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Responsibility for the opinions expressed in this report rests solely with the authors. Publication of this document does not imply endorsement by WFP of the opinions expressed.

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Acronyms

AAR After action review ADB Asia Development Bank

CIDA Canadian International Development Agency

CO Country office (WFP)
CPS Community primary school

CSB Corn soya blend (a micronutrient fortified, blended food product)

DANIDA Danish International Development Agency

DAR During action review
DEO District education officer
DoA Department of Agriculture
DSE Department of School Education

DoR Department of Roads

DUDES Department of Urban Development and Engineering Services

EB Executive Board (WFP)

ECW Enhanced commitments to women (WFP)

EDP Extended delivery point
FCB Food Corporation of Bhutan
FYDP Five-year development plan

FDP Final delivery point FFE Food-for-Education FFW Food-for-Work

GDP Gross Domestic Product HDI Human Development Index

HIV/AIDS Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

HSS Higher secondary school IDD Iodine Deficiency Disorders

IECH Information, Education and Communication for Health department

IP Implementing partner

ITSH Internal transport, storage and handling

LSS Lower secondary school (Classes VII and VIII)

LTSH Landside transport, storage and handling

M&E Monitoring and evaluation MDG Millennium Development Goals

MoA Ministry of Agriculture
MoE Ministry of Education
MoF Ministry of Finance
MoH Ministry of Health

MLHR Ministry of Labour and Human Resources

MoU Memorandum of understanding

MoWHS Ministry of Works and Human Settlements
MSS Middle secondary school (Classes IX and X)

Mt Metric ton MW Megawatts



NFE Non-formal education NFI Non-food item(s)

NGO Non-governmental organisation NID National Institute for the Disabled Nu Ngultrum (Bhutanese currency)

ODB WFP Asia Regional Bureau (Bangkok)

ODOC Other direct operational costs (a WFP budget category).

OEDE Office of Evaluation (WFP HQ)
PDM Post-distribution monitoring

PS Primary school

PWB Pea wheat blend (a micronutrient fortified blended food)

QPR Quarterly progress report
RAA Royal Audit Authority
RBM Results-based management
RGoB Royal Government of Bhutan
RR Retention rate (of students)
SC Save the Children (NGO)

SF School feeding

SPR Standardised project report (WFP)

SSR Student survival rate
UN United Nations
UNCT UN Country Team

UNDAF UN Development Assistance Framework

UNDP UN Development Programme

UNICEF UN Children's Fund

UPE Universal primary education

US\$ United States dollar

WB World Bank

WFP World Food Programme

VAM Vulnerability analysis and mapping

WHO World Health Organisation

WINGS WFP's corporate information network (global system)/SAP-based

Definition of Bhutanese terms:

Dzongkha National Language of Bhutan

Dzongkhag District

Geog Administrative Block or Sub-district

Kharang Broken Maize/maize meal



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Executive Summary

For almost three decades, WFP has provided food and other related assistance to Bhutan through individual projects and, currently, a five-year Country Programme (CP) that was initiated in 2002 and will continue until 2007. The assistance has aimed to improve road and rural tracks and access to markets and social services, to raise school attendance levels and to encourage attendance at health clinics. In September and October 2005, a mid-term evaluation was carried out to determine the outputs and outcomes of the CP. The evaluation assessed the CP following 12 criteria, including coherence, relevance¹, effectiveness² and sustainability. The evaluation focused on the largest activity, school feeding (SF).

Activity 1

SF was found to be effective, contributing to the achievement of joint WFP-government objectives of improved school enrolment and attendance. The evaluation was unable to obtain precise data on the number of eligible school-age children in the country, making it difficult to assess the extent to which Bhutan has progressed towards the goal of universal primary education.³ Recent surveys, however, showed that where SF is provided, both enrolment and attendance have increased. Conversely, where SF has stopped, attendance has reportedly dropped and concentration levels of students declined. The number of students attending school at all levels rose steadily over the period under evaluation.

Anecdotal evidence from monitoring reports, including the opinions of school teachers, suggests that SF also contributed to enhanced learning capacity and attention span of some students, most likely by addressing short-term hunger. However, no comparative studies have been carried out.

Available data on food security suggested that many children from rural families, especially those dependent on subsistence agriculture, would be unable to meet the costs of SF, or, at times, to provide sufficient food for their children to bring to school. Without SF, it could be expected that greater numbers of children from such families would not attend school, particularly when boarding was required.

At the time of the evaluation, nearly 200 schools received food for day students for 225 days a year, and for boarders for 287 days a year. A total of 41,396 students received school meals in 2005 (29 percent of a total student population in Classes PP - XII of 141,388), or slightly more than the number targeted in WFP's CP document. Of these, just less than half (18,596 or 44.9 percent) were girls, and the remainder boys (22,800 or 55.1 percent), a figure slightly lower than that planned by WFP (49 percent girls).

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Relevance: Extent to which the objectives of a WFP operation are consistent with beneficiaries' needs, country needs, organisational priorities, and partners' and donors' policies (Source: WFP M&E Glossary).

Effectiveness: Extent to which the operation's objectives were achieved, or expected to be achieved, taking into account their relative importance (Source: WFP M&E Glossary).

Although the number of eligible school children is estimated to be just over 200,000.



The evaluation found the SF food basket to be nutritionally adequate and acceptable to most school children. Over half (56 percent) of the day students' nutritional requirements, and 80 to 90 percent of boarders' nutritional requirements, were met by WFP food, at an average cost of around US\$0.12 (i.e. 12 cents) per meal. The government contributed funds and/or commodities for the third meal for secondary schools boarders, while parents provided the same for primary school students. Two items were judged to be less appropriate: canned fish was expensive, while sugar was deemed unnecessary due to its low nutritional value. Some school kitchens visited by the evaluation were insufficiently cleaned and maintained, and cooks and several kitchen staff were found to be lacking in expertise in food preparation, hygiene and storage. Such skills are needed, not only improve the taste and variety of meals provided to school children, but also to enhance the nutritional value of the SF programme by preventing illness and maximizing the nutrient content of the SF meals.

Resources from other UN agencies and bilateral donors were substantial in schools and adjacent communities where SF programmes operate. Complementary activities and non-food inputs from both WFP and its partners include training and capacity building of kitchen staff, school managers and District Education staff; kitchen and store improvement and construction; the installation of girls' latrines, water sources, school gardens and fuel-efficient stoves; and dormitory construction. The evaluation observed the poor quality of some installations, and the lack of maintenance of some buildings, fixtures and equipment. Follow-up, supervision, monitoring and technical support to those who had received training in cooking, nutrition and gender was lacking in some cases. While a number of concerns identified by the evaluation could be addressed directly by WFP and its implementing partners at district, sub-district and school levels, others were felt to require advocacy on the part of WFP to mobilize the government and other donors at the national level.

The evaluation noted several missed opportunities to link SF with both academic and practical learning. School staff, parents and students required information and advocacy to appreciate the importance of diversifying the diet and consuming sufficient quantities of micronutrient-rich vegetables. School gardens varied considerably from one school to another, with only some providing a regular supply of nutritious vegetables.

SF monitoring, despite difficult access to many remote schools, was commendable. A new school monitoring form was developed in mid-2004 to facilitate interviews and school inspections, and updated guidelines were distributed to partners at all levels for data collection. Monitoring analyses took place in 2004 and 2005, with the most recent exercise including 147 schools out of 170 assisted schools, or 86 percent of the total, excluding the schools where biscuits are being distributed on a pilot basis.

The evaluation recommends that WFP Bhutan, in addition to adjustments to improve Activity 1, should encourage a gradual increase in contributions to SF by the government and parents/communities, based upon an agreed-upon, step-by-step phase-out plan for SF.

During the remainder of the CP, SF should focus increasingly on providing meals to school children from food-insecure, rural communities at the primary school level, in keeping with WFP's mandate to reach those most in need, and thus gradually reduce support to SF at other levels. Regarding future interventions following the present CP, the evaluation



recommended a continuation of current support to SF under a single project approach, through the following:

- (i) a simplified food basket at the start of the next phase in order to ease the assumption of responsibility for food provision by the national authorities in the medium term;
- (ii) an early withdrawal from lower, middle and higher secondary schools during the course of the next phase;
- (iii) a gradual take-over by the RGoB of part of the WFP simplified food basket (e.g. maize meal as a first step).

Activity 2

From 1976 to mid-2004, the government and WFP collaborated to improve living conditions of the road workers on the national highways, known as the National Work Force (NWF). This was achieved through the provision of subsidized food rations and the creation of a counterpart fund to be used for various welfare activities. As foreseen at the beginning of the CP, Activity 2 was phased out in June 2004. However, the Country Office (CO) continues to monitor the use of the counterpart fund. In close collaboration with relevant national authorities, the CO undertook a final evaluation of the activity in September 2004.

Since Activity 2 had already ended at the time of the evaluation, no specific assessment was made. During the evaluation, some beneficiaries were visited and meetings held with government counterparts, and subsequent findings noted. NWF salaries had not been increased to compensate for the loss of subsidized food rations. As a result, some workers may subsequently have difficulties obtaining basic food supplies at reasonable prices in towns near to their camps, although funds from the counterpart fund were used in part to subsidize the transport of food.

Road workers and their families, who are amongst the most vulnerable in Bhutan, may not receive sufficient follow-up now that the activity has ceased. The impact of the proposed privatization of national highways/road construction and maintenance on the economic and social well-being of road workers and their families may also be of concern. In order to ensure the well-being of the former beneficiaries of Activity 2, and in view of the considerable length of time that WFP assistance was provided to the NWF, WFP should undertake a CO-managed follow-up survey of the NWF workers and their families before the end of the current CP. The results should be shared with the government and concerned donors, for follow-up action, as needed.

Activity 3

After completing six farm roads through WFP support in 2004, the government and WFP shifted resources to power tiller tracks and mule tracks to improve access to remote villages and farm lands. The government initiated a pilot project using Food For Work (FFW) to construct power tiller tracks in late 2004, and began the construction of mule tracks in Mongar and Zhemgang districts. A pilot project for agricultural land rehabilitation was also initiated in Trashigang district.



The evaluation found that some mule tracks visited did not always follow recommended technical specifications. Further efforts were needed by the government to ensure that mule tracks have appropriate hillside water run-off ditches and transverse earth culverts to reduce erosion and lessen future maintenance work. If not already included, these specifications should be written into the mule track construction guidelines, possibly in the form of a simple field manual for work gang supervisors.

Efforts are also needed to ensure, to the extent possible, that mule tracks are constructed within the normal gradient guideline of 6-7 percent and should only rarely exceed the maximum of 10 percent (e.g. to avoid negative ecological impact).

The evaluation also concluded that WFP should support the construction of a further 60 kilometres of mule track, using remaining available resources under the current CP.



I. INTRODUCTION

I.0 Context

Bhutan is currently categorized as a Least Developed/Low Income Food-Deficit Country, with an estimated total population of 658,000.¹ The majority of Bhutanese (80 percent) reside in rural areas and are dependent on subsistence farming, despite a sharp rise in rural-urban migration in recent years. Over 39 percent of the population is under the age of 15, and the 2005 growth rate is estimated at between 2.1 and 2.5 percent. While there are several language groups and communities, the population of Bhutan is essentially composed of two broad groups – the early inhabitants of Buddhist faith, and people of Nepalese origin who have settled in the country in more recent times.

A landlocked country with a land area of 38,394 square kilometres, Bhutan is bordered by the Tibetan autonomous region of the People's Republic of China to the north and by the Republic of India to the south. The country has one of the most formidable mountainous terrains in the world, ranging in height from 100 metres to 7,500 metres, which hinders access to health and educational services, as well as to markets. Climatic conditions vary considerably according to altitude, but the entire country experiences monsoon rain in summer and a relatively dry winter. With over 70 percent of its land area covered by forests of temperate and sub-tropical species, Bhutan has one of the richest biodiversities in the world, with about 3,281 plant species per 10,000 square kilometres. The country is endowed with a river system that has an estimated potential to generate 30,000 megawatts (MW) of hydro-electricity. However, the steep and unstable terrain and the relatively young Himalayan mountain system render the country ecologically very fragile. Agricultural production is severely constrained, as only around 16 percent of the land area is cultivable and less than 5 percent is under cultivation.

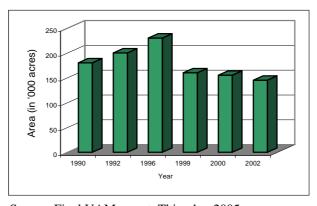


Figure 1: Total area under cereal crops

Source: Final VAM report, Thimphu, 2005

^{9&}lt;sup>th</sup> Five-Year Plan (2002-2007), page 2; other figures available include 734,340 (National Health Survey – 2000, with 2.5 percent growth rate for 2003), 752,700 (Statistical Yearbook of Bhutan, 2004) or 895,000 (World Bank Bhutan Data Profile, www.devdata.worldbank.org) in 2004. Some UN documents record a figure of 2.1 million that appears to be based on an original estimate from the 1970s that has been increased automatically with a fixed annual adjustment and has not been modified. A population census was being undertaken in 2005 and should give more reliable data. Per capita GDP estimates are complicated by the currently unreliable population data.



Administratively, the country is divided into 20 *dzongkhag* (districts), which in turn are composed of 201 *geog* (sub-districts or blocks). Year-round food insecurity is estimated to affect about one third of the population, while a larger proportion is affected by lean-season food shortages. Grain deficits affect nearly one third (63) of Bhutan's 201 *geogs*. This situation is caused by difficult terrain, limited communications, scattered communities and insufficient road infrastructure.² Bhutan is connected to the Indian grain market, however, and able to access cereals such as rice at competitive prices from its southern neighbour.

The GDP per capita was estimated to be US\$834 in 2003 with a Human Development Index (HDI) of 0.536.³ The new Tala hydro-electric power project, expected to generate up to 1,200 MW of electricity, is scheduled for completion in March 2006. Bhutan's growth prospects will receive a boost, and GDP is expected to grow significantly from 2006-2007 onwards. The revenues from the project should enable the government to meet all of its current expenditures, while total debt as a percentage of GDP is expected to move on a downward trajectory.

For over 40 years, the Royal Government of Bhutan (RGoB) has sought to address constraints to development, focusing considerable efforts on reducing poverty. Multilateral organizations, including the United Nations, and bilateral donors currently provide assistance to the Bhutanese government to achieve its key development goals, including food security and universal primary education.⁴

The RGoB is implementing its 9th five-year development plan (FYDP), covering the period from 2002 to 2007. The plan aims to "develop the social and infrastructure sectors through quality education and health services, enhance productive capacities and income in the rural areas through rural access and poverty alleviation programmes, and further develop the private sector." In a recent needs assessment conducted by the Asia Development Bank (ADB), support to the education sector was ranked highest of ten priorities. Accordingly, over 14 percent of the RGoB's budget under the 9th FYDP has been earmarked for the achievement of universal primary enrolment or "education for all" school-aged children by the year 2007. The proposed outlay for education over the five-year period was Nu.10,209

NYCOM Consultants, WFP School Feeding Programme Baseline Survey, Preliminary Findings, Thimphu: 27 May 2005.

Bhutan's rating in the Human Development Index (HDI) remained at 134 out of 177 countries. The HDI figure of 0.536 is from the Statistical Year Book of Bhutan, 2004. A composite indicator, the HDI focuses on three measurable dimensions of human development – living a long and healthy life, being educated and having adequate resources for a decent standard of living.

According to a note from the CO, the draft Bhutan MDG Status Report for 2005 records that the education sector has been provided with about 14.6 percent of the total outlay to date under the 9th Five Year Plan.

Universal Primary Education (UPE) is the full enrolment of all children in primary school and age-group, i.e. 100 percent net enrolment ratio. At the Education Forum of 2000, Bhutan agreed that by 2015, all children of primary school age would participate in free schooling of acceptable quality, gender disparities would be eliminated, levels of adult illiteracy halved, early childhood care and education enhanced, learning opportunities for youth and adults greatly expanded, and all aspects of education quality improved. In Article Eight of the Dakar Framework, governments, organizations and agencies represented at the World Education Forum pledged to "systematically monitor progress towards EFA goals and strategies at the national, regional and international levels". Also in 2000, the MDGs were agreed upon, two of which (UPE and the elimination of gender disparities in primary and secondary education) were defined as critical to the elimination of extreme poverty.



million (approx. US\$250 million), of which Nu. 2,597 million has been slated for the central programmes, Nu. 7,264 million for the 20 *dzongkhag* and Nu. 348 million for the 201 *geog*. Of the total planned budget, just over half (Nu. 5,351 million) was for recurrent expenditures and the remainder (Nu. 4,858 million) for capital expenditures.

I.1 Evolution of WFP Assistance to Bhutan

The first WFP Food for Education (FFE) activities were approved in November 1974 and commenced in early 1975. Since the establishment of the WFP Country Office (CO) in 1976, WFP has provided food and other related assistance to help improve road and rural track access to markets and social services, to raise school attendance levels and to encourage attendance at health clinics.

Following more than 25 years of WFP development assistance based on an individual project approach, the first five-year CP in Bhutan was initiated in mid-2002, and consists of the following activities:

- Activity 1 Improving Rural Children's Access to School: The first and main activity, accounting for 85 percent of the original CP budget, aims to enhance participation in education by rural families. By providing school meals, the activity aims to offer an incentive to families to send children to school and to facilitate learning. The activity is in line with the MDG of universal access to primary education. A detailed log frame of Activity 1, updated in 2004, is found in Annex 8.
- Activity 2 Improving Road Workers' Access to Education and Health Services: WFP's support has been phased out since June 2004, although WFP continues to monitor the counterpart fund for social welfare improvements.
- Activity 3 Improving Rural Households' Access to Agricultural Services: A number of activities, such as power tiller track and mule track construction, aim to improve rural households' access to agricultural services. This Food-for-Work (FFW) activity is nearing completion.

Activity **Cost in US\$** Food % in MT Activity 1 Improving Rural Children's Access to School 13,007,055 85 29,766 80 Activity 2 Improving Road Workers' Access to Education and 9 4,649 13 1,431,180 **Health Services** Activity 3 Improving Rural Households' Access to Agricultural 825,000 6 2,760 7 Services Total 15,263,235 100 37,175 100

Table 1: WFP Bhutan CP Resources (in US\$ and MT) by Activity

Activities are implemented by relevant ministries of the RGoB, including the Ministry of Agriculture (MoA), Ministry of Education (MoE) and the Ministry of Works and Human Settlement (MoWHS). Key implementing partners include the Department of School Education (DSE), the Department of Roads (DoR), the Department of Agriculture (DoA) and the Department of Urban Development and Engineering Services (DUDES).

Sometimes written as "gewogs". The spelling in English appears to vary from one document to another.

Figures in ngultrum (Nu.) from the 9th FYP are rounded up or down to the nearest million ngultrum in this text.



I.2 Objectives of the Evaluation and Scope of Work

The evaluation focused on output and outcome level results at the mid-term of the CP, with emphasis on the SF activity. It aimed to assess the extent to which the current CP, as implemented, has provided the best modalities for reaching the intended objectives, on the basis of results to date. The scope of the evaluation includes an assessment of the CP based on 12 evaluation criteria, as well as an examination of logistics and procurement. General compliance with WFP's Enabling Development policy and Enhanced Commitments to Women policy was also assessed.

In light of ongoing regional efforts to assess the nutritional impact of SF, the evaluation reviewed the viability of assessing the effects of the Bhutan programme on the nutritional status of school children as a possible objective in the future. In addition, the evaluation attempted to provide feedback on the contribution of SF to the RGoB's efforts to attain the objectives outlined in global initiatives such as Education for All and the UN MDGs. The evaluation aimed to provide recommendations for the remaining phase of the current CP and for the next phase of WFP operations in Bhutan. (See Annex 2 for Terms of Reference of the Evaluation.)

I.3 Methodology

The evaluation team undertook background research before travelling to Bhutan in mid-September 2005. Much of the documentation had been collected during a pre-mission visit to Bhutan by the OEDE Junior Professional Officer in June 2005.

The in-country evaluation work commenced in the capital, Thimphu. There were five days of meetings with partners and WFP staff, as well as with document review and research. The evaluation team then conducted a nine-day field visit to schools that are recipients of WFP food aid, with brief visits to several schools that have graduated from WFP assistance. Visits to three FFW sites were also undertaken, including one power tiller track and two mule tracks. The team returned to Thimphu for five days for additional interviews and research, and to draft an aide-memoire. One day was devoted to an internal "during action review" (DAR) with CO staff, facilitated by the evaluation team, followed by a de-briefing with RGoB counterparts, sister UN agency staff, bilateral donors and NGO staff. The final day of the evaluation was spent in the WFP Asia Regional Bureau in Bangkok for de-briefing.

