing. The Bank should therefore raise grant funds to finance a global Nutrition Action Fund, which would provide the financial means—and a suitable incentive—for countries and Bank country departments to participate. The Bank would also need to increase its currently very limited capacity to manage action research. Staff would be required to raise and manage the grant funds; to help countries locate suitable technical assistance; and to carry out monitoring and quality control for the action research program.

Knowledge-Sharing and Advocacy
The Bank’s work on the economic benefits of reducing malnutrition has been widely disseminated in prestigious publications—academic journals, the World Development Report, the Disease Control Priorities books, and the Copenhagen Consensus, for example. Other Bank analytical work has been poorly disseminated:
- the Bank currently has no worldwide distribution list for its nutrition publications, and there has been no systematic strategy for disseminating the Bank’s valuable nutrition toolkit
- some working papers in nutrition have had print runs of as little as 300, making publication hardly worthwhile
- though most publications are also available on the Bank’s website, many developing country readers do not access this; and even if they did
- the Bank’s analytical work in nutrition cannot be accessed in one place on its website (this review is the first recent attempt to even list this work).

Sharing experience outside the Bank. If the Bank commits itself to reducing malnutrition, systematic dissemination of its analytical work will be an important tool in strengthening
commitment to nutrition, and capacity in nutrition, at the country level and among the
development partners. An external dissemination strategy should include

- identification of development partner and country level stakeholders (nutritionists,
economists, policymakers, politicians, NGOs, the public)
- consideration of what information in what format is most appropriate for each
  audience, and of the best channels to get this information to them
- costing of an outreach strategy.

The multiplicity of information sources on nutrition is an issue. In addition to pulling all
its analytical work on nutrition together in one place on its website, following the
evaluation recommended above, the Bank should develop the Nutrition Toolkit into its
primary source of information for practitioners. Consideration might be given to
converting the Toolkit to a loose-leaf format, so that updates in each subject area can be
sent to subscribers as new knowledge becomes available (the current version of the
Toolkit is outdated, even before the first edition of the series has been completed,
indicating the need for it to be redesigned as a ‘work in progress’). Consideration might
also be given to making it available in French, for the benefit of Francophone African
countries. The Toolkit would then become a practical way of disseminating the findings
of the proposed action research program.

**Knowledge-sharing within the Bank.** Internal knowledge-sharing has also been poor.
Even nutrition staff are not well informed about nutrition programs in other countries and
regions—especially since budget constraints led to the demise of the widely read
newsletter ‘New and Noteworthy in Nutrition’. As with external dissemination, more use
could be made of ‘signposts’ to direct attention to where information can be found. In
addition, it would be useful to set up a ‘learning exchange’ as part of the proposed action
research program, in which staff from other regions would help formulate action research
and participate in occasional progress review/problem-solving sessions. This would serve
a dual purpose, of disseminating experience and improving the quality of action research.

As of mid 2005, there had been no systematic attempt to reach internal audiences beyond
the health and nutrition staff with key nutrition communications. Key audiences are
country directors and country economists, and poverty reduction and economic
management (PREM), agriculture, education, social development and social protection
staff. Better communication, along with clear signals from senior management about
nutrition’s importance to achieving the MDGs, will be key to overcoming the Bank’s
institutional constraints to doing more in nutrition. The Bank should therefore apply to
itself the BCC approaches it uses in its country-level communication work. The
behavioral changes required from each internal stakeholder group should be identified;
‘positive deviants’ and resistors to change should be studied; and for each group,
appropriate messages and communication channels should be defined.
Annex 1. World Bank Lending for Nutrition

Estimating Bank lending for nutrition poses significant methodological problems, because few projects finance only nutrition. Where projects finance activities in more than one sector, the Bank estimates lending in the different sectors by asking the Task Team Leader (TTL) of each project to code which sectoral themes are supported by the project, and then by applying an algorithm, as described below, to allocate the total project amount between the sectors/themes. This system was adopted in FY2002, at which point projects from FY1993 onward were recoded according to the FY2002 criteria. Therefore, data for nutrition lending for the years 1993 to the present are more comparable between those years, than they are with data for previous years.

