Fighting Hunger Worldwide

Impact Evaluation

School Feeding Programmes in The Gambia 2001-2010: A Mixed Method Impact Evaluation Vol I Full Report

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We value the competence, advice and dedication of the data-collection team led by Donald Sock and Alieu Bahoum.

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A special debt of gratitude and recognition is owed to the hundreds of parents, school administrators, teachers, students, and community members who participated in this evaluation and shared their invaluable experience with the team. It is our hope that this evaluation contributes to the effort to improve their lives and expand quality education for all in The Gambia. Highly-deserved recognition is owed to Marian Read, the OE evaluation manager, whose watchful eye and stimulating comments have proven so helpful throughout the study and to Caroline Heider, Director of OE, for her technical leadership.

Disclaimer

Evaluation Management

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Fact Sheet: WFP's School Feeding Programme in The Gambia

School Feeding Operations

Type	Project No.	Title	Time Frame	Total Budget		% funded
				Approved (Project Document)	Revised *(latest SPR)*	
Dev	5932.1	Community-based school feeding project in The Gambia	Sept 1999 Jun 2004	6,273,590	10,155,058	79%
Dev	10311.0	Support to basic education in rural vulnerable regions	Aug 2004 Jul 2007	6,925,148	8,295,922	76%
Dev	10548.0	Support to basic education in rural vulnerable regions	Aug 2007 Jul 2011	8,544,499	13,635,330	46%

*Source: Project Document & SPR. * % funded is the confirmed contribution over the approved budget of the latest SPR.Source:*

Donors, Partners and Cooperating Communities

Donors: USA, Italy, Faroe Islands, Private donors.

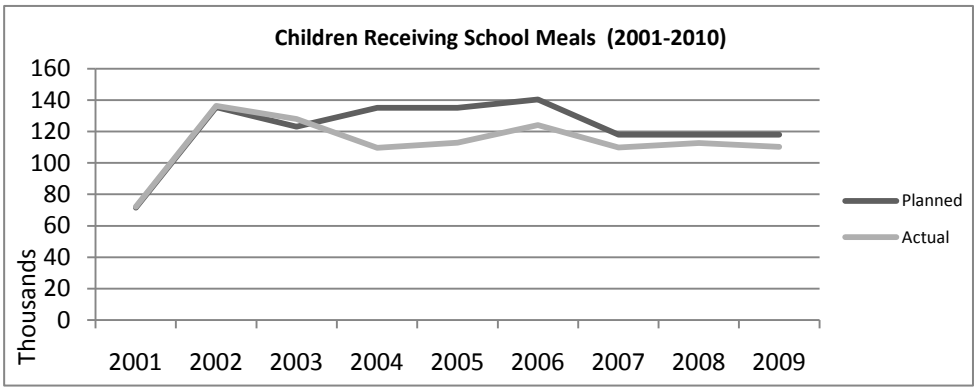
Partners:

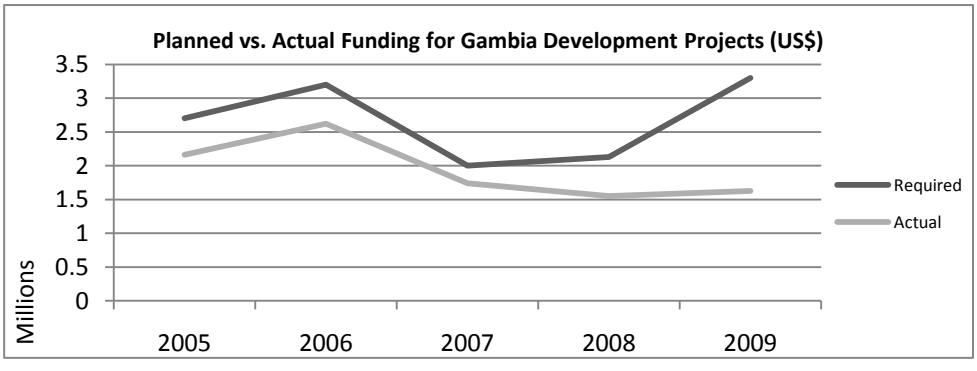
- The Department of State for Basic and Secondary Education,
- 3 International NGOs: Future in our Hands, Christian Children's Fund/USA, and Catholic Relief Service, 4 Local NGOs: Gambia Food and Nutrition Association (GAFNA), ActionAid The Gambia, Nova Scotia Gambia Association, National Nutrition Agency

Cooperating Communities:

Parent Teacher Associations, Village Development Committees, Women's Farmers Groups

NGO and Donor Relations Unit.





Source: Required funding (Projected Needs for WFP projects and Operations); Actual funding (WFP Donor Relations).

Executive Summary

Background

Evaluation Features

1. WFP's Office of Evaluation (OE) commissioned this mixed-method impact evaluation of school feeding in the Gambia as part of a series of similar evaluations. The evaluation team consisted of specialists in education, evaluation, nutrition, food security and economic/social impact assessment, and those with experience of poverty reduction programmes in the Gambia.

2. This evaluation served both accountability and learning purposes, and was intended to evaluate the outcomes and impact achieved on: i) stated educational, gender and nutritional objectives; and ii) objectives specified in WFP's new social safety net policy objectives, which were not explicitly included in the programme design. It also aimed to identify the changes needed to contribute to the Gambia's development objectives and those of the WFP Strategic Plan (2008–2013) and the 2009 school feeding policy.

3. The evaluation study used a mixed-methods approach, comparing the treatment group with a non-treatment group. Data were gathered using questionnaires from school staff, students, cooks and households; interviews with a range of stakeholders, including the WFP country office, government staff and policy-makers, donors and non-governmental organizations (NGOs); secondary materials and data; and qualitative interviews with groups of community members, using the participatory rural appraisal approach.

4. Of the 44 schools selected to participate in the evaluation, 21 were benefiting from school feeding and 23 were not. Of the 500 households selected for in-depth interviews regarding issues of wealth, assets, diet, reasons for sending or not sending children to school, etc., 335 were receiving school feeding and 189 were not. In the 18 communities selected – 12 receiving school feeding and 6 not – groups were formed of opinion leaders, members of food management committees, and women heads of households.

5. Instruments included protocols for interviews with households, teachers, head teachers, school cooks, and six students per school. Data on attendance – validated in each classroom at each school, and compared with teacher and head teacher records for that day - and on other elements of the school "climate" and the Essential Package were used to form an attendance and school climate checklist. A participatory rural appraisal approach was developed for use in both school-feeding and non-school-feeding communities.

6. Results of the surveys were analysed at the aggregate levels, split between school-feeding and non-school-feeding groups, and by applying a range of filters to the responses to identify patterns across indicators of poverty and food vulnerability.

Context

7. The Gambia is one of the least developed countries in Africa, ranking 168th out of 182 in the United Nations Development Programme's human development index (2009). With annual growth of 2.6 percent and high levels of rural–urban migration, the population of 1.7 million people is young, growing and increasingly concentrated in urban areas. Forty percent is under 15 years of age and 20 percent is aged between

15 and 24 years. Although the percentage of population below the poverty line declined between 1989 and 1992, overall poverty has increased considerably since then, by 17 percent in urban and 22 percent in rural areas. The exception is Banjul, where poverty has declined by half. In 2003, an estimated 63 percent of the rural population was poor.[1]

8. The Gambia experiences periods of weather-related vulnerability every year, and is highly dependent on rice, the preferred staple, which has very low production levels. Grain production declined by 35 percent between 2005 and 2007, and there is high dependence on imported food. The 2008–2009 food and fuel price and financial crises resulted in increases in all cereal prices, which in 2010 remained 25 percent higher than their 2006 levels. Food security is constrained mainly by low purchasing power, particularly among rural households, and inadequate diversification of income-generating activities and assets.[2]

9. Over half of the Gambian population has had no education: only 13 percent has completed primary school; 20 percent upper basic school – grades 7 to 9; and 8 percent senior secondary school. Significant efforts by the Government and donors increased net student enrolments from 46 percent in 1991/92 to 94.9 percent in 2008/09, and gender parity was reached in 2004. An estimated 80,000 children were out of school in 2007, 45 percent of them girls.[3] The Government predicts that if recent enrolment trends remain unchanged, the primary completion rate in 2014 will be only 59 percent, far below the Millennium Development Goal target of 100 percent by 2015.

10. The 2005/06 multiple-indicator cluster survey data for the Gambia showed significant benefits for girls completing senior secondary school, which were far greater than the benefits of completing only primary school.

11. A multi-sectoral working group for the education sector brings together stakeholders, from government departments, NGOs, local authorities and local committees, civil society organizations and international agencies, to review data related to educational efficiency and quality, including of the school feeding programme (SFP).

12. Malnutrition in children under 5 years of age is caused by poor feeding practices, inadequate care and increasing exposure to infections, along with poor sanitation.[4] The main nutritional problems facing school-age children include stunting, underweight, anaemia, and iodine and vitamin A deficiencies, but only limited data are available; nutrition status is also affected by illnesses such as helminth infestations and diarrhoeal diseases.[5]

School Feeding Interventions 2001–2010

13. The SFP is aligned with the Government's Education Policy 2004–2015. WFP's support began in 1970; from 2001 to 2010 there were three WFP-supported development projects with objectives of increasing levels of school enrolment,

[1] Department of State and Economic Affairs. 2006. *Poverty Reduction Strategy Paper II (2007–2011)*. Banjul
[2] Republic of the Gambia. 2010. *Agriculture Sector Support Programme – A Proposal for the Global Agricultural and Food Security Programme*. Banjul
[3] The United Nations Educational, Scientific and Cultural Organization (UNESCO). 2010. *Education for All Global Monitoring Report*. Paris
[4] National Nutrition Policy 2000–2004
[5] WFP 2008. Summary Report on Deworming Activities Organized in Schools in the North Bank, Central and Upper River Region Benefiting From the School Feeding Programme in the Gambia. Banjul.

attendance and retention. Rural areas – in part of Region 2 and all of Regions 3 to 6 – are selected on the basis of having higher levels of poverty and food vulnerability and lower levels of school enrolment.

14. From 2001, WFP provided meals at lower basic schools (LBS, grades 1 to 6) and basic cycle schools (BCS, grades 1 to 9); in 2004 it added madrasahs and early childhood development centres (ECDCs) that met government standards. From 2001, the SFP aimed to reach 120,000 children per year, but the actual number averaged 113,000, of whom 50 percent were girls. These 113,000 children represented about 40 percent of all enrolments in grades 1 to 9. The average number of schools was 429 per year, of which 71 percent were LBS or BCS, 24 percent ECDCs and 5 percent madrasahs. The ration changed over time, from lunch and a mid-morning or afternoon snack in the first project, to only lunch in subsequent projects.

Outcomes and Impact of School Feeding

Education and Learning

15. Poor data collection, management and use at the school level, and significant data losses by the Government preclude the drawing of any definitive conclusions about the impact of school feeding on enrolment, attendance and completion.

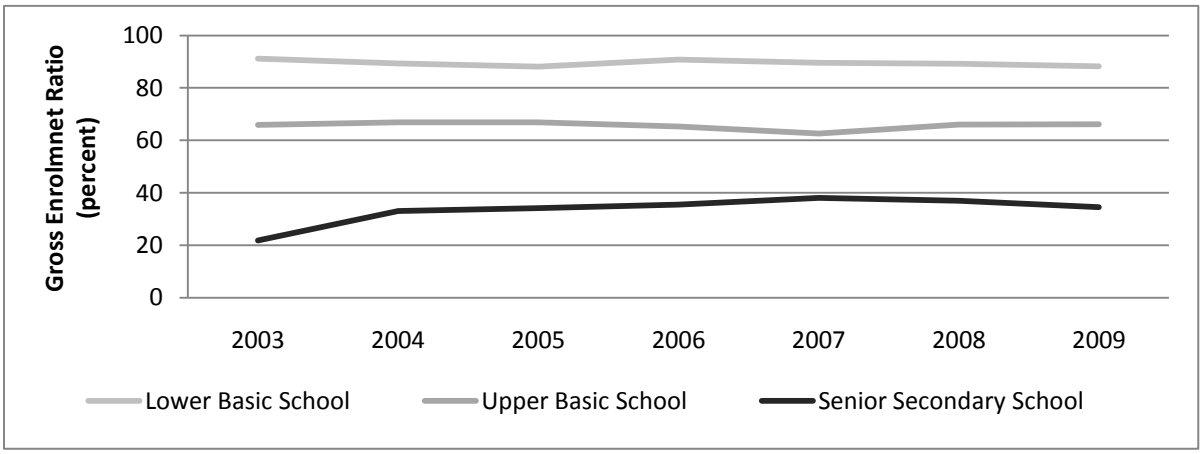
16. **Enrolment.** Enrolments increased over the ten-year period of this study, but the greatest increase was between 1988 and 2004, when the Ministry of Basic and Secondary Education and a range of donors and NGOs made significant efforts in this direction. After these efforts subsided, so did enrolments, which declined marginally from 2008 to 2009.

17. At the national level, the gross enrolment rates (GERs)[6] stayed more or less constant between 2003 and 2009, but regions registered varying increases and decreases. Between 2003 and 2009, at the national level, the GERs declined marginally from 91 to 88 percent in LBS and from 84 to 81 percent in BCS, but increased substantially from 22 to 34.5 percent in secondary schools. Figure 1 shows GER trends by type of school and Figure 2 by region. [7] Of concern is that the Gambia's GER is lower than that of about 65 percent of other low-income African countries.

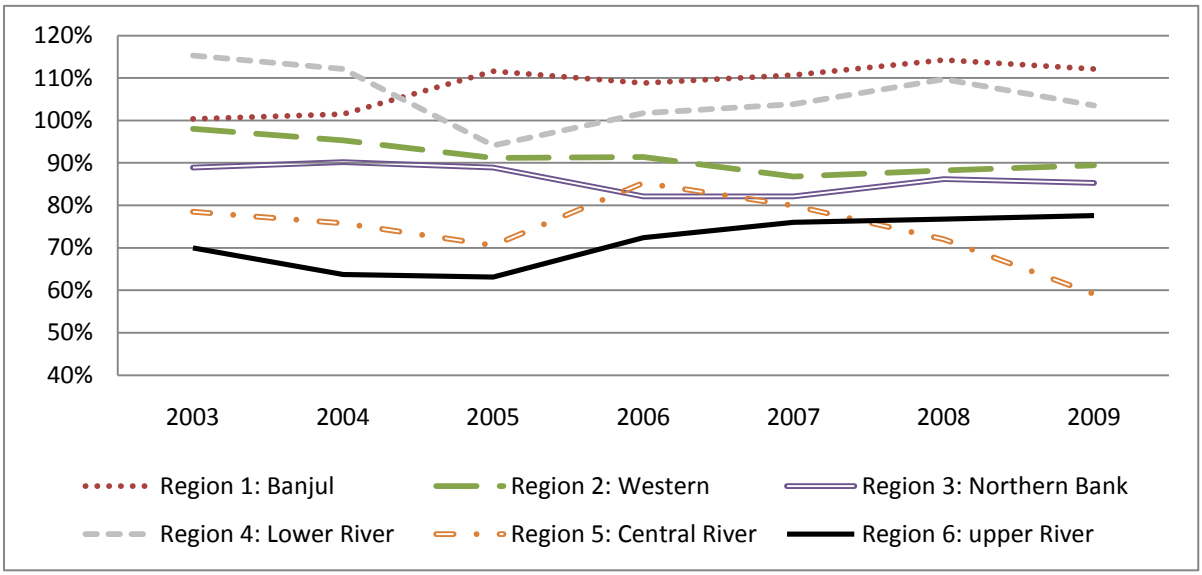
[6] GER is the number of students enrolled in a particular level of schooling, regardless of age, as the percentage of the population of official school age for that level.

[7] The evaluation's household survey results on enrolment are presented only to provide triangulation with other sources of information; household survey findings showed that in one region, GERs in schools benefiting from school feeding were rising, in spite of an overall decline in that region's GERs.

Gross Enrolment Rates for Basic and Secondary Education (2003–2009)



Gross Enrolment Rates, by Region (2003–2009)



18. Net enrolment improved overall during the evaluation period, including girls' enrolment, which reached parity with boys' in 2004. Positive enrolment trends cannot be attributed solely to school feeding, given that a large number of other initiatives took place during the early part of the decade.

19. **Attendance/out-of-school.** The evaluation found large discrepancies between reported and observed attendance, and considered school-based data too unreliable for drawing conclusions. A household-level survey in 2006 found an average attendance rate of 68 percent,[8] while data from the evaluation's household survey found a substantially higher rate of attendance in schools not receiving school feeding, at 83 percent, than in those with school feeding, at 75 percent, although these figures include out-of-school children.[9]

[8]The Gambia Bureau of Statistics. 2007. The Gambia Multiple-Indicator Cluster Survey 2005/2006 Report. Banjul. The report also noted that of the 32 percent of children not attending school, 29 percent had never attended. A similar breakdown is not available from the evaluation household survey data.

[9] The larger portion of Region 2 schools in the non-school feeding survey group may have influenced this finding, as Region 2, although rural, is relatively close to the major urban area.

20. **Completion rates and continuation to higher levels**. The Gambia's average primary completion rate in 2009 – 7.6 years – compares well with those in other low-income African countries in the same year, which averaged 6.9 years. Almost 63 percent of students entering grade 1 completed grade 6. The average promotion rate was 87.3 percent for grades 1 to 12. However, the survival rate from grades 1 to 9 was 41.4 percent, and that from grades 1 to 12 was 21.2 percent.