Data collection was carried out through a variety of techniques ranging from direct observation to informal and semi-structured interviews. The analysis was developed by triangulating information obtained from various stakeholders' views with secondary data and documentation reviewed by the team.



I.4 Constraints

Many schools supported by WFP, particularly community primary schools (CPS), are located in remote off-road sites, and can require several days' walk through steep, rugged terrain to be reached. Due to time constraints the evaluation team was unable to visit such schools, and thus was limited to those that were fairly accessible (located either on or near a road). Moreover, travel by vehicle was slow due to narrow, winding roads and other impediments such as heavy rain, fog and the threat of landslides. Therefore, the number of schools visited was quite small, despite the relatively large portion of time in-country spent in the field.

The evaluation team was also unable to carry out more than a few interviews with the parents of school children. Most boarding students resided between several hours and several days' walk from the school, making it impossible for the team to visit their homes. For this reason, beneficiary perceptions are limited mainly to those of school children met by the evaluation team.

The evaluation team was able to visit several mule track work sites. However, there was insufficient time to walk more than a few kilometres on each of the tracks. FFW beneficiaries met and interviewed by the evaluation team were hence limited to those residing within close proximity to the road, rather than those from more isolated areas.



II. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

II.1.0 Bhutan Country Programme Overview

II.1.1 Activity One: Improving Rural Children's Access to School

Background

MoE, 2005.

The Bhutanese government has supported education since the medieval period, when the state provided free monastic education. From six years of age, every Bhutanese child has the right to eleven years of free "basic education" which extends from pre-primary to Class X. School attendance in Bhutan is not compulsory, however.

The seven-year primary school (PS) cycle begins with pre-primary and ends with Class VI (one year of pre-primary and six years of primary), and is followed by two years of lower secondary school (LSS) and two years of middle secondary school (MSS), or a total of four years of secondary school. Following MSS, a limited number of students go on to complete Higher Secondary School (HSS), which includes Class XI and Class XII.

According to the MoE, the objective of primary education is to "educate students in our country's history, geography, culture and traditions, while also teaching them basic literacy and numeracy skills."

The current modern educational system, initiated in 1960, provides free tuition, stationery, textbooks, sports equipments, and, where required, meals and boarding facilities. ¹⁰ In some rural schools, uniforms are not obligatory, in an effort to encourage greater enrolment and attendance. Students are required to contribute to a school Welfare Fund Scheme. Parents make contributions to the School Development Fund at the following annual rates:

- Token fee of Nu. 5 (approx. US\$0.15) at all levels¹¹
- School Development Fund of Nu. 30 (approx. US\$0.75) for primary level
- School Development Fund of Nu. 100 (US\$2.50) for other levels

Where there are boarding facilities, government provides a stipend of Nu. 250 (US\$5.56). Without accurate census data, the number of children in each age group within the population can only be estimated, making it difficult to assess the actual proportion of Bhutanese children enrolled in school and/or achieving basic education. The RGoB has generally relied on the indicator of gross enrolment, ¹² using an estimate of the school-aged population.

www.devdata.worldbank.org, November 2005. RGoB Education policies are very much in line with the EFA goal of Education for All by 2015.

Increased cost-sharing with parents has been the trend over the past decade. Accordingly, since 1993, students in urban areas provide their own stationery.

The Bhutanese currency, the Ngultrum (or Nu.), is linked to the Indian rupee. During the latter half of 2005 the value of the currency was in the range of Nu.40 to 45 to the US\$.

Gross enrolment refers to the total enrolment at a given level of education, regardless of age, expressed as a percentage of the population in the officially defined school age-group, while net enrolment refers to total enrolment of the official school age population divided by the total population of the corresponding age. Gross enrolment is obtained by dividing the total number of children, of whatever age, attending school by an estimate of the total number of children of primary school age.



Bhutan has achieved substantial progress towards increasing the proportion of pupils who complete primary education. In 2000, almost 70 percent of children starting Class I reached Class VI, compared to 35 percent in 1990. By 2005, 313 schools at the primary level were functioning in Bhutan, including 92 government primary schools (PS) and 221 community primary schools (CPS). In 2005, 26 new schools were established, including 20 CPS, three PS, one LSS and two MSS, while seven other schools were upgraded.

The RGoB has made concerted efforts to provide educational opportunities to communities in rural and remote areas. The CPS system was established in order to provide education to children in such communities. Whereas government schools are built, maintained and staffed with state funding and offer all seven primary classes, CPS are constructed and maintained by communities in isolated areas with relatively few children. The government contributes funds for teachers, equipment and supplies.

A boarding system was developed to address the remote locations of many schools. Boarding schools are mainly for HSS and provide room and board for children who live too far to walk to school each day (usually those living over seven kilometres, or two hours' walk). The government and/or communities have established some form of boarding facilities in approximately half of the country's PS, LSS and MSS. Boarding students in government schools are provided with a dormitory bed, showers and toilets, and meals.

About 45,000 school-aged children (about 25 percent of Bhutan's children between the ages of six and 14) do not attend school, with variations across the country ranging from less than 7 percent in Gasa, Ha and Bumthang districts, to over 35 percent in Dagana, Tsirang, and Samtse districts. ¹⁴ One reason for non-attendance is the lack of availability and limited accessibility of primary schools. According to MoE attendance data, districts with the lowest enrolment are in the south. ¹⁵ The 9th FYDP includes an objective of building 137 new CPS, in order to halve the walking distance from seven kilometres (two hours) to three kilometres (one hour). The construction of additional PS would also reduce the need for boarding facilities at the primary level.

Another reason cited for non-attendance and dropping out of school was poverty, since poor families cannot afford to send children to school and/or to lose their potential earnings/contributions to family income. For the very poor, school attendance represents a considerable financial burden. In addition to annual nominal fees, parents must provide uniforms, and, if there is a SF programme, a cash or in-kind contribution. According to a UNICEF study, parents paid an average of Nu. 1,729 per student over six months. Forty percent of the study sample households had a cash income of only Nu. 5,000 per year and an average of 3.4 children. Not surprisingly, households with the lowest cash income had correspondingly lower school enrolment ratios. Surveys show that most parents understand the importance of education. Some were skeptical, however, of the employment opportunities their children would eventually have. Others were concerned that their

¹³ The remainder are private schools.

¹⁴ MoE. 2003.

¹⁵ During the

During the period from 1989 to 1990, some schools in southern Bhutan were closed due to security concerns. At present, however, most schools have re-opened with only a few remaining closed.

⁶ UNICEF-RGoB, Factors affecting enrolment, repetition and dropout of primary-school-age children in Bhutan, UNICEF-RGOB, Thimphu: 2002.



offspring would be dissatisfied with rural farm life after completing school.¹⁷ Less than one percent of Bhutan's total enrolment is in higher education at degree level in college and above.

The rapid expansion of primary education country-wide and overall success of the education system in retaining students has placed enormous pressure on secondary and post-secondary schools. About nineteen private schools were recently established, easing to some degree the pressure on public schools. Educational opportunities beyond high school are limited, leaving a critical shortage of secondary education facilities, and an insufficient number of qualified teachers. Despite encouragement for school leavers to enter some form of technical training, the present system is limited in both capacity and efficiency, and may suffer from social stigma that blue collar jobs are "undesirable." Three new Vocational Training Institutes (VTI) were opened in 2003, which, together with the Construction Training Centre (CTC) provide training to 419 students. The Royal University of Bhutan and several ministries offer vocational education in forestry, health, management and natural resources.

Table 2: Progress Towards MDG Target 3 - Completion of a Full Course of Primary Schooling by 2015

Indicators	1990	2000 2015		Will goal be met by 2015?			
Gross Primary Enrolment rate	55%	72%	100%	Probably			
Proportion of pupils starting grade 1 who reach grade 5	73% (1991)	86% (1998)	100%	Probably			
Proportion of pupils starting grade 1 who reach grade 7	35%	69.30%	100%	Potentially			

Source: MDG Progress Report, UNDP, Thimphu, 2002¹⁸

Priorities for development assistance recommended by the *MDG Progress Report 2002* to facilitate the achievement of Target 3 included:

- Improving access to primary education through the expansion of schools, particularly the network of community schools
- Capacity building at various levels to accommodate increased enrolments
- Supporting school meals and boarding facilities
- Upgrading quality of primary education through improvements in curriculum, learning environment, teacher qualifications and didactic methods
- Focusing on the special education needs of disabled and disadvantages groups

Dorji, L. "Determinants of School dropout and Non-enrolment from the Young People's Perspective", Bhutan Education, Employment, Development, Centre for Bhutan Studies, Thimphu: 2005.

UNDP Bhutan Website, www.undp.org.bt/mdg/mgoal_two.htm, November 2005.



WFP Support to Education in Bhutan

WFP's food assistance through SF expanded from 11 schools and some 1,000 students in 1975 to 196 schools and 41,396 students throughout all of Bhutan's 20 dzongkag districts in 2005. The CP currently targets over a quarter of all children currently enrolled in school in Bhutan, of whom 49 percent are planned to be girls. In terms of coverage and budget, SF is the largest component under the CP and currently constitutes over 90 percent of resource utilization.

WFP's first development project in Bhutan (Project 2143) was approved in November 1974 for a total value of about US\$1.1 million, and aimed to improve nutrition in primary schools. The project was expanded twice, first in 1979 and later in 1985, for a further total commitment of approximately US\$12.6 million. The project title was changed to "Food assistance to education development", thus emphasizing the revised objective of educational enhancement rather than nutritional improvement. Project 3734, "Assistance to primary and post primary students and vulnerable groups", approved in December 1988, combined assistance to school children and vulnerable groups, including young children and women. An expansion phase was approved in December 1994, with a focus on school children and hospital patients, for a total value of US\$12.3 million. The last stand-alone education project was Project 3734.02 ("Support to primary education"), which had a total value of US\$3.6 million. Total support by WFP to SF in Bhutan had an estimated value of between US\$35 and 40 million, including the current CP's Activity 1 (Table 3 below).

WFP Project/Programme	Years	Committed Resources (in US\$)			
2143	1974	1,1 million			
2143 Expansions	1979; 1985	12,6 million			
3734 and Expansions	1988 – 2002	12,3 million*			
3734.02		3,6 million			
Country Programme	2002 – 2007	15,26 million			
TOTAL VALUE	1974 – 2007	44,86 million			

Table 3: WFP's Contribution to Education, 1975 – 2007

SF activities were established to contribute to the RGoB's objective of expanding basic education, while maintaining quality and alleviating gender gaps. Activities were specifically intended to increase enrolment, increase attendance, reduce absenteeism and drop-out rates and increase learning achievement. Below are the specific anticipated outcomes of the SF activity, as defined in the CP Logframe:

1. Increase enrolment ²¹ of students up to the end of middle secondary school (MSS or Class X) in all rural boarding schools

^{*} Includes resources used for both SF and vulnerable groups/hospital patients

Basic Education refers to education intended to meet basic learning needs; it includes instruction at the first or foundation level, on which subsequent learning can be based; it encompasses early childhood and primary (elementary) education for children, as well as education in literacy, general knowledge and life skills for youth and adults; it may extend into secondary education in some countries.

WFP Logframe, Activity 1, WFP, Thimphu: 2002.

[&]quot;and reduce the drop-out rate" was removed from the CP Logframe following an update in December 2004.



- 2. Improve regular attendance of day students, especially girls, from remote areas in less accessible schools
- 3. Improve children's attention at school by increasing their food intake
- 4. Close the national gender gap in school enrolment for each age cohort of school-aged children, and
- 5. Assess children's enhanced concentration span at outcome level.²²

Outputs set in 2002²³ at the start of the CP were as follows:

- An average of 27,400 boarding students at primary schools, lower secondary schools and middle secondary schools having received two meals per day during 295 days per year for five years
- An average of 13,900 day students at selected remote primary and community schools having received two meals per day during 230 days per year for five years
- An average of 1,800 day students at lower secondary schools having received one meal per day during 230 days per year for five years
- At least 49 percent of the above students' being females.

Main findings for Activity 1

Quality of SF Programme. According to the latest monitoring reports, the SF monitors found about 92 percent of the SF programmes reviewed to be of generally acceptable quality, with most of these (60 percent) either good or excellent. Only 11 of 138 schools responding to monitoring questions were found to be poor.

Number of school meals served and attendance. Approximately 41,396 students received school meals in 2005, of whom 18,596 were female (44.9 percent) and 22,800 male (55.1 percent). A total of 196 schools received food for 225 days a year for day students and 287 days a year for boarders. The number of students attending school at all levels has risen steadily over the period. Available evidence suggests that WFP's support to the education sector has been a contributing factor. As WFP is one of many providers of a variety of resources for improved education, it is difficult to quantify the comparative weight of its contribution to the objectives of increased enrolment and improved daily attendance. In schools with no SF, and in some schools that no longer provide SF, enrolment rates have also increased, and school attendance improved. The evaluation was unable to obtain precise data on the number of school-age children eligible for schooling, making it difficult to assess the extent to which school enrolment is nearing the goal of universal primary education. Nonetheless, information from WFP-Bhutan monitoring reports shows that where SF is provided, schools have experienced increases in both enrolment and attendance. Conversely, where SF has been discontinued, there have been reports of attendance rates dropping and decreased concentration levels. Available data on food security suggest that many children from rural families, especially those dependent on subsistence agriculture, would be unable to meet the costs of SF, or, at times, to provide sufficient food for their

A case study is suggested as a means of verification of the indicator, and Form 6 of the recently revised monitoring system also contains a question on enhanced concentration.

Output indicators were to be adjusted annually, taking into consideration the duration of the academic year and the most recent number of students.



children to bring to school. Without SF, it could be expected that greater numbers of children from such families would not attend school, particularly in the case of boarders.

Contributions from government and families. Contributions from RGoB and families/communities appeared to be minimal, inconsistent and, in terms of quality, inadequate. For example, vegetables purchased with the government stipend and provided from family contributions consist mainly of potatoes, radishes and chillies. Parents sometimes provide fuel for SF, but not consistently. (Some school agriculture activities produced considerable amounts of vegetables and livestock, which were later sold and the proceeds used to purchase mainly starchy roots rather than micronutrient-rich vegetables.)

SF and learning capacity. Anecdotal evidence from monitoring reports, including the opinions of school teachers, suggests that children's attention spans have been enhanced by the SF programme through eliminating short-term hunger. This is further supported by the latest school monitoring analysis in 2005, in which almost all teachers (97 percent) had perceived the programme to have enhanced the concentration and learning capacity of the students. Of these, 83 percent felt that the feeding programme had had either very significant or extremely significant effects on their students' ability to learn. (No comparative studies have been carried out, in part due to the difficulty in establishing controls amongst those who do and those who do not receive SF, and in accurately quantifying the variable of paying better attention in class.)

Quality of food basket. WFP food rations are generally balanced and nutritious, delivered on a regular basis and are eaten by students. The food basket, consisting of rice, "kharang" (maize meal), pulses, canned fish, fortified vegetable oil, sugar and a fortified blended food – either corn soya blend (CSB) or pea wheat blend (PWB) – was nutritionally adequate and largely acceptable to the beneficiaries. Minor problems with the quality of some locally purchased kharang were experienced during the period but had been resolved. While rich in nutrients, canned fish was found to be a high-cost item, while sugar, with little nutritional value, had limited value in the food basket. If the fish were replaced by a larger ration of mixed pulses, for example, both items could be removed from the food basket with virtually no impact on its nutritional value. The evaluation noted that the nutrient value of PWB, the main blended food found in schools visited by the evaluation, is similar to that of CSB, but that the PWB contains 6 percent sugar. The ration could be simplified in order to facilitate eventual phase-over to the RGoB and communities.

School meals and snacks. Boarding students in selected CPS, PS, LSS, MSS and HSS currently receive food assistance for a mid-morning snack and two meals per day from the WFP. Parents cover the third meal in primary schools and the Government provides funds for the third meal for secondary school students. Day students in selected CPS, PS and LSS receive a mid-morning snack and one meal per day from the WFP. Food for day students provided up to 56 percent of the energy and protein requirements, while that for boarders provided 80-90 percent. Total WFP costs were estimated at US\$0.12 (twelve cents) per meal.

SF equipment and facilities. About two thirds of the schools reported good or acceptable kitchens, yet 50 schools (36 percent) had insufficient cooking facilities and three schools had no kitchens at all. Most schools had food stores in acceptable or good condition, and



only four schools (3 percent of those monitored) had no food stores. In nearly one third of the schools monitored regularly by the CO and partners, food stores were in unacceptable condition. Fuel-efficient stoves were found to be in good or acceptable working order in some 52 percent of the monitored schools, but not functioning well in 27 percent and non-existent in 21 percent of schools. These findings were verified by the evaluation in some of the schools visited. Some had broken equipment, including non-functioning fuel-efficient stoves, and lacked cleaning materials and supplies.

Hygiene and sanitation. In three quarters of the schools monitored in 2005, hygiene and sanitation were acceptable. Similarly, while hygiene and sanitation of the kitchen and cooking utensils was found to be adequate in most schools, 17 percent were found to be below acceptable standards. The evaluation observed food preparation and clean up activities being carried out by some cooks and mess committee members with little knowledge of food hygiene and sanitation practices.

Dining facilities. About 60 percent of the schools monitored had dining facilities of acceptable or good quality, but 15 percent had no designated place for children to eat and 25 percent had unacceptable facilities for dining.

Cooks and food preparation. Cooks were generally recruited from neighbouring villages or areas near the schools. The evaluation found that most cooks were not trained in cooking, and had worked previously as either farmers or unskilled labourers. Although all of the cooks observed had learned to cook large quantities of food for group feeding, most were not particularly creative. The evaluation thus confirmed the findings of a Nutrition Review for FFE conducted in 2001 (see section II.2.7 for a discussion of this review) that many cooks were not familiar with WFP commodities and that the same recipes were used in all schools visited, day after day, resulting in a monotonous and even less nutritious (in terms of diversity of vegetables, for example) diet for school children. In some schools, in addition to cooking, kitchen staff collected firewood, maintained the water supply, and fed the pigs and other livestock. No female cooks were observed in any of the schools visited by the evaluation. Schools administrators explained that no women had applied for the positions and that the tasks involved in cooking school meals were too strenuous for females. WFP had organized nutrition training for senior school staff, and cooks' training workshops in 2003 and 2005 that also included information on nutrition. The evaluation did not meet any cooks who had received the training. All cooks could benefit from training (or refresher courses), and regular follow-up and supervision after workshops to help improve food preparation techniques. Possible topics for training to improve the capacity of cooks and kitchen staff, and the general knowledge of students and teachers include: how to diversify dishes, meals and weekly menus; how to ensure adequate levels of hygiene and sanitation for food preparation, service and storage; and how to provide creative, satisfying and nutritious meals with limited resources.

Mess committee. All schools visited by the evaluation team had a mess committee composed of both teachers and students, with emphasis on gender balance. The roles of mess committees, which comprised between three and nine people, included: stock-taking of the WFP food supply; maintenance of a stock register that includes the issue of rations; supervision of the kitchen (hygiene); assistance in food service; reporting the status of stock



to the school authority; and keeping accounts of parents' contribution and shopping for the school. Stock registers appeared to be well maintained in the schools.

Non-food support. Non-food support from WFP to the education sector included the construction and improvement of school kitchens and stores; the provision of fuel-efficient stoves and bunk beds; support to the construction/renovation of warehouses and installation of "wiikhalls" (pre-fabricated canvas storage facilities); and technical and financial support to school gardens. WFP also provided capacity building, in the form of training for cooks, training in fumigation and warehouse management, and training of implementing partners in monitoring and reporting, nutrition and gender. The evaluation identified several concerns regarding non-food support to SF, including the quality of the installation and maintenance of buildings, fixtures and equipment and insufficient training in cooking, nutrition and gender. Nearly half of the schools reported inadequate or non-existent boarding facilities, an issue of great concern particularly in terms of the safety and wellbeing of informal boarders. Some 21 percent of the schools reported inadequate water supply for the SF programme, and two schools had no water supply at all. About one third of the schools reported that toilets were inadequate, and five schools (4 percent) had no toilet facilities. Slightly less than two thirds had acceptable or good sanitation facilities. While some issues can be addressed directly by WFP and its implementing partners at district, sub-district and school levels, others will require advocacy with partners in order to be resolved.