A review in mid 2004 by the Bank’s Nutrition Anchor Unit revealed two kinds of problems with the Bank’s official lending figures for nutrition, based on the system adopted in FY2002. First, some TTLs had not coded for nutrition some projects that had significant nutrition content, thus underestimating the amount of nutrition activity financed by the Bank. Second, the way the Bank’s ‘Business Warehouse’ software algorithm calculates nutrition lending is not by summing the amounts actually allocated for nutrition in each project, but through a two-step process as follows. First, the TTL is asked to assign the project up to 5 themes, and rate them as primary or secondary, based on their importance (primary themes carry twice the weight of secondary themes). Second, the themes are given a dollar allocation by the system-generated algorithm (not by the TTL), so that the total for the themes adds up to the total amount of the project.

This system can lead to official lending figures that are at wide variance with what was actually allocated for nutrition. This is best illustrated by example. Congo Dem. Rep. Emergency Multisector Rehabilitation, a US$454 million project, was assigned three primary themes (conflict prevention and post-conflict reconstruction; access to urban services and housing; and nutrition) and one secondary theme (other communicable diseases). The three primary themes (nutrition being one) were assigned approximately $127 million each by the system-generated algorithm, and the communicable diseases theme got the remaining amount. However, the amount that was actually budgeted for nutrition was only US$300,000, not US$127 million. On the other hand, Bangladesh National Nutrition, a US$92 million project whose sole objective was to improve nutrition, was assigned only US$27 million for nutrition by the algorithm. Thus the algorithm can both overestimate and underestimate what was allocated for nutrition.

Because of these kinds of issues regarding the Bank’s official lending figures for nutrition, an alternative estimate of nutrition lending was made for this paper, based on a review of PADs for nutrition-related projects in the portfolio, and on follow-up discussion with TTLs to confirm what was allocated to nutrition. Table A2 below gives the project-wise results of this alternative estimate for new nutrition lending in the years FY2000-04. The estimates differ from the Bank’s official figures in three ways:

- First, in some projects coded for nutrition in the official figures (the shaded lines in the table), the amounts for nutrition have been adjusted to reflect the proportion of the project that the PAD/the TTL suggests will benefit nutrition;
• second, a number of projects which are not coded for nutrition but which nevertheless have significant nutrition content are included (the clear lines);
• third, some Bank projects that will benefit nutrition are likely to do so at best indirectly and in many cases only slightly (these are shown in italics). Examples of such projects include agriculture, rural development and fertilizer projects in the Philippines, Timor-Leste, Mexico and Ethiopia; a transport project in Chad; and SWAps in Ecuador and Peru. The Bank’s recent sector report on nutrition (World Bank, 2005a) distinguishes between direct, ‘short route’ and indirect, ‘long route’ approaches to nutrition improvement; consistent with this approach, the totals at the end of table A2 distinguish between these two types of lending.

There remain several possible sources of error in the estimates of nutrition lending shown in Table A2. First, the review of PADs did not include Poverty Reduction Sector Credits (PRSCs) outside Africa Region. Second, accurate estimates of nutrition lending are not possible in the case of SWAps, where the Bank provides budget support for the program and individual expenditure items are not identified. Since few PRSCs and SWAps to date have had substantial nutrition content, this will not be a large source of error in the current estimates.\(^{16}\)

Third, TTLs cannot accurately estimate how much is being spent on nutrition in projects where services for health and nutrition are integrated in the field and budgeted on an integrated basis—for example, where some growth monitoring is carried out in health clinics, but the budget for scales and growth charts is integrated with the budget for child health; or where budgets for nutrition supplements and nutrition education for pregnant women are included in integrated budgets for reproductive health. While we have no way to know, it is unlikely that the allocation for nutrition would be more than 5% of what is allocated to child health and 1% of what is allocated to reproductive health in the average integrated project (because, if spending on nutrition was substantial, TTLs would have identified it as such, either by coding the project for nutrition, or when contacted for follow-up discussion in the course of the PAD review). On these assumptions, Table A3 shows that no more than about US$5 million would need to be added for this, suggesting that this is also probably not a large source of error.