21. **Learning.** School feeding's contribution to improved learning could not be demonstrated, given the overall poor test results of students in the Gambian education system; teachers, head teachers and the evaluation team attributed these low results to factors other than school feeding.

Nutrition

22. There is clear evidence that the school meal contributed to students' minimum daily nutritional requirements when they were in school and able to contribute. However, there is also substantial evidence that certain school-based practices negatively influenced participation in the school meal for some children. There were indications that students were more attentive and energetic because of the meal. The planned ration for the school lunch accounted for 30 percent of the recommended daily allowance (RDA) of kilocalories, 31 percent of protein and fat, 17 percent of iron, 15 percent of iodine, and 21 percent of vitamin A, and was in accordance with the recommended daily intakes for a midday meal. However, substantially less funding was available than planned, so only 78 percent of the average daily ration was provided between 2001 and 2010; in January 2010, the ration was halved, with likely effects on children's food consumption.

NUTRIENTS PROVIDED THROUGH SCHOOL MEALS TO LBS STUDENTS

	Energy	Protein	Fat	Iron	Iodine	Vitamin A
	kcal	G	g	mg	µg	µg Re
Planned daily ration	551	14	11	3	181	104
Daily requirements (6–12-year-olds)	1 850	46	35	18 7–9 years	120	500 7–9 years
Planned ration as % of RDA	30	31	31	17	151	21
Reduced ration as % of RDA (50% for 2010)	15	16	16	8	75	10
Reduced ration as % of RDA (78% from 2001 to 2010)	23	24	25	14	94	16

23. A dietary diversity measure found similar levels of diversity between students benefiting from school feeding and those not benefiting. All students had a high average score of 6 out of a possible 12 food groups. However, the most vulnerable households' average score of 4.4 was significantly lower than the least vulnerable households' 7.5. Morbidity rates among children experiencing swelling in the neck – a proxy indicator for iodine deficiency/goitre – in the last 12 months of the survey were low in both groups, at less than 1 percent. Two percent of school feeding

students and 3 percent of non-school-feeding students were finding it difficult to see at night – a measure of night blindness and a proxy indicator for vitamin A deficiency. Greater numbers of students enrolled in schools with feeding received deworming medication than did those in schools without meals, at 69 versus 52 percent.

HOUSEHOLD FOOD DIVERSITY SCORE, BY VULNERABILITY GROUP			
Vulnerability group	**Mean**	**Minimum**	**Maximum**
Least vulnerable	7.5	5	10
Somewhat vulnerable	6.3	3	9
Most vulnerable	4.4	1	6

Source: Evaluation team, household survey 2010

Value Transfer and Safety Net

24. WFP's school feeding policy recognizes the school meal as a value transfer to households. In the Gambia, the value of the transfer to households varied by the level of household vulnerability, and was also influenced by resource shortfalls and pipeline breaks. The value transfer through school meals came close to the cost of education for the most vulnerable households.

25. Using The Boston Consulting Group's (BCG's) methodology for assessing costs for 2008, the costs of the school meal were approximately 3.4 dalasi (D) (US$0.15) per student per meal, and D1,628 (US$73) per household per year.[10] Based on what it would cost a household to purchase the ingredients for an equivalent meal on the local market, the value transfer would be slightly higher at more than D1, 710 per year, representing an average of 8.5 percent of food consumption. Value transfers varied according to the household's level of vulnerability, from 12 percent for the most vulnerable households, to 3 percent for the least vulnerable, and 7.3 percent for all groups.[11] Pipeline breaks reduced the value transfer to 9.6 percent for the most vulnerable and 2.4 percent for the least vulnerable households.

[10] The average exchange rate in 2008 was US$1 = D22.4.
[11] The mean household income calculated from the household survey data was D23,317 per annum.

SCHOOL MEALS' COST OR VALUE TRANSFER TO HOUSEHOLDS, UNDER DIFFERENT METHODOLOGIES			
Cost/value transfer 2008		**Cost (BCG)**	**Value transfer (local prices)**
Cost/value per meal (dalasis)		3.40	3.57
Cost/value transfer per beneficiary per year (dalasis)	Planned	677	711
	Actual[a]	541	568
Cost/value transfer per household per year[b] (dalasis)	Planned	1 628	1 710
	Actual[a]	1 301	1 366
% of household food consumption represented by transfer[c]	Planned	8.1	8.5
	Actual[a]	6.5	6.8

[a] In 2008 funding shortfalls and pipeline breaks reduced the number of school feeding days to 159 from the planned 199. Calculations here are based on 159 days.
[b] Based on an average of 2.4 children per household attending primary school (Evaluation team, 2010).
[c] Based on household food consumption data from The Gambia Integrated Household Survey, 2003–2004 and selecting rural areas with lowest standard error for consumption of food and non-alcoholic beverages, updated to 2008 prices.

COST OR VALUE TRANSFER AS PERCENTAGE OF INCOME,[12] BY VULNERABILITY GROUP		
Vulnerability group	**Local prices, no shortfalls/breaks**	**Local prices 2008, with shortfalls/breaks**
Least vulnerable	3.1%	2.4%
Somewhat vulnerable	9.7%	7.7%
Most vulnerable	12.0%	9.6%
All groups	7.3%	5.9%
Annual value transfer (dalasis)	1 710	1 366

Source: Evaluation team

Food Security

26. Many households suffer severe food shortages for several months of the year. In the long run, addressing food shortages through school feeding to alleviate household hunger has limitations, because school feeding does not operate during the most severe hunger season, when students are on school break and food is most scarce.

Capacity Development and Sustainability

27. The Gambia remains at a very early stage in the transition towards government responsibility for the design, support and management of an SFP. Using

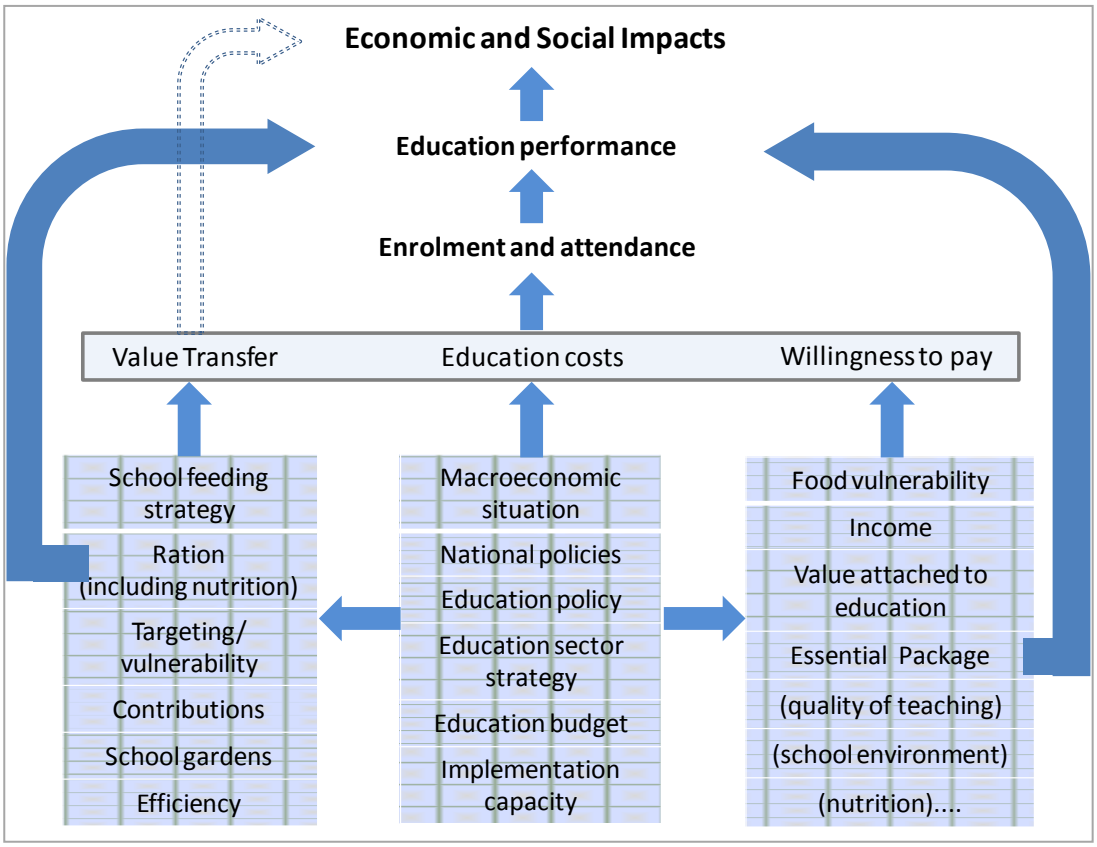
[12] Average annual incomes were calculated from the evaluation household survey data: least vulnerable, D 56,000; somewhat vulnerable, D 17,695; and most vulnerable, D 14,233.

WFP's recently designed quality standards for school feeding,[13] the overall assessment is that only "limited status" has been achieved and significant inputs are likely to be required over the medium term to prepare the country for this transition, particularly given the Gambia's severe fiscal constraints. However, the WFP country office leadership has made significant efforts to strengthen the Government's ownership of and capacities for school feeding.

How Does School Feeding Create Impact?

28. Children's access to school and households' decisions regarding whether or not to send their children to school may be influenced by a wide range of factors, including an SFP, as illustrated below. Some factors are contextual, while others are related to SFP implementation.

School Feeding Impact Framework



Source: Evaluation team.

Contextual Factors Outside WFP's Control

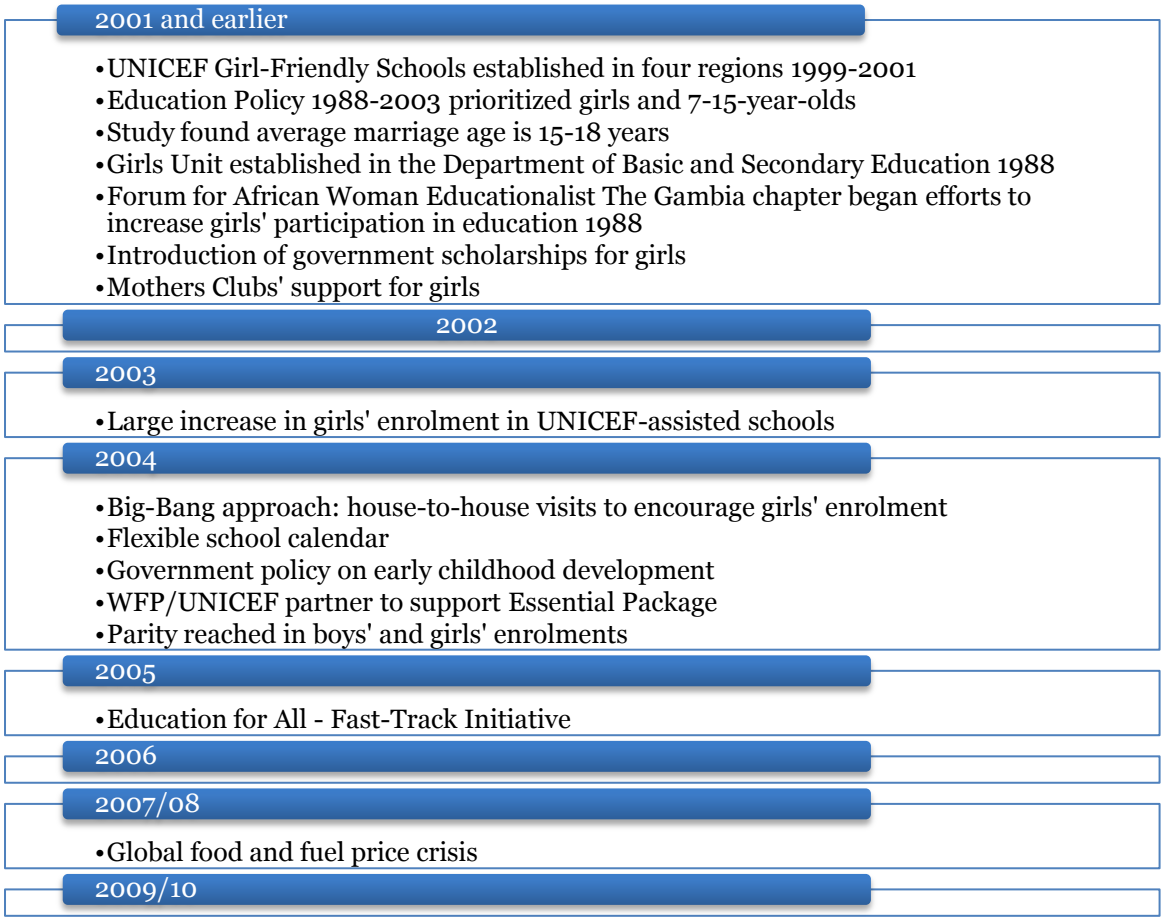
29. The effectiveness of school feeding – its ability to generate intended outcomes – and its impact were limited by a number of external factors beyond the control of WFP's SFP. Most significant among these was the quality of education, which is seen as the main draw for children to attend school, but requires significant improvement. The evaluation findings were not conclusive regarding the role of poverty in

[13] The eight school feeding quality standards are: i) sustainability; ii) sound alignment with the national policy framework; iii) stable funding and budgeting; iv) needs-based, cost-effective quality programme design; v) strong institutional arrangements for implementation, monitoring and accountability; iv) a strategy for local production and sourcing; vii) strong partnerships and itersector coordination; and viii) strong community participation and ownership.

households' decisions about sending their children to school, although the percentage of out-of-school youth was highest among the poorest quintile. The extent to which food security, and therefore safety net, objectives can be attained is affected by the fact that school holidays fall in the lean season, when food insecurity is highest, meaning that children do not benefit from the school meal during the time when they and their families are most food-insecure.

30. **Education outcomes and impacts.** Owing to the poor quality of education data, it was not possible to determine whether, or to what extent, school feeding contributed to increases in educational enrolment, attendance, completion and learning. A number of other government and donor efforts to increase enrolment, especially of girls, were highly effective, but the numbers of children enrolled in LBS ceased to increase when these efforts waned, suggesting a limited impact of school feeding, as it was offered throughout.

Factors Influencing School Enrolments



31. Low levels of learning were due to a range of factors, including parents with limited or no education, and teachers with limited education and inadequate teaching skills. Numerous changes being made suggest that significant improvements in the education sector will occur in the near future.

32. **Nutrition outcomes and impact.** While the school meal contributed to the daily nutritional requirements of children at school, a lack of nutrition and health-related data for school-age children undermined the ability to assess accurately the

nutritional adequacy of the school meal. There was also substantial evidence that many school staff were benefiting from school meals without contributing financially, while children who were unable to contribute financially or in-kind were either denied the meal or stigmatized in a variety of ways, both affecting the consumption of school meals by students.[14]

33. **Value transfer.** Factors that affected the value transfer of the school meal includes its nutritional value and whether it was reduced by pipeline breaks, school breaks, absenteeism, non-targeted beneficiaries consumption of school meals, cash or in-kind payments required from students, students not being allowed to eat, and/or food losses. The value of the transfer was also influenced by the degree of vulnerability of the household: the value was higher for the most vulnerable.

Implementation Factors within WFP's Control

34. Recent changes in government standards for madrasahs and ECDCs are facilitating increased enrolments in basic education, as anticipated in the country office project plans. Unfortunately, the lack of resources for meeting project needs resulted in a dilution of the per-student ration. Re-targeting exercises were delayed by a lack of country office staff. However, recent changes in WFP funding structures resulted in increased funding and resource allocations, which provided the country office with sufficient capacity to update studies on food insecurity. This resulted in more precise geographical targeting; capacity development for actors in the school feeding process; and the use of a more sophisticated monitoring system. The country office has used its leadership of the multi-sector working group for the education sector to advocate for increasing the number of actors contributing to the Essential Package.

35. The SFP is the only social safety net operating in the Gambia, and the only mechanism offering a feasible platform for systematically reaching the entire country. Although the country office is making significant strides towards hand-over of SPF management and implementation to the Government, a nationally designed, managed and owned programme remains a long way off.

Interactions Among Factors

36. **Household-level factors: willingness/ability to pay.** In addition to the direct financial costs and benefits, households deciding whether or not to enrol their children in school take into account factors such as the value they place on education, their income, religious considerations, their food vulnerability, the quality of teaching in school, and the school facilities.[15] A higher percentage of the most vulnerable households in the sample did not send their children to school. These households are likely to have a lower willingness/ability to pay, and the value transfer is less of an incentive for school enrolment in the face of the additional education costs that must be incurred.

37. For households that have decided to enrol their children and have incurred the education costs, the extent of the value transfer will be critical in determining whether the benefits outweigh the costs. Funding shortfalls and pipeline breaks can

[14] The SFP's design did not plan for school staff to benefit from these meals, regardless of whether they contribute.

[15] The Poverty and Social Impact Analysis Report 2009. Reasons cited by households with out-of-school children included religious considerations, by 48 percent, and because the child was needed to work/school was too expensive, by 26 percent.

be extremely influential in this, particularly, for example, as in 2010, when half rations were applied and the gross value transfer was closer to D855 than D1,710.

Conclusions and Recommendations

Conclusions

38. At the national level, the GERs stayed more or less constant between 2003 and 2009, but regions showed variations. Net enrolment improved overall, including for girls, who reached parity with boys. Positive enrolment trends cannot be attributed solely to school feeding, as many other initiatives took place, especially from 1988 to 2004. School feeding's contribution to improved learning could not be demonstrated, given the overall poor test results of students in the Gambian education system.