School gardens. The 2005 monitoring analysis showed that while most school gardens were good or acceptable (72 percent), 12 percent were inadequate. Some 16 percent of schools with SF programmes had no gardening facilities at all. School gardens provided some seasonal vegetables but quality and quantity varied greatly, depending on the skills and interest of the person responsible for the garden. School gardening activities are potentially useful in promoting nutrition, agricultural skills and respect for the farming profession and manual labour, and the activity could be enhanced.²⁴

Other resources. Resources from other UN agencies and bilateral donors in schools and adjacent communities where SF is operating have been substantial, with subsequent positive effects on WFP's assistance. Examples of complementary inputs include the provision of fuel-efficient stoves (UNDP Small Grants Project); support to health, nutrition and hygiene (school vitamin and mineral supplementation and deworming programmes through MoH, UNICEF and WHO; latrine construction and water supply through MoH and UNICEF); and improved school infrastructure (classrooms and school facilities through MoE, UNICEF, Save the Children (SCF) and the World Bank). Directed multilateral support from the Government of Denmark through WFP for a pilot school biscuit programme was also provided.

According to a recent School Agriculture Programme evaluation, agriculture forms an integral part of the formal curriculum for Class VIII (LSS) in the science and geography textbooks. Nutrition information is provided in the biology curriculum in Class IX (MSS). The linkages could be extended more broadly into the curriculum at different levels, however.



Recommendations for Activity 1

- WFP should remove canned fish and sugar from the food basket at the end of the current CP. Fish should be replaced with a higher ration of locally available pulses in order to "nationalize" the food basket, reduce costs and simplify food management, while maintaining its nutritional value. In this way, the commodity cost of the food basket could be reduced by an estimated 40 percent.
- WFP should advocate with the RGoB to continue to develop the interface between school gardens and the school curriculum (at least until LSS level), including an increase in the practical application of subjects such as science, geography, health/nutrition and marketing/business practices.
- WFP should address technical and capacity development needs in health/nutrition, food preparation, hygiene and service, infrastructure development, agriculture, environment and personal sanitation and hygiene with other national and international partners (in addition to MoE), to ensure acceptable quality of support activities and thereby enhance the overall outcomes of the SF programme.
- WFP should foresee a gradual increase in contributions to SF by RGoB and parents/communities, based upon an agreed-upon, step-by-step phase-out plan by WFP for the medium term. WFP should continue to focus during this period on providing SF to school children from food-insecure, rural communities, at the primary level, in keeping with its mandate to reach those most in need, and gradually reduce support to SF at other levels.



II.1.2 Activity Two: Improving Road Workers' Access to Education and Health Services

Background

From 1979 to mid-2004, the RGoB and WFP worked together to improve the living conditions of the national highway road workers, known as the National Work Force (NWF). This was achieved through a series of stand-alone projects that provided subsidized food rations and created a counterpart fund to support various welfare activities. In the 2002-2007 CP document, Activity 2 is linked to WFP Strategic Priority (SP) 2, enabling poor households to invest in human capital through education and training. During the formulation of the WFP CP, however, it was concluded that providing support to national road construction and maintenance was not in keeping with WFP's Enabling Development policy, which focused on direct asset creation for the beneficiaries or communities. In order to phase out Activity 2 gradually, WFP decided to carry out the activity for only two years, from mid-2002 to mid-2004.

Activity 2 aimed to promote beneficiaries' access to schools and health services, and to provide the government with a sound foundation for continuing support to the social and economic development of the NWF, which is one of the most vulnerable groups in the country. The activity was to receive 4,649 tons of commodities (rice, pulses and vegetable oil) valued at US\$1,431,180 – representing some 9 percent of total core CP resources. Family rations of rice, pulses, vegetable oil and salt were to be made available to up to 4,000 workers and 16,000 of their family members.

Using a system of subsidized sales, with the proceeds going into a counterpart fund, road workers paid only Nu. 634 (approximately US\$15) for a monthly family ration of 62.5 kg of rice, 7.5 kg of pulses, 1.875 kg of oil and 0.75 kg of salt. Single workers paid Nu. 253 (approximately US\$6) for a monthly ration of 25 kg of rice, 3 kg of pulses, 0.75 kg of vegetable oil and 0.3 kg of salt.. Based on the average monthly wage of Nu.3, 000 (approximately US\$70) for an unskilled worker, the cost of a family ration represented 21 percent of the monthly wage. The cost of a single ration was about 8.5 percent of the monthly wage. In addition, CSB was to be provided to expectant and nursing mothers. Workers' children in day-care were to receive a morning drink or an afternoon porridge that would provide 43 percent of their daily calorie and 70 percent of their daily protein requirements.²⁷

The first project (2117: "Construction and up-grading of roads, mule tracks and suspension bridges) was approved in April 1979 for a total WFP value of US\$2.82 million. A first expansion worth US\$4.52 million was approved in November 1984 and a second expansion worth US\$8.12 million was approved in May 1992. A new project (5822: "Construction and Rehabilitation of Roads") worth US\$2.56 million was approved prior to the start of the new CP. Thus, total WFP assistance to roads construction and rehabilitation prior to the start of the current CP may be estimated at some US\$18 million over a period of 23 years of stand-alone projects.

²⁶ Introduced in 1999.

The rations cited were the arrangements at the end of WFP's intervention. Rations had changed over the course of the project.



As noted above, a counterpart fund for the social welfare of road workers was created from the subsidized sale of WFP rations to the road workers. The fund totalled some Nu 35.36 million (approximately US\$850,000). According to the disbursement plan for the period 2004-2007, Nu 15.22 million was to be disbursed in 2004-05, Nu 10.2 million in 2005-06 and Nu 9.94 million in 2006-07. The largest foreseen expenditures were to be for welfare grants (25.6 percent), which included assistance to families with schooling expenses; the construction of new dwellings (22.6 percent); and a transport subsidy to enable workers to travel to local towns to purchase food supplies (16.9 percent). Other planned activities were the renovation of existing dwellings; latrine construction; the provision of electricity and water supply; the purchase of *bukharis* (heating stoves), clothing and safety equipment; and the provision of health awareness training. The WFP CO continues to monitor the use of the counterpart fund.

According to Standard Project Reports (SPRs) produced by the CO, a total of 3,465 workers participated in Activity 2 in 2002 (of whom 1,040 were female) and 2,354 workers in 2003 (of whom 1,153 were female). Food rations were halved during 2003 and phased out completely in mid-2004. The CO, in close collaboration with relevant national authorities, undertook a final evaluation of Activity 2 in August and September 2004 and a summary of the findings is provided under the M&E section of this document.²⁸

Main Findings for Activity 2

Living conditions. While the evaluation did not specifically assess Activity 2 in light of the above, the team members inspected the dwellings of a newly constructed road workers' camp, and briefly visited some of the camps that had not received WFP assistance. The evaluation noted that new NWF housing and associated facilities (water supply, electricity, latrines, and heating stoves) represented a considerable improvement in living conditions over those of other road workers and their families observed during the evaluation field visits. The evaluation nonetheless concluded that further improvements in road workers' living conditions and services were needed, partly through the use of the remaining counterpart fund.

Implications of the phase-out. Road workers and their families may not receive sufficient support and follow-up now that Activity 2 has ceased. The proposed privatization of national highways/road construction and maintenance may also have a negative impact on the economic and social well-being of road workers and their families. NWF salaries have not been increased to compensate for the loss of subsidised food rations. Some workers may subsequently have difficulties obtaining basic food supplies at reasonable prices in towns near to their camps, most of which are in remote locations. Financial assistance to transport food provided under the counterpart fund mitigates the problem to some extent.

Other resources. In September 2005,²⁹ the Asia Development Bank (ADB) approved a grant of US\$500,000 from its Japan Fund for Poverty Reduction to improve the well-being of road workers in Bhutan. The intended use of the fund appears to be similar to that of the WFP-DoR counterpart fund, namely to improve workers' shelter, water and sanitation

Report on the final evaluation of Activity 2 – Rabten Associates, Thimphu, September 2004.

News Article in "Kuensel Online", Thimphu: 29 September 2005.



facilities, electricity connectivity, access to schools and training opportunities. The evaluation assumes that the ADB grant and the WFP/DoR counterpart fund will be managed in such a way that the two resources complement one another.

Recommendations for Activity 2

- WFP should undertake a CO-managed survey of the well-being and living conditions of NWF workers and their families before the end of the current CP (2007), sharing the results with the RGoB and other partners for possible follow-up action, as needed.
- Considering its considerable support to the NWF over an extended period, WFP should continue to monitor developments, particularly regarding the social and economic welfare of road workers.

II.1.3 Activity Three: Improving Rural Households' Access to Agricultural Services

Background

The agricultural work force is estimated to be declining at a rate of 1.3 percent per year, while the country's non-farm sector workforce is growing at the rate of about 10 percent per year. In 2003 and 2004, a MoA survey on migration suggested that 16 percent of Bhutanese had migrated from their place of birth, with variations in the size of migrant populations ranging from a minimum of 6 percent in Gasa to 27 percent in Zhemgang.³⁰ Rural populations have migrated, mainly to urban areas, for a variety of reasons including inadequate education facilities and other services, insufficient employment, the drudgery of farm work, and the relative unattractiveness of agriculture as an occupation. As a result of the trend, the total acreage under cultivation has fallen, leading to decreased cereal production.

In addition to other measures to slow down rural-urban migration, the government has planned improvements in rural transportation infrastructure through the construction of farm roads, power-tiller tracks and mule tracks. To understand the relationship between farm roads and power tiller tracks, the following hierarchy of roads and tracks may be useful:

- National highways (MoWHS)
- Feeder Roads (MoWHS)
- Farm Roads (MoA)
- Power Tiller Tracks (MoA)
- Mule Tracks (DUDES, under MoWHS)³¹

Power tiller tracks are a new category or roads/tracks, introduced some two years ago, as an intermediate category between farm roads and mule tracks. While farm roads are three metres wide, power tiller track specifications are for a width of two metres. Mule tracks are supposed to be 1.5 metres wide. (Apart from the width, power tiller tracks and mule tracks have similar specifications with regard to average gradient, maximum gradient, etc. Most mule tracks are intended to be up-graded to power tiller tracks in due course, a fact that has been kept in mind when mule tracks are being surveyed and constructed, particularly with regard to maximum gradients and design of the bends in the tracks.)

Despite its name, DUDES is involved in rural mule tracks, apparently for historical reasons.

Ura, Karma. A brief on Food Security, Thimphu, 4 June 2005.



After completing six farm roads through WFP support in 2004, the RGoB and WFP shifted resources to power tiller tracks and mule tracks to improve access to remote villages and farm lands. From discussions with the MoA, the evaluation understood that the Ministry decided to withdraw from FFW for farm roads, as progress in completion of these higher-specification roads with communal labour was found to be too slow, since the workers had to absent themselves frequently to work on their farms and for other reasons. The considerable number of person-days required to complete a farm road (11,000 person-days per kilometre) was felt to be too high for a FFW approach and the MoA found it difficult to attract sufficient regular labour to construct the roads. The MoA began to contract farm road construction to private firms, through a tendering process to commercial contractors, ending the use of FFW.³²

In 2004, the RGoB designed a decentralized system for rural infrastructure development. With assistance from WFP, the RGoB initiated a pilot power tiller track project in late 2004 and began the construction of mule tracks in Mongar and Zhemgang districts. A pilot project for agricultural land rehabilitation was also initiated in Trashigang district.

Findings and recommendations for Activity 3 can be found in the section II.2.5, "Effectiveness of Activity."

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In Bhutan, many contractors use imported Indian manual labour, although local labour is also employed.



II.2.0 Assessment of the Country Programme According to Evaluation Criteria

II.2.1 Coherence

The CP is coherent with both the RGoB's 9th FYDP and the current United Nations Development Assistance Framework (UNDAF 2002-2007) for Bhutan.

With respect to Activity 1, Chapter 15 (Education) of the 9th FYDP states that Bhutan's tradition of entitlements and welfare has emphasized free education that is accessible to all children.³³ One of the key goals of the 9th FYDP is to increase enrolment of children between 6-12 years of age in primary schools to 90 to 95 percent by 2007. The goals of enhancing the quality of education to a level comparable with international standards and increasing the minimum level of education from Class VIII to Class X are also linked to WFP's SF programme.

The UNDAF is supportive of Activity 1, emphasising universal access to quality social services, including the expansion of and improvement in quality basic education and training. It also seeks to promote improved nutrition, including increasing food production and enhancing food security.

Regarding Activity 2, Chapter 18 (Roads and Bridges) of the 9th FYDP notes that the DoR will shift from direct involvement in the execution of road works, including road maintenance, and concentrate increasingly on design, supervision, quality control and a regulatory role. Accordingly, road works are to be executed through the engagement of national contractors. Private contractors are also to assume responsibility for routine maintenance works, for which modalities are being formulated. The 9th FYDP also foresees the introduction of more automation (i.e. heavy plant machinery) for road construction and maintenance, in order to enhance productivity and overcome labour shortages, as well as to create employment opportunities for school leavers. It is assumed that these arrangements will have some impact on NWF over the course of time.

Regarding Activity 3, Chapter 27 (Renewable Natural Resources) of the 9^{th} FYDP³⁴ states that priority will be given to the construction of farm roads. This implies that the priority for road-building extends to power tiller tracks, which were not yet conceived as a separate category at the time of the drafting of the 9^{th} FYDP, and mule tracks.

For Activities 2 and 3, the UNDAF recognizes that poverty is predominantly rural and linked to a lack of access and poor transport infrastructure, especially roads. The more remote a village, the poorer it usually is.

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Typically parents provide their children with school uniforms and certain school materials; they may also contribute in-kind to school feeding programmes, where these operate, with such commodities as fresh vegetables, potatoes and firewood. One school principal interviewed by the evaluation team estimated that it costs parents about 5,000 Ngultrum per year (approx. US\$125) to keep a child in higher level boarding school

Ninth Five-year Plan, page 121.



The VAM analysis of 2005, the first conducted in Bhutan,³⁵ confirms the coherence of the CP in terms of its focus on areas with the highest food deficits (See map in Annex 1). The 2005 VAM exercise analyzed 17 indicators reflecting variations in availability of, access to and utilization of food in the country's 201 *geog*, which were classified into four categories (most vulnerable, more vulnerable, less vulnerable and least vulnerable to food insecurity). According to the VAM, the number of *geog* falling into these categories was 51, 53, 48 and 49, respectively. Those considered to be most vulnerable (25 percent) and more vulnerable (25 percent) to food insecurity are those in which WFP assistance is concentrated. The final VAM exercise shows *geog* in the east and south as being most and more vulnerable to food insecurity, although a few northern geog are also categorized as most vulnerable. The VAM report notes that its results were consistent with data from national surveys and other available studies.

This was the country office's first VAM document.³⁶ The CO is aware that the last couple of years have produced additional statistics and that it is likely, therefore, that the next VAM will be of higher quality. The evaluation team noted that the VAM was based largely on data from official sources, and was lacking sufficient variables reflecting variations in food security. For example, insufficient attention was given to access to food, an area of vulnerability that should be assessed and mapped in future analyses, particularly as Bhutan is relatively integrated into the Indian market for cereals and general foods. The choice of and relative weight given to the 17 current indicators was also an area of concern.

Activity 1 was found to be internally coherent, with its various components complementing and supporting expected outputs and outcomes. Consideration is made, for example, of constraints to SF programme quality, such as the capacity of SF staff to store food and prepare meals, and inadequate kitchen facilities and equipment. WFP provides funds and technical resources to assess staff capacity and, as required, supports training and other capacity development activities to improve the skills and knowledge of SF managers and cooks. Partners have been identified and involved in addressing critical needs for equipment such as fuel-efficient stoves and facilities such as water supply and sanitation blocks.

Regarding the coherence amongst the various CP activities, while linkages are apparent, the evaluation concludes that they could have been stronger. For example, criteria for selecting areas for constructing mule tracks and power tiller tracks using FFW include, amongst others, the number of schools located on the tracks. In this sense, Activity 3 indirectly contributes to the achievement of the SF objective of improving rural children's access to schools. The number of tracks planned and executed, however, is small in comparison to the number of schools and communities requiring improved means of access. The lack of rural roads and communication facilities throughout Bhutan continues to restrict opportunities for income generation and employment in rural areas. To curb rural to urban migration, Bhutanese farmers and their families, and especially young people, need opportunities to improve their lives without being required to relocate to towns and cities. By constructing power tiller tracks and mule tracks, rural people will have better access to basic services and amenities. If rural life is more attractive, especially to youth, school graduates may be convinced to stay on their farms rather than migrate to cities and towns.

^{35 &}quot;Vulnerability Analysis and Mapping of Bhutan - 2005", MoA/RGoB and WFP, Thimphu.

VAM experts from Bangladesh and Sri Lanka helped the CO with the VAM exercise.



II.2.2 Coordination

WFP works together with several other donors and agencies on SF-related activities, although all implementation is carried out by the RGoB. For example, in 2003 donor and private-sector support was used to upgrade school kitchen and storage facilities, to launch the school agricultural programme and to provide fuel-efficient stoves in schools receiving WFP support for SF. UNDP (Global Environment Fund – GEF) and WFP worked together to provide fuel-efficient stoves to several schools. The stoves are manufactured in Bhutan and cost some Nu.35,000 each (approx. US\$800). The activity is intended to have a positive impact on the environment and human health by reducing the amount of cooking fuel (wood) needed to cook school meals and by reducing the amount of smoke produced.

In 2004, UNICEF and WFP signed a Memorandum of Understanding (MoU) covering joint efforts in support of the RGoB's objectives to attain gender parity in primary education and to achieve the MDG of universal primary education. UNICEF agreed to provide iron supplementation in schools, deworming of school children, and upgrading of water and sanitation facilities at WFP-assisted primary and CPS. Joint support to the national iron supplementation project, which aims to reduce the high anemia rate of over 60 percent nationwide, resulted in 135,988 students (including all school children up to Class VIII and girls only in Classes IX and X) receiving a weekly supplement of iron-folate and bi-annual deworming tablets in 2004. WHO provided technical support and policy guidance for the de-worming component of the project. Other activities included an "iron day" on 8 September 2004 and the reproduction and distribution of a booklet on iron supplementation. Water and sanitation facilities in selected schools were either created or upgraded, under the MoU.

In December 2004, a joint WFP/UNICEF mission was carried out to enhance collaboration in Bhutan. The mission concluded that the partnership was potentially "one of the most effective strategies in the drive to help countries achieve Education for All and the MDGs." It also found that joint programming for education enabled each agency to focus on its comparative advantage while maximizing impact and providing opportunities for:

- Improving the quality of education and enable every child to complete basic education
- Contributing to the implementation of the FRESH (Focusing Resources on Effective School Health) Framework, which seeks to help countries overcome health and nutrition problems that interfere with teaching and learning, and
- Contributing to the achievement of Education for All and MDGs.

The mission's recommendations for enhancing the impact of UNICEF-WFP joint programming can be found in the box at the end of this section.

Since 2004, the Danish Embassy has worked with WFP to develop a school biscuit activity. Launched on a pilot basis in early 2005 in 26 CPS and PS, the activity involves the distribution of an imported high energy biscuit donated in kind by the Danish Government.³⁷ At the time of the evaluation, no feedback was available on the new activity. A baseline survey for 26 schools has been completed, however, and monitoring will be carried out during the coming academic session in 2006.

The biscuit is called BP5 and is normally used as a food supplement in emergencies.