Adding an arbitrary but generous amount to the figures in Table A2 to compensate for these sources of error, Table A1 below, which summarizes the overall picture, supports the official Bank estimate of nutrition lending in the five years FY 2000-2004 of about

\(^{16}\) However, this situation will shortly change, since large-scale nutrition activities are being included in some program loans processed since this report was written, e.g. the Bangladesh Health, Nutrition and Population Sector Program. The Bank will therefore need to devise a way of estimating the nutrition content of program loans, if its tracking system for nutrition lending is to remain viable.
US$400 million, amounting to 2.3% of human development themes lending. The two estimates agree because, while the differences in the estimates for individual projects can be very large, as illustrated above, the differences in the totals are not significant, because the project-wise over- and under-estimates produced by the business warehouse algorithm happen to be largely self-cancelling. On the other hand, looking at only direct (short route) nutrition interventions, which are probably a better measure of the Bank’s effective effort in nutrition, this paper’s estimate is 20% lower, at US$320 million and 1.9% of human development lending.

Table A1. New Commitments for Nutrition and Food Security (NFS) Theme, Human Development (HD) Themes, and Total Bank lending, FY2000-04 ($m)

<table>
<thead>
<tr>
<th>Business Warehouse estimate</th>
<th>NFS (theme)</th>
<th>HD (themes)</th>
<th>NFS as % of HD</th>
<th>Total Bank</th>
<th>NFS as % of Bank</th>
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<td></td>
<td>410</td>
<td>17,097</td>
<td>2.3</td>
<td>90,639</td>
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<tr>
<td>Direct and Indirect Interventions</td>
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<td>17,097</td>
<td>2.3</td>
<td>90,639</td>
<td>0.45</td>
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<td>&lt;1.9</td>
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</table>

Note: In the above table, 'NFS theme' refers to the total of commitments for the nutrition and food security theme across projects in all sectors; and 'HD themes' refers to the total of commitments for the human development themes across all sectors.
<table>
<thead>
<tr>
<th>Approval FY</th>
<th>Region</th>
<th>Country</th>
<th>Project Name</th>
<th>Total Project Comm. (US$M)</th>
<th>Amt Nutrition or Amt for Designated Theme(^1) (US$M)</th>
<th>% Nutrition of Entire Project</th>
<th>Activity Code(^2)</th>
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<td>% Nutrition of Entire Project</td>
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<sup>1</sup> Active Nutrition-Coded Projects are highlighted. Non-Nutrition-Coded Projects which nevertheless contain nutrition activity are unhighlighted. Projects that will affect nutrition only through indirect 'long routes' are shown in italics. If a project not coded for nutrition is likely to have included some nutrition activity integrated into activities under another theme, the coded theme is shown in parentheses.
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<td>Micro-credit</td>
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2 Theme Codes:

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<td>Health System Performance</td>
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Sources:
1. Commitment amounts taken from the Bank's Business Warehouse data on project lending.
2. The project-wise nutrition activities were reviewed and the nutrition amounts were estimated for this paper following the methodology set out above.
Table A3. Guesstimated Amounts (US$m) for Nutrition in Integrated Population and Reproductive Health and Child Health Activities in Projects That Are Not Coded for Nutrition in Table A2 above.