39. There is clear evidence that the school meal contributes to students' minimum daily nutritional requirements when they are in school and able to consume it. However, substantial evidence indicated that certain in-school practices – students' financial or in-kind contributions and staff's consumption of school meals – negatively influenced participation in the school meal for some children.

40. The value transfer to households varied by level of household vulnerability and was also influenced by resource shortfalls and pipeline breaks. The value transfer through school meals was close to the cost of education, and was highest for the most vulnerable households.

41. Assessment of the SFP's sustainability – its continuation rather than the sustainability of its results – identified many areas where sustainability standards were met to only a limited extent, despite the country office's efforts to hand over programme management and implementation to the Government. These observations, together with the Government's need to prioritize scarce financial resources and invest in a variety of sectors, affect the likelihood of the Government assuming greater responsibility for funding the SPF in the near future.

Recommendations

For the Government, WFP Country Office and Schools/Communities

42. **Recommendation 1:** Develop, disseminate and implement a policy on children's contributions and the appropriateness and consequences of school staff eating the school meal.

43. **Recommendation 2:** Develop a formal school feeding policy and strategy leading to eventual hand-over of the SFP to the Government, with specific dates, tasks and objectives.

44. **Recommendation 3:** Provide technical assistance and fund other appropriate activities to develop the Government's capacity to manage and implement the SFP.

45. **Recommendation 4:** Explore ways of transferring more authority to certain education units within the Ministry of Basic and Secondary Education.

46. **Recommendation 5:** Identify strategies for more precise targeting of the most vulnerable and most food-insecure. In addition to tighter geographic targeting based on food-insecurity indicators, consider other targeting options.

47. **Recommendation 6:** Advocate with the National Nutrition Agency, UNICEF and other agencies addressing the underlying causes of malnutrition, to collect data on school-age children's anthropometric status, including vitamin A deficiency and anaemia prevalence; continue implementing strategies to address vitamin A and other micronutrient deficiencies for school-age children; and review the ration composition for school feeding.

48. **Recommendation 7:** The WFP country office should cooperate with and support the Early Childhood Development Unit in the Ministry of Basic and Secondary Education in conducting a baseline study of ECDCs.

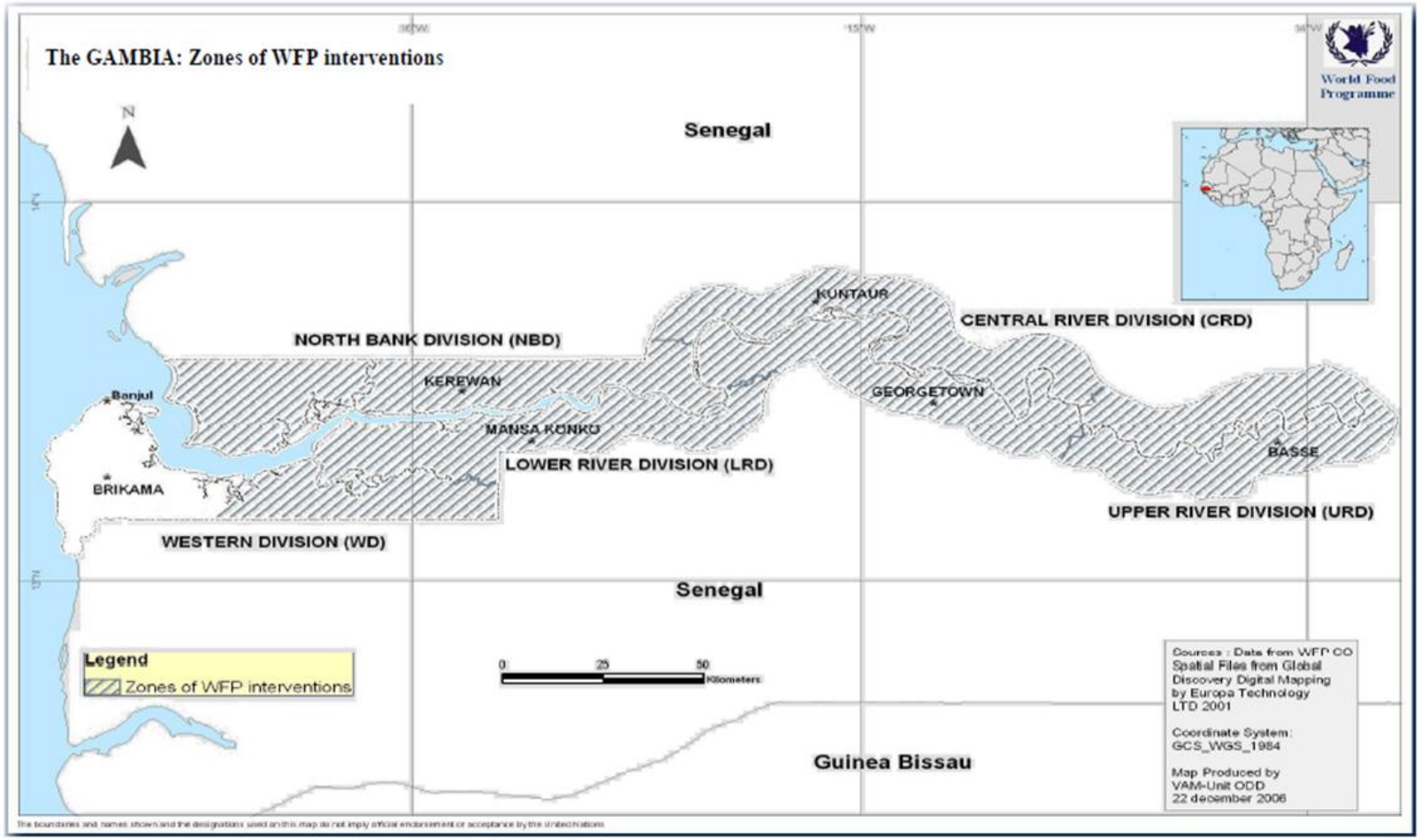
For the West African Examinations Council – the Gambia and the Ministry of Basic and Secondary Education[16]

49. **Recommendation 8:** Report national assessment test results at the school rather the student level, and report school-level results to communities.

50. **Recommendation 9:** Test teachers on knowledge appropriate for grade-level content and on the teaching skills needed to teach primary grade subjects.

[16] These recommendations are not within WFP's area of responsibility, nor are they directly related to school feeding. However, they are likely to contribute to improvements in educational quality and accountability.

Map



Region 1: Banjul
Region 2: Western
Region 3: Northern Bank
Region 4: Lower River
Region 5: Central River
Region 6: Upper River

1. Introduction

1.1. Evaluation Features

1. The Office of Evaluation of the World Food Programme (WFP) commissioned this mixed method impact evaluation of school feeding in The Gambia as part of a series of similar evaluations. The Evaluation Team consisted of specialists in education, evaluation, nutrition, food security, economic/social impact assessment and experience with poverty reduction programmes in The Gambia. The Terms of Reference for the evaluation are provided in Annex 1.

2. **Evaluation Objectives**. This evaluation serves both accountability and learning purposes, and is intended to evaluate the outcomes and impact achieved on: *(i)* stated educational, gender and nutritional objectives; and *(ii)* objectives specified in WFP's new social safety net policy objectives (although they were not explicitly included in the programme design), and to identify the status of and changes needed to contribute to Gambia's development objectives (which now, in education, are moving from increasing access to improving quality) and those of the current WFP Strategic Plan and 2009 School Feeding Policy.

3. Methodological Approach. The evaluation study used a mixed-methods approach, comparing the "treatment" group (participants in school feeding) with a comparison group, gathering data using questionnaires from school staff, students, cooks, and households; interviews with a range of stakeholders, including WFP/CO and government staff and policymakers, donors and NGOs; use of secondary materials and data; and qualitative interviews of various groups of community members using the Participatory Rural Appraisal (PRA) approach.

4. **Sample**. Forty-four schools were selected to participate, with 21 benefiting from school feeding and 23 schools not. Five hundred households were selected for in-depth interviews regarding issues of wealth, assets, diet, reasons for sending or not sending children to school, etc. Of the 500, 335 were school feeding households and 189 were households not receiving school feeding. Members of 18 communities were selected, 12 school feeding and 6 not receiving school feeding, forming groups of opinion leaders, members of Food Management Committees, and Female Heads of Households. (Details of each sample and the selection process are in Annex 3, along with limitations of the control group, which ultimately undermined confidence in the comparisons between school feeding and not school feeding groups).

5. Instruments. Instruments included interview protocols for households, teachers, head teachers, school cooks, and 6 students per school. Attendance data was validated at each school in each classroom and compared with teacher and head teacher records for that day, and various other elements of the school "climate" and elements of the "essential package", formed an Attendance and School Climate Checklist. A PRA was developed for use in school feeding and not school feeding communities, with various groups. Copies of all the instruments are available from the Office of Evaluation.

6. Data Collection. All school, household and PRA interviews were conducted by a local data-collection team trained specifically for the purposes of this evaluation. Schools were not informed of the site visits in advance, so were not likely to be doing things differently from their "regular" practices.

7. Data Analysis. Results of the household survey were analyzed both at the aggregate levels by school feeding and not school feeding groups and by applying a range of

filters to the responses to identify patterns across key indicators of poverty and food vulnerability, including "number of months of own agricultural production", total income and number of assets owned. Responses then were analyzed across three equal-sized groups in each category (e.g. low, medium and high income sub-groups). Analysis was carried out in SPSS 14. Since limited differences between the responses for each sub-group were observed, further analysis was carried out using principle component analysis. A wealth index comprising three categories, "least vulnerable", "somewhat vulnerable" and "most vulnerable" was created and households were assigned to one of the three groups. The variables "annual household income" (Dalasis) and "household dietary diversity score" (HDDS) based on 12 food groups were used to create the vulnerability groups.

1.2. Context

8. **Poverty**. The Gambia is one of the least-developed countries in Africa, ranking 168th out of 182 countries on UNDP's Human Development Index (2009). While the percentage of the population below the poverty line had declined between 1989 and 1992, since then overall poverty has been increasing considerably in both urban and rural areas (17 percent and 22 percent respectively), with the exception of Banjul, where poverty has declined by half (World Bank, PRSP, 2009). In 2003, 63 percent of the rural population was estimated to be poor. According to the Global Agriculture and Food Security Program. (GASFP) report (2010), national food security is constrained mostly by low or decreasing purchasing power, particularly among rural households; and, inadequate diversification of income generating activities and assets. In addition, the employment market is highly saturated (JAM 2009).

9. Food Security. The 2003 Vulnerability Assessment Mapping (VAM) exercise found that most households ate three meals a day and had a diversified, complete diet with cereals, proteins (mainly from fish) and vegetables. The study also found that acute malnutrition was associated more with illness and poor weaning practices. However, the 2006 VAM study reported that food security was affected by the low productivity of the agriculture sector, a decline in absolute grain production by 35 percent between 2005 and 2007, and high dependence on imported food. The agriculture sector is seen as the prime sector to improve food security and reduce poverty, but suffers a number of constraints. The 2008/9 food and fuel price and financial crises resulted in increases in all cereal prices in The Gambia and remained 25 percent higher in 2010 over 2006 prices.

10. Demographics. The Gambia is a small country with a population of 1.7 million (WFP/CO Executive Brief, 2010), located on the west coast of Africa, and surrounded by Senegal on all but its coastal side. With an annual population growth of 2.6 percent and strong rural-urban migration, The Gambia's population is growing, and increasingly becoming concentrated in urban areas (WFP/CO Executive Brief, 2009). It is a young population with a large proportion being in the bracket of school-age children (40 percent are under 15), or in the age group just above (20 percent are 15 to 24), who may still require schooling.

11. Education Achievements. A somewhat higher percentage of Gambians have had no education (54 percent) compared to the average of all African countries (52 percent), and only 13 percent have completed primary school, compared with 29 percent for Africa overall, but almost twice as many Gambians have completed UBS grades 7-9 (20 percent) compared with only 11 percent in African countries overall, and 8 percent of Gambians vs. only 5 percent of Africans overall have completed

senior secondary school (CSR, 2010). Enrolment, attendance and other educational performance indicators are discussed in chapter 2 of this report together with the results of WFP's school feeding programme.

12. Education Sector. The formal system consists of six years of lower basic school (LBS) grade 1-6, three years of upper UBS,grade 7-9, and three years of senior secondary school (SSS grade 10-12). The first nine years of education constitute basic cycle schooling (BCS). Since 2004, early childhood development centres (ECDs) were added to the basic education system, in some cases, annexed to primary schools. The survival rate from grade 1-9 is 41.4 percent and from 1-12 is 21.2 percent in 2008-2009. If this remains unchanged over the years to come, the primary completion rate in 2014 would be only 59 percent, far below the Millennium Development Goals (MDG) that 100 percent of all students complete primary school by 2015.

13. BCS is mainly financed by the government and falls under the responsibility of the Ministry of Basic and Secondary Education (MoBSE). In addition to these public schools, madrassas now constitute 15 percent of formal school enrolments (Planning Department, 2010), some serving primarily as religious schools designed to teach Arabic and Islamic studies (daras), while others provide a more formal education aligned with the national curriculum and offer English as a subject of instruction. Secondary education is primarily provided by private or grant-aided schools, the latter of which are managed by School Boards with the Government providing teachers' salaries in return for relatively modest school fees set by the Boards.

14. A Multi-Sectoral Working Group for the education sector brings together stakeholders from government departments, NGOS, and local authorities and local committees, civil society organizations and international agencies, and meets regularly to review data related to a range of factors impacting educational efficiency and quality, including the provision of school meals.

15. Investments in the Education Sector. According to the Education Sector Medium Term Plan 2008-2011[17] major achievements were made in the education sector through investments in, among others, improvements to the curriculum, instructional materials (core text books, teacher guides, and supplementary learning materials), incentives to teachers to serve in difficult areas, and initiatives to generate greater public interest in education. Until recently, many teachers were unqualified, particularly at the primary level, but MoBSE introduced requirements for teachers' qualifications, which should improve the quality of teaching over the next few years.[18] These efforts reportedly resulted in a more equitable distribution and better utilization of resources invested in the education sector (Education Sector Medium Term Plan). The Plan recognizes a number of remaining challenges, including addressing gaps in enrolment, attendance and achievement rates, and improvements to the quality of education, but does so against a realistic assessment of budgetary implications that requires appropriate fund raising and judicious use of resources.[19]

[17] Republic of The Gambia, Department of State for Basic and Secondary Education, August 2008.
[18] Teacher salaries are extremely low and may undermine attempts to attract more qualified teachers into the system, although a 20% increase was instituted at the beginning of the 2010/11 academic year.
[19] In a similar vain, the more recent mission of the International Monetary Fund (May 2010) concluded that the Gambian economy had performed well in recent years – the real gross domestic product had grown and remained strong in spite of the global economic crisis and that inflation levels were less than 5 percent and falling – but raised concerns over the fact that interest on domestic debt continued to place a strain on government resources and that overruns in spending in 2009 were significant and not compensated for by better fiscal performance in early 2010.

16. Girls' Education. Student enrolment has expanded substantially in recent years, with significant gains for girls across all cycles. The Net Enrolment Rate (NER) for both genders was estimated at 46 percent in 1991/92, but has increased dramatically to 94.9 percent in 2008-09 (Touray, 2010). The gain in both boys' and girls' enrolment is attributable to a number of efforts over the past 12 or so years.

17. Many studies have shown numerous benefits of educating girls, and The Gambia is no exception. The 2005/06 Multiple Indicator Cluster Survey (MICS) data for The Gambia provides solid evidence of some of the benefits of girls completing senior secondary school – benefits far greater than only completing primary school, some of which include:

- The under-five child mortality rates shows that those with no education are 140 per 1000, dropping to 133 for those completing primary school, and substantially fewer to only 66 deaths per 1000 for infants born to mothers who completed secondary school.
- 30 percent more children of mothers who complete secondary school are more likely to attend ECD than are children whose mothers have no education (45 percent vs. 15 percent) and almost 20 percent more likely than those with a primary education.
- The likelihood of female genital mutilation (FGM) for girls whose mothers had no education is 70 percent; for those with a primary education 58 percent, but for those with mothers having a secondary education, FGM drops to 41 percent.
- Similarly, data has shown that higher levels of education reduce the percentage of girls marrying early, having sex at an early age, and accepting domestic violence, whereas their understanding of HIV increases.

18. **Nutrition Status of School-age Children.** Malnutrition in The Gambia starts in children less than five years old, largely caused by poor feeding practices, inadequate care and increasing exposure to infections, along with poor sanitation (The Gambia National Nutrition Policy 2000-2004). Mothers themselves suffer from malnutrition, which is reflected in the high prevalence of low birth weight babies especially in the rainy seasons, where most food shortages occur. The main nutritional problems facing school-age children include stunting, underweight, anaemia, iodine and vitamin A deficiencies, although only limited data is available for school-age children on the micro-nutrients. The school-age children's nutritional status is further affected by illnesses such as helminth infestations and diarrheal diseases (WFP 2008).