Recommendations for Joint WFP/UNICEF Education Programming in Bhutan December 2004

- Enhance partnership as stated in the joint letter on collaboration by both Executive Directors
- Target the same schools
- Conduct joint assessments and analysis of the problem; joint work planning on common actions, joint quarterly workplan reviews, and joint monitoring visits whenever possible
- Build on joint implementation of operational research and surveys wherever possible and relevant
- Develop a mechanism for documenting experiences
- Where appropriate, the two Representatives should conduct joint fund raising
- Advocate with the RGoB for the following:
 - o Free and compulsory primary education
 - o Creation of a policy on school health and nutrition with well-defined implementation mechanisms
 - o Collection, analysis and use of data on attendance for corrective actions
 - o Active involvement of community leaders and parents to promote enrolment and attendance and enhanced community participation
- Collaborate with UNFPA to support actions to prevent early pregnancy
- Develop a joint strategy to create a protective environment for girls in schools, with particular emphasis on improvement of the informal boarders' lodging situation
- Expand current collaboration efforts (deworming, micronutrients supplementation, etc.) to support the implementation of the Minimum Package in schools as follows:
 - o UNICEF Support adaptation of Life Skills curriculum for primary schools
 - o UNICEF Participate actively in World Bank project meetings and ensure HIV prevention and education in schools
 - o UNICEF Support training of teachers' in life skills and HIV and AIDS education
 - o UNICEF Support realignment of multigrade teaching skills to ensure universality
 - o UNICEF Advocate for flexibility in curriculum to adjust to community seasonal activities that take children out of school and reduce absenteeism
 - O UNICEF Ensure integration of hand washing facilities in water and sanitation activities
 - o UNICEF Consider giving priority to installation of water points and sanitary latrines in WFP-supported primary schools
 - o WFP Target CPS supported by UNICEF
 - WFP Organise information campaigns to solicit enhanced community participation in school feeding activities
 - o WFP Promote school gardens in jointly supported schools to complement food basket and provide variations in school meals
 - o WFP Support improvement of kitchens in jointly supported schools through the following:
 - Improving ventilation
 - Expanding implementation of fuel-saving stoves pilot



II.2.3 Cooperation

Cooperation between the RGoB and WFP is guided by the Basic Agreement and by operational contracts (MoUs) with line ministries – e.g. the MoE, DoE, for Activity 1 and the MoA and the Department of Urban Development and Engineering (DUDES) for Activity 3.

Because of the relative importance of Activity 1, WFP's main implementing partner is the MoE. Initially, the Ministry of Development (MoD) housed all social sector departments. In 1985, this ministry was replaced by the Ministry of Social Services (MoSS), which had responsibility for the health, education, culture, and public works departments. By the early 1990s, the MoSS had been replaced by the Ministry of Health and Education (MoHE), which was officially separated into two ministries in mid-2003. Although the split has permitted each ministry to establish departments with sector-specific mandates, it may have rendered inter-sectoral collaboration more challenging. The RGoB's School Health Programme, for example, is currently managed by the Information and Communication Bureau (ICB) for Health of the Ministry of Health, while school feeding is managed by the Department of School Education (DSE) of the MoE. UNICEF's school water, hygiene and sanitation projects are administered through the Public Health Engineering Division (PHED) of the Department of Public Health (MoH), the ICB and the Department of Youth, Culture and Sports.

The evaluation acknowledged considerable efforts at national level amongst WFP's partners to collaborate on SF. During visits to schools, however, a number of issues emerged such as inadequate or poorly maintained sanitation facilities, lack of integration of food, agriculture and nutrition learning in the school curriculum, and poor hygiene practices.

WFP and the MoE developed SF guidelines, and conducted training in nutrition for District Education Officers (DEOs), who in turn trained school principals and headmasters. The use of cascade training may not have been appropriate for the task, since a certain level of expertise is required to adequately train people in technical issues. The short training course for DEO's may have been insufficient to prepare them to conduct the course at lower levels.

Recommendation

 There is a need for a coordinating group on issues related to SF and the nutrition and well-being of school children, so that better collaboration can take place. Such a group could also contribute to the integrated monitoring and assessment of SF and related inputs.



II.2.4 Gender and WFP's Enhanced Commitments to Women

The high value attached to women and children is strongly reflected in the country's socio-economic development policies and strategies, and ratification of international instruments such as the UN's Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) and Convention on the Rights of the Child (CRC). The 9th FYDP states that, "People have always been central to the socio-economic development efforts of the Royal Government and human development remains one of its important strategies." Currently, a draft framework for the National Plan of Action for Gender is in progress and will be included in the 10th Plan.

Bhutanese women do not face any institutionalized form of discrimination – politically, socially, economically or legally. National law treats women and men equally, and many of its provisions protect the rights and interests of women and children. The updated Summary of the CEDAW 2003 Report notes that women in Bhutan have the right to employment and equal pay for equal work. This right is "enshrined in the civil service rules, which are gender-neutral regarding pay, hiring, training, promotions and benefits." The Report notes that a draft labour policy and legislation is under formulation.

In reality, however, few women actually participate in the modern economy because of past low education levels and lack of skills. Amongst government employees, including teachers, health workers and other civil servants, far fewer women than men are employed, with subsequently few role models for girls. Nationwide, only about one third of all teachers are women, for example, with a smaller proportion in remote CPS.

With respect to education, however, in 2005, girls' enrolment was nearly equal to that of boys. According to the 2005 WFP SF Programme Baseline study, the gender balance in overall enrolment was 51.9 percent for boys and 48.1 percent for girls, although the gender gap widens as age increases. 40

Table 4: Enrolment by School Type and Gender, 2005

School Type	Total	Gen	%	
CPS	5902	Boys	3047	51.62
CIS	3902	Girls	2855	48.37
LSS	10321	Boys	5295	51.30
LSS		Girls	5026	48.69
MSS/HSS	3618	Boys	1965	54.31
VI39/1199	3016	Girls	1653	45.69

Source: SFP Preliminary Findings Report 2005, NYCOM Consultants, Thimphu, 2005

The retention and completion rate for girls in PS is greater than for boys, with 85 percent of girls completing Class VI and 73 percent Class VIII, compared to 73 percent and 62 percent, respectively, for boys. ⁴¹ For HSS, the situation is reversed, however, with only 18

Bhutan Ninth Five-year Development Plan, 2002-2007.

³⁹ CEDAW: An Updated Summary of the Report of the Kingdom of Bhutan, Thimphu, 2003.

⁴⁰ Ibid., p.11.

UNICEF, Mid-term Review, Thimphu, 2004.



percent of girls who have completed Class X enrolling in Grade XI, compared to 28 percent of boys.

Numerous studies have been carried out to identify the reasons for gender disparities in enrolment, retention and completion rates. In addition to concerns about the security of girls when walking long distances or boarding away from home, some families keep girls home because they believe the earning potential of women does not merit the cost of sending daughters to school.

According to the Activity 1 Logframe, SF should contribute to reducing gender disparities between boys and girls in assisted schools, even though WFP has no "gender programme", per se. By enabling schools to provide food to students, either as day students or as boarders, when distances between communities and schools are considerable, the CP aims indirectly to encourage parents to send their daughters to school. Under Activity 1, every school with a SF programme is required to form a mess committee made up of teachers and students, with equal numbers of females and males and including at least one female teacher. According to monitoring reports, verified by the evaluation during field visits, the mess committees were gender balanced. WFP also provided training in gender awareness to SF staff and government partners throughout the country.

Guidelines for Activity 2 state that the welfare fund management committees should be comprised of equal numbers of men and women, a requirement that was verified during WFP field monitoring trips.

Under Activity 3, Food Management Committees (FMC) were established on all farm roads, mule tracks and power tiller tracks, with 50 percent of each committee's decision-making roles assumed by women.

Table 5: Progress Towards the Achievement of Gender Process Indicators (2004)

Gender Process Indicators	Planned	Actual
Activity 1: Improving Rural Children's Access to Schools		
Proportion of women in leadership positions in food management	50%	50%
committees		
Activity 2: Improving Laborers Access to Education		
Proportion of women in leadership positions in food management	50%	43%
committees		
Activity 3: Impact on Rural HH Access to Education		
Proportion of women in leadership positions in food management	50%	50%
committees		
Proportion of women receiving household food rations at	40%	60%
distribution point.		

Source: SPR, WFP Bhutan, 2004



Recommendation

• WFP may need to recognize broader gender issues that could eventually affect girls' enrolment, retention and completion rates. As the part of a gender thematic working group, WFP has an opportunity to advocate with government partners for solutions to address longer-term gender issues, and thus help to guarantee the sustainability of efforts to promote girls' education.

II.2.5 Effectiveness

Effectiveness of Activity 1

Despite numerous obstacles, including the remoteness of some schools, lack of skilled labour for cooking school meals, and the inadequacy of cooking equipment and facilities in some schools, large numbers of children have received healthy, nutritionally sound school meals. School feeding has proven to be an effective means of promoting basic education among children, along with other incentives such as free education, textbooks, and stationery, improved teaching, and enhanced school buildings and boarding facilities.

The evaluation team met numerous government technical and administrative staff, including some at high levels, who had benefited from WFP SF as children. These individuals overwhelmingly credited the school meals with enabling them to attend school far away from home and with providing them with required nutrients for adequate physical growth and academic success.

The actual number of children who received SF was generally less than planned each year, although the trend shows an increase in actual numbers of children reached, beginning in 2003. The discrepancy between planned and actual figures (See Table 6) is largely due to the reluctance of the RGoB to expand to more schools and students, in order to avoid increasing dependence on external SF resources.

Table 6: Planned vs. Actual Beneficiaries for Activity 1, 2004

Beneficiary Category	Planned			Actual			% Actual v Planned		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Act1: Imp.RuralChild.AccesstoSch									
Number of children 5 to 18 years of age	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %
Total number of beneficiaries in 2004	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %
Total number of beneficiaries in 2003	20,963	20,141	41,104	19,042	14,242	33,284	90.8 %	70.7 %	81.0 %
Total number of beneficiaries in 2002	17,639	12,705	30,344	20,329	14,721	35,050	115.3 %	115.9 %	115.5 %
The total number of beneficiaries includes all targeted persons who were provided with WFP food during the reporting period – either as a recipient/participant in one or more of the following groups, or from a household food ration distributed to one of these recipients/participants.									
Children receiving school meals	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %

Source: SPR, WFP Bhutan, 2004



Effectiveness of Activity 2

Since this activity had been terminated in 2004, the mission did not examine effectiveness in relationship to Activity 2 (support to the roads National Work Force).

Effectiveness of Activity 3

According to the WFP Standard Project Report (SPR)/2002, the implementation of Activity 3 did not take place during the first year of the new CP due to delays in conducting the feasibility studies of the terrain by the government. SPR/2003 notes that implementation of Activity 3 started in January of that year with the construction of six farm roads. Thirty five kilometres of farm roads were constructed, against a target of 53 kilometres (66 percent of target). The lower rate of achievement was partly explained by a reorganization of the MoA's implementation programme.

SPR/2003 further noted that Activity 3 aimed to support the government under its 9th FYDP target of constructing 1,000 kilometres of farm roads. WFP had committed itself to supply food for the construction of 260 kilometres of farm roads in the six eastern districts (out of twenty districts in the country). The SPR noted, however, that WFP support to the construction of farm roads would cease in 2004 due to a change of government policy with regard to the use of FFW for the construction of farm roads.

SPR/2004 notes that, after completion of the six farm roads, the government and WFP decided to shift resources to tracks suitable for power tillers and mules. A pilot power-tiller track project was initiated in late 2004 and is currently under construction using WFP food rations as an incentive. Progress has been slow, however, and only a six kilometre stretch (of a total of 27) has been completed in just over a year. At this rate, the track could take several years to complete, according to discussions with the MoA. Since this is a pilot track, the MoA is considering changing the system for track construction from a community labour approach to a commercial contractor approach, as for the farm roads.

The use of communal labour and FFW for mule tracks, currently being constructed under MoWHS/DUDES supervision, has been more successful. Of a total of 59 kilometres of mule tracks planned, 23 kilometres had been completed at the time of the evaluation. The success could be due to the fact that mule tracks are built in remote areas where people are more food insecure and place a higher value on additional food resources provided through WFP food rations. In addition, mule tracks are simpler to construct and require less engineering and person-days of work per kilometre.⁴²

The evaluation met workers constructing mule tracks in Mongar and Zhemgang districts. In both areas, workers expressed strong appreciation for the food rations and remarked that food commodities were either a greater incentive than cash (Mongar) or equal to cash (Zhemgang).

Each village along the mule track route is supposed to provide one worker per household, if possible, on a rotational basis, according to the size of the village. Construction takes place during periods when farm work is not labour-intensive. Since payment is on the basis of

Mule tracks are often up-graded footpaths, which are usually very steep and the only access to certain villages.



volume of work completed, rather than actual person-days, workers can potentially earn more than the basic daily ration if they achieve more than the established daily work norm. The evaluation calculated that, at current prices and transport costs (including ITSH), the value of the WFP daily worker ration⁴³ of four kg of rice, 350 g of pulses and 60 g of vegetable oil was about Nu. 52 (approximately US\$1.25).⁴⁴ The actual value of the food ration to the worker was considerably higher, however, particularly in remote locations and where markets are not developed, as the alternative of purchasing these commodities locally or in the nearest urban centres would be considerably more expensive.

Table 7: Planned vs. Actual Beneficiaries for Activity 3 (2004)

Beneficiary Category	Planned		Actual			% Actual v Planned			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Act3: Imp.Rural HH Access to Edu									
Number of children below 5 years of age	400	400	800	478	472	950	119.5 %	118.0 %	118.8 %
Number of children 5 to 18 years of age	800	800	1,600	873	877	1,750	109.1 %	109.6 %	109.4 %
Number of adults	400	400	800	800	800	1,600	200.0 %	200.0 %	200.0 %
Total number of beneficiaries in 2004	1,600	1,600	3,200	2,151	2,149	4,300	134.4 %	134.3 %	134.4 %
Total number of beneficiaries in 2003	1,600	1,600	3,200	1,600	1,600	3,200	100.0 %	100.0 %	100.0 %
Total number of beneficiaries in 2002	1,400	1,400	2,800						
The total number of beneficiaries includes all targeted persons who were provided with WFP food during the reporting period – either as a recipient/participant in one or more of the following groups, or from a household food ration distributed to one of these recipients/participants.									
Participants in Food For Work	1,422	1,422	2,844	1,256	1,380	2,636	88.3 %	97.0 %	92.7 %

Source: SPR, WFP Bhutan, 2004

Recommendation

• WFP should support the construction of a further 60 kilometres of mule track, using the remaining resources under the current CP.

II.2.6 Cost-effectiveness

Historically, one of the important "value-added" aspects of WFP assistance has been in bringing relatively large amounts of food to remote areas at a reasonable cost. WFP's role has been possible through its long-term collaboration with the Food Corporation of Bhutan (FCB). WFP's partnership with the FCB stretches back some 30 years to 1975, when WFP started its first SF project in remote primary schools in Bhutan.

Over the years, WFP has developed a close working relationship with the FCB, and provided considerable staff capacity development and non-food item support, such as the provision of additional warehouse space. Because of the relatively high volume of food

Ration for unskilled workers. Skilled workers and user committee members receive a somewhat higher ration.

The calculation is based on the following commodity prices delivered to the border town of Phuontsholing: rice – US\$200 per metric ton; pulses – US\$670 per metric ton; vegetable oil – US\$1,100 per metric ton. To this is added a combined WFP/government ITSH cost of US\$40.58 per metric ton (twice the 50% WFP ITSH rate of US\$20.29 per ton). It excludes local WFP CO and Government management and overhead costs, however, as these are not part of the net delivered costs. The latter could add a further circa. 20%, bringing the total daily ration cost to around 62 Nu.



moved, the overall costs of providing food aid in Bhutan have been reasonable despite the remoteness of some of the assisted schools and other delivery sites. Similarly, the value of WFP rations to students, road workers and others has been competitive in comparison to local market prices. 45

According to the most recent SPR (2004), the cumulative direct project costs from the start of the CP in mid-2002 until the end of 2004 show the following:

- commodity costs of 78.28 percent (FOB, if in-kind from donors, or delivered to FCB, if local/regional purchases)
- ocean/overland transport costs of 10.33 percent
- land-side transport, storage and handling (LTSH) costs of 4.50 percent⁴⁶
- other direct operational costs (ODOC) of 1.77 percent
- direct support costs (DSC) of 4.12 percent.

The combined total of ocean/overland transport and LTSH is 14.83 percent. This is a reasonable percentage for total transport costs in comparison to many WFP operations in other parts of the world, particularly in light of the remoteness of some of the final delivery points in Bhutan. ⁴⁷ In Bhutan, the commodity costs appear to be higher than related costs (transport and overheads) compared to most WFP global operations and this is due in large part to the cost of the canned fish.

WFP/FCB delivery of basic food rations has been cost-effective, particularly for road workers and mule track communal workers in remote locations, as local market prices are consistently higher. According to the results of the 2004 CO-managed evaluation of Activity 3, after food aid support had stopped, some NWF employees were no longer able to buy a sufficient quantity of food. With the same amount of money they had contributed to the counterpart fund, road workers were only able to buy the bulk of their rice requirements, but no pulses, vegetable oil or iodized salt, as in the past. The difference in purchasing power was largely due to the fact that WFP rations were sold to the workers at a subsidized price. Larger families with only one worker faced the most difficulties.

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Alpha value calculations (value of transfer/WFP costs) could not be made because the unavailability of reliable regional market food price data, however.

WFP pays 50% of ITSH and the RGoB the other 50%. Thus, actual overall LTSH costs are somewhat higher than 4.50% and around 6-7% of the total, if one takes into account the government contribution.

According to SPR/2004, in 2004 LTSH generated US\$185,971. Overall WFP Bhutan CP costs for the year were around US\$4 million. A potential problem in the proposed reduction of the value of the food basket is its impact on Direct Support Costs (DSC) and the relative cost of external transport and ITSH costs. Both would rise as a percentage of overall operational costs. The issue of DSC may be mitigated if the "new model" for smaller country PSA allocations is adopted – i.e. funding for one Country Director, one Deputy and US\$200,000 for other CO operational costs, including the cost of national staff.



Findings

- According to the WFP Country Office, 3,123 tons of commodities were distributed in 2004, at a food cost of approximately US\$1,384,869. This infers an average commodity cost of US\$443 per ton and includes canned fish, an expensive item (254 tons in 2004, valued at US\$564,642 or US\$2,223 per ton). If canned fish were removed from the food basket cost calculations, the tonnage for 2004 would drop to 2,869 tons and the food cost to US\$820,227, thus reducing the average commodity cost to US\$286 per ton. These are net commodity costs, excluding external/overland/internal transport costs and overheads.
- Looking at data for the two and a half year period (i.e. half of the five years CP duration) from mid-2002 to end 2004, it appears that 14,162 tons of food had been distributed, at a commodity cost of approximately US\$5,341,270. This indicates an average commodity cost of US\$377 per ton and includes 801 tons of canned fish valued at US\$1,780,623. If one removes the canned fish from the food basket cost calculations for this two and a half year period, the tonnage falls to 13,361 tons and the commodity cost to US\$3,560,647, giving a lower average commodity cost of US\$266 per ton.

II.2.7 Monitoring and Evaluation

Activity 1

In 2003, WFP supported opportunities for RGoB counterparts to improve their capacity in monitoring and reporting systems. Joint monitoring visits were carried out by government partners and WFP to meet with beneficiaries and to measure results. The FFE Guidelines for Implementation and Monitoring, updated in 2005, were found by the evaluation to be a practical tool for monitoring food deliveries and distributions, and reporting on indicators related to outputs and outcomes of the SF programme. The guidelines target school principals, head teachers, mess committee members and DEOs, providing them with the project objectives, details regarding food entitlements and instructions on completing the modified monitoring and reporting procedures for the SF programme. The guidelines were an attempt by WFP and MoE to simplify reporting procedures, with the intention of gathering and using only information needed to effectively measure progress. In addition to providing examples of all required forms, and instructions for completing them, the guidelines include descriptions of the tasks of various actors in the programme.

The Royal Audit Authority (RAA) audits activities funded through WFP, and the Department of Aid and Debt Management (FADM) oversees project implementation. Monitoring and evaluation systems were streamlined in 2004 and adapted to Result-Based Management (RBM) principles. For Activity 1, the revised monitoring system was intended to assess quantity, quality, acceptability, damages and losses of food delivered, feeding days, and numbers of students receiving a mid-morning or afternoon snack, and rations as day students and as boarding students.

⁴⁸ 2004 was the last year for which figures were available for the whole year, at the time of the evaluation team's visit in September-October 2005.



The Programme Division/Unit of the MoE maintains primary responsibility for counterpart monitoring. The MoE/WFP staff members have committed themselves to visiting all 196 schools at least once every two years. However, a handful of the schools, particularly those in the far north of Bhutan, are extremely remote and require a week's walk in each direction to be reached.

Since the CP began, WFP staff members have monitored the food distribution and post distribution systems regularly, although visits by government staff of the DoE to SF schools have not been as frequent as anticipated. Previous problems with complex monitoring forms and late submission have been resolved following the streamlining of the monitoring systems and development of easy-to-use forms. A GTZ-funded external consultant assisted with some of the practical improvements to the monitoring system.

By October 2004 MoE/WFP staff had jointly visited 126 schools, representing 75 percent of the 168 schools being assisted at the time. Of the schools visited, complete monitoring forms were available for 57 schools; the remaining 69 schools visited had incomplete forms. The results of an analysis made of the 57 schools visited with complete monitoring forms are presented in the box that follows.