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* shown only for projects over US$10m
* * to nearest US$1m

S = satisfactory
U = unsatisfactory
IP = implementation plan
DO = development objectives

Note: A project marked U (DO) is unlikely to achieve its development objectives. But a project whose implementation is currently unsatisfactory—U (IP)—may nevertheless ultimately achieve its development objectives.
### Annex 3. Direct Nutrition Lending per Child in Selected African Countries

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50
Annex 4. Countries with Vitamin A Prevalence > 10% or Anemia Prevalence > 20%

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Source: World Bank (2005a)
### Annex 5. 22 Projects with Nutrition Content Completed in the Period 1998-2003

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<th>S</th>
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<th>Outcome DO/Sus/ID</th>
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<td>152</td>
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<td>S/L/SU</td>
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<td>S/L/M</td>
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<td>?S/S/S</td>
<td>S/L/SU</td>
<td>Hi local impact, low cov</td>
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## Annex 7. Projects under Implementation with Nutrition Content over US$1 Million

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<th>Year to Board</th>
<th>$ Total</th>
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<td>Burkina Faso IV</td>
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<td>Other Types of Operation</td>
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<tr>
<td>Ethiopia Social Rehab and Development Fund</td>
<td>1996</td>
<td>120</td>
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<tr>
<td>Cambodia Agr. Productivity Improvem.</td>
<td>1997</td>
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<tr>
<td>Ghana Comm-Based Pov Red</td>
<td>1999</td>
<td>5</td>
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<tr>
<td>Kenya HIV/AIDS Disaster Response</td>
<td>2001</td>
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<td>2001</td>
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<tr>
<td>El Salvador Earthquake Emergency Reconstruction and Health Services Extension</td>
<td>2002</td>
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<td>Ethiopia Food Security</td>
<td>2002</td>
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<td>Ethiopia Emergency Drought Recovery</td>
<td>2003</td>
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<td>Malawi Soc. Action Fund III</td>
<td>2003</td>
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<td>Zambia Emergency Drought Recovery</td>
<td>2003</td>
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</tbody>
</table>

* To nearest million dollars

Note: Summaries of the Project Appraisal Documents of most of the above projects are available from the Bank’s Health, Nutrition and Population Department (Priyadarshi, 2004).
## Annex 8. Projects under Implementation in 2004 with Nutrition Content over US$1 Million: Distribution of Activities by Sector/Type

<table>
<thead>
<tr>
<th>Only/Mainly Nutrition</th>
<th>Micro N</th>
<th>Macro N</th>
<th>Health</th>
<th>ECD/ Education</th>
<th>Water/Sanitation</th>
<th>Agriculture</th>
<th>Food for Work</th>
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S = substantive impact on nutrition
N = Negligible impact on nutrition
* Not coded nutrition in business warehouse.
Annex 9. 10 Reasons Why Countries Are Uncommitted to Investing in Nutrition

Malnutrition is usually invisible to malnourished families and communities
Most protein-energy malnutrition (PEM) around the world is moderate or mild rather than severe, and most affected families do not realize they are suffering from it. Even a health professional may not know if a child has PEM in the absence of a growth chart, because moderately and mildly malnourished children often look healthy. Micronutrient malnutrition is even harder to detect. While serious micronutrient deficiencies cause night blindness (vitamin A), extreme pallor and lethargy (iron), or goiter (iodine), moderate and mild deficiencies can be detected only by blood tests that most families never get.

The human and economic costs of malnutrition are not recognized
When a child dies of diarrhea, pneumonia, or malaria, few families realize that malnutrition is often the underlying killer, weakening the immune system and reducing the energy to fight disease. Many health workers do not know that malnutrition is the underlying cause of more than half of child deaths. Most families do not realize that malnourished children are likely to be less intelligent, do less well in school, and be less successful as an adult as a result. Many policymakers are unaware of malnutrition’s role in death and disease, or the extent to which malnourished populations with lower IQs, smaller bodies, and reduced energy are less economically productive and competitive. As a result, nutrition often gets low priority in the competition for public investment.

Governments may not know there are faster interventions against malnutrition than economic growth and poverty reduction or that nutrition programs need not be prohibitively expensive
Governments often see malnutrition only as a consequence of poverty rather than as a cause of it as well; if so, they are likely to see economic growth and poverty reduction as the only ways to tackle malnutrition. Decision-makers may not know that relying on economic growth and poverty reduction will not solve the malnutrition problem soon enough, or that there are faster and affordable direct interventions against malnutrition.