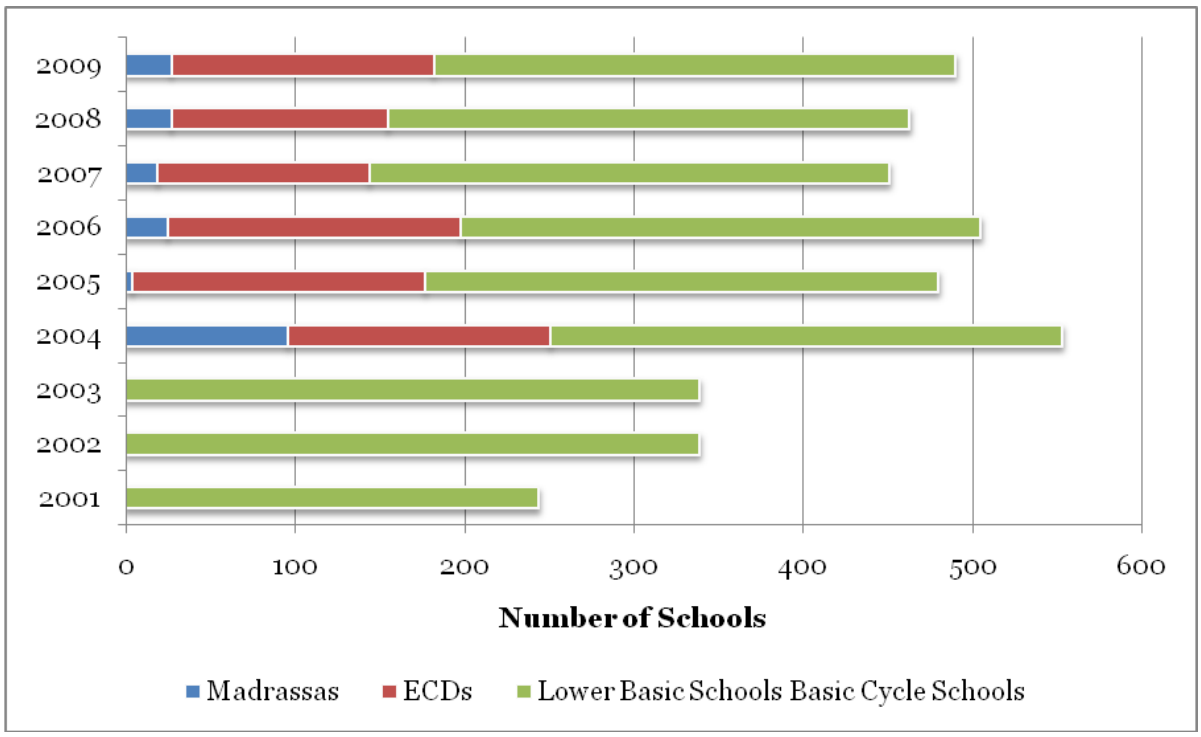
1.3. WFP's School Feeding Programme in The Gambia

19. WFP's support to school feeding programmes in The Gambia began in 1970. Between 2001 and 2010, the period covered in this evaluation, three development projects provided school feeding. The primary objective in all three projects was to increase levels of enrolment, attendance and retention. Each targeted primarily rural areas of the country, based on the prevalence of higher levels of poverty and food vulnerability, coupled with low levels of school enrolment.

20. **Schools Reached.** From 2001 through 2003, WFP provided meals to LBS (grades 1-6) or BCS (grades 1-9) and, from 2004 onwards, added madrassas and ECDs that met certain Government standards. ECDs added one grade level to

existing LBS/BCS schools, while madrassas added whole new schools with a range of grades. The average number of schools assisted per year was 429 of which 71 percent were either LBS or BCS, 24 percent ECDs and 5 percent madrassas. The number of schools assisted per year by type of school is shown in Figure 1 below.

Figure 1: Number of Schools Assisted with WFP School Feeding



21. **Number of Students Served.** During the review period, the school feeding programme aimed to reach on average 120,000 children per year. The actual number of children fed, as reported in WFP's standard project reports (SPRs), averaged around 113,000 children per year of which 50 percent were girls, reaching on average 93 percent of planned beneficiary numbers (see Table 1 for a year-by-year report). These 113,000 children represent about 40 percent of all children enrolled in basic education schools in The Gambia.

Table 1: Students Receiving School Meals – Planned versus Actual 2001-2009

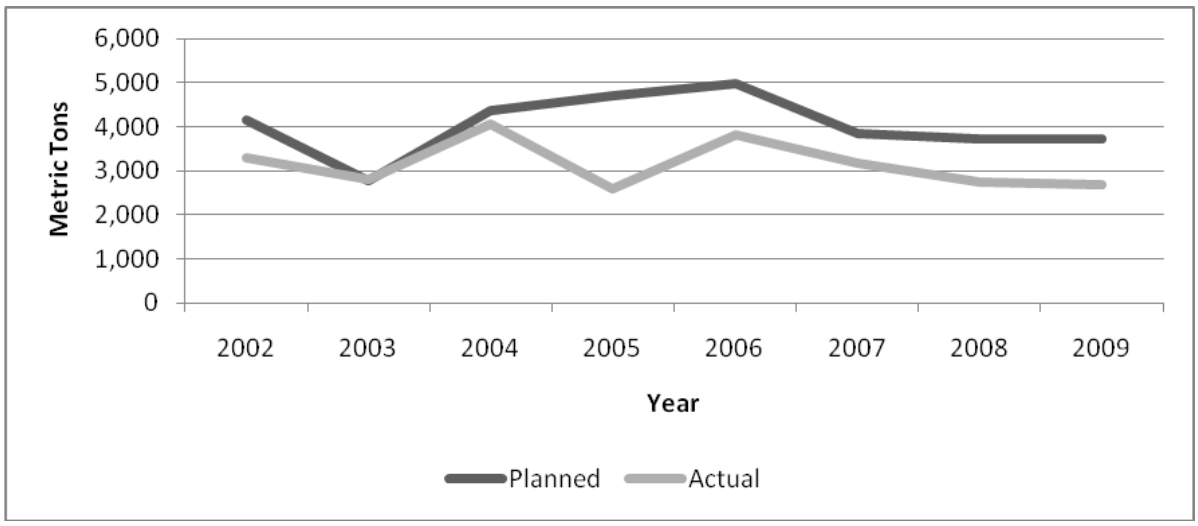
	Planned*	Actual				
Year	Total	Boys	Girls	Total	% girls	% Actual vs Planned
2001	71,500	37,341	34,690	72,031	48	101
2002	135,500	71,079	65,322	136,401	48	101
2003	123,161	64,961	63,032	127,993	49	104
2004	135,000	54,388	55,334	109,722	50	81
2005	135,000	55,945	57,034	112,979	50	84
2006	140,400	60,792	63,207	123,999	51	88
2007	118,000	53,163	56,641	109,804	52	93
2008	118,000	54,661	57,965	112,626	51	95
2009	118,000	53,397	56,790	110,187	52	93
Average	**121,618**	**56,192**	**56,668**	**112,860**	**50**	**93**

*Following any revisions during the project's lifetime.

22. **Food Distributed.** For each of the projects, just below 15,000 metric tons were approved as total budgeted food commodities. The average annual distribution target

was just above 4,000 metric tons. With the exception of 2003 and 2004, the actual distribution remained below the planned figures and was on average 3,150 metric tons per year, or around 78 percent or original plans (see Figure 2 below).

Figure 2: Planned versus Actual Food Distributions



23. **Food Distributed per Child.** The reduced total amounts of food distributed had an effect on the quantity distributed per child. Initially, the school feeding programme planned to distribute, on average, 32 kg of commodities per child per year. The rations actually distributed were on average 27 kg, or 85 percent of original plans. Because of resource constraints and lack of donor contributions, fewer beneficiaries were reached (average 93 percent) with the reduced ration bringing an average of 78 percent of the food distributed compared to the plan. The variations were the smallest for 2003/04 (a year when more than anticipated was distributed) and highest for the most recent two years. These figures are further affected by unreliable reporting of attendance rates (see paragraph 35 below) and participation in school meals (see paragraph 93 below). Data is provided in Table 2.

Table 2: Planned versus Actual Distribution of Food per Child

	Beneficiaries		Quantity per child/kg		Qty Actual/Planned Per child %
Year	Planned	Actual	Planned	Actual	
2002	135,500	136,401	31	24	77
2003	123,161	127,993	23	22	96
2004	135,000	109,722	32	37	116
2005	135,000	112,979	35	23	66
2006	140,400	123,999	35	31	86
2007	118,000	109,804	33	29	88
2008	118,000	112,626	32	24	75
2009	118,000	110,187	32	24	75
Average	127,883	117,964	32	27	85

24. **Ration.** Food was selected on the basis of local consumption, rice being the staple. Iodized salt and vitamin A-fortified vegetable oil were included to address iodine and vitamin A deficiencies (WFP project 10548.0, 2007). The lunch ration is discussed more fully in section 2.2. Nutrition Outcomes and Impacts of this report.

25. **Participation in School Meals.** The reported figures on beneficiary numbers and commodities distributed is contrasted by actual practices in participation in school meals, which is affected by the capacity and willingness of students and their parents to pay – in cash or in kind – for school meals. Confusion existed at the schools visited by the evaluation team about the right of children to participate in school meals if they did not pay. Reports by others and findings of the evaluation team indicated that between 12 and 28 percent of students attending school the same day did not participate in the school meal served on that day. Head teachers, teachers and cooks all benefit from the school meals, but reports about their contributions (payments or in-kind) vary between none and regular payments. These practices and weaknesses in recording enrolment and attendance rates (see section 2.1.) affect the extent to which students actually participated in the school feeding programme and thus how the programme could attain expected educational, nutrition, and value transfer outcomes and impacts as discussed in the following chapter.

2. Results: Outcomes and Impact of School Feeding in The Gambia

2.1. Education Outcomes and Impacts

26. **Intended Educational Outcomes and Impacts.** Expected results in the area of school feeding's impact on education include: (1) increasing student enrolment in primary school, (2) increasing daily school attendance, (3) increasing the number of students who complete primary school, and (4) contributing to learning achievement. Each is addressed in this section. A related and high-priority objective for the Government and WFP/CO have been to increase the number of girls in school, and in keeping with the Millennium Development Goal of having 100 percent of each country's children complete primary school, so wherever possible, enrolment, attendance and completion rates for each gender are specified.

27. **Data Limitations.** A number of data sources are used to attempt to answer these questions, but for a variety of reasons, primarily a major loss of data by the Government entity responsible for maintaining enrolment records (due primarily to a computer crash), and poor and often inaccurate record keeping on the part of school head teachers, the various figures provided here should be considered highly unreliable. The sources of data used here include: data "refined" during the data-gathering and cleaning process for the Country Status Report (CSR), which used a statistical approach referred to as "smoothing", which generates estimates based on data gathered in the 2003 census and current enrolment figures. In addition, the evaluation team gathered data directly from school, of which however only a total of 19 had enrolment data (nine with school feeding, and ten without) for more than three years. In spite of these efforts to use existing data and complement it with primary data collection, the members of the evaluation team believe that it is next to impossible to say any more than that there have been major increases in student enrolment over the years. However, the extent to which increases can be attributed to school feeding are impossible to estimate.

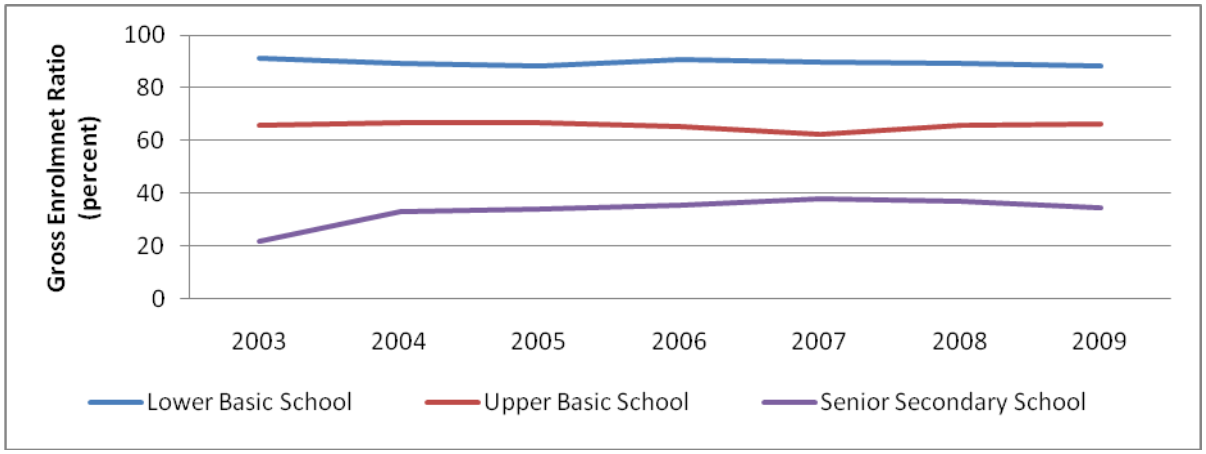
28. **Annual Growth Rates (AGRs).**[20] In general, across all levels, the greatest growth in enrolments was in the early part of the decade when the MoBSE and some donors put a significant amount of effort to increase enrolments nationwide, even going door-to-door. Since the mid-decade enrolments (absolute number of children enrolled) have stagnated or declined, most significantly and recently from 2008-

[20] AGR is year over year change expressed as a percent.

2009. There has been a major trend away from grant-aided schools to both private schools (primarily in the urban areas where there has been a large increase in population due to migration from the rural areas) and in madrassas, many of which are now offering a full, government-sanctioned curriculum. A 2008-09 study commissioned by the CO looked at differences in enrolment, admission and attendance rates of primary schools before and after WFP phased-out of school feeding in 2005 (Cham, M., *et al*, 2009). Findings showed a greater decline in the AGR for schools that were phased-out (1.2 percent greater), although when comparing AGRs for the years 2002-05 with those of 2005-08, schools in all categories (except one) experienced declines, which is consistent with the larger enrolment picture presented here.

29. **Gross Enrolment Ratio (GER).**[21] The GER for LBSs has declined slightly since 2003, from 91.1 to 88.2 percent, while that of UBSs has increased slightly from 65.9 percent in 2003 (the year of the last census) to 66.2 percent (Figure 3). BCS GER has declined slightly from 83.5 percent to 82.1 percent, however, Senior Secondary GER has increased substantially by about 13 percent from 21.9 percent in 2003 to 34.5 percent in 2009, although it has declined from its peak of 38.1 percent in 2007. Of concern is the fact that the GER for The Gambia is lower than about 65 percent of other low-income African Countries.

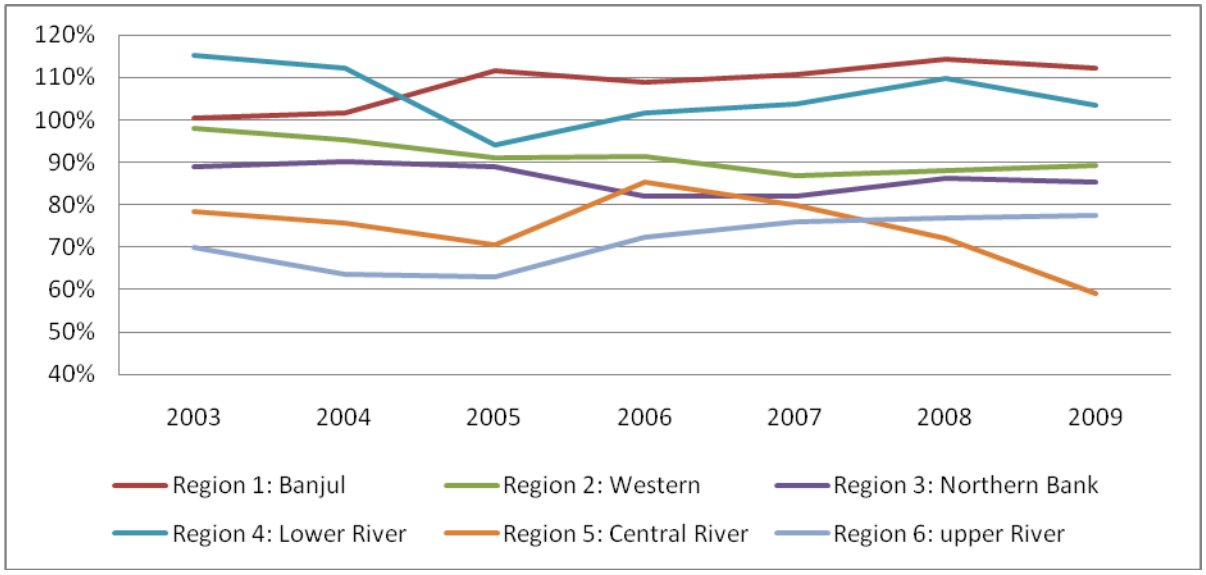
Figure 3: Gross Enrolment Ratio for Basic and Secondary Education (2003-2009)



30. Figure 4 shows GER by region, with the highest being in Regions 1 and 4 across all 7 years, increasing most in Region 1, the urban area of Banjul, which is consistent with the migratory rural-to-urban trend. Enrolments have declined in Region 2, only half of which is receiving school feeding, and Regions 3 and 5, the most rural of regions. In 2003, the lowest GER was in region 6, but increased to 77.6 percent in 2009, while the reverse happened in Region 5, which declined by almost 20 percent from 2003 to 2009, and by 25 percent since 2006. All of these regions, except Region 1 and half of Region 2 have been benefiting from school feeding.

[21] GER is the number of students enrolled in a particular level of schooling, regardless of age, as the percentage of the population of official school age for that level. For example some of the primary school students interviewed for this study were 20 years old and so would fit into the GER estimate, but not the NER estimate.