A WFP/OEDI Inspector visited Bhutan in December 2004 and noted the "best practice" of non-programme staff (e.g. finance, administration) being encouraged to participate in field monitoring trips at least once a year, so that they better understand the programmes which their work supports.

Selected Results from an Analysis of SF Monitoring Data (October 2004) 49

- Food was not delivered on time in 7 percent of schools visited
- Quality of food preparation was considered mainly satisfactory or good (97 percent for morning snack; 100 percent for lunch)
- In 95 percent of schools visited teachers perceived school feeding to be very/extremely significant in enhancing the concentration and learning capacity of students
- Food stores and kitchen facilities were inadequate in 35 percent of schools visited
- Hygiene and cooking utensils were inadequate in 24 percent of the schools visited
- Fuel-efficient stoves were unavailable in 11 percent of schools visited and inadequate in a further 27 percent
- Water supply for cooking and cleaning was inadequate in 25 percent of the schools visited and non-existent in 2 percent of others
- Toilet facilities were inadequate in 23 percent of schools and non-existent in 4 percent of others
- The school agriculture programme (not supported by WFP at that time in the schools visited) was good in 32 percent of schools and acceptable in 35 percent of others
- Overall, SF was rated as follows: excellent in two schools visited (4 percent), good in 38 schools (67 percent), acceptable in 13 schools (23 percent) and poor in four schools (7 percent)

Analysis based on monitoring forms completed for 57 schools, comprised of 22 PS and CPS; 17 LSS and 18 HSS/MSS. Just over half were on-road and just under half off-road.



In September 2005, a second monitoring analysis was carried out, based on 147 schools visited (out of 170 schools assisted, and excluding the biscuit schools). Some sections were not completed on all monitoring forms, but the most important elements were filled in, providing information that the CO was able to use to make recommendations for practical follow-up. Results of this exercise are found in the following box.

Selected Results from an Analysis of SF Monitoring Data (September 2005)⁵⁰

- Kitchens were inadequate in 36 percent and unhygienic in 17 percent of schools visited; stores were inadequate in 30 percent and unhygienic in 23 percent
- Food was not delivered on time in 15 percent of schools visited
- Quality of food preparation was generally considered good/satisfactory (99 percent for both morning snack and lunch)
- In 83 percent of schools visited, teachers perceived SF as very/extremely significant in enhancing the concentration and learning capacity of students, and as significant in 15 percent of other schools
- Food stores in 23 percent of schools visited and kitchen facilities in 36 percent of schools visited were inadequate
- Hygiene and cooking utensils were inadequate in 17 percent of the schools visited
- Fuel-efficient stoves were not provided in 21 percent of schools visited and inadequate in a further 27 percent
- Water supply for cooking and cleaning was inadequate in 21 percent of the schools visited and non-existent in 1 percent of others
- Toilet facilities were inadequate in 34 percent of schools and non-existent in 4 percent of others
- Boarding facilities were inadequate in 21 percent of schools visited, and non-existent in 28 percent
- The school agriculture programme (not supported by WFP at that time in the schools visited) was good in 29 percent of schools and acceptable in 43 percent of others
- Overall, SF was rated as follows: excellent in two of the schools visited (7 percent), good in 38 schools visited (53 percent), acceptable in 13 of the schools visited (33 percent) and poor in four of the schools visited (8 percent)

In 2004, in preparation for the mid-term evaluation planned for 2005, a Nutrition Review of Food for Education was carried out that assessed nutrition-specific issues of the CP and recommended ways to improve the implementation of SF. Specifically, the Review:

- Analysed the nutritional effectiveness and appropriateness of the provided food basket; and
- Reviewed complementary activities in place with the aim of improving synergy with MoE/MoH and other UN agencies.

Analysis based on monitoring forms completed for 147 schools (out of 170), comprised of 37 CPS; 47 PS, 34 LSS; 14 MSS and 15 HSS. Sixty-five were on-road and 82 off-road, during the period Jan. – Sept 2005.



According to the Review⁵¹ WFP and the RGoB projected a higher number of participating schools and students for SF than was actually achieved by 2004. One of the main reasons cited for proceeding cautiously in expanding SF was the lack of resources for adequately supporting infrastructure (kitchen, kitchen equipment and stores).

A number of practical recommendations for enhancing the effectiveness of SF were proposed in the Nutrition Review, including:

- Simplifying SF management by reducing the number of food baskets to two, while maintaining the number of commodities
- Improving the timing of school meals, and enhancing preparation methods
- Increasing the number of CPS and students from younger age groups receiving SF, and gradually phasing out beneficiaries in MSS/HSS
- Enhancing boarding facilities, together with other donors
- Carrying out a complete review of the nutritional aspects of SF during the mid-term evaluation, assessing the school health approach, being implemented as Bhutan's comprehensive school health programme, and the possible need for a clear future exit strategy, including strengthening and preparing communities to play a central role in SF

The CO followed up on the review's main recommendations, instituting significant changes in some aspects of the SF programme, reinforcing 'best' practices already in existence in others, and/or justifying its rejection of certain recommendations.

Activity 2

While monitoring of Activity 2 ceased with the phase-out of WFP assistance in mid-2004, the WFP office continues to monitor the use of the counterpart fund, which should be fully expended by the end of the current CP.

An evaluation of Activity 2 was undertaken in 2004, following the cessation of WFP support to the NWF.⁵² The evaluation:

- Assessed the relevance, fulfilment of objectives and impact of Activity 2 from a beneficiary perspective;
- Made recommendations on the use and guidelines of the proposed Emergency Fund and on the use of the Social Development Fund; and
- Proposed possible measures to the Department of Roads for the post-WFP food assistance period.

The evaluation was based on focus group discussions with the beneficiaries in a sample of two camps in three of eight Field Road Maintenance Division. Selection of the sample was based on information from WFP quarterly progress reports and included criteria such as distance from basic services and the altitude of camps. At the time of the evaluation, there were a total of 4,451 road workers employed by the DoR, of whom 1,406 were permanent workers and 3,046 were casual recruits. WFP had been supporting 2,354 workers, of whom 1,759 received family food rations and 559 received single worker rations.

Report on the final evaluation of Activity 2 – Rabten Associates, Thimphu, September 2004.

The WFP Nutrition Review was carried out from 16.03.2004 to 09.04.2004, and covered 12 schools in Bumthang, Mongar, Lunthse and Tashigang receiving WFP support, and 2 schools not receiving support.



The key results of the evaluation are found in the following box.

Main findings of the 2004 CO-managed Evaluation of Activity 2

- While the DoR has made significant efforts to improve road workers' housing conditions to meet minimum standards, further improvements will be needed to provide adequate drinking water, latrines and electricity or solar lights, activities which are ongoing as part of the counterpart fund
- Current house design should be improved to make a separate attachment for kitchens to reduce smoke and soot in the houses and to address the problem of the flimsy single-layer bamboo ceiling (the roofs are of corrugated iron sheeting)
- Following the cessation of WFP food aid, each sub-division should make bulk purchases of rice from FCB sources for their workers and distribute it free of transportation charges. (During the period of WFP assistance, workers had received rice, pulses, vegetable oil and iodized salt from WFP, with CSB for under-five-year-old children and pregnant/nursing mothers)
- DoR should propose a salary increase for the workers. An increase of 16 to 20 percent would be appropriate, considering that the food aid has stopped
- Under-five children and pregnant/nursing mothers should continue to receive CSB during a six-month transition period
- Workers value the non-formal education (NFE) literacy programmes, but many are too tired at the end of the working day to avail themselves of the programmes

Activity 3

With regard to Activity 3, a national programme assistant, working under the direct supervision of the WFP project officer, makes regular visits to the on-going construction sites, including three mule tracks, one power tiller track and the agricultural development site. The evaluation concluded that work gangs were in need of more technical supervision and guidance from government counterparts, particularly when there is a change of gang supervisor. On one of the mule tracks visited, the gang supervisor had received no training at all, possibly because he had replaced an earlier supervisor. The evaluation also feared that the mule track might be susceptible to serious erosion unless some simple engineering techniques were introduced, such as the construction of earth gullies/culverts to guide rain water away from the road surface to the outer slope in appropriate locations. (Section II.2.9, "Sustainability," provides more discussion of this issue.⁵³)

engineering methods seem to be useful and could be adapted to a simple mule track construction guide.

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In this respect, the evaluation team came across an interesting FAO publication dated September 1994 and entitled "Ad Hoc Study for the preparation of an implementation plan for environmental measures in Bhutan – Handbook for gully and landslide stabilization methods in Bhutan" – prepared by ITECO AG/Switzerland in collaboration with ITECO Nepal (P) Ltd. Some of the illustrations on small scale



During Action Review

In conjunction with the Mid-term Evaluation of the CP, a "During Action Review" (DAR) was carried out on 5 October 2005. Programme, administration, logistics/procurement and finance staff members were involved in a participatory review of the past two and a half years. Using an adaptation of the After Action Review (AAR) methodology designed by WFP Headquarters Policy Division, the evaluation team leader facilitated a process in which the office staff assessed what had gone well, what had gone less well, and based on the results, developed recommendations for future action. In addition, several lessons learned were identified, and plans developed to further document these lessons and share them with other countries. Two 'best practices' were selected to be documented through case studies for WFP's new system for sharing ideas and practices known as "Pass it on."

Main Findings from the One-day Workshop Held with WFP CO Staff (6 October 2005)

Food for Work: Activity 2

- Phase out more gradually
- Improve/extend monitoring of the impact of phase-out on beneficiaries
- Develop a simple a field manual for field staff (to be discussed with RGoB)
- Carry out more frequent technical monitoring visits
- Advocate for continuation of activities

Administration/HR/Finance

- Put into place the personnel management system (By HQ)
- Attain deeper insights into WINGS, including on-the-job and face-to face learning (RO and CO)
- Improve dialogue with UNDP to improve existing financial system (2005 2006)
- Strengthen the training needs analysis (CO)
- Enhance Finance's role as regards Programme

Logistics/Procurement

- Establish a standard shipping time for Bhutan
- Favour SP rather than in kind contributions including focusing on local production, esp. maize
- Strengthen capacity of FCB for sustainability
- Reinforce the EDP process

FFE/SE- Activity 1

- In selected districts, support/train DEOs to train head teachers in monitoring and reporting
- Continue DEO workshops to improve their involvement
- Strengthen coordination between programme division and DEO
- Identify locally available food commodities of good nutritional value to replace some imported ones, and drive MoA to improve production
- Strengthen multi-sectoral coordination, e.g. for improved nutrition outcomes



II.2.8 Targeting

According to the CP document, WFP intended to target the populations that were most vulnerable to poverty and food insecurity. For SF, WFP attempted to reach students in basic education, rather than those in higher grades. The evaluation found that by the end of 2004, the number of PS covered by the SF activity had risen from 78 schools (combined CPS and PS) in 2002 to 122 primary-level schools, including 65 CPS and 57 PS. The number of LSS providing SF had also increased, but to a much lesser extent (from 34 schools in 2002 to 41 in 2005). Likewise, the number of MSS and HSS had increased from 22 in 2002 to 33 in 2005 (18 MSS and 15 HSS).

The increased number of CPS is evidence of WFP's growing support to remote schools that receive relatively few external resources. Continuing support to LSS is indicative of WFP's efforts to target vulnerable populations, since many of these schools provide boarding to children who are unable to walk long distances in rough terrain to reach school.

Situation analyses and informal vulnerability studies were used to guide geographic targeting of WFP food aid. According to the 2005 VAM report, 42 percent of the sub-districts received food aid through SF, 2 percent through road construction, and 1 percent through both Activities 1 and 2. Almost half of the sub-districts did not receive food aid at any time. In Gasa, Bhumthang, Lheuntse, Mongar, Pemagatshel, Tashigang, Trashi Yang and Zhemgang districts, over 80 percent of the sub-districts received food aid through Activity 1 or Activity 3.

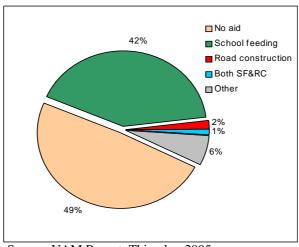


Figure 2: WFP Food Aid Distributions by Type, 2005

Source: VAM Report, Thimphu: 2005



II.2.9 Suitability of Food Rations

The external Nutrition Review ⁵⁴ conducted in May 2004 found that the existing food basket had different amounts of commodities according to the type of school and students, making calculations of commodities a complicated process, placing managers at risk of ordering incorrect amounts of food stocks and overloading the rather limited available human resources. Following the Review, the CP adopted a system whereby all day students, regardless of their age, received the same food basket and all boarding students received the same food basket. Boarding students were provided with twice the day students' ration, with the exception of CSB and sugar, which were provided in equal amounts for both day scholars and boarders. The quantity of sugar was reduced from 30 g/day to 20 g/day. Although still regarded as too high at 20g/day, the quantity was maintained in light of the fact that it was used to prepare CSB and to sweeten tea.

The following table presents the quantities of food provided to schools per student and average cost per metric ton.

Student type	Rice	Kharang	Pulses	Vege. Oil	Fish	CSB	Sugar
Day Students	125	25	15	10	30	75	20
Boarding Students	250	50	30	20	60	75	20
Costs per ton	260 \$/t	230 \$/t	450 \$/t	800 \$/t	1800 \$/t	290 \$/t	380 \$/t

Table 8: WFP SF Food basket – Quantities in grams per student (revised in 2004)

The evaluation concluded that the revised WFP ration was generous and nutritionally adequate, noting that one commodity (sugar) could be eliminated and another (canned fish) exchanged for a locally procured substitute. The limited number of locally produced and/or purchased items in the food basket was found to be cause for concern, particularly in terms of the future sustainability of SF. Not only was canned fish expensive, the commodity had no educational value for students.

During the evaluation visit, only PWB was observed in schools, rather than CSB. Both products were usually consumed roasted, fried or cooked with sugar and water as a porridge.

Improvements in food preparation practices could enhance the nutritional value of SF and should be instituted as soon as possible. For example, CSB or PWB should not be served with tea,⁵⁵ a current practice in most schools that inhibits the absorption of the micronutrients in these blended foods. Cooks should add iodized salt during the last stages of cooking/immediately prior to serving food to preserve the iodine content. Vegetables should be prepared and served in ways that enhance their micronutrient value (i.e. potatoes

Kaufman, Silvia, Final Report WFP Bhutan CP'S Activity 1: Improving rural children's access to School; A review of the nutrition relevant aspects of the FFE programme, World Food Programme, Thimphu, May 2004.

WFP reported that it had provided SF programmes with the message that students' consumption of micronutrient fortified blended foods, served mainly as a snack, was to be separated from tea consumption, either through direct communication with schools or through training activities. However, the practice persisted and was observed by the evaluation.



should be washed and consumed without peeling; leafy greens and other brightly coloured vegetables should be washed before cutting, and cooked as little as possible in very small amounts of water, etc.).

Iodized salt was not included in the food basket because this commodity was purchased by the government for all SF programmes. The evaluation observed iodized salt in all SF programmes visited. However, no iodized salt testing kits were available to verify the iodine content, and few of the SF staff and/or beneficiaries interviewed were aware of the benefits of consuming iodized salt.

I.2.10 Nutritional Impact

Child survival is a public health priority in Bhutan. Survival rates of young children have improved with the development of an effective primary health care system that currently covers 90 percent of the population, a variety of mother and child care initiatives, and a sustained immunization programme. Increased access to safe drinking water (77.8 percent) and improved sanitation have also contributed to a decline in infectious diseases. The infant mortality and under-five mortality rates dropped, respectively, from 90 and 123 (per 1,000 births) in 1990, to 71 and 97 in 1994, and to 60.5, and 84 in 1999. The sex-specific mortality rates in age groups above nine years of age reveal that death rates are lower for women in each age group, suggesting that factors influencing the survival of women are as good as or better than they are for men. (Women out-number men in Bhutan, with 100 women per 97.8 men.)

Nutritional status has improved over the years, and most significantly for the vulnerable groups (women and children) due to an effective network of health care services, increased awareness of health care and growing economic prosperity. At present, nutrition is an integral component of primary health care services. Breastfeeding in the country is universal and efforts are being made to encourage mothers to breastfeed exclusively for four months and continue breastfeeding, with complementary food, for two years. Knowledge of complementary feeding and other aspects of infant and child care are also given emphasis in public health efforts. Generally, girls' nutritional status is better than that of boys.

Table 9: Summary of Nutritional Indicators in Bhutan (1980s and 1990s)

Indicator	19	80s	1990s		
mulcator	Year	%	Year	%	
Low birth weight	-	-	1998	13.5	
Under weight (weight for age)	1988	37.9	1999	18.7	
Stunting (Height for age)	1988	56.1	1999	40	
Total goitre rate	1983	64.5	1996	14	
Iodized salt coverage (>15ppm)	1983	-	1996	82	
Vitamin A deficiency (sub-clinical)	1985	14	1999	2.6	
Iron deficiency Anemia (Pregnant women)	1985	60	-	60	

Source: Annual Health Bulletin 2002, in Final VAM Report, 2005



The most recent national nutrition surveys were carried out in 1989 (see Table 10) and 1996. Official figures on under-five malnutrition indicate that nutritional status of under-five year-old children has improved in the past decade, with current rates of 19 percent underweight (weight for age) and 40 percent stunting (height for age). In a regional study conducted between 2002 and 2004 on children between the ages of two and 20 years, the prevalence of underweight was found to be high, although great variations existed between different age groups and geographic zones. Without an updated nationwide nutrition survey or nutrition information system, it is difficult to estimate the prevalence of global acute malnutrition, chronic malnutrition and underweight.

Table 10: Malnutrition prevalence in children (percentage by zone)

Zone	Stunting	Underweight	Wasting
South	56.8	44.9	12.8
West	49.8	29.4	7.4
East	65.5	33.3	6.7
Urban	44.7	33.0	6.0
Central	53.6	27.1	6.1

Source: National Nutritional Survey 1988/89, in Final VAM Study, 2005

Iodized salt coverage is high, and Bhutan is the first country in the region to have achieved iodine deficiency-free status. However, iron deficiency anaemia and vitamin A deficiency continue to be serious public health problems.

Despite the progress made in health care and other areas of public health, available evidence suggests that the overall nutritional status of the Bhutanese population may still be unsatisfactory. This may be the result of a combination of factors, including periodic and/or seasonal food shortages, extended exposure of certain population groups to adverse climatic conditions, high rates of infections amongst very young children, monotonous and inadequate diets, and inadequate infant and young-child feeding practices. Ideally, a nutrition surveillance system, incorporating systematic analyses of data to discern the causes of malnutrition, should be established to regularly monitor and assess nutritional status. A national nutrition information system, however, requires high and costly inputs of skilled human resources.

The evaluation considered the possibility of including nutrition as a measurable output of SF. It concluded, however, that the relative lack of expertise amongst the public health staff in nutritional surveillance, and the absence of a national nutrition information system, rendered the measurement of nutrition indicators amongst school-aged children unfeasible.

The assessment of the effect of SF on some aspects of micronutrient malnutrition reduction may be possible. Using operational research or a small-scale study, an assessment can be made of nutritional anaemia reduction and/or prevention as an outcome of the weekly iron supplements and de-worming, in addition to SF meals and education. UNICEF, as the provider of iron tablets, could take the lead in such efforts.



The evaluation was only able to briefly assess a small number of nutrition-related issues due to time constraints. It concluded that further efforts were needed to improve the potential impact of SF on nutrition. Enhancing the nutritional value of the SF ration could be achieved through improved cooking techniques, more hygienic food service practices, and better storage conditions, personal hygiene habits of cooking staff and beneficiaries, school water supply and school sanitation facilities. Additional efforts were also needed to ensure that contributions from parents and from government funds included nutritious, micronutrient-dense foods, rather than starchy foods, such as potatoes, with limited nutritional and/or educational value.

Recommendation

• Given the difficulty of measuring nutrition indicators, the evaluation recommends that the main objectives of SF, enhancing school enrolment and attendance, remain unchanged. Improved nutritional status will remain an unmeasured secondary effect or added benefit of a programme that provides regular sources of nutritious food to a large number of school-aged children.



II.2.11 Relevance

Activity 1

SF has been, and continues to be, relevant, due to the difficulties faced by children living long distances from school, and the constraints of poor rural parents to provide adequate food for their children. The high level of food insecurity in many remote areas of Bhutan has created a situation in which SF is a deciding factor in terms of the ability of many families to send at least some of their children to school. The educational aspects of the programme, including training staff to manage and implement SF, and involving students in the planning and service of school meals, are also important contributions to the sustainability of SF following the withdrawal of WFP support to the activity.