There are multiple organizational stakeholders in nutrition
Reducing malnutrition involves families and communities; local and provincial governments; ministries of health, education, food, agriculture, fisheries, and livestock; government departments in charge of income, employment generation, and safety net schemes; NGOs; private health care providers; and the food industry. Getting and maintaining support for nutrition programs is difficult, given the number of stakeholders involved. In theory, nutrition is everyone’s business, but because it is rarely the central concern of any one ministry or department, in practice it can become nobody’s business.

There is not always a consensus about how to intervene against malnutrition
Opinions about how best to reduce malnutrition can differ, depending on viewpoints about what causes it. People working in agriculture may see food insecurity as the cause of malnutrition and increased food production as a solution. People working in health may see malnutrition as a disease, and improving health services as the solution. These differences
are apparent in development assistance agencies, as well as countries. Underinvestment in care-based nutrition programs is especially likely, since care does not figure prominently in the food- or disease-based models of malnutrition that predominate.

**Adequate nutrition is seldom treated as a human right**
This seems surprising at first sight, since no need is more basic and universal than the need to eat. One explanation is that the rights-based approach to development is recent, and nutrition is only beginning to be incorporated into it. Another may be that some governments have little interest in citizens’ rights; if this is the case, articulating nutrition as a human rights issue may generate opposition rather than commitment to action.

**The malnourished have little voice**
Most of those suffering from malnutrition are poor. Poor people have less influence on their governments than the better off, because they lack the education, organization, and political power to pursue their interests. Governments that hear little from their citizens about malnutrition, as well as governments that care little about the poor, have little incentive to give high priority to investing in nutrition.

**Some politicians and managers have goals other than good implementation**
When nutrition programs are implemented less well than a country’s managerial capacity should permit, politicians and managers may be pursuing goals other than reducing malnutrition. Politicians may pay attention to more vocal constituencies than the malnourished, they may be preoccupied with rent seeking, or they may simply pay little attention to nutrition because they hear little about it. Likewise, managers may be preoccupied with bureaucratic concerns, or with seeking rents for themselves or their politicians, rather than with making the nutrition program work.

**Governments sometimes claim they are improving nutrition when they are not**
Governments sometimes back policies—such as subsidizing urban food prices or promoting food production—that are claimed to support nutrition but that often benefit the middle class, better-off farmers, or exporters more than the malnourished. They may be unaware that their policies have little beneficial impact on nutrition, or, as is often the case with urban food subsidies, they may be consciously satisfying a vocal, politically influential, nearby constituency at the expense of a quieter, weaker, more remote one.

**Lack of commitment breeds lack of impact breeds lack of commitment**
This mechanism works through multiple vicious circles. Weak commitment leads to under-investment. Because of this, the quality of nutrition education and services is poor; hence there is little client demand for services, and worker motivation declines. Poor program impact convinces policymakers—even those well disposed to nutrition—that malnutrition is too difficult to tackle. They perpetuate the cycle by under-investing.