Figure 4: Gross Enrolment Ratio by Region (2003-2009)



31. The evaluation team's household surveys gathered data on GERs by region, gender and for schools with and without school feeding.[22] In regions 3 and 5 GERs for schools with school feeding are significantly higher than those without, both for the overall GER and for girls, although they are only slightly higher for boys in 2 of 3 regions. The data indicates a significant impact of school feeding in these rural regions – for instance, Region 5 showed a decline in GER rates nationally (see Figure 4 above) as compared to the data collected by the evaluation – where religious and financial reasons exist for not sending children to school, as further discussed in chapter 3 of this report.

32. Data collected by the evaluation team from schools showed that neither schools with nor without school feeding had any pattern of increase or decrease in enrolment rates. However, using data provided by the MoBSE for the small sample of SF and NSF schools in this study, SF schools' enrolment shows a steady increase since 2004, whereas this is not the case for the NSF schools until 2008/09. Enrolment data provided by the government for the complete set of 44 sample schools, shows that until 2006 average enrolments at schools without school feeding were generally about 100 students higher than were those with school feeding. From 2008, enrolments in schools with school feeding surpassed those of other schools, but dropped again in 2009. This drop may reflect a greater impact of the financial crisis on the most vulnerable, or rural-urban migration.

33. **Net Enrolment Rates (NER).**[23] Findings from the Poverty and Social Impact Analysis (PSIA) 2010 study showed that NERs improved considerably over the years for all students, which means that the students, who are enrolling, are at more appropriate ages – not older students starting school late. In 1991/92, the total NER was estimated at 46 percent, gradually increasing to 77 percent in 2008/09. Gender parity was also achieved: in 1991/92, the NER for boys was almost 16 percent higher than for girls, but enrolments increased substantially for both groups to 75 percent and 78 percent in 2008/09, where girls now outnumber boys.

[22] The HH survey results on enrolment are not intended to present a comprehensive and statistically accurate situation as regards enrolment. Rather, given the difficulties associated with official figures highlighted in the report, to provide triangulation of sources of information in this area.
[23] NER is the proportion of the age-appropriate students enrolled compared to the total population of children of official school age.

34. **Household Characteristics and School Enrolment**. Opinion leaders, asked during the evaluation's PRA, indicated that the wealth status of a household is one of the key determinants of whether children go to school and how long they continue. Other studies also have found that children from poorer households are more likely to drop out in lower grades due to financial and livelihood restrictions (PROGEBE, 2009); (PSIA, 2010). However, groups of households' most senior females argued that a large proportion of parents send their children to school regardless of their poverty status, particularly so in Region 2, while in Region 6 they estimated about 10 percent of community households do not (Table 3). They also reported that several socio-cultural factors influence the value placed on education by households, particularly religion, concern about children adopting western lifestyles, and parental attitudes regarding the importance of education[24]. These reasons are further discussed in chapter 3 of this report.

Table 3: School Enrolment by Wealth Ranking (Region 2 and 6)

Households	Region 2				Region 6			
	VP	P	NP	Av	VP	P	NP	Av
% sending	98	96	98	97	87	93	89	89
% not sending	2	4	2	3	13	7	11	10

VP = very poor, P = poor; NP = not poor; Av = average
Source: Evaluation Team, PRA 2010.

35. **Attendance.** The evaluation found large discrepancies between reported attendance (both between numbers provided in monitoring reports, and between those estimated by head teachers and class-room teachers) and those observed by the evaluation team. Other studies have found the same issue. This makes it difficult to obtain an accurate assessment of student attendance. This observation applied to schools with and without school feeding, whereby the household survey undertaken for this impact evaluation showed better attendance rates for schools without school feeding. A survey conducted at the household level in 2006 found an average attendance rate of 68 percent,[25] while the data from households in this evaluation's survey, found a substantially higher rate of attendance in schools not receiving school feeding (83 percent) compared with those that are (75 percent), although these latter figures may also include out-of-school children (see Table 4). Out of school children are estimated at 80,000 in 2007, 45 per cent girls.[26]

Table 4: Attendance Rates (percent of children, ages 7-15, by gender)

	2006[a]	2010[b]	
		With school feeding	Without school feeding
Attending/In school	68	75	83
Girls		53	52
Boys		47	48
Not attending/Not in School[27]	32	25	17
Never attended	29	NA	NA

Sources: [a] MICS 2006; [b] WFP/Gambia Impact Evaluation household survey, 2010

[24] This concurs with the WFP VAM Study (2003) and the PSIA (2010)
[25] MICS 2006. The report also noted that of 32% not attending, 29% had never attended. A similar breakdown is not available for the Evaluation's household level data.
[26] UNESCO, Education for All Global Monitoring Report 2010.
[27] This result may be overstated for 2010 by the lack of data on the non-attending/not in school children. Results do not show which children categorized as 'not in school' had never attended, meaning had not enrolled.

36. The findings of the school survey showed that almost all school feeding teachers and head teachers said they believe that school feeding improves enrolment, retention and attendance, but only about 25 percent of teachers reported that attendance goes down when food is not served, although 6 indicated that it declined by more than 10 percent when asked by how much, and 2 said it declined by 41-50 percent. The findings of the PRA shows that households' most senior female members identified June/July as the peak period when the greatest number of children may not attend school followed by the period between September and November. These periods coincide with the end and beginning of the school year, respectively; and, with the peak period for agricultural activity (June – November). These women also explained attendance to be frequently influenced by delayed arrival of the WFP food supply and the absence of teachers at the beginning of the term.

37. **Completion Rates and Continuation to Higher Levels.** Gambia's average completion rate compares well with other low-income African countries. In 2009, the average Gambian child achieved 7.6 grades of schooling, compared with the average of 6.9 grades for low-income African countries. Using the updated, draft CSR data, Table 5 shows that at the LBS level, between 88.4 percent and 96.4 percent of students are promoted to the next highest level, with the greatest percent being promoted from grade 5-6 and the least from grade 6-7. Almost 63 percent of the students who enter grade 1 complete grade 6. Promotion rates at the UBS level decline slightly from grade 7-8, but fall by 25 percent at grade 9. This may be because many students do not pass the grade 9 completion test and/or because there are not enough classrooms or schools at the senior secondary level to accommodate all students who successfully complete grade 9. The average promotion rate is 87.3 percent from grade 1-12. The survival rate from grade 1-9 is 41.4 percent and from 1-12 is 21.2 percent.

Table 5: Promotion Rate from One Standard to the Next

	Non-Repeaters		Promotion Rate from One Standard to the Next	Survival Profile
	2009	2008		
Grade 1	44,208	43,157	90.8	100
Grade 2	39,202	39,863	88.9	90.8
Grade 3	35,422	36,835	88.8	80.7
Grade 4	32,717	34,217	91.0	71.7
Grade 5	31,135	30,803	96.4	65.2
Grade 6	29,695	30,040	88.4	62.9
Grade 7	26,566	26,434	87.6	55.6
Grade 8	23,151	24,797	84.9	48.7
Grade 9	21,059	21,705	62.7	41.4
Grade 10	13,598	12,980	97.1	25.9
Grade 11	12,604	11,997	84.1	25.2
Grade 12	10,084	9,632	0.0	21.2

Source: MoBSE

38. **Contributing to Learning.** The evaluation used three sources of data, all provided by The Gambian branch of the West African Examinations Council (WAEC), which administers three measures of student learning to students in grades 1-9.

- The Gambian Assessment of Basic Education Completion, given to students who have completed all the course requirements in grades 1-9 showed that in

2009 only 24 percent of grade 9 students passed these exams in the 4 core subject areas.

- The national assessment Test (NAT) of student learning is administered to all students in grades 3 and 5 in the subjects of English and Math at grade 3, and Science at grade 5. Results from the 2008 and 2009 NATs show extremely low performance, with only about 2-3 percent of the students showing mastery and only 14-20 percent performing at grade level. Girls' performance was just slightly better than that of boys (1 percent), but private schools' performance was substantially better than that of government schools, with about 21 percent of students showing mastery and about 55 percent performing at grade level. Combined, this means that 76 percent of private-school students are performing at grade level or above, compared with a maximum of only 23 percent of government-school students, of whom about 40 percent are receiving school meals.
- The Early Grade Reading Assessment, which is a fairly new measure developed by RTI International[28] with support from the World Bank and USAID, and was designed by reading and measurement specialists to assess early grade reading skills. Student performance was extremely low on the first Early Grade Reading Assessment given in 2007 to students in grades 1-3, but scores improved in 2009, in large part due to a large scale teacher-training effort in the phonics skills needed to teach young children to read.

39. Interviews undertaken by the evaluation team during school visits, showed teachers in both schools with and without school feeding attributed reasons for such poor performance to poor reading skills (too poor to understand the test question), students not studying, or a mismatch between assessments and curriculum and textbooks. The only area where there was a marked difference between respondents from teachers in schools with school feeding and those without concerned the preparation and qualification of teachers themselves: only 2 schools with school feeding felt they were inadequately equipped, while seven schools without school feeding responded in this way. There are a number of possible explanations for such low scores across these various measures, including a mismatch between the assessment and the curriculum (as teachers noted), poor quality teaching, or a test that is inappropriately difficult or confusing. The evaluation's student survey showed that only 4 students of 258 reported that they learned a lot in school. Regardless of the reason, student achievement on all three measures is quite low. Because of this, it would be difficult to defend a claim that school feeding contributes to student learning in The Gambia, as other important factors are not in place. In fact, students in private schools do not benefit from WFP school feeding, yet perform substantially better than students in government schools. However, private school students are likely to be from less economically vulnerable backgrounds and their schools are likely to be better equipped and teachers better paid. Nonetheless, the results of the PRA showed that 25 percent of food management committee members felt school feeding increased concentration, and an equal percentage indicated that school feeding enhanced punctuality and retention, which they interpreted as signs of active learning.

[28] A research and international development organization based in the US.

2.2. Nutrition Outcomes and Impacts

40. This evaluation collected data in June 2010, right before the onset of the rainy season; therefore findings represent the nutritional situation at that time, when students had been receiving regular school meals, but at half ration.

41. **Intended Nutritional Outcomes and Impacts.** Nutritional objectives as stated in the logic model are enhanced nutrition and child health, including improved micronutrient status of school children and improved calorie and protein intake. The fieldwork of this evaluation was not designed to measure nutritional status through anthropometric surveys, but assessed the effects of school meals on food consumption and dietary intake through household interviews (24 hours recall about food consumption added to the nutritional intake provided by school meals).

42. **Sufficiency of WFP Rations.** The school feeding programme aimed to provide a daily per-child ration for children in grades 1-6 composed of 100g rice, 30 g pulses, 10 g vegetable oil, and 3 g iodized salt. For preschool children, the rice ration is 80 g, while the rest of the rations are the same as for older children. This ration has been consistent in all project periods since the year 2000.[29] The sufficiency of WFP rations was assessed using WFP's NutVal EXCEL programme. Table 6 shows what the ration contributes to the daily requirements for students aged 6 to 12.

Table 6: Nutrients Provided through School Meals to LBS Students (percent of daily requirements)

	Energy	Protein	Fat	Iron	Iodine	Vit. A
Unit	Kcal	g	g	mg	µg	µg Re
Planned daily ration	551	14	11	3	181	104
Daily requirements (6-12 year olds)	1850	46	35	18 (7-9 yrs)	120	500 (7-9 yrs)
Planned ration as % of RDA	30	31	31	17	151	21
Reduced ration as % of RDA (50% for 2010)	15	16	16	8	75	10
Reduced ration as % of RDA (average of 78% from 2001 to 2010)	23	24	25	14	94	16

43. According to these calculations, rations provide 30 percent of daily energy requirements and 31 percent of daily protein and fat requirements for primary school students, although pipeline breaks since January 2010 have resulted in providing half of what was planned. However, from 2001 to 2010, 78 percent of the average daily ration was provided and in Table 6, the last two lines show the percent the reduced meal contributes to the recommended daily intake per child per day. Other factors that affect the percent of nutrients provided by the school meal include condiments added to the meal through students' contributions and vegetables or fruit from school gardens. Moreover, whether a student eats the meal every day and whether they eat everything served, was not asked in any of the surveys. Conversely, many students reported buying food from vendors in addition to the school meal, which would add some nutrients. These supplementary foods were not considered in calculating the percent of nutrients provided.

[29] From 1999-2004, a mid-morning cereal beverage of 25 grams of Corn Soy Blend with 25 grams of sugar was provided. This snack has not been included in the calculations because it was only provided for a limited time.

44. **Meal Substitution.** According to the students' survey, 45 percent of students in schools with school feeding programmes reported eating breakfast at home, even more than those attending schools without school feeding programmes (37 percent). Thirty-nine percent of the students receiving school feeding said they do not eat breakfast, primarily because they are not hungry. Almost three-quarters of them said they eat dinner, while the 32 (25 percent of the sample) who said they do not, the main reasons given were "not enough food at home", followed by "they were not hungry". The evaluation's household survey corroborated these findings from the student survey: 59 percent of households with children receiving school meals indicated that their children ate less at home on days when they receive school meals. When asked how much less, 10 percent indicated that the child ate no lunch at home and 77 percent that they ate a small lunch. While the differences are not great, it appears that slightly lower percentages of children from the most vulnerable group eat less at home when they eat at school. The PRA resulted in similar observations, namely that it reduced the amount of food that was consumed at home; while households where children did not benefit from school meals addressed the lack of school meals by the following means: students are given money to buy lunch at school; they go home during lunch break; they take fruit to school to eat; or, they persevere without food until school day is over.

45. The household survey showed that only 65 percent of school-going children from households benefiting from school feeding eat breakfast at home before going to school, but 97 percent eat breakfast at home when they are not in school suggests that children are using the school meal as a meal replacement.[30] This is especially important to note because currently a reduced ration is being served during much of the school year and children do not benefit from school meals during the season with the greatest food shortage and highest household vulnerability. It also has implications for the value transfer of the food ration and the potential savings households can materialize from the school feeding programme, as discussed in paragraph 63 below.

46. Combining the fact that some children eat less at home after eating a school meal with the fact that 68 percent of respondents said that they prepare the same amount of food at home on days when their children eat at school, tends to suggest that more food is available for other household members when children receive school meals. This does not seem to be to the detriment of the students since household respondents perceive there to be significant health benefits to their children from eating school meals, with approximately 80 percent saying that their children are stronger, healthier or more active since receiving school meals. This being the case, there are likely to be additional indirect benefits as a result of improved health status, such as lower expenditures on medical costs, although these have not been quantified and included in the value transfer of the school feeding programme discussed in section 2.3 below.

47. **Dietary Diversity.** The number of meals consumed, the HDDS, and the proportion of households consuming foods from various food groups, was used to assess dietary adequacy. The number of different foods or food groups consumed in a household provides a measure of the quality of the diet, reflected HDDS. To accurately capture this diversity, the indicator is measured by the variety of food groups consumed, rather than the total of all types of foods consumed (Swindale, A.

[30] This data from the household survey shows different results from the student survey where students answered for themselves. In the household survey parents answered questions about students behaviour.

et al. 2005). A consistent positive association between dietary diversity and child nutrition has been found in studies from a number of developing countries, (Arimond and Ruel, 2004). The HDDS is meant to provide a snapshot of the economic ability of a household to consume a variety of foods.

48. Results of this evaluation's household survey showed that the HDDS was very similar for households where children benefited from school feeding and those that did not. Out of 12 food groups, the average number of groups consumed by households with school feeding was 6.1 versus 6.3 for households without school feeding. No household consumed foods from all groups. A majority of the households in both groups had a HDDS of 6. A score >= 6 food groups is considered high dietary diversity. Out of 523 households, only 5 households had a HDDS lower than 3 and 14 households had a score lower than 4. Comparisons by vulnerability group, showed a statistically significant differences with the least vulnerable households having the highest mean HDDS score of 7.5 and the most vulnerable households having the lowest (4.4, p<.001) (Table 7).

Table 7: Household Food Diversity Score by Vulnerability Group

Vulnerability Group	Mean	Minimum	Maximum
Least Vulnerable (N = 103)	7.5	5	10
Somewhat Vulnerable (N = 320)	6.3	3	9
Most Vulnerable (N = 100)	4.4	1	6

Source: Evaluation Team, Household Survey 2010

49. All households (with and without the benefit of school feeding) reported consuming high amounts of cereals and fish (90 percent school feeding and 93 percent non-school feeding). Households benefitting from school feeding were significantly more likely to eat pulses, legumes, or nuts (71 percent and 53 percent, p<.001), and condiments, spices, and beverages (72 percent and 46 percent, p<.001), but were significantly less likely to report eating white tubers and roots (16 percent and 31 percent, p<.001), vitamin A rich fruits (26 percent and 67 percent, p<.001), other vegetables such as cabbage, onions, and tomatoes (88 percent and 95 percent, p<.05), and oils/fats (56 percent and 81 percent, p<.001). Both groups consumed low levels of milk and milk products. Annex 6 provides further details on these findings.