Activity 2

The evaluation found that the provision of subsidized rations through Activity 2 was relevant during the considerable period of WFP assistance, due to the level of food insecurity of the workers and the budgetary constraints of the RGoB during past years. The activity helped to improve the income levels and welfare of the road workers who perform (often under hazardous working conditions) a vital function in keeping Bhutan's primary road network open. Continued support for welfare improvements through the WFP-DoR counterpart fund should help to further improve shelter, services and the road workers' general living conditions.

Activity 3

As noted earlier in the report, the construction of farm roads under Activity 3 faced a number of problems, in particular the availability of sufficient numbers of workers who were able to work on the farm roads on a sustained basis. For this reason, the MoA has decided to move away from FFW and adopt a commercial contracting approach.

Since 2004, Activity 3 has concentrated on power tiller and mule tracks, with one small intervention in Trashigang district of eastern Bhutan for land development (45 hectares). The evaluation concluded that mule track construction under Activity 3 is particularly relevant in the Bhutanese context. Mule tracks are relatively simple and low-cost to build, requiring limited non-food resources. The major input is community labour from adjacent villages, compensated by a FFW ration. Mule tracks reach some of the most remote communities in Bhutan and draw on surplus labour which is available in the agricultural off-season. FFW enables beneficiaries to cover their lean-season food supply gap, allowing them to remain in their village rather than migrate in search of work. A longer-term benefit is improved access to schools, basic health units, shops and other facilities.

The evaluation understands that a decision has already been taken, in agreement with the RGoB, to phase-out of all FFW activities in Bhutan, including power tiller and mule track construction, at the end of the current CP. In the meantime, some additional resources should be available during the remaining one and a half years of the current CP. The CO estimates that it should be possible to construct a further 60 kilometres of mule tracks between now and the end of the current CP. During the evaluation's field visits to Mongar and Zhemgang districts, Mongar authorities asked WFP to consider supporting at least one more mule track, which seemed to be feasible.



II.2.12 Sustainability

Activity 1

When WFP phases out assistance, it is expected that SF will continue for the neediest students in remote areas, with support from the government and parents/communities. The post-WFP phase of SF will most likely focus on boarding students from rural areas, particularly as school infrastructure improves and fewer children reside long distances from PS. The number of students covered may drop significantly if government resources are limited. The government has indicated that it needs a medium-term period of transition before WFP's support is withdrawn. During discussions with RGoB officials, the evaluation team suggested the end of 2011 as a phase-out date for WFP's assistance to SF in Bhutan. This date was based on the evaluation's review of correspondence that had taken place between senior staff in WFP Headquarters and the Asia Regional Bureau (copied to the CO). Several senior RGoB officials, however, made it clear that a final phase-out date for WFP assistance to SF of end 2015 was preferred, in order to coincide with the anticipated achievement of the MDG goal for universal primary education.

During the current CP, a relatively high percentage of funds were disbursed for non-food items, training workshops and other forms of capacity development. The degree to which these efforts have been successful in ensuring the continuity of activities after WFP's withdrawal may only be known once SF activities have been turned over to government partners. Meanwhile, assessments of some activities, particularly training programmes for school staff (including managers and cooks), fuel-efficient stoves and school gardens, would not only help to determine their relative contribution to achieving the objectives of SF, and their potential sustainability upon the completion of WFP support, but also identify areas for improvement and adjustment, if any, during the current CP.

Recommendation – Activity 1

Taking into account the changing economic conditions in Bhutan and the improving financial situation of the RGoB, the evaluation recommends that WFP should carry out a further (final) expansion of current support to SF under a single project approach, followed by a complete phase-out of WFP support by the end of 2011.⁵⁷ This could be achieved through:

- (i) a simplified food basket at the start of the next phase in order to ease the assumption of responsibility for food provision by the national authorities in the medium term;
- (ii) a gradual withdrawal from LSS and MSS during the course of the next phase;
- (iii) a gradual take-over by the government of part of the WFP simplified food basket (e.g. maize meal).

Net and gross enrolment rates, as well as VAM indicators, should be taken into account in targeting WFP assisted schools in the next development project.

As noted in the introductory section of this report, the RGoB is expecting to improve its budgetary situation from 2006 onwards, due to the commissioning of the Tala hydro-electric power scheme. Some government officials interviewed by the evaluation team expected budgetary resources to be tight for some years to come, however, in part due to increased financial demands to support the on-going constitutional changes.

According to the Country Office, it was subsequently agreed that WFP would phase out of HSS by January 2008 and LSS/MSS during the course of the next phase of assistance (2007-2011), with WFP phasing out of primary schools by 2015.



(The WFP Asia Regional Bureau and Bhutan CO advised the evaluation team that a longer phase-out could be envisaged, subject to continued donor support and availability of resources. A later phase-out date, namely the end of 2015, is now being discussed. After WFP closes its operations in Bhutan, the RGoB is expected to continue SF at selected remote Primary Schools, based on the vulnerability of school children).

Activity 3

As noted earlier in this report, the MoA plans to switch from FFW for power tiller track construction to a commercial contractor approach in the future. Once the power tiller tracks are constructed, however, it is assumed that the local communities will be responsible for routine maintenance, as is currently the case.

Communities benefiting from mule tracks will also be responsible for the routine maintenance, with villagers assuming responsibility for certain stretches of the track, depending on the size of the community. Villagers should be able to undertake most maintenance work during the non-monsoon period and during periods when their farms do not demand much work. Since the mule tracks are of simple design, routine maintenance should not be a problem, and villagers have already been provided with tools for the construction phase that can be used for the subsequent maintenance. No compensation, in the form of either food or cash, is foreseen for routine maintenance work.

However, the evaluation team had the following concerns about the sustainability of two mule tracks visited⁵⁸:

- In several places the gradient was considerably more than the maximum 10 percent (one in ten) permitted. Besides exposing the mule tracks to the possibility of greater erosion, this will make it more difficult to up-grade the tracks to power-tiller tracks in due course;⁵⁹
- The specifications for track construction do not include the building of culverts. Both tracks visited were beginning to suffer from erosion due to water run-off. The hillside ditches need to be improved in depth, and simple diagonal earth culverts, covered with locally available stone slabs, need to be built at appropriate locations and distances. 60

The team member walked several kilometres up and down each of the two mule tracks visited, to inspect the works, together with the DUDES engineers and local officials/technical staff. Workers were interviewed at the second mule track and User Committee members at the first mule track visited.

The DUDES engineer accompanying the team assured the team that the ditches would be deepened and earth culverts built at the end of the main construction work – i.e. after the main track had been built.

The reason given for the steep gradient of the first mule track visited was that the first four kilometres had not required extensive re-engineering, as an adjacent new forestry (logging) road was to join with the mule track at the four kilometres point. It was stated that the gradient from the four kilometres point onwards was gentler, but the mission did not visit this section. The reason given for the steep gradient of the second mule track visited was that the engineers/surveyors designing the mule track wished to avoid a rocky outcrop, which would have required extensive blasting in an ecologically sensitive area, near a hot springs.



Recommendations – Activity 3

- DUDES and the field engineers should ensure that mule tracks have appropriate hillside water run-off ditches and transverse earth culverts to reduce erosion and lessen future maintenance work. These should be written into the specifications and guidelines in the form of a simple field manual for work gang supervisors.
- To the extent possible, mule tracks should remain within the normal gradient guideline of 6-7 percent and only rarely exceed the maximum of 10 percent for special reasons (e.g. to avoid negative ecological impact).



II.3.0 Logistics

The evaluation did not look into logistics issues in detail. Several missions have taken place over recent years that have led to a large number of recommendations for improvements that are now being implemented.⁶¹ In addition, a professional Logistics Officer based in the WFP CO in Kathmandu, Nepal, provides regular support to the Bhutan CO, on a cost-sharing basis (20 percent of his work time).

Since the start of WFP operations in Bhutan in the mid-1970s, the Food Corporation of Bhutan (FCB) has been the primary implementing partner for the practical logistics arrangements of food deliveries to schools and other institutions or work locations. The FCB has an established network of three regional offices and warehouses, the main one being in the south-western border town of Phuntsholing, and seven smaller Extended Delivery Point (EDP) warehouses. The FCB is responsible for receiving cargo from Kolkata (formerly known as Calcutta – some 700 km from the Bhutan border) and Haldia ports in India. Food is delivered to Phuntsholing in sealed containers and de-stuffed at that location, with quantity/quality checks being done at the same time. The FCB is responsible for transporting cargo from the regional warehouses to the seven transit stores and 45 EDPs for the SF programme and to four sites for the FFW. Food commodities are delivered directly by the FCB to schools located on or near roads. For off-road schools, food commodities are transported to EDPs and then carried to the schools by human and/or animal porters.

The final distribution function is currently the responsibility of the relevant line ministries and related departments, i.e. DSE for schools, and DUDES for the mule tracks project.

An internal WFP Office of Inspection (OEDI) report dated December 2004 noted a number of operational and management problems related to the storage and logistics operations undertaken by the FCB. These included the absence of a formal MoU between the FCB and WFP to define processes and standards expected of FCB by WFP. A draft MoU was prepared and finalized soon after the evaluation. The report also noted that ITSH payments to the FCB were in arrears for 2004. The 2004 costs had been paid at the time of the evaluation.

The other two main FCB offices and warehouses are in the southern towns of Samdrup Jongkhar and Geylegphug.

For example, a logistics mission to Bhutan in October-November 2002, undertaken by Damiano Scalici, Logistics Officer; a Bhutan Logistics Capacity Assessment (LCA) undertaken in 2003; an OEDI mission undertaken by a WFP Senior Inspector, in December 2004 that made a number of recommendations for improvements in logistics management.



II.4.0 Procurement

According to data provided by the CO Logistics and Procurement Unit, the CO purchased 7,039 tons of commodities "locally", including procurement in Bhutan of commodities from neighbouring India, from the start of the CP in mid-2002 to September 2005. Such purchases constituted 46 percent of the total 15,236 tons of food used. The remaining 8,197 tons (54 percent) was received in-kind from donors, and consisted primarily of rice, some of the pulses, vegetable oil, canned fish and blended food.

The situation by commodity was as follows:

- Rice: mostly from in-kind donations (76 percent), with the balance (24 percent) purchased locally (Indian origin)
- Maize meal: mainly a local purchase (mostly from India with a small amount from eastern Bhutan)
- Pulses: both imported (yellow split peas and lentils) and purchased locally (Indian origin), though WFP donors' imported prices (FOB) appear to be considerably lower than Indian prices for lentils
- Vitamin A and D fortified vegetable oil, canned fish and blended food (CSB and PWB): always imported, though regional purchase of a blended food (Indiamix) should have been possible
- Sugar: always purchased locally (Indian origin)

Only a small part of overall tonnage purchased by the CO is produced locally (i.e. Bhutanese maize meal), while the majority of local purchases are of commodities originating and imported from India. Although regionally procured rice and maize meal prices are competitive with imported in-kind rice and maize meal, the price of regionally procured pulses appears to be higher, even when additional ocean and overland transport costs added to imported in-kind pulses are taken into account. For example, the WFP FOB price for imported peas and lentils was US\$440 and US\$450 per ton, respectively, 63 while the latest procurement price for regionally procured lentils was US\$670 per ton, 50 percent higher than the WFP FOB price for imported lentils.

Some beneficiaries interviewed said that they preferred the taste of regionally procured lentils, and noted that they were easier to prepare than the imported yellow split peas, which require a longer cooking time.⁶⁴ On the other hand, some beneficiaries interviewed preferred the taste of the imported in-kind rice, which is of a higher quality.

The evaluation observed several cartons and individual containers (cans/plastic jugs) of vegetable oil that were not marked as being fortified with vitamins A and/or D. This should now be standard practice for WFP, whether procured or donated in-kind. It was also noted that the packaging of the pea-wheat blend (PWB) needs improvement. The inner lining needs to be heat-sealed (rather than stitched together with the outer bag). Currently, insects can enter the bag through the stitches, which are rather widely spaced.

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WFP February 2005 price list.

Pulses should normally be soaked for some hours prior to cooking to reduce the cooking time, but this is often not done, it seems.



Recommendations

- WFP should attempt, in the next phase of assistance, and subject to the availability of cash resources, to maximize local/regional procurement in order to facilitate the eventual phase-over to the government of the SF operations.
- WFP should continue to seek to purchase maize meal from local producers in eastern Bhutan, subject to acceptable price, packaging and quality.
- At Headquarters resources mobilization and food procurement level, WFP should ensure that supplies of vegetable oil are adequately fortified with Vitamin A and D, and that fortification is clearly marked on individual containers and external cartons. Compliance with WFP regulations needs regular monitoring.
- Packaging of the pea-wheat blend needs to be improved.



II.5.0 Production of a Local Micronutrient - Fortified Blended Food

From the very start of WFP's operations in Bhutan, micronutrient fortified blended foods have been a part of the food basket – either corn soya milk (CSM), corn soya blend (CSB), wheat soya blend (WSB) or, more recently, pea-wheat blend (PWB). An examination of the nutrient value of PWB revealed that the blend is less micronutrient-dense than CSB. Under the current SF activity, the blended food (CSB or PWB) is mixed with water and sugar and boiled into porridge, or roasted, or left as an uncooked powder and served to students as a mid-morning or mid-afternoon snack.

Since the mid-1970s, WFP has developed locally produced micronutrient blended foods at a competitive price in a number of countries. Within the region, for example, blended foods have been developed in India, Nepal and Viet Nam. The evaluation team concluded that there could be two options for eventually replacing imported in-kind blended food, in order to begin to nationalize the food basket and to offer a suitable alternative to imported CSB or PWB, following WFP's phase out:

- Purchasing "Indiamix" from India.
- Developing a local micronutrient blended food based on rice/maize, pulses, iodized salt, sugar (if a sweeter blend is preferred) and a micronutrient pre-mix.

One of the evaluation team members, as former WFP Country Director to Viet Nam, had been involved in the development of a low-cost extruded blended food that had been produced in two decentralized production units. Given that an extruded blended food had been produced in Viet Nam for around US\$400 a ton ex-production unit, the team member believed that the same could be feasible in Bhutan. One kg capacity metal foil laminate packaging had been used in Viet Nam, as the blended food had been distributed through the maternal-child health programme as a take-home ration. In Bhutan, where the fortified blended food would be used for SF, however, lower-cost packaging (e.g. 25 kg multi-ply paper/polythene liner sacks) would be sufficient.⁶⁵

Recommendation

• The Country Office should consult with the senior nutritionist and food technologist in the Regional Bureau (ODB) regarding the possible establishment of local production of a micronutrient-fortified blended food. Depending on the outcome of this consultation, and taking into account the RGoB's level of interest, the CO could plan a feasibility study in 2006, with a view to designing a pilot production unit, preferably in a central or eastern location. The low-cost extrusion process could be investigated as a first choice of production method. Final production costs should be competitive with imported in-kind or regional products, taking into account transport costs for these products. Equipment costs could be amortized over a five year period. 66

According to the WFP February 2005 FOB price list, the FOB price of US corn soya blend was US\$310 per ton and that of Danish pea wheat blend US\$390 per ton. Adding ocean freight and overland transport costs to these FOB prices indicates that a local production at around US\$400-450 per ton should be competitive.

Subsequent to the evaluation, the CO advised that it had decided to drop blended food from the next phase of assistance, after consultations with the WFP regional nutritionist and with the MoE. The evaluation team had concerns about this decision, however, because of the value of the micro-nutrient fortification.



II. 6.0 New Biscuits Programme

The biscuit SF pilot project was initiated in July 2005 using donations in-kind of BP5 biscuits. For reasons stated above, the evaluation does not consider the use of imported emergency high-energy/high-protein biscuits particularly suitable for SF programmes in rural Bhutan. As the project progresses, monitoring data should provide feedback on the appropriateness of the biscuits. Should a biscuit programme be deemed suitable in Bhutan, the importation of specially-formulated SF biscuits from Bangladesh or India should be considered as an alternative.



III. SUMMARY OF RECOMMENDATIONS

Recommendations for Activity 1

Recommendations on page 14

- WFP should remove canned fish and sugar from the food basket at the end of the current CP. Fish should be replaced with a higher ration of locally available pulses in order to "nationalize" the food basket, reduce costs and simplify food management, while maintaining its nutritional value. In this way, the commodity cost of the food basket could be reduced by an estimated 40 percent.
- WFP should advocate with the RGoB to continue to develop the interface between school gardens and the school curriculum (at least until LSS level), including an increase in the practical application of subjects such as science, geography, health/nutrition and marketing/business practices.
- WFP should develop a plan to address technical and capacity development needs in health/nutrition, food preparation, hygiene and service, agriculture, environment and personal sanitation and hygiene with other national partners (in addition to MoE), to ensure acceptable quality of support activities and thereby enhance the overall outcomes of the SF programme.
- WFP should foresee a gradual increase in contributions to SF by RGoB and parents/communities, based upon an agreed-upon, step-by-step phase-out plan by WFP for the medium term. WFP should continue to focus during this period on providing SF to school children from food-insecure, rural communities, at the primary level, in keeping with its mandate to reach those most in need, and gradually reduce support to SF at other levels.

Recommendation on page 23

• There is a need for a coordinating group on issues related to SF and the nutrition and well-being of school children, so that better collaboration can take place. Such a group could also contribute to the integrated monitoring and assessment of SF and related inputs.

Recommendation on page 26

• WFP may need to recognize broader gender issues that could eventually affect girls' enrolment, retention and completion rates. As part of a gender thematic working group, WFP has an opportunity to advocate with government partners for solutions to address longer-term gender issues, and thus help to guarantee the sustainability of efforts to promote girls' education.

Recommendation on page 40

• Given the unfeasibility of measuring nutrition indicators, the evaluation recommends that the main objectives of SF, enhancing school enrolment and attendance, remain unchanged. Improved nutritional status will remain an unmeasured secondary effect or added benefit of a programme that provides regular sources of nutritious food to a large number of school-aged children.



Recommendations on page 42

Taking into account the changing economic conditions in Bhutan and the improving financial situation of the RGoB, the evaluation recommends that WFP should consider a further (final) expansion of current support to SF under a single project approach, followed by a complete phase-out of WFP support by the end of 2011. This could be achieved through:

- (i) a simplified food basket at the start of the next phase in order to ease the assumption of responsibility for food provision by the national authorities in the medium term;
- (ii) an early withdrawal from LSS and MSS during the course of the next phase;⁶⁷
- (iii) a gradual take-over by the government of part of the WFP simplified food basket (e.g. maize meal, as a first step).

Net and gross enrolment rates, as well as VAM indicators, should be taken into account in targeting WFP assisted schools for the next development project.

(The WFP Asia Regional Bureau and Bhutan CO advised the evaluation team that a longer phase-out could be envisaged, subject to continued donor support and availability of resources. A later phase-out date, namely the end of 2015, is now being discussed. After WFP closes its operations in Bhutan, the RGoB is expected to continue SF at selected remote Primary Schools, based on the vulnerability of school children).

Recommendations for Activity 2

Recommendations on page 17

- WFP should undertake a CO-managed survey of the well-being and living conditions of NWF workers and their families before the end of the current CP (2007), sharing the results with the RGoB and other partners for possible follow-up action, as needed.
- Considering its considerable support to the NWF over an extended period, WFP should continue to monitor developments, particularly regarding the social and economic welfare of road workers.

Recommendations for Activity 3

Recommendation on page 28

• WFP should support the construction of a further 60 kilometres of mule track, using the remaining resources under the current CP.

Recommendations on page 44

- DUDES and the field engineers should ensure that mule tracks have appropriate hillside water run-off ditches and transverse earth culverts to reduce erosion and lessen future maintenance work. These should be written into the specifications and guidelines in the form of a simple field manual for work gang supervisors.
- To the extent possible, mule tracks should remain within the normal gradient guideline of 6-7 percent and only rarely exceed the maximum of 10 percent for special reasons (e.g. to avoid negative ecological impact).

Assistance to HSS should be phased out at the end of the current Country Programme.