*Source: Abridged from Heaver, 2005*

<table>
<thead>
<tr>
<th>Project</th>
<th>Key Performance Indicators in ICRs</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Free-Standing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China Iodine Def. Control</td>
<td>% HH consuming iodized salt; school children—enlarged thyroid, urinary iodine</td>
<td>Cov 40&gt;89%</td>
</tr>
<tr>
<td>Indonesia Iodine Def Control</td>
<td>% HH consuming iodized salt; + baseline survey of TGR, IUR done and used for targeting of project interventions</td>
<td>Cov 58&gt;73%; <strong>cost-benefit ratio calculated</strong></td>
</tr>
</tbody>
</table>
| Burkina Food Sec and N Infant   | Infant nutritional status: ‘to be determined’          
N Ed: 75% of beneficiaries changed infant feeding behavior  
IGA: income increase by 30% +; credit repayment rate 95%  
FFW: days of employment | Not measured, ‘had impact’  
71% quantity; 84% quality  
60% of cash inc is from IG  
95% repayment  
NA |
| Rwanda Food Sec/Soc Action       | Output data only. Food aid: nos. of clients  
Micro-credit: repayment rates  
Soc fund: no. days employment | 128,000  
12-60%  
Soc fund 2.5m days |
| Madagascar Food Sec and N Social | Social fund: days of employment: 1.9m  
Food for work: days of employment: 3.16m  
GMP: nos of children in GM: 310,000  
Coverage rate of children in GM: ? | 1.9m  
1.27m  
489,000  
?  
Reduction in mn 48-58% |
| Honduras N and Health            | Malnutrition children <5 (exact indicator not defined)  
Stunting children 6-9 years  
LBW %  
Conditional transfers: maternal/child coupons: target 317,500  
Training of nutrition staff: 10,504  
Training of mothers and health staff in breast-feeding: 0 | No change at 27%  
Down from 40 to 36%  
From 10.4 to 9.7%  
357,455  
11,746  
16,896 |
<table>
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<tr>
<th>Project</th>
<th>Key Performance Indicators in ICRs</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>Senegal Community N</td>
<td>Weight for age malnutrition: 16.5%</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>No. children growth monitored: 197,000</td>
<td>197,800</td>
</tr>
<tr>
<td></td>
<td>No. women receiving IEC: 272,000</td>
<td>259,200</td>
</tr>
<tr>
<td></td>
<td>No. children receiving food supplementation: 140,700</td>
<td>128,000</td>
</tr>
<tr>
<td></td>
<td>No. women receiving food supplementation: 93,800</td>
<td>92,500</td>
</tr>
<tr>
<td></td>
<td>Proportion of children weighed monthly: 90%</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Prop. of malnourished children recuperated after 6 months: 80%</td>
<td>69</td>
</tr>
<tr>
<td></td>
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<td>Attempt to measure c-e</td>
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<td>Bangladesh Integrated N</td>
<td>Severe malnutrition down to 8%</td>
<td>1%</td>
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<tr>
<td></td>
<td>Moderate malnutrition down to 24%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>LBW: 20%</td>
<td>18%</td>
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<tr>
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<td>Parents’ child care knowledge improved: 70%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>80% of 0-2s covered by GMP</td>
<td>94%</td>
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<td></td>
<td>No evaluation data from project on agr. component</td>
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<tr>
<td>ECD</td>
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<td>India ICDS II</td>
<td>Reduction in severe malnutrition: Madhya Pradesh: -50%</td>
<td>+29%</td>
</tr>
<tr>
<td></td>
<td>Bihar: -40%</td>
<td>-18%</td>
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<td>Reduction in moderate malnutrition: Madhya Pradesh: -20%</td>
<td>+3%</td>
</tr>
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<td>Bihar: -25%</td>
<td>13.1%</td>
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<td>No impact, outcome or output indicators for nutrition</td>
<td>?</td>
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<td>Tanzania Health and N</td>
<td>No impact or outcome indicators for nutrition</td>
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<td>Burkina Health and N</td>
<td>No impact or outcome indicators for nutrition</td>
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<tr>
<td>Malawi Pop H and N Sector</td>
<td>Goiter rate (not clearly defined) Melanoma screening: no indicator defined Iron supplementation: no indicator defined, not measured GMP apparently done, but no indicator defined Women’s credit: repayment rate</td>
<td>Down from 56% to 27% ‘less successful’ ? 95%</td>
</tr>
<tr>
<td>Ecuador Soc Dev II: H&amp;N</td>
<td>Nutrition education: training of staff GMP apparently done, but no indicator defined Vitamin A supplementation: no target noted Iron supplementation: no target noted</td>
<td>3,385 ? 1.9m children 652,000PW, 460,480 infants Vit A def down fr. 15-10% Mat. Anemia down 50-40%</td>
</tr>
<tr>
<td>Peru Basic Health and N</td>
<td>% of children 0-5 months exclusively breastfed % of children 6-9 months receiving breastmilk + solids % of children 6-23 months receiving solid foods first % of children 6-23 m consuming animal protein &gt; 3 times a week % of children 6-23 months receiving daily iron supplement % of women who took iron daily in pregnancy % of women who took vitamin A following delivery % of children 0-5 years which included N counselling No of children 2-7 years given anti-parasite drug: target 45,000</td>