50. **Vitamin A Deficiency.** A 2008 survey of children-under-five, conducted by National Nutrition Agency[31] showed that 64 percent are deficient in vitamin A and 76 percent are anaemic (Bah and Jen-Ngom, 2008). Limited data is available for school-aged children in terms of vitamin A deficiency and anaemia[32], but of the 2,178 students aged 3-18 in the 524 households interviewed for this evaluation, 2 percent of students benefiting from school feeding and 3 percent of students that are not, were identified by household respondents as having difficulty seeing at night, a measure of night blindness and a proxy indicator for vitamin A deficiency. According to the WFP Food and Nutrition Handbook (2000), a 1 percent prevalence or above of night blindness in a population indicates a serious situation. The HDDS survey showed that only 58 percent households benefiting from school feeding consume vitamin A-rich foods as compare to 78 percent households that do not have children in school feeding programmes (a significant difference p<.001). The planned ration

[31] The agency is targeting Vitamin A deficiency and deworming. The interventions include public awareness and supplementation of children with a high-dose Vitamin A capsule, deworming using Mebendazole tablets, and promoting the production and consumption of foods rich in the micronutrient.

[32] This evaluation did not include any biochemical measures such as blood tests therefore haemoglobin concentrations in blood were not measured.

has a relatively low level of vitamin A, despite fortification of vegetable oil, and the actual ration had even less. These findings suggest a need for continued implementation of strategies to address vitamin A deficiency for children of all ages, together with NaNA, UNICEF and other partners, and may warrant a review the ration composition for school feeding as well as further nutrition surveys of school-aged children.

51. **Iodine Deficiency**.[33] In the household survey, only 15 children (1 percent of total) were reported swelling in the neck of their children, a measure of goitre, or iodine deficiency. This may be due to the fact that iodine in the school meal provided 94 percent of the recommended daily intake even during the reduced ration. However, the majority (13) were from households benefiting from school feeding which may be a result of children not finishing their meal.

52. **Deworming.** According to the WFP School Feeding Policy, the most intense worm infections are likely to occur in school-age children (Jukes, 2008), which contributes to morbidity, under-nutrition, and iron deficiency. Iron deficiency anaemia is a major issue for school-age children affecting more than half of children worldwide. In 2002 and 2005, Jobot laboratories in The Gambia carried out surveys and reported the presence of ascaris, giardia, tapeworm, hookworm and schistosomes in the population (WFP/CO, 2008). The target of WFP's deworming activity was to ensure that at least 53 percent of assisted schools are dewormed. In 2008, where the latest information is available, 62 percent of the schools and 70 percent of the students in regions 3, 5, and 6 were dewormed. Of the households interviewed for this study, 63 percent reported that their children had received deworming medication at school. Sixty-nine percent (69 percent) of households whose children benefited from school feeding reported that their children had been given deworming medication, compared with only 52 percent of households that did not participate in school feeding, a statistically significant difference ($p<.001$). UNICEF also has been involved in administering this medication to children. Furthermore, only 1 percent of the respondents of children aged 3 to 18 years old reported experiencing "intestinal parasites" in the prior 12 months.

2.3. Value Transfer Outcomes and Impacts

53. WFP's School Feeding Policy recognises the school feeding as a value transfer to households. While this had not been an expressed objective of the school feeding programmes in The Gambia, the evaluation nonetheless reviewed the value transfers that had been realized to draw lessons from the experience.

54. **Direct Value Transfer.** Food provided to the child at school represents a direct transfer to the household in terms of the value of the food itself, as well as the nutritional value provided to the child. The cost of the school meal in Gambia, using the approach used by the BCG (2009), was US$38.60 per annum per beneficiary (2008 prices), based on a standardised ration of 700 kcal over a school year involving 200 feeding days. Adjusting this for the ration size in Gambia (550 kcal as identified in the Project Document for the current WFP programme), this cost would be approximately US$30 per beneficiary per year, or D3.40 per meal in Gambian currency (average exchange rate in 2008 was US$1 = D22.4).

[33] Iodine-deficient individuals can have an IQ up to 13.5 points lower than the average, which is a major determinant of lower educational outcomes (Grantham-McGregor, 1999). A study carried out by the World Health Organization (WHO) and NaNA in 1999 found a goitre rate for endemic areas of 16% among children aged 8–12, (Egbuta, 1999). Iodine-deficient individuals can have an (IQ) up to 13.5 points lower than the average, which is a major determinant of lower educational outcomes, (Grantam-McGregor, 1999).

55. The real "value transfer" to households is represented by the amount it would cost them to purchase the ingredients for an equivalent meal on the local market. The ration in Gambia includes split peas, iodized salt and fortified vegetable oil (vitamin A). Fortified oil and split peas are not readily available in rural areas in The Gambia, but using information estimated by the WFP/CO for locally available beans (using 2008 prices), the local price for a similar set of ingredients is D3.57 per meal, which represents the value transfer to households.[34] Table 8 details calculations for cost and value transferred using the methods described above, along with a third that uses the planned overall programme costs[35] for the current school feeding programme for a comparison estimate of the cost of the school meal. (See Annex 8 for an explanation of the methodology used to derive these estimates.)

56. Table 8 below shows that depending on the methodology adopted, the value transfer from school meals was between 7.7 – 8.5 percent of household cost for consumption of food and non-alcoholic beverages, based on the planned number of meals in 2008. This indicator is preferred due to its suitability for direct comparison with the value of the school meal. Overall consumption and income include many other elements with different motivations and importance attached to each and variations in food consumption may not be so closely related to variations in these variables. It is noted that comparing the two sets of data for value transfer 'as a percentage of consumption of food' and 'non-alcoholic beverages and as a percentage of household income' is not possible since the sources for both overall income and consumption come from two different sources as identified in the footnotes below the table.

Table 8: Cost and Value Transfer to Households from School Meals (Different Methodologies)

Cost/Value Transfer 2008		**BCG (Cost)**	**Local Prices (Value Transfer)**	**Current Programme Budget (Cost)**
Cost/Value per meal (Dalasis)		3.40	3.57	3.22
Cost/Value Transfer per beneficiary per year/Dalasis	Planned Actual[a]	677 541	711 568	642 513
Cost/ Value Transfer per household per year[b]/Dalasis	Planned Actual[a]	1,628 1,301	1,710 1,366	1,543 1,233
% of household food consumption represented by transfer[c]	Planned Actual[a]	8.1 6.5	8.5 6.8	7.7 6.1
% of household income represented by the value transfer[d]	Planned Actual[a]	7.0 5.6	7.3 5.9	6.6 5.3

2008 selected as year for comparison due to availability of BCG cost estimates for this year

[a] 2008 saw pipeline breaks reduce the number of school feeding days to 159 instead of the planned 199. Calculations in the Actual rows are based on 159 feeding days in 2008 [b] Based on an average of 2.4 children per household attending primary school as estimated from the results of the household survey [c] Based on household food consumption data from Gambia Integrated Household Survey, 2003-04 and selecting rural areas with lowest standard error for consumption on food and non-alcoholic beverages, value updated to 2008 prices. [d] Mean Household income of D23,317 generated from data collected in household survey used for these calculations

[34] It might be expected that the cost of the meal provided by WFP would be significantly less than for the equivalent bought on the local market, given WFP's large-scale buying power, but this might be the result of methodological issues in the BCG calculation).

[35] Base cost calculations are simplified and based on the total programme costs divided by the planned number of beneficiaries

57. Other studies have used household income as a comparator for the value transfer. Table 9 below shows the value transfer as a percentage of average annual income. It illustrates the difference in the significance of the transfer by vulnerability group: the transfer represents a significantly higher percentage of the most vulnerable households' income, where the value transfer was between 8.7 and 12.0 percent of household income when compared with incomes for the least vulnerable households, where the value transfer ranged between 2.2 and 3.1 percent. Given that 33 percent of households in the school feeding group reported their own-grown food lasts 4 months of the year or less, with 51 percent reporting it lasted 5-8 months and 16 percent 9-12 months. This pattern leaves a significant gap in food availability during the year and suggests that food purchases play a significant role in maintaining satisfactory dietary diversity scores in Gambia. The value transfer from the school meal (of 7.7 - 8.5 percent of annual food consumption and non-alcoholic beverages on the basis of planned school feeding days in 2008) would therefore represent a significant contribution to households' food budget.

Table 9: Cost/Value Transfer as Percentage of Income[36] by Vulnerability Group

Vulnerability Group	BCG, No breaks %	BCG 2008 %	Local prices, no breaks %	Local Prices 2008 %	Current programme budget, no breaks %	Current programme budget 2008 %
Least vulnerable	2.9	2.3	3.1	2.4	2.8	2.2
Somewhat vulnerable	9.2	7.4	9.7	7.7	8.7	7.0
Most vulnerable	11.5	9.3	12.0	9.6	10.9	8.7
All groups	7.0	5.6	7.3	5.9	6.6	5.3
Annual Value Transfer – Dalasis	1,628	1,301	1,710	1,366	1,543	1,233

Source: Evaluation Team.

58. **Reduction of Value Transfer: Absenteeism and Pipeline Breaks**. The calculation for the value transfer assumes that children receive the full ration on every day planned throughout the school year (except for those based on 2008 figures where there were significant pipeline breaks). Non-attendance at school will reduce the overall size of the value transfer, as will any reduction in the ration distributed to each student. Discussions with the Planning Unit at the MoBSE confirmed the unreliability of attendance data, which was corroborated in this study (see paragraph 35 above). For example, 15 percent non-attendance would have a corresponding 15 percent reduction in the value of the transfer in total.

59. Pipeline breaks further reduce the value of the transfer to households. In 2008, for example, there were only 159 school feeding days out of a planned 199 and the consequent reduction in food consumed results in the value transfer being reduced by approximately 20 percent from the planned D677 to D541 per beneficiary per year, and from D1,628 to D1,301 per household per year (based on the BCG derived estimates)[37]. It is noted that students have been receiving half rations throughout

[36] Average annual incomes for the different groups calculated with data from this study's HHS are: Least vulnerable – D56,000; Somewhat vulnerable – D17,695, Most vulnerable – D14,233

[37] The section on the implementation of SF in Gambia estimated that actual delivery of food against planned was approximately 78% across the period 2002-2009 which, as a proxy estimate for pipeline breaks is consistent with the estimate for 2008.

2010 as a result of budget shortages, resulting in a halving of the value transfer during this period.

60. It has been mentioned in paragraph 25 above that many teachers, head teachers and cooks also eat from the WFP ration (without making any contribution). With the allocation to schools being based on enrolment, but taking into consideration stocks left over at the end of each term, this can mean that the amount of food available for students is reduced, and thus the value transfer.

61. **Children's Contributions.** Children's contributions also serve to reduce the size of the value transfer, particularly where this is made in cash. Respondents to the evaluation's household survey reported an average of D372 per annum is being paid by households in cash contributions to WFP-supported school meals for an average of 2.4 children per households. This direct cost represents a reduction in the value transfer of the school meal and might be applied to the figures on value transfer above, although the contributions are reported to be commonly used to purchase condiments, fish, meat and vegetables which, increases the value of the meal.

62. **Children's Alternative Use of Time.** Children often work on family farms from a relatively young age, and their attendance at school represents a loss in labour at home. On average 53 percent of all households in school feeding areas with children in school indicated that if they were not in school, the children would be working at home. The percentage was higher for the most vulnerable groups (60 percent) but just above 50 percent also for the least vulnerable group. This reality results in an additional "cost" for households that decide to send their children to school for the school meal, but would not have done so otherwise. However, it is not possible to quantify the number of children this applies to as the responses may not have applied to all school-aged children in the household. The second most frequent response was that the children would be playing if they were not at school (Figure 5 below).

Figure 5: Children's Alternative Activities

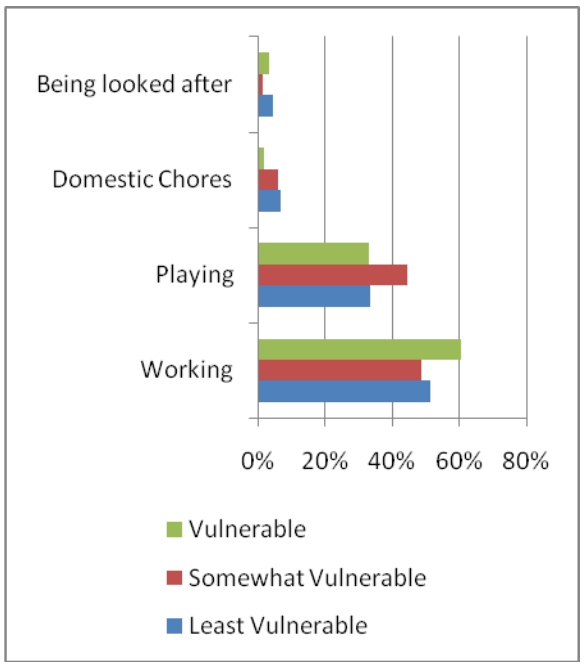
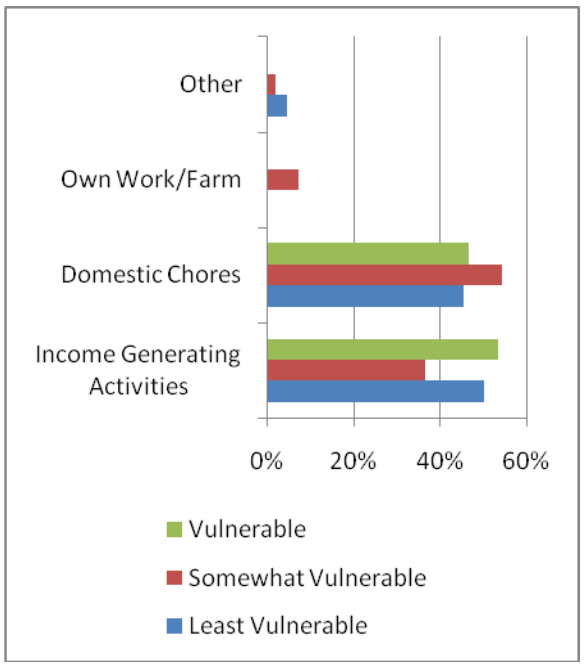


Figure 6: Caretakers' Alternative Use of Time



Source: Evaluation Team, Household Survey 2010.

63. **Caretakers' Alternative Use of Time.** Households also benefit from the fact that they have more time available to do other things when their children are at school. 53 percent of the most vulnerable group, 44 percent of the somewhat vulnerable group and 50 percent of the least vulnerable group reported engaging more in income generating activities and work/farm work (Figure 6 above). While Figures 5 and 6 above are based on two separately asked independent questions and present different perceptions, perhaps somewhat contrasting.

64. **Potential Savings.** Although the amount of the direct value transfer represents an increase in the overall household budget, different households react in different ways when taking this into account for the student's overall food intake as well as the household's overall expenditure on food, in that when a child eats less at home, potential savings can be made. More than 50 percent of all groups said their children eat less at home (see paragraph 45) and households could make food savings, but 68 percent of households responded that they prepared the same amount of food whether the children ate at home or at school and thus did not materialize savings. 31 percent of respondents indicated that they prepare less food at home on days when children eat at school (almost exactly the same across the 3 vulnerability groups), some food savings (although not quantifiable) will have occurred for households; savings on food expenditure was the most frequent response (57 percent on average) when asked what were the main benefits to the household from the school feeding programme. It appears that this benefit accrues to the least vulnerable households slightly more often than to the most vulnerable (although any food savings made at home may be more significant to the most vulnerable households due to their higher vulnerability status). It is to be noted that the survey took place in 2010 during a year when, due to pipeline breaks, the meal ration has been 50 percent of that intended. Responses that children eat less at home after eating at school may therefore be lower than when school meals are provided at full ration.

65. **Informal Family Safety Net.** It is also noted that in the non-school feeding group, 62 percent of the most vulnerable group respondents and 66 percent of the somewhat vulnerable group respondents are likely to receive support from household members who move away from home, more than the least vulnerable group (46 percent). This was slightly different for the school feeding group, where a higher percentage of the least vulnerable group (55 percent) still received some support.