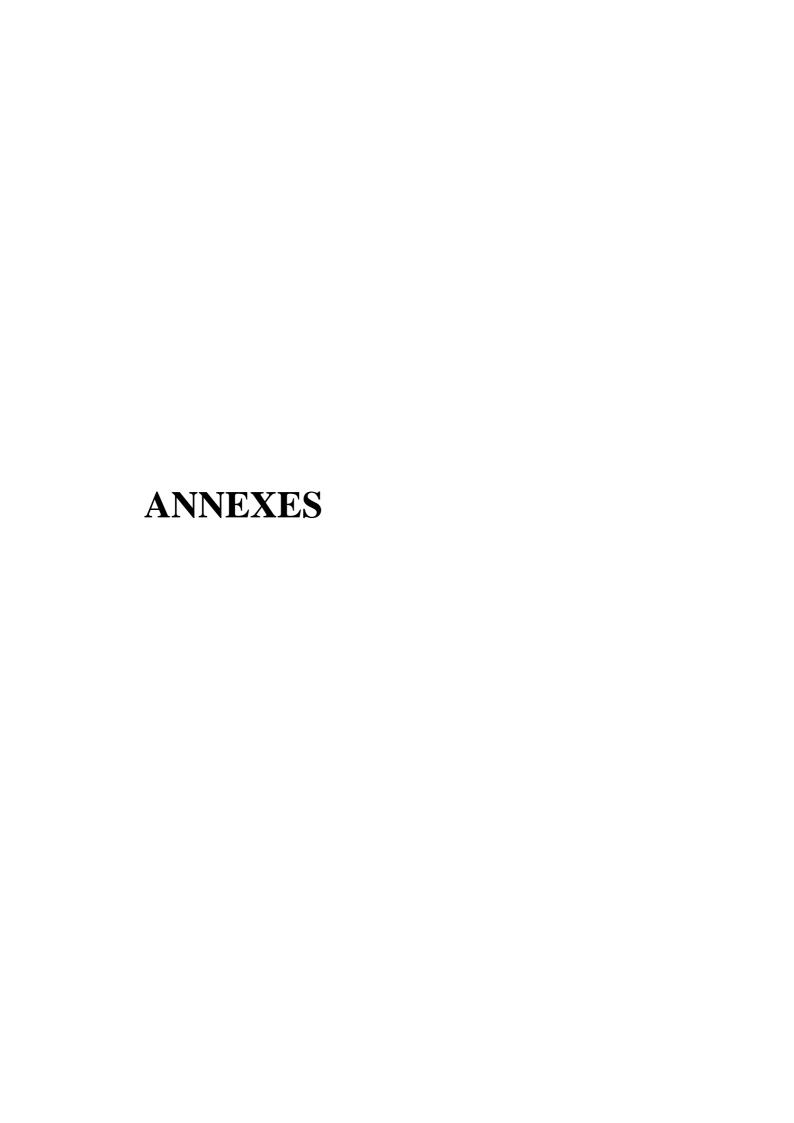


Recommendations on Procurement (page 47)

- WFP should attempt, in the next phase of assistance, and subject to the availability of cash resources, to maximize local/regional procurement in order to facilitate the eventual phase-over to the government of the SF operations.
- WFP should continue to seek to purchase maize meal from local producers in eastern Bhutan, subject to acceptable price, packaging and quality.
- At Headquarters resources mobilization and food procurement level, WFP should ensure that supplies of vegetable oil are adequately fortified with Vitamin A and D, and that fortification is clearly marked on individual containers and external cartons. Compliance with WFP regulations needs regular monitoring.
- The packaging of pea-wheat blend needs improvement.

Recommendation on the local production of a blended food (page 48)

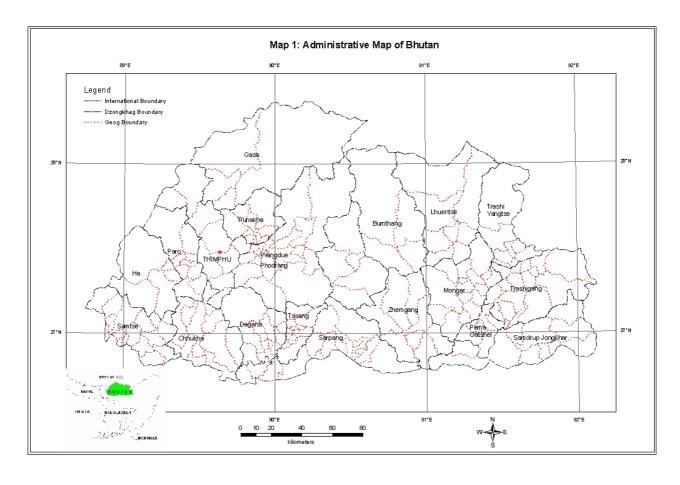
• The Country Office should consult with the senior nutritionist in the Regional Bureau (ODB) regarding the possible establishment of local production of a micronutrient-fortified blended food. Depending on the outcome of this consultation, and taking into account the RGoB's level of interest, the CO could plan a feasibility study in 2006, with a view to designing a pilot production unit, preferably in a central or eastern location. The low-cost extrusion process could be investigated as a first choice of production method. Final production cost should be competitive with imported in-kind or regional products, taking into account transport costs for these products. Equipment costs could be amortized over a five-year period.





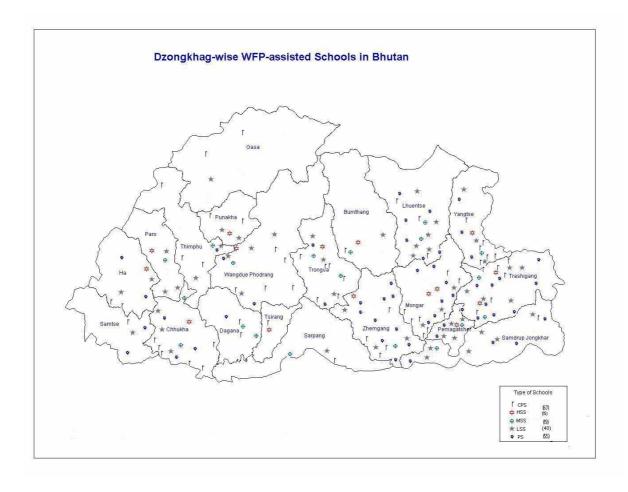
ANNEX 1 - MAPS OF BHUTAN

1.1 ADMINISTRATIVE MAP OF BHUTAN



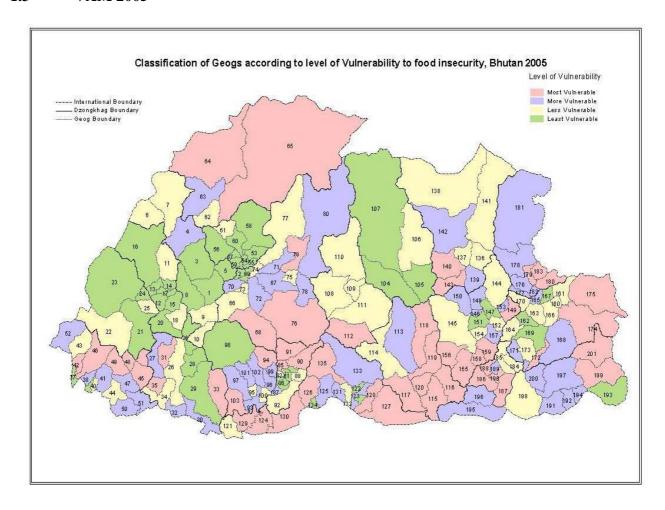


1.2 MAP OF SCHOOLS ASSISTED BY WFP IN 2005.





1.3 VAM 2005





ANNEX 2 - TERMS OF REFERENCE

Rationale

Since the WFP Country Programme will end in June 2007, the OEDE-led evaluation intends to take stock of actual achievements and provide independent recommendations for the formulation of the forthcoming phase of WFP activities in Bhutan, should such a continuation of activities seem advisable. The evaluation also aims to provide an independent opinion on the renewal of the CP, however, and of the continued role for WFP food aid in Bhutan.

Purpose and scope

The evaluation focuses on output and outcome-level results achieved through the implementation of the CP to date. It takes into consideration its achievements since July 2002 in regard to what was intended, and also attempts to examine the unintended effects of WFP's interventions. As a "first generation" CP, its general compliance with WFP's corporate CP approach is also assessed, including, but not limited to, its relevance to national priorities, those of the UNDAF, and connectedness¹. General compliance with WFP's Enabling Development policy and Enhanced Commitments to Women policy will be assessed.

The evaluation will assess the extent to which the current CP, as implemented, has provided the best possible modalities for reaching the intended objectives, on the basis of results to date. The mid-term evaluation will provide recommendations for the remaining phase of the current CP and provide support for the design of any future WFP operations in Bhutan (whether this may be in the framework of a successor CP or a stand-alone project.)

The scope of the evaluation will include an examination of coherence, relevance², effectiveness³ and sustainability of the current CP, with a particular emphasis on the SF activity.

In light of ongoing regional efforts to assess the nutritional impact of SF, special attention will be given by the evaluation to assessing the effects of the Bhutan programme on the nutritional status of school children, and on determining the viability of including this objective in future WFP efforts. In addition, the evaluation will attempt to provide feedback regarding the contribution of SF to Bhutan's efforts to attain the objectives outlined in global initiatives such as Education for All and the UN MDGs.

Connectedness: Ensuring that activities of a short-term emergency nature are carried out in a context that takes longer-term and interconnected problems into account (Source: WFP M&E Glossary).

Relevance: Extent to which the objectives of a WFP operation are consistent with beneficiaries' needs, country needs, organisational priorities, and partners' and donors' policies (Source: WFP M&E Glossary).

Effectiveness: Extent to which the operation's objectives were achieved, or expected to be achieved, taking into account their relative importance (Source: WFP M&E Glossary).



Audience

The main audience of the evaluation is the WFP CO and RGoB counterparts. Both entities will benefit from findings, conclusions and recommendations aimed at improving operations during the current phase, and establishing guidance for the next phase.

In addition, the WFP Executive Board will benefit from the evaluation process and resulting report. Accordingly, the report will cover relevant information on progress in terms of stated objectives, feedback on the sustainability of current operations, and advice on the nature of future activities. The report will also provide information on issues of corporate interest, such as the evolution of government educational policy to include SF, and the progress to date on a timely, effective and efficient hand-over of WFP-supported interventions to government counterparts.

Key Bhutan CP Evaluation Issues

Coherence

The CP will be examined for external coherence with the RGoB's ninth Five-Year Plan, the UNDAF and other key planning documents. In terms of internal coherence, the CP will be examined with reference to activity log frames for Activities 1 and 3.

Coordination

The evaluation will examine the nature and extent of coordination with government departments, relevant UN agencies, NGOs and other agencies that are active particularly in the educational sector and in efforts to reduce gender disparities. The evaluation will assess the extent possible, how partnerships with other agencies have affected the outcomes of activities. For example, the MoU with UNICEF on the sharing of responsibilities in the SF activity and its practical implementation will be the subject of special attention. WFP's position and relative importance as a donor to Bhutan will also be examined.

Cooperation

Cooperation with the RGoB is guided by the Basic Agreement and by operational contracts (MoUs) with line ministries - e.g. the MoE for Activity 1 and the MoA/DUDES for Activity 3. The evaluation team will examine these MoU and the associated implementation guidelines to ascertain to what extent they are relevant, are being followed, and their effect on the outputs and outcomes of the CP. The annual Project Plans of Action (PPA) and records of reviews will also be examined. Minutes of the quarterly technical coordination meetings will be reviewed. At the district level,⁵ the evaluation team will meet with the District Education Officers of the districts visited and ascertain to what extent guidelines are being followed in the implementation of the SF activity.⁶ The joint role of WFP and RGoB partners in monitoring will also be reviewed.

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It appears that WFP is monitoring the educational results, while UNICEF is monitoring nutritional outcomes.

⁵ There are twenty districts in Bhutan.

Most of the implementation and monitoring of the SF activity is carried out jointly by WFP and District Education Officers (DEOs) in a relatively de-centralized system.



Gender

The evaluation team will review to what extent the CP activities are compliant with WFP's Enhanced Commitments to Women (ECW) policy. Progress in improving girls' participation in education and other gender-related issues affecting the achievement of the SF objectives will be assessed. Two relevant entities, a National Commission for Women and Children created by the government in 2004, and a gender thematic working group that meets several times a year (quarterly) to discuss issues of common interest, will be consulted for information and feedback, as appropriate.

Effectiveness

The evaluation will examine the CP's effectiveness, including to what extent the mid-term objectives of the two current CP activities, in particular SF, have been reached. For SF, it will examine evidence for increased enrolment of students in the schools assisted and for improved regular attendance of day students (particularly girls) from remote areas. To the extent that empirical evidence is available, the evaluation will look into an improvement in children's concentration (attention) due to school meals. The evaluation will also consider whether any additional measures are needed to achieve the objectives of Activity 1. Some issues possibly affecting the overall effectiveness of SF could be considered, such as the potential job market for school graduates, parental attitudes towards school vs. working at home, etc.

For Activity 3, the evaluation will examine outputs and outcomes of the construction of community assets to date. The timely despatch and receipt of food will also be examined, as well as how any breaks in the pipeline may have impacted on the activities.

Cost effectiveness

The evaluation will examine the cost of delivering food aid to Bhutan, including internal distributions to small population groups in remote areas within the country. To the extent that data is available, the evaluation will examine whether alternative solutions (e.g. cash subsidies) could be more cost-effective. The use of local and regional purchases as a part of WFP's delivery plan will also be reviewed. As part of its background research, the evaluation will examine Bhutan's national food balance sheet and the proposed longer-term solutions to food insecurity, especially in the eastern parts of Bhutan.

Monitoring and evaluation

In 2002, a regional WFP officer concluded that the collection of quantitative data was hindered by difficulty of access. In order to address this problem, a qualitative approach to monitoring was developed to compensate for the relatively small quantity of data collected. Several M&E consultants have contributed to staff training and proposed indicators for monitoring in 2003, 2004 and early 2005. The evaluation team will study the existing

The Permanent Secretariat Office has not yet been established; recruitment of staff is being undertaken.

The working group is not directly involved in the WFP SF activity, however.

Baseline data available include the 2001 baseline survey, the follow-up 2002 baseline and the 2005 baseline survey. The evaluation mission can also consult self-evaluation reports prepared in 2002 and Silvia Kaufmann's 2004 SF review.

The Logistics Capacity Assessment of 2002 may be useful.

¹¹ Report, J. Fleuren, WFP/2002.



monitoring systems and review the reports and work of the M&E experts who have visited Bhutan in recent years, making recommendations for further improvements if necessary.

Targeting

A re-targeting study for SF was undertaken in 2002, partly to investigate the problem of "informal boarders" and to provide guidance on where WFP should concentrate its support to education. Taking walking distance to schools and remoteness of villages as the two main factors of eligibility, each school categorised as either better or worse off situations, compared to the national "norm." The evaluation will examine whether the recommendations of this study have been followed and will review the current targeting approach (in terms of effectiveness and appropriateness).

Composition, acceptability/suitability and sustainability of the food rations

The evaluation will review the current food basket and recommend any needed changes to reduce its cost, yet maintain its nutritional value. It will also propose possible means to include more locally-produced commodities, in order to improve the sustainability of the SF programme after WFP's eventual withdrawal.

Nutritional impact

Although educational improvement, rather than improved nutritional status, is the stated objective of the CP, the evaluation will examine a possible nutritional impact of the CP, to the extent that reliable data is available. Specifically, the evaluation will attempt to examine the extent to which SF is contributing to the RGoB's efforts to address nutritional issues, including under-nutrition and specific micronutrient deficiencies.

Relevance

The evaluation will examine whether the two remaining CP activities are still relevant. In view of the planned phase-out at the end of the current CP of Activity 3 (FFW), it will concentrate on the SF component and assess whether food aid remains the most effective tool for encouraging enrolment and attendance. The evaluation will ask: Is there a nutritional need/benefit that justifies the continuation of WFP food assistance? If the answer is positive, the integration of nutrition specific outcomes and indicators should be considered and a recommendation could be made by the mission for any successor phase of assistance.

Sustainability

The evaluation will look at contextual obstacles to sustainability after the eventual cessation of WFP assistance and whether the RGoB, Parent-Teacher Associations and/or NGOs would be able to carry on a SF programme (primarily in terms of managerial and technical capacity), if deemed desirable, in the not too distant future.

The evaluation will also attempt to determine the extent to which the RGoB depends on WFP food assistance for SF, particularly in boarding schools. Since improvements in the government's budgetary situation (e.g. due to currently foreseen increases in hydro-electric power sales to neighbouring India) may enable it to assume the relatively modest cost of the SF programme in the future, he evaluation will investigate the feasibility of the government or communities, or a combination of both, assuming increasing fiscal responsibility for SF in

¹² Refers to students who remain at the school but are not officially counted as boarding students.



the future. The evaluation will consider the desirability of an interim period of capacity building and community mobilisation, and review the extent to which this has already begun. Recommendations on the appropriate timing of eventual phasing-out of SF and for a smooth exit strategy may also be made.

Other issues

Keeping in mind is that Bhutan is a disaster prone country, susceptible, inter alia, to floods, landslides on farms, paths and highways, seismic activity, etc., the evaluation could analyse some potential obstacles to programme success. For example, the effect of the monsoon floods and ensuing landslides of 2004 affected the implementation of activities could be reviewed. On the other hand, the evaluation is not a CP or project formulation mission and decisions on possible future activities, such as support to disaster preparedness, will therefore be the responsibility of later planning exercises.

Other issues which the evaluation may examine include:

- 1. Protection (especially in boarding schools or day schools where children are required to walk long distances)
- 2. Poverty (inability of families to pay for additional costs for school books, transport, uniforms etc.)
- 3. HIV/AIDS/STIs and other social concerns affecting the well-being of Bhutanese youth, and the role of SF in addressing and/or preventing them

Methodology

The evaluation team will undertake background reading and research before travelling to Bhutan. Much of the documentation has been collected during a pre-mission visit to Bhutan by the OEDE Junior Professional Officer, in June 2005.

The in-country evaluation process will commence in the capital, Thimphu, for 3-4 days and then proceed on a field visit lasting 10-12 days. The focus will be on visiting schools that are recipients of WFP food aid and, if possible, a few that are not. Visits to FFW sites that are en route will also be undertaken. The team will return to Thimphu for a final 3-4 days for final interviews and for the drafting and presentation of a brief Aide-Memoire. A day will be spent in the WFP Asia Regional Bureau in Bangkok for de-briefing at the RB level.

Besides further in-country document and record review (including WFP field monitoring reports), the team will interview beneficiaries, counterparts, partners and WFP staff. The collection of evaluation data will be carried out through a variety of techniques that will range from direct observation to informal and semi-structured interviews and focus groups, where feasible. The analysis will build on triangulating information obtained from various stakeholders' views as well as with secondary data and documentation reviewed by the team.

After the mission has left Bhutan the team leader will produce a full technical report, with inputs from the second team member. Subsequently, an Executive Board summary report and recommendations tracking matrix will be produced.



Team composition and sharing of responsibilities

The team will be comprised of two persons, namely a team leader (external, independent consultant) and team member (OEDE staff member). The OEDE staff member is also the evaluation manager.

The **team leader** is a Ph.D. nutritionist with a background in community education and educational administration. She has experience in the region, has previously visited Bhutan in the context of her work with UNICEF and is familiar with SF in Bhutan. She has been a team leader or team member of several WFP evaluations over the past two years. The team leader will focus on the following issues: Coordination (in particular with UNICEF); Gender; Effectiveness of Activity 1 – SF; Targeting in SF; Composition and acceptability/suitability of food rations; Nutritional impact; Relevance.

The **international team member** is an experienced WFP staff member, with an educational background that includes post-graduate studies in development economics. He has worked as Country Director in several countries of Africa and Asia, managing a variety of development and relief operations. He has also worked in WFP Headquarters in resources mobilization and management, food procurement and, since 2001, evaluation. The team member will concentrate on the following issues: Coherence; Cooperation; Effectiveness of Activity 3 – FFW; Cost effectiveness; Monitoring and Evaluation; Sustainability. As noted above, the team member is also the evaluation manager and will manage the process of the evaluation mission and the subsequent report finalization.

The **national team member**, Ms Ugen Choden, is experienced in gender, needs assessment and in the evaluation of development projects and activities. In order to facilitate the team's work, the national consultant was hired to carry out additional document searches, assist in interviews and focus group discussions, and carry out other research-related activities during the evaluation. Ms. Choden speaks several Bhutanese languages, in addition to English, which will be of great assistance to the international team members in conducting interviews of beneficiaries throughout the country.

Evaluation schedule: timetable and itinerary of the mission.