<td>57%, control 64% 70%, control 49% 63%, control 49% 76%, control 77% 16%, control 15% 94%, control 90% 43%, control 47% 3 of 4 project areas improve 89,000</td>
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<tr>
<td>China Comp MCH (Health VI)</td>
<td>No indicators for nutrition</td>
<td>?</td>
</tr>
<tr>
<td>Guinea Health and N Sector</td>
<td>Reduce preval.of mod and sev malnutrition in &lt;5 children to 27% Output numbers but not coverage for iodine and vit A capsules</td>
<td>Down from 36% to 18% ? clients</td>
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<td>Mexico Second Basic Health</td>
<td>Included GMP, but no impact or outcome indicators for nutrition</td>
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<td>Key Performance Indicators in ICRs</td>
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<tr>
<td>Indonesia Third Community H &amp; N</td>
<td>Prevalence of under five underweight&lt;br&gt;West Java&lt;br&gt;Central Java&lt;br&gt;NTT&lt;br&gt;Maluku&lt;br&gt;Irian Jaya&lt;br&gt;Infant birth weight &gt; 2.5 kg&lt;br&gt;West Java&lt;br&gt;Central Java&lt;br&gt;NTT&lt;br&gt;Maluku&lt;br&gt;Irian Jaya</td>
<td>34-21%&lt;br&gt;34-21%&lt;br&gt;46-33%&lt;br&gt;38-26%&lt;br&gt;29-30%&lt;br&gt;91-89%&lt;br&gt;95-93%&lt;br&gt;86-86%&lt;br&gt;93-93%&lt;br&gt;89-92%</td>
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<td>Philippines Urban H and N</td>
<td>Reduction of anemia among registered pregnant women by 25%&lt;br&gt;Reduction of underweight in 14 month children by 25%&lt;br&gt;100% elimination vitamin A def among registered wom &amp; childr.</td>
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<td>Cameroon H Fertility and N</td>
<td>Micro-nutrient suppl. &amp; GMP for 1.5m childr. in150 health centers&lt;br&gt;Prevalence of malnutrition in project areas down from 12% to 8%</td>
<td>?&lt;br&gt;Increased to 22%</td>
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<td><strong>POLICY ANALYSIS AND DEVELOPMENT</strong></td>
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<td>Combating Malnutrition – Time to Act</td>
<td>HNP Peer Reviewed Series 2003</td>
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<td>Food Policy Options: Preventing and Controlling Nutrition Related Non-Communicable Diseases</td>
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<td>Interactive Learning Exchange: Exploring Strategies to Reach Adolescents</td>
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<td>The Millennium Development Goals For Health: Rising to the Challenges</td>
<td>World Bank 2004</td>
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<td><strong>DETERMINANTS OF NUTRITION</strong></td>
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<td>Socioeconomic Inequalities in Child Malnutrition in the Developing World</td>
<td>WPS2434 2000</td>
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<td><strong>ORGANIZATION OF SERVICE DELIVERY</strong></td>
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<td>Social Services Delivery Through Community-Based Projects</td>
<td>SP Discussion Paper 118 2001</td>
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<td>Subsidies as a Social Safety Net: Effectiveness and Challenges</td>
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<td>Food-Based Safety Nets and Related Programs</td>
<td>SP Discussion Paper 225 2002</td>
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<td>The ‘Glass of Milk’ Subsidy Program and Malnutrition in Peru</td>
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<td>Alleviating Structural Poverty in Developing Countries: the Approach of PROGRESA in Mexico</td>
<td>WDR 2004 Background Paper 2003</td>
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<td>A New Approach to Social Assistance: Latin America’s Experience with Conditional Cash Transfer Programs</td>
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<td>Child Growth, Shocks, and Food Aid in Rural Ethiopia</td>
<td>Draft: Yamano, Alderman and Christiaensen</td>
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<td><strong>COST-EFFECTIVENESS/COST-BENEFIT ANALYSIS</strong></td>
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<td>A Cost Analysis of the Honduras Community-Based Integrated Child Care Program</td>
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<td>Estimated Economic Benefits of Reducing Low Birth Weight in Low-Income Countries</td>
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<td>Increased Weight Gain with Mass Deworming Given During Child Health Days In Uganda</td>
<td>Draft: Alderman, Sebuliba, Konde-Lule, Hall</td>
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<td>Hunger and Malnutrition: Copenhagen Challenge Paper</td>
<td>(Behrman, Alderman and Hoddinott)</td>
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<td>Health Economics in Development</td>
<td>HNP Peer Reviewed Series</td>
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<td><strong>MONITORING AND EVALUATION</strong></td>
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<td><strong>COMMITMENT, CAPACITY, INSTITUTIONAL ANALYSIS</strong></td>
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<td>India’s Tamil Nadu Nutrition Program: Lessons and Issues in Management Capacity Development</td>
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<td>Strengthening Country Commitment to Human Development: Lessons from Nutrition</td>
<td>Directions in Development</td>
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## 2. REGIONAL AND COUNTRY STUDIES