3. How Does School Feeding Create Impact in The Gambia?

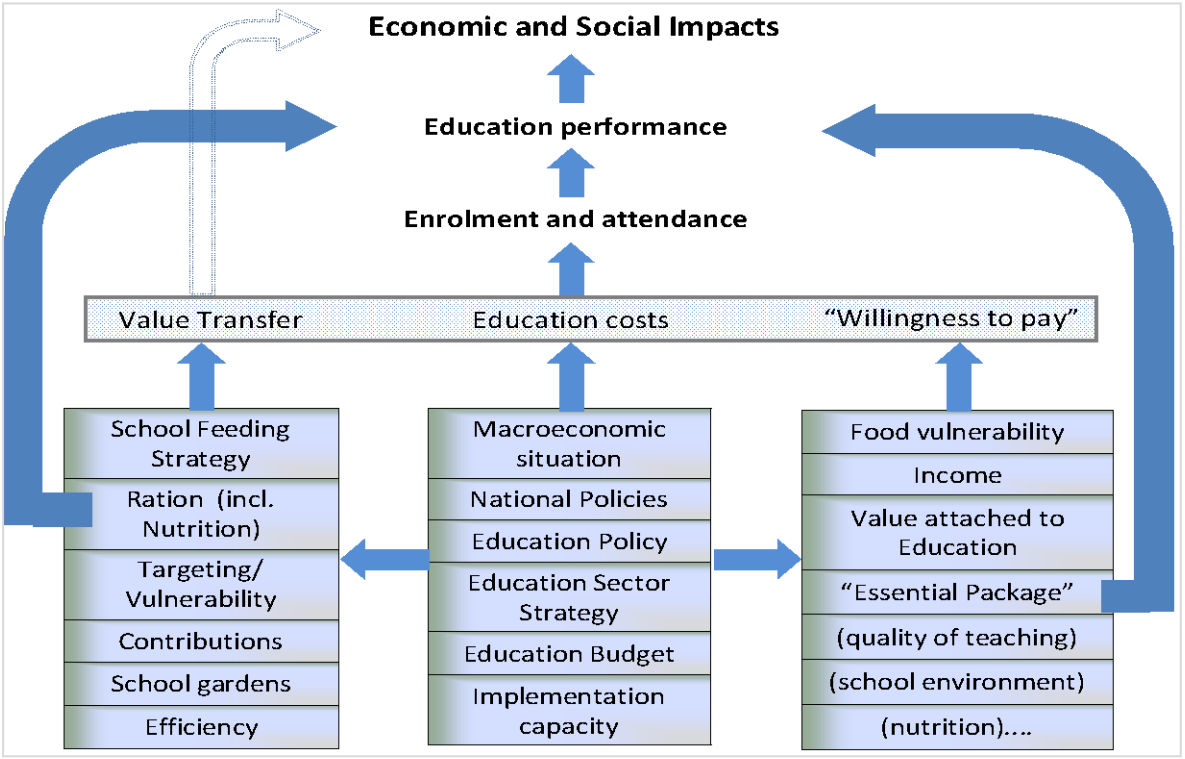
66. A child's access to the school meals depends on a number of contextual and implementation factors, including the school calendar, which runs for 9 months; absenteeism of students for a variety of reasons; inability of some students to afford the contribution required for the school meals; number of days food is cooked; reduced ration to school children as school staff also eat; management of food once delivered in schools; as well as pipeline breaks and delivery delays. Figure 7 below provides an overview of the range of factors that combine to influence higher level impacts, and the following sections set out and describe the role of contextual and implementation factors (individually and combined) in influencing the scale of impacts on participation and performance in the education system as well as the extent to which social and safety net objectives are achieved,

67. Household decisions on whether to send children to school are influenced by a wide range of factors, as illustrated in Figure 7, which are complex and differ

according to each household's circumstances. Within the context of a school feeding programme, these factors can be grouped into three categories:

- The scale of the value transfer represented by the school meal which acts as an incentive for both enrolment and attendance, particularly for poorer households. This will be influenced by implementation factors, such as community involvement e.g. the role of food management committees and the strength of linkages of the programme's interactions with existing institutional setups such as village and/or ward development committees, as well as the efficiency of transport mechanisms and management of school level feeding by head teachers;
- The costs incurred by households when actually sending their children to school. These costs are influenced by the wider macroeconomic situation and government revenues, effectiveness and efficiency, education sector policies and strategies (regarding school fees, uniform, distance to school and cost of school meals);
- The willingness and ability of households to send their children to school and pay the required costs, influenced by general attitudes towards education, households' circumstances regarding income and food vulnerability, the quality of teaching and learning, the school environment and the physical infrastructure etc.

Figure 7: School Feeding Impact Framework



68. External contextual factors include those such as school costs, the quality of teaching, the likelihood of better employment opportunities, religious resistance to school, etc., all of which are outside the direct control of WFP (although advocacy inputs and partnership working facilitates its influence). Contextual factors and their

implications for the school programme are detailed in Section 3.1, implementation factors in Section 3.2 and the interplay of both in Section 3.3.

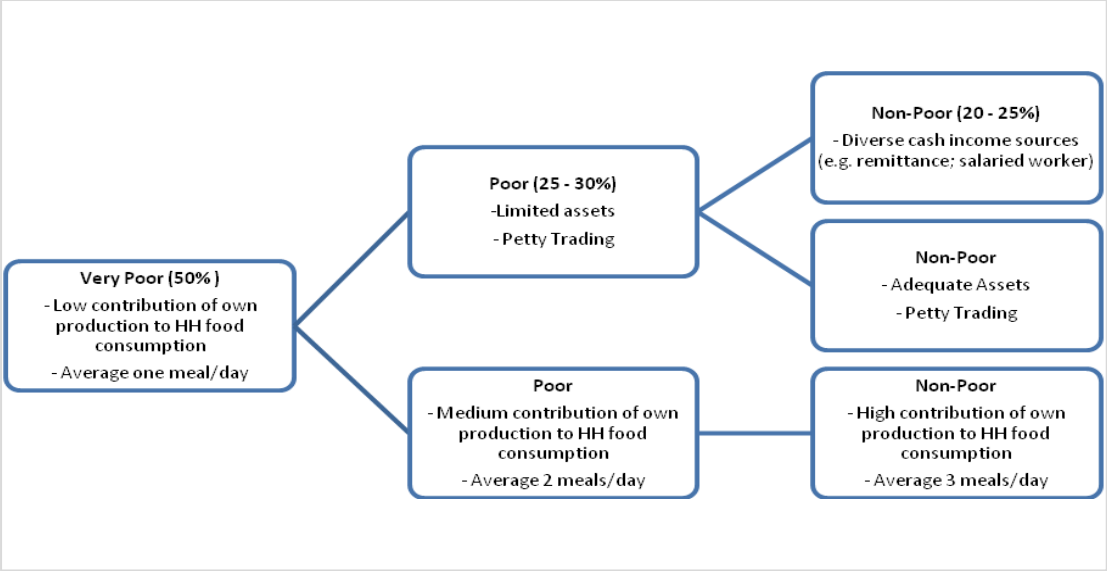
69. Finally, the overall macroeconomic and education policy/strategy environment, as well as being the key determinants of the direct costs of education for households, will also play a significant influencing role on the overall approach to school feeding. Looking forward and in the context of WFP's strategy to support and develop national school feeding programmes, Section 3.4 provides an assessment of the status of these and other aspects which determine the potential future sustainability of school feeding in The Gambia.

3.1. The Role of Contextual Factors

70. There are a range of contextual factors that influence households' decisions to send their children to school. Higher costs do not necessarily preclude poorer households from sending children to school if other factors carry a high weight in their view. It is the strength and relative weight of these factors that bear on households' ultimate decisions. The factors include poverty and food security of the households, the affordability and cost of education, the value attached to education, the quality of education, and resultant future prospects that result from better education.

71. **Poverty and Food Security.** According to the recent PSIA study (2010), wealth and region are strong influences on whether children attend school. The report states that children (ages 7-15) in the lowest wealth quintile are 27 percent more likely to be out-of-school than are those in the richest quintile, and those in the rural areas of Janjabureh and Kuntaur are almost twice as likely to be out-of-school than are those in the urban areas of Banjul and Kanifing. (However, there are also predominantly urban areas in Janjabureh and Kuntaur and data was not made available regarding school attendance in these urban parts of these rural areas.) Figure 8 provides a profile of households' wealth ranking and some their characteristics in the sample communities.

Figure 8: Differentiating Factors between Wealth Groups in Sample School Communities

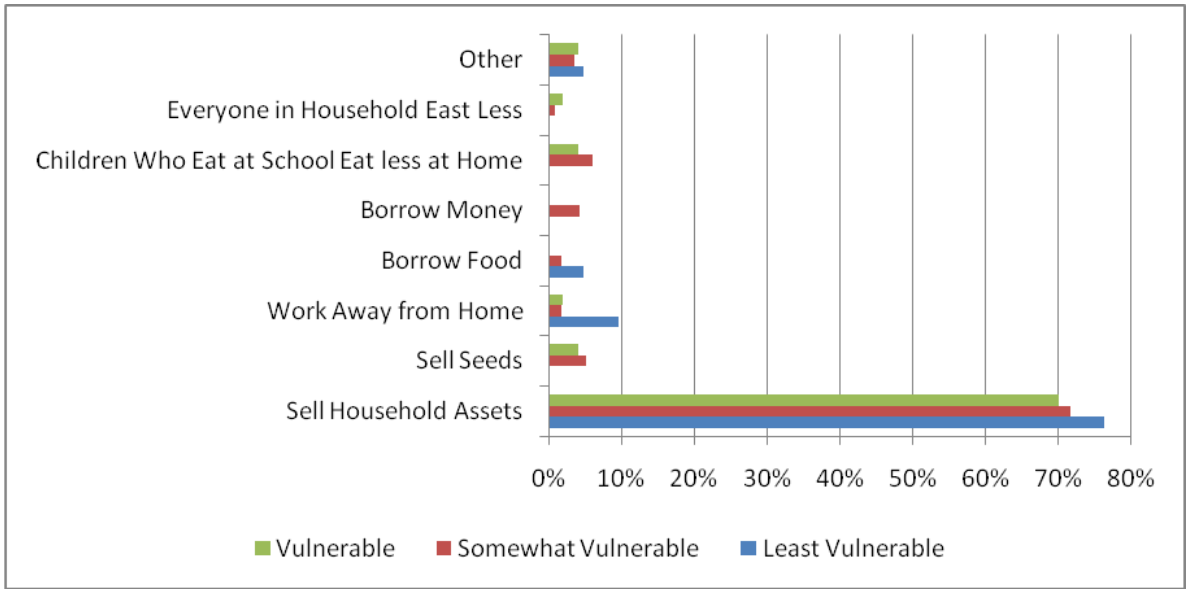


Source: Evaluation Team, PRA.

72. The least vulnerable group in both the school feeding and non-school feeding samples had a higher percentage of respondents indicating that they had never experienced food shortages, but the percentage was lower in the school-feeding group (44 percent vs. 59 percent). The least vulnerable groups clearly have income streams that mean they experience food shortages less often than do the somewhat and most vulnerable groups.

73. Among the households benefitting from school feeding, of the 56 percent that experience food shortages the most commonly used strategies of the most vulnerable group are: selling household assets, children who eat at school eat less at home, selling seeds and working away from home, followed by everyone in the household eats less as indicated in Figure 9 below. Selling seeds is likely to be a somewhat negative coping strategy as it puts the following year's food production levels at risk if the household is unable to replace them.

Figure 9: Coping Strategies of Households with School Feeding



74. Over the period 2001-2010, data suggests there has been an improvement in households' situations in the school feeding areas regarding reliance on coping strategies with 57 percent of respondents to the survey from the school feeding group (as against only 32 percent from the non-school feeding areas) indicating they rely less on such strategies now as compared with 2001. In the school feeding area, 87 percent of the most vulnerable group indicated that they had not changed their coping strategies since children began school feeding, as compared with 77 percent of the least vulnerable group, and in the non-school feeding area, a higher percentage of the least vulnerable group said that they had had to rely on these coping strategies more often. The differences between the least and most vulnerable groups are relatively small, which may suggest that the size of the school meal is unlikely to have any significant effect on coping strategies. Also, any differences between school feeding and non-school feeding areas are unlikely to be related to the effects of the school meal but rather by differences in livelihoods of the two groups.

75. The food and fuel price crisis of 2008 also affected food insecurity in The Gambia, but the WFP analysis[38] also showed that it was only one of several factors affecting food insecurity in the country. Other factors were diminishing cereal production, increasing urban poverty, declining income from the groundnut industry, declining tourism sector, and declining re-exports (WFP/Gambia, 2008).

76. **Affordability of Education.** The key determining factors related to food security and income were the ability to afford education-related expenditures and labour constraints. The PRA study indicates a clear correlation between these two factors and the level of vulnerability. Similar findings came from the 2003 VAM study, where the majority of the most vulnerable households had only 2 sources of income with more than 27 percent having only one. Labour constraints featured highest in Regions 2 and 3, which also had the highest percentages of food-insecure populations.

77. **Cost of Education.** While there are no fees to attend primary school, there are costs associated with sending children to school such as the cost of uniforms, books and materials, transport etc. which households are expected to pay and which they will take into consideration when deciding whether to enrol their children. This evaluation's household survey found that the average annual costs across households were D2,266 for households sending children to schools with school meals, and D2,697 for those sending children without school feeding. The difference between the least vulnerable group's expenditure and the most vulnerable group's expenditure for education is more pronounced among the households that benefit from school feeding: the least vulnerable mean expenditure is D3,119, as compared to D1,718 for the most vulnerable. The range among households without school feeding is between D2,933 and D2,384.[39] Table 10 provides the details. Overall, expenditures are for school meal cash contributions (D372); vendor food (D836); and other education costs such as uniforms, books and materials, transport, etc. (D1,057). The mean household income calculated from the household survey data is D23,317 per annum.[40]

38 WFP is considered the focal point for food security, within the UN Agencies (Aide Memoire, 2008). WFP efforts to fill in information gaps on analysis, consolidation and dissemination of information collected by various government departments provided a strong foundation for the formation of the task force created and the inter-agency assessment mission, both of which eventually led the government endorsed food security and safety net interventions (CAP, 2009, GNAIP, 2010). A VAM position, financed from a EU trust fund in response to the high food crisis (2010), should allow the CO to collect data on and better understand vulnerability issues in the country. WFP initiated some consensus-building processes on vulnerability through a workshop to identify food security indicators, and a VAM study is planned for the end of 2010.

39 These are computed figures from the household survey and data to explain the differences is not available. A possible explanation for the difference in mean expenditures for different vulnerability groups is that children from more vulnerable households would be clothed in cheaper uniforms, spend less on vendor food etc. As regards differences in the school feeding and non-school feeding areas, higher expenditures in the non-school feeding areas are probably explained by the fact that a relatively high number of respondents were in Region 2 closer to the urban areas where costs of consumer items would be higher.

40 The Gambia Bureau of Statistics indicated that there is no comprehensive income data available in Gambia.

Table 10: Average Education Expenditure for Groups with and without School Feeding

	With School Feeding			Without School Feeding		
	Mean	95 Confidence Interval for Mean		Mean	95 Confidence Interval for Mean	
		Lower	Upper		Lower	Upper
Least vulnerable	3,119	2,239	4,000	2,933	1,996	3,869
Somewhat vulnerable	2,260	1,937	2,582	2,668	2,199	3,137
Most vulnerable	1,718	1,416	2,021	2,384	1,550	3,218
All	2,266	2,014	2,518	2,697	2,315	3,078

Source: Evaluation Team, Household Survey 2010.

78. Among the households that benefit from school feeding, the average education expenditure per annum for the most vulnerable households (D1,718) is the same as the value transfer figure for the school meal using local prices in 2008. This means that school feeding does not result in a net value transfer.

79. The cost of education represents a significant proportion of families' income. Table 11 shows that education expenses are twice as much of vulnerable and somewhat vulnerable households' income as they are for households in the least vulnerable group. When education expenses represent more than 10 percent of a household's income (in spite of the fact that there are no school fees to pay when a child is in primary school), it is likely that a number of the more vulnerable households may decide not to send their children to school for direct financial reasons alone. The PRA and other sources found that the cost of schooling was given by 64 percent of households as the reason why children did not attend school. The dramatic increase in the enrolment of girls is impressive, and the availability of scholarships was considered by many informants to have played a major role in their enrolment in school.

Table 11: Education Expenditure as Percentage of Income (School Feeding Households)

	Mean education expenditure	Mean income/Dalasis	Education expenditure as % of income
Least vulnerable	3,119	56,000	6
Somewhat vulnerable	2,260	17,695	13
Most vulnerable	1,718	14,233	12
Most vulnerable*	1,429	14,233	10
All	2,266	23,317	10

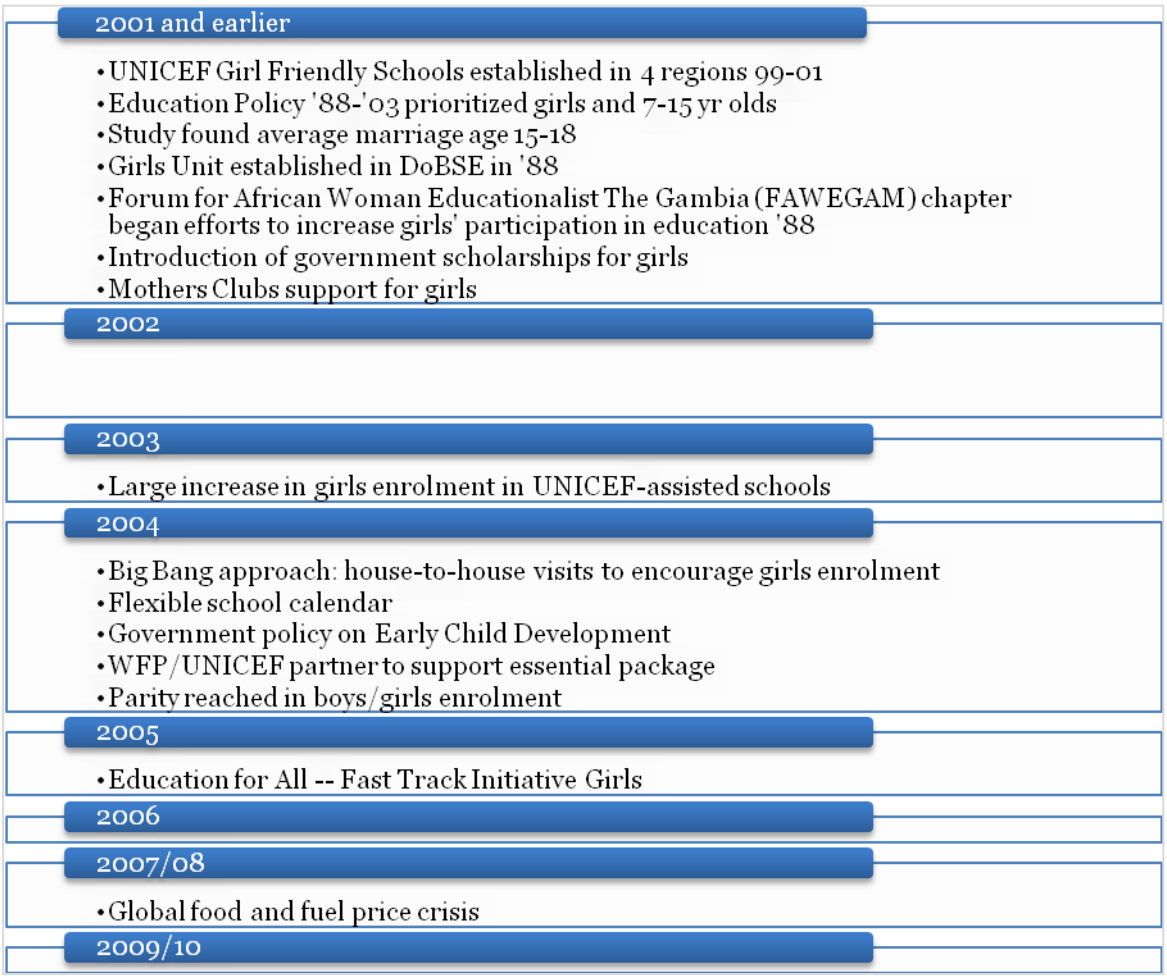
* Assuming no expenditure on vendor food.