- May 2005: Concept paper prepared.
- > June 2005: Ten days pre-mission undertaken by the OEDE Junior Professional Officer.
- August 2005: Preparation of the terms of reference; contracting of the team leader; travel arrangements made.
- > 16 September to 12 October 2005: Inclusive dates of mission, including international travel, in-country mission and de-briefing in the Regional Bureau in Bangkok.
- > Second half of October 2005: Writing of the full technical report, EB summary report and recommendations tracking matrix (management response matrix).
- November-December 2005: Circulation of the full and summary reports (plus matrix) within WFP for review and comments.
- > June 2006: Submission of the summary report and matrix to the Annual Session of the Executive Board (date to be confirmed).



Expected outputs

- Full technical report, which should not exceed 60 pages, including all annexes.
- Summary report (maximum 5000 words).
- Recommendations tracking matrix/management response matrix (maximum 2000 words, with the management responses). Ideally, the number of key recommendations should not exceed a dozen, although additional subsidiary recommendations may be contained in the full technical report.

As noted above, the deadline to receive these reports in final draft form from the team leader is 31 October 2005.

In addition to the above, a short (max. 5 pages) Aide-Memoire should be produced for debriefing purposes, before the team leaves Bhutan.

Cost of the evaluation

The evaluation will cost approximately US\$ 38,000 (excluding the salary costs of the OEDE team member/evaluation manager and the cost of OEDE support services). This cost will be borne by the OEDE 2005 PSA budget.



ANNEX 3 - FIELD VISIT ITINERARY

Evaluation Mission (18 September – 8 October 2005)

Sunday, 18 September Arrival in Paro

Depart to Thimphu

Monday, 19 September Meeting with CD and CO staff

Courtesy call with Director of Multilateral Dept/MoFA Meeting with Secretary of MoE, MoA, MoF, MoHS

Tuesday, 20 September Continuation of above, plus work on the office.

Wednesday, 21 September Meeting with DG, Director/WFP coordinator of MoE, DADM,

MoA, DUDES

Thursday, 22 September Meeting with UNICEF, UNDP, FAO, WHO.

Friday, 23 September Desk review

Saturday, 24 September Travel to Bumthang

Enroute visit Nobding LSS, Wangdue

Night halt at Bumthang

Sunday, 25 September Travel to Mongar

Enroute visit Tang PS, Bumthang

Night halt at Mongar

Monday, 26 September Call on Dasho Dzongda (along with the Mongar DEO and DFO)

Visit Serzhong CPS, Mongar (1 hour trek)

Night halt at Mongar

Tuesday, 27 September Visit the Mule Track in Mongar

Visit Kilikher LSS (Non WFP School), Mongar

Night halt at Mongar

Wednesday, 28 September Travel to Trongsa

Night halt at Trongsa

Thursday, 29 September Travel to Zhemgang

En route visit power tiller tracks and DP construction at

Wangdigang, Trongsa.

Call on Dasho Dzongda (along with the DEO)

Visit Taktshi HSS, Zhemgang

Night halt at Zhemgang



Friday, 30 September

Visit Gomphu PS, Zhemgang

En route visit construction of mule tracks at Praling, Zhemgang

Visit Yebilaptsa MSS, Zhemgang Visit Tingtibi LSS, Zhemgang Night halt at Zhemgang

Saturday, 1 October Travel to Trongsa

Visit Tshangkha PS, Trongsa Night halt in the Resort, Trongsa

Sunday, 2 October Return to Thimphu

Monday, 3 October Research and report drafting in the Thimphu WFP office

Tuesday, 4 October Further meetings with government Departments, bilateral donors

Wednesday, 5 October Research and report drafting; Meeting with WFP successor

project formulation team

Thursday, 6 October During Action Review (DAR) with the Country Office staff

Friday, 7 October Debriefing with government counterparts and other IPs

Lunch with government counterparts and other IPs Debriefing with CO staff and project formulation team

Saturday, 8 October Travel to Paro

Depart Paro to Bangkok with Druk Airlines, via Calcutta

Monday/Tuesday, 10/11 October

De-briefing in Asia Regional Bureau, Bangkok

Tuesday, 11 October Return of evaluation manager to Rome.

Wednesday, 12 October Return of team leader to Gothenburg



ANNEX 4 - LIST OF PERSONS MET

People Met in Thimphu

- Mr. Tenzin Rondel, Under Secretary, Ministry of Foreign Affairs, Thimphu
- Dasho Tsultrim, Ministry of Foreign Affairs
- Aum Yangki Tobgyel Wangchuk, Finance Secretary, Ministry of Finance
- Mr. Sonam Wangchuk, Director General, Department of Aid & Debt Management
- Ms. Leki Wangmo, Programme Officer, DADM
- Lyonpo Thinley Gyamtsho, Minister of Education
- Dr. Pema Thinlay, Secretary, Ministry of Education
- Mr. Tsewang Tandin, Director, Ministry of Education
- Mr. Dago Dorji, WFP Counterpart, Ministry of Education
- Mr. Jambay Wangchuk, PPD, Ministry of Education
- Dasho Sangay Thinlay, Secretary, Ministry of Agriculture
- Ms. Anoja Wijeyesekera, Representative, UNICEF
- Ms. Renata Lok Dessallien, UN RC, UNDP
- Dr. Ei Kubota, Representative, WHO
- Mr. Torben Bellers, Minister Counsellor, DANIDA
- Mr. Tek B. Chhetri, Programme Officer, DANIDA
- Mr. Phuntsho Wangdi, Director, Department of Roads
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ANNEX 5

BIBLIOGRAPHY OF MAIN DOCUMENTS CONSULTED AND REFERENCES

Black, Maggie, Stalker, Peter. The Situation of Women and Children in Bhutan, Thimphu: 10 June 2005. (Second Draft Not for citation)

Doma, Ugen. Piloting Blended Food in Goenshari Community/Primary School, 6 – 30 November 2000.

Dorji, L. Determinants of School-dropout and Non-enrolment from the Young People's Perspective", in Youth in Bhutan Education, Employment, Development, Centre for Bhutan Studies, Thimphu: 2005.

Kaufmann, Silvia. CP's Activity 1: Improving Rural Children's Access to School, A review of the nutrition relevant aspects of the FFE Programme, Report Final 1/5, May 2004.

King, Rebecca. Back to Office Report, Mongar, Trashinyangtse, Trashigang (November 27th – December 13 2004).

NYCOM Consultants, WFP SF Programme Baseline Survey, Preliminary Findings, Thimphu: 27 May 2005.

Royal Government of Bhutan, 9th Five-year Development Plan, 2002 – 2007, Thimphu: 2002.

Royal Government of Bhutan. Education Sector Strategy, Reliving Vision 2020 Policy and Strategy, Department of Education, Ministry of Education, Thimphu: 12 May 2003.

Royal Government of Bhutan, Bhutan National Literacy Survey: Summary of Findings on Households' Knowledge and Perceptions on Education, Health and Development programs. Ministry of Education, Thimphu: 2003.

Royal Government of Bhutan, Girls' Enrolment Study. Ministry of Education, Thimphu: 2003.

Royal Government of Bhutan, Implementation and Reporting Guidelines, Joint Director, Programme Division, Department of School Education, Ministry of Education. Thimphu: 2005.

Royal Government of Bhutan, Labour Force Survey, Department of Employment, Ministry of Labour and Human Resources, Thimphu: 2004.

Royal Government of Bhutan, Ministry of Education, Policy and Planning Division, General Statistics 2005, Thimphu: 2005.

Royal Government of Bhutan, Ministry of Finance, Department of Planning, CEDAW: An updated summary of the report of the Royal Government of Bhutan, 2003.



Royal Government of Bhutan, Ministry of Health, Annual Health Bulletin 2003, Thimphu: October 2004.

Royal Government of Bhutan, Ministry of Health, National Anaemia Survey, "Anaemia Among Men, Women and Children in Bhutan: How big is the problem?", Thimphu: August, 2003.

Royal Government of Bhutan, National Statistical Bureau, Poverty Analysis Report Bhutan, Thimphu: August 2004.

Royal Government of Bhutan. Policy and Planning Division, Ministry of Agriculture. Rural – Urban Migration in Bhutan, Thimphu: 2005.

Royal Government of Bhutan/FAO: Bhutan National Food Security Strategy Working Paper Draft 0.3, Thimphu: 2005.

Royal Government of Bhutan/UNICEF, Girls Enrolment Study Report 2003, Thimphu: 2003.

Royal Government of Bhutan/UNICEF, Master Plan of Operations, 2002 – 2006, Programme of Cooperation for Children and Women of Bhutan, Thimphu: 2001.

UNICEF-RGoB, Factors affecting enrolment, repetition and dropout of primary-school-age children in Bhutan, UNICEF-RGOB, Thimphu: 2002.

Royal Government of Bhutan/UNICEF, Mid-term Review of the 2002 – 20006 Country Programme of Cooperation between the Royal Government of Bhutan and UNICEF and Annexes, Thimphu: 2004.

Royal Government of Bhutan/World Food Programme, a Draft Note on Retargeting of WFP Assistance to Schools (Primary and Community), WFP/Department of Education, Thimphu: 4 March 2002.

Royal Government of Bhutan/World Food Programme. Evaluation of Project BHU 3724.02, "Support to Primary Education" WFP, MoHE/DADM, Thimphu: October – November 2002.

Royal Government of Bhutan/World Food Programme, Operational Contract Agreed Upon Between the Royal Government of Bhutan and the World Food Programme Concerning Improving Rural Children's Access to School (WFP Activity No. 1), Thimphu: 17 October 2002.

Royal Government of Bhutan/World Food Programme, Self-Evaluation of the World Food Programme's Support to Primary Education, Implemented from 1999 to 2002, Education Project Evaluation Taskforce, Thimphu: 13 December 2002.

Royal Government of Bhutan/World Food Programme, Vulnerability Analysis and Mapping Report 2005, Ministry of Agriculture, Thimphu: 2005.



United Nations, UN Development Assistance Framework (UNDAF), Bhutan 2002 – 2007, Thimphu: 2001.

United Nations Resident Coordinator's Annual Report 2004, Thimphu: 2005.

Ura, Karma, <u>A Brief on Food Security Trends</u>, Thimphu: 4 June 2005. Ura, Karma, Perceptions of Security, Journal of Bhutan Studies, Thimphu: Winter 2001, pages 113 – 136.

World Bank website www.devdata.worldbank.org, November 2005.

World Food Programme, Analysis of School Monitoring Forms, Thimphu, October 2004.

World Food Programme, Analysis of School Monitoring Forms, Thimphu, December 2005.

World Food Programme, Logframe Food for Education, Thimphu: 2004.

World Food Programme, Report on the final evaluation of Activity 2 (prepared by Rabten Associates), Thimphu, September 2004.

World Food Programme, School Feeding Bhutan Baseline Study, Thimphu: 2001.

World Food Programme, Standardized Project Report, Thimphu: 2002.

World Food Programme, Standardized Project Report, Thimphu: 2003.

World Food Programme, Standardized Project Report, Thimphu: 2004.



ANNEX 6

PLANNED VS ACTUAL WFP SCHOOL FEEDING AND FFW BENEFICIARIES Based on SPRs for 2003 and 2004

2003

Beneficiary Category	Planned Number		Actual Number			Actual compared to planned beneficiaries reached %			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Act1: lmp.RuralChild.AccesstoSch									
Total Beneficiaries	20,963	20,141	41,104	19,042	14,242	33,284	90.8 %	70.7 %	81.0 %
Children receiving school meals	20,963	20,141	41,104	19,042	14,242	33,284	90.8 %	70.7 %	81.0 %
Act2: Imp.Laborers Access to Edu									
Total Beneficiaries	2,749	2,484	5,233	2,696	2,643	5,339	98.1 %	106.4 %	102.0 %
Children given food under supplementary feeding	405	495	900	415	500	915	102.5 %	101.0 %	101.7 %
FFW participants	1,227	1,133	2,360	1,201	1,153	2,354	97.9 %	101.8 %	99.7 %
Act3: Imp.Rural HH Access to Edu									
Total Beneficiaries	1,600	1,600	3,200	1,600	1,600	3,200	100.0 %	100.0 %	100.0 %
FFW participants	400	400	800	400	400	800	100.0 %	100.0 %	100.0 %



Beneficiary Category	Planned		Actual			% Actual v Planned			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Act1: Imp.RuralChild.AccesstoSch					•				
Number of children 5 to 18 years of age	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %
Total number of beneficiaries in 2004	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %
Total number of beneficiaries in 2003	20,963	20,141	41,104	19,042	14,242	33,284	90.8 %	70.7 %	81.0 %
Total number of beneficiaries in 2002	17,639	12,705	30,344	20,329	14,721	35,050	115.3 %	115.9 %	115.5 %
The total number of beneficiaries includes all targeted persons who were provided with WFP food during the reporting period – either as a recipient/participant in one or more of the following groups, or from a household food ration distributed to one of these recipients/participants.									
Children receiving school meals	21,852	20,997	42,849	19,866	15,418	35,284	90.9 %	73.4 %	82.3 %

Act2: Imp.Laborers Access to Edu									
Number of children below 5 years of age	405	495	900	1,092	1,017	2,109	269.6 %	205.5 %	234.3 %
Number of children 5 to 18 years of age	1,117	856	1,973	1,504	1,399	2,903	134.6 %	163.4 %	147.1 %
Number of adults	1,227	1,133	2,360	2,216	1,867	4,083	180.6 %	164.8 %	173.0 %
Total number of beneficiaries in 2004	2,749	2,484	5,233	4,812	4,283	9,095	175.0 %	172.4 %	173.8 %
Total number of beneficiaries in 2003	2,749	2,484	5,233	2,696	2,643	5,339	98.1 %	106.4 %	102.0 %
Total number of beneficiaries in 2002	2,749	2,484	5,233	2,691	2,630	5,321	97.9 %	105.9 %	101.7 %
The total number of beneficiaries includes all targeted persons who were provided with WFP food during the reporting period – either as a recipient/participant in one r more of the following groups, or from a household food ration distributed to one of these recipients/participants.									t in one
Children given food under supplementary feeding	405	495	900	1,092	1,017	2,109	269.6 %	205.5 %	234.3 %
Participants in Food For Work	1,227	1,133	2,360	2,216	1,867	4,083	180.6 %	164.8 %	173.0 %

Beneficiary Category	Planned		Actual			% Actual v Planned			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Act3: Imp.Rural HH Access to Edu									
Number of children below 5 years of age	400	400	800	478	472	950	119.5 %	118.0 %	118.8 %
Number of children 5 to 18 years of age	800	800	1,600	873	877	1,750	109.1 %	109.6 %	109.4 %
Number of adults	400	400	800	800	800	1,600	200.0 %	200.0 %	200.0 %
Total number of beneficiaries in 2004	1,600	1,600	3,200	2,151	2,149	4,300	134.4 %	134.3 %	134.4 %
Total number of beneficiaries in 2003	1,600	1,600	3,200	1,600	1,600	3,200	100.0 %	100.0 %	100.0 %
Total number of beneficiaries in 2002	1,400	1,400	2,800						
The total number of beneficiaries includes all targeted persons who were provided with WFP food during the reporting period – either as a recipient/participant in one or more of the following groups, or from a household food ration distributed to one of these recipients/participants.									
Participants in Food For Work	1,422	1,422	2,844	1,256	1,380	2,636	88.3 %	97.0 %	92.7 %



ANNEX 7

RESOURCE TABLES FOR THE BHUTAN COUNTRY PROGRAMME

Total Commodities distributed in 2002¹

Activity 1

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	2,835	206	584,010
MML	109	228	24,852
Beans	78	473	36,894
Yellow Split Peas	48	331	15,888
Veg. Oil	126	492	61,992
Canned fish	0	-	-
CSB	322	245	78,890
PWB	0	-	-
Sugar	112	352	39,424
Total	3,630		841,950

Activity 2

Addivity 2						
Commodity	Qty in MT	FOB price	Food cost in US\$			
Rice	760	206	156,560			
Beans	152	473	71,896			
Veg. Oil	22	492	10,824			
PWB	-	-	-			
CSB	6	245	1,470			
Sugar	2	352	704			
Salt	8	80	640			
Total	950		242,094			

Activity 3

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	-	-	-
Lentils	-	-	-
Veg. Oil	-	-	-
Total	0	-	-

Tonnages as per SPR; prices as per the 2002/03 average price.



Commodities distributed in 2003 (US\$ and MT) by Activity

Activity 1

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	2,602	206	536,012
MML	474	228	108,072
Lentils	245	567	138,915
Yellow Split Peas	-	-	-
Veg. Oil	198	977	193,446
Canned fish	547	2,223	1,215,981
CSB	309	245	75,705
PWB	-	-	-
Sugar	303	352	106,656
Total	4,678		2,374,787

Activity 2

Addivity 2						
Commodity	Qty in MT	FOB price	Food cost in US\$			
Rice	1,358	206	279,748			
Lentils	235	567	133,245			
Yellow Split Peas	-	-	-			
Veg. Oil	52	977	50,804			
PWB	-	-	-			
CSB	11	245	2,695			
Sugar	6	352	2,112			
Salt	17	80	1,360			
Total	1,679		469,964			

Activity 3

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	88	206	18,128
Lentils	12	567	6,804
Veg. Oil	2	977	1,954
Total	102		26,886



Commodities distributed in 2004 (In MT and in USD)

Activity 1

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	985	206	202,910
MML	171	228	38,988
Lentils	138	567	78,246
Yellow Split Peas	8	357	2,856
Veg. Oil	76	977	74,252
Canned fish	254	2,223	564,642
CSB	314	245	76,930
PWB	140	372	52,080
Sugar	91	352	32,032
Total	2,177		1,222,936

Activity 2

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	548	206	112,888
Lentils	100	567	56,700
Yellow Split Peas	2	357	714
Veg. Oil	13	977	12,701
PWB	42	372	15,624
CSB	2	245	490
Sugar	2	352	704
Salt	9	80	720
Total	718		200,541

Activity 3

Commodity	Qty in MT	FOB price	Food cost in US\$
Rice	194	206	39,964
Lentils	27	567	15,309
Veg. Oil	7	977	6,839
Total	228		62,112



ANNEX 8 - LOGFRAME FOR ACTIVITY 1



Improving Rural Children Access to School LOGFRAME



	Objectives and Results	Objectively Verifiable Indicators	Data Source / Means of Verification	Assumptions / Risks
Goal/ Impact	G-1: Improved access to education for children of poor and food insecure families in remote areas, especially for girls.	 Children with completed basic education increased by X% for girls and by Y% for boys in targeted areas. 	MoE Statistics, School Records	Education sector development remains a high priority of the RGoB.
Outcome Level	OC-1: Increased enrolment of boys and girls in assisted schools.	The number of boys and girls enrolled increased by X% each year, differentiated by school type.	MoE Statistics, School Records, Follow-up Baseline	Sufficient boarding schools and capacity are available to ensure transition to lower and middle secondary level.
	OC-2: Reduced gender disparity between boys and girls in assisted schools	The ration of girls to boys increased to 1:1 in primary and lower secondary schools by 2007.	MoE Statistics, School Records, Follow-up Baseline	
	OC-3: Improved attendance of boys and girls, especially in less accessible schools.	3.1 Attendance rate in primary community and primary schools is maintained above 80%.	School Attendance Records, Monitoring Records, Follow-up Baseline	Teacher/pupil ratio will not exceed 1:40 in target schools.
	OC-4: Improved capacity of boys and girls to concentrate and learn in assisted schools.	4.1 Teachers ranked perception of children's improved concentration and learning as a result of school feeding.		
Output Level	OP-1: Boarding students at Primary -, Lower- Middle- and Higher Secondary Schools received the mid-morning snack and two meals per day.	1.1 Number of boarding students received the mid-morning snack and two meals per day; differentiated by gender, school type and year.	MoE Records, WFP Food Release Notes, M&E Reports	implemented to achieve the target of 49% female WFP food beneficiaries. Donor agencies provide timely resources. Additional funds for
	OP-2: Day Students at Primary Community, Primary – and Lower Secondary Schools received the mid-morning snack and one meal per day.	Number of day students received the mid- morning snack and one meal per day; differentiated by gender, school type and year.	MoE Records, WFP Food Release Notes, M&E Reports	
	OP-3: Non-food items and funds for non-food items are distributed/disbursed to selected schools/MoE.	Number of schools reached with food and non-food assistance, differentiated by school type and year.	MoE Statistics, WFP Food Release Notes, Financial Reports	
	OP-4: Stakeholders' capacity in managing the school-feeding programme, including	4.1 Number of persons trained, differentiated by training subject and gender.	MoE and WFP Records	non-food items are secured.
		4.2 Percentage of women in decision making positions, food preparation and distribution increased by X% each year.	Monitoring Forms	