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<td>Middle-East and North Africa</td>
<td>Towards a Virtuous Circle: A Nutrition Review Of the Middle-East and Africa</td>
<td>Sector Report 20960</td>
<td>1999</td>
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<tr>
<td>Eastern Europe and Asia</td>
<td>Prospects for Improving Nutrition in Eastern Europe and Asia</td>
<td>Sector Report 23965</td>
<td>2002</td>
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<td>India</td>
<td>Improving Household Food and Nutrition Security</td>
<td>Sector Report 20300</td>
<td>2001</td>
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<td>Bolivia</td>
<td>Poverty and Nutrition in Bolivia</td>
<td>Sector Report 24691</td>
<td>2002</td>
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<td>Brazil</td>
<td>Maternal and Child Health</td>
<td>Sector Report 23811</td>
<td>2002</td>
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<td>Russia Federation</td>
<td>Child Welfare Outcomes During the 1990s</td>
<td>Sector Report 24450</td>
<td>2002</td>
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<td>Yemen</td>
<td>Strengthening, Integrating and Sustaining the Expanded Program on Immunization and Public Health Programs</td>
<td>Sector Report 25928</td>
<td>2003</td>
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<td>India</td>
<td>Attaining the Millennium Development Goals in India: How Likely and What Will It Take?</td>
<td>Sector Report 30266</td>
<td>2004</td>
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<td>India</td>
<td>Reaching Out to the Child: An Integrated Approach to Child Development</td>
<td>Sector Report 29695</td>
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<td>India</td>
<td>India’s Undernourished Children: A Call for Reform and Action</td>
<td>Sector Report draft</td>
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<td>Bangladesh</td>
<td>Breaking the Malnutrition Barrier – Key to Development</td>
<td>Bangladesh Development Series</td>
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### 3. OPERATIONAL GUIDELINES: THE NUTRITION TOOLKIT

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<th>Guidebook</th>
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<td>1. Incorporating Nutrition into Project Design</td>
<td>1996</td>
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<td>2. Basic Facts. Nuts and Bolts of Nutrition</td>
<td>2005</td>
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<td>5. Food Supplementation for Women and Young Children</td>
<td>1999</td>
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<td>6. Food Stamps and Related Nutritional Safety Nets</td>
<td>2000</td>
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<td>7. Nutrition in Early Childhood Development Programs</td>
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<td>11. Food and Nutrition Policy</td>
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<td>12. Management and Supervision</td>
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* not yet prepared
REFERENCES


The references for the review of lending are the Project Appraisal Documents for the more than 60 projects with allocations for nutrition in the Bank’s current lending program; and the 22 Implementation Completion Reports for nutrition projects completed between 1999 and 2003. These projects are shown in Annexes 1 and 5.
Good Work—But Not Enough of It: A Review of the World Bank’s Experience in Nutrition

Richard Heaver

June 2006