80. **Value attached to Education.** Households have multiple objectives for sending their children to school. Interviews with teachers and head teachers found that the top two were related to quality of schooling and parents' desires for inter-generational advancement. The PRA found the increased community value of education is parents' greater awareness of its importance and their view that education is likely to lead to better and more employment opportunities, as discussed

further in paragraph 88 below. Most parents have limited[41] or no education which limits their abilities to reinforce school learning at the household level, and may negatively influence attitudes vis-à-vis children's enrolment and attendance. Religious resistance to traditional schools has been a major reason for not sending children to school, particularly in rural areas, so now that madrassas must adopt the national curriculum and offer English language by a qualified teacher, children attending these schools are likely to benefit from a higher quality of, and more well-rounded, learning experience.

81. **Quality of Education.** Several factors related to education both encourage and discourage children's school enrolment and attendance, as well as parents' willingness to send their children to school. Changes in enrolment rates correspond to efforts of the Government and its partners to invest in the education sector (see paragraph 15 above) in the latter years of the 1990s and the first half of 2000s (see Figure 10 below). Once these efforts waned, so did enrolments.

Figure 10: Factors Influencing School Enrolments



82. The large number of unqualified teachers and very little learning occurring in schools continues as a powerful disincentive for enrolment, attendance, completion and continuation to higher levels of schooling. Although very few classrooms were observed for this study, the few that were, were clear examples of teaching that not

[41] Nationally only 13% of the population has completed primary level while those with no education are the majority at 54% (Source CSR).

only did not contribute to learning, but also was quite boring, which in itself can be a powerful disincentive to attend school. These few classrooms may not be the norm, but considerable assessment and examination evidence confirms that little learning is occurring.

83. Head teachers and teachers were asked by the evaluation team to provide their assessment of factors contributing most to enrolment, attendance and learning in schools. One notable finding is the very high numbers of teachers and head teachers who said they believed that "good quality teaching" is one of the main reasons students come to school. This finding is somewhat contrasted by the recent examination given to teachers, which showed very limited content knowledge in mathematics and English, and virtually all examination and assessment scores of students are extremely low (see paragraph 38 above). School feeding was the fourth most likely choice given, superseded by "good quality teaching", which received 49 votes across the 21 schools with and 23 schools without school feeding. "Parents think it's the best way to get ahead" received 33 votes and is discussed further in paragraph 89 below, followed by "a supportive school environment" (20 votes). Table 12 below provides the details.

Table 12: Main Reasons for Children Coming to Schools

Reasons for children coming to school	With School Feeding		Without School Feeding		Total
	Teachers	Head Teachers	Teachers	Head Teachers	
Good quality teaching	8	13	11	17	49
Parents think it's the best way to get ahead	10	4	15	4	33
Supportive environment	3	4	7	6	20
Meals at school	6	9	0	1	16

Source: Evaluation Team

84. The education sector in The Gambia is fortunately benefiting from the leadership of a highly committed Permanent Secretary and participation in the CSR process, which together are rapidly moving the sector to levels of greater efficiency and effectiveness, in part based on greater use of data-based decision making, which has been shown to be a highly effective approach to making ongoing improvements in any sector. The monthly meetings being held at the Regional Education Directorates (REDs,) with the input of various donor agencies (including WFP), cluster monitors, and regional directors, are a very useful process to support ongoing reform and accountability. An example of the leadership and partnership is evident in enhanced access to schools whereby through infrastructure development almost all students are now living within 3 km of a school.

85. The Whole School Development pilot, which has introduced guidelines for school improvement planning and US$500 grants for school improvement planning and implementation, holds substantial promise for large-scale reform of the education sector, as does recent requirements that all teachers must be qualified to teach, or at least actively working toward becoming qualified. Basic education support for poverty reduction and the Gambia teachers college efforts to develop head teachers' skills as school managers and as instructional leaders also will serve as a positive force. Considerable research worldwide has shown that whole school development,

strong school leadership and skilled teachers are the most powerful influences for improving school quality.

86. Poor quality record-keeping on the part of head teachers, and those responsible for monitoring their record keeping (cluster monitors and REDs) preclude efforts to draw valid conclusions regarding the effectiveness of any educational programme, and undermine WFP and SAFMU's management of accurate food ration distribution.

87. When 44 teachers and 44 head teachers were asked to give the two top factors that they believe influence student learning, the greatest number said they believe it is the support of teachers and administrators (43), followed by the quality of teaching (37), and the encouragement of parents (33). School feeding was fourth in place but with considerably fewer votes (12). Improved instructional materials and better qualified teachers were seen as the most important contributors to improved education quality.

88. The high number of "support from teachers and administration" responses is consistent with students' responses when asked why they come to school. All students in both groups reported that they "like to come to school", and the overwhelming reason given for liking school was, "I like to learn" (102 respondents from schools with and 91 respondents from schools without school feeding). A distant second reason for liking school was "to get a good job" (15 with and 24 without school feeding). School feeding was not considered to be one of the top 3 things that improve learning and continuation in school.

89. **Timing of School Holidays.** The summer months in Gambia are characterised by food shortages when stocks from the previous year's harvest have been exhausted. This period coincides with the long summer holidays when children are not receiving food at school and households therefore have to provide greater quantities at home. So while the savings on food made by households can assist with prolonging their food stocks, the issue of the timing of the school summer holidays coinciding with the hungry season limits the benefit. This is particularly the case for the most vulnerable households: 44 percent of which said they have to prepare extra food in the school holidays, compared with 41 percent of somewhat and 23 percent of least vulnerable households. This factor affects the nutritional and value transfer outcomes of the school feeding programme.

90. **Employment Opportunities.** According to PRA respondents the key explanation for the increased community value placed on education, which translates into higher enrolment rates, is parents' increased awareness of its importance and their perception that education likely leads to better and more employment opportunities. This finding was corroborated by the survey of teachers and head teachers who ranked parents' perception of education as a means to get ahead second (see Table 12 above), but a marked contrast to students' motivation where a much smaller proportion of respondents felt school would help them get a good job, although the students interviewed were quite young (see paragraph 88 above).

91. Households' most senior female members emphasized employment opportunities that enable graduates to support the family. They considered the following to be examples of occupations obtainable with varying levels of education:

- Grade 9 completion (which requires sitting for exams): join the police force, teach or work as a secretary.
- Not completing Grade 9: Masonry, carpentry, driving and gardening.

- No schooling: Unskilled labourers (e.g. digging wells), farming, skilled workers (e.g. driving), petty trading, and gardening (e.g., maintain an orchard).

92. However, employment evidence shows that students who complete higher levels of schooling tend to be underemployed – which undermines one of the major reason for going to school. Recent CSR data shows that unemployment and underemployment rates are high among people having UBS, SSS or vocational training, and a very high proportion of SSS and university graduates are employed in the non-formal sector (Table 13). This situation may reveal a mismatch between education and labour market needs, but it also reduces the incentive for schooling.

Table 13: Employment Situation and School Achievement (ages 15-59) in percent

Highest education level attained	Formal Job	Non Formal Job	Unemployment Rate
No Education	8	89	3
LBS	12	82	6
UBS	34	49	17
SSS	27	56	17
Vocational Training	43	41	16
Higher Education	58	35	7
Total all levels	16	76	8

Source: Evaluation Team

3.2. The Role of Implementation Factors

93. Just as much as factors external to the school feeding programme influence decisions of parents to send their children to school or not, so do aspects that are within the control of the school feeding programme and its implementers. In addition, the magnitude of educational, nutrition and value-transfer outcomes and impacts depend on how the school-feeding programme is designed, implemented and managed. These factors are discussed in detail below and include targeting, choice of partner schools, [the design and implementation of the programme], and resource levels.

94. **Targeting.** Nationally, rural areas are significantly worse off on poverty, food security and/or educational indicators than urban areas (PSIA, 2010; MEPID, 2010), although urban poverty is also increasing (WFP/CO Executive Brief, 2009). Within rural areas depending on whether one takes educational or food security indicators, the regions can more or less be divided into two. Based on food security indicators, Regions 4, 3 and parts of Region 2 (East) would be the regions to target (in that order), while if based on educational enrolment, the regions to select would be 6 and 5, where parents are concerned about their children becoming Westernized if they go to a traditional school (PSIA, 2010) (WFP/VAM, 2003). WFP school feeding targets all official rural schools (all regions, except 1 and parts of 2) over the evaluation period and some urban schools were included during different periods. Differences are less well understood between districts in a given region and certainly between neighbouring communities (PSIA, 2010). If the school feeding programme selected only certain schools within a district, a pull effect between schools could over-stretch schools resources (not to mention the logistical challenge of delivering small quantities of food to individual communities widely dispersed). This pull effect is likely to already be happening between madrassas with and without school feeding,

because only a few of the total number in any of the districts and regions are included in the school feeding programme.

95. Within schools in any of the regions in rural areas, the variation in terms of a households' wealth and their food insecurity situation appears to be quite marked – as shown by the fact that some children struggle to pay for the 50 bututs, while others can afford to spend 5 dalasis or more for lunch from vendors or choose other food sources over the school meal as discussed in the section on value transfers (2.3) and on external factors (3.1) above.

96. The majority of households in the household survey fell into the lower two vulnerability categories (approximately 74 percent non-school feeding and 84 percent of school feeding households). Female-headed households in the school feeding group were quite similar to all households receiving school feeding, but a much higher percentage of them were in the "most" and "somewhat" vulnerable categories, and far fewer in the "least" vulnerable than in the non-school feeding sample. From a targeting perspective, this suggests that there is a degree of inclusion error in the programme targeting strategy, with 16 percent of the relatively well off households also benefiting from school feeding.

Table 14: Female headed households by vulnerability category

	Female headed households		All households	
	School Feeding %	Non-School Feeding %	School Feeding %	Non-School Feeding %
Most vulnerable	25	16	24	12
Somewhat vulnerable	61	55	60	62
Least vulnerable	14	29	16	26

Source: Evaluation, Household Survey 2010.

97. It appears significant that those households in the school feeding sample that have primary school aged children but do not send their children to school (20 percent of households sampled and 23 percent of children) fall into the lower-wealth categories in terms of income, assets and number of months their food lasts throughout the year, implying that these are the poorest households with the least ability to pay the additional education costs required.

98. **School Characteristics of Partner Schools.** The local data collection team visited 44 schools during the course of this evaluation, including those distributing school meals and those without. The schools have the following characteristics:

- Only three of the head teachers were female. This could be explained by the fact that some women may be less willing to work in remote rural areas.
- Twenty-three of the schools, twelve of which distribute school meals, reported that they are participating in externally funded special programmes, mostly for maintenance or renovations of school kitchens, classrooms or libraries. What is notable is that none reported school feeding as an externally funded special programme.
- Twelve schools with and fourteen schools without school feeding have more than one shift. The majority of schools with school feeding reported that

students attended class between 3 and 5 hours per day, while twice as many schools without school feeding reported that students attend school for more than 5 hours a day. This means that schools without school feeding, at least in this sample, have almost twice as many hours per day devoted to learning. It is quite possible that these differences are due to not having a truly comparable control group. It's likely that schools closer to the major urban areas, such as many of the control schools in Region 2, are more likely to attract a sufficient number of teachers to offer a full course load and more hours of teaching per student. Considerable evidence worldwide confirms that students learn more then more hours they are "on task" – longer school days and longer school years, and efficient use of time during class. It may be possible or even advisable to have learning time be a criteria for selecting schools for participation in school feeding.

- The official teacher-student ratio at the primary level is 1:45 (1:60 in madrassas), but many of the schools reported far fewer students per teacher (5 schools with ratios 1:25 or less and another 5 with 1:35 or less). Only one school with school feeding had over 45 students per teacher, while 6 schools without school feeding did. This raises the question as to why so many school feeding schools have split shifts, when if they didn't, students could benefit from more learning time.
- Twelve ECDs with school feeding had teacher-student ratios over 25 – very high for that level of schooling. One reported a ratio of 1:45, a second of 1:47, 4 with a ratio of 1:52, and another with a ratio of 1:53. These are inappropriate numbers of students per teacher at this young age.
- A majority of the 44 teachers interviewed had completed college (31 of the 44), although far more of these were teachers from schools in the control group. This may be due, in part, to the fact that a number of the control schools were UBS schools, where required teacher qualifications are somewhat higher than for primary levels.
- Most teachers reported having a Primary Teaching Certificate, which is completion of SSS and 1 credit and 3 passes on the West African Senior School Certificate. A number of teachers in schools without school feeding reported having higher degrees (diploma, bachelors and master's) and thus be better qualified teachers. Apparently the government has been providing incentives to attract more qualified teachers to more remote areas, which are likely to be school feeding areas. The fact that schools without school feeding have more qualified teachers is likely contribute to increased learning in those schools.
- Six of the schools with school feeding indicated that they could not accommodate any more students, compared with only two schools without. Of the three schools that reported that more students are asking to enrol in their school, all reported that this is because their students perform well on examinations. None reported that it was because the school served meals.
- Overall twenty-two schools of which nine benefitted from the school-feeding programme reported that "fewer" students are asking to enrol in their school. This is consistent with the overall decline in enrolments at government and grant-aided schools.

99. **Programme Design and Implementation.** The evaluation found a number of factors that were rooted in the design and implementation of the school feeding programme and that affected its outcomes and impacts. For instance, Food Management Committees commented on factors such as the quality of food, inadequacy of cooking utensils and lack of adequate incentives for cooks, reductions in food rations and late arrivals of supplies. The main determining factor affecting the scale of the value transfer from the school meal is the size and value of the food consumed, although a range of other factors as set out in Table 15 affect the scale of the value transfer. Among them are some design issues (for instance, the value of the school meal being equal to the value transfer, the contribution of children to the meals) and implementation issues such inclusion errors, de facto exclusion of some children, etc.

Table 15: Factors affecting ultimate transfer value of the school meal

Factors that reduce VT	Factors that increase VT
Absenteeism	Direct transfer from school meal ration
Pipeline breaks[a]	Nutritional value[b]
Non-target beneficiaries eating (e.g. teachers)	Time available for other activities
Children's contributions	Savings on household food budget
Target beneficiaries not allowed to eat	Reduced healthcare costs
Opportunity cost of "lost" labour	Decreased reliance on negative coping strategies
Losses (from spoilage, misappropriation[c]	

[a] Pipeline breaks refers to when meals are either not prepared at all or at reduced rations and can be the result of lack of funding, logistic problems or poor school meal management
[b] Nutrition impacts are discussed in a separate section
[c] Misappropriation refers to theft at any point along the supply chain. These appear to have been limited under the programmes reviewed and measures to reduce them are discussed under the section on Capacity Building

100. **WFP Capacities**. Lack of capacity in the CO has probably been the most important factor that affected implementation over the lifetime of the school feeding programme in The Gambia. Without adequate personnel, the CO has been limited in its programme coverage. As a small CO with predominantly small development projects programming capacity has been limited by the funding model described above. This point is made clear when one compares the difference in number of programme staff in the three projects under evaluation.[42] In the current project, programming capacity has been expanded by getting "extra hands" through options available for temporary positions/support at the corporate level (such as interns; fellowships and staff on temporary duty from headquarters and other COs within the region).

101. **Government Capacities.** The human and financial resources available to the School Agriculture and Feeding Management Unit (SAFMU) are limited and, to date,

[42] Community Based School Feeding (1999 – 2004) had 1 Country Director (CD) and two programme staff but no Head of Programme (HoP). The Support to Basic Education Phase I (2004 -2007) had 3 different CDs (and a gap of at least one year without CD where the HoP was also Officer in Charge). The Support to Basic Education Phase II (2007 -2012) has had more or less the same CD and HoP over its lifetime so far. It has also had between 5 – 8 programme staff; two among whom have been with the CO for at least than 5 years, which facilitates institutional knowledge.

the unit is not carrying any real authority.[43] There are still concerns about the perception of the school-feeding programme being a WFP-owned initiative rather than government owned. Until this is resolved, and government actors at national, regional and community levels are fully involved in the development, implementation and review of all aspects of the programme (with authority as well as responsibilities), such issues are likely to remain. Currently SAFMU and the REDs are charged with some responsibilities for planning, implementing and monitoring the school feeding programme but with no authority, despite earlier, but unsuccessful attempts to hand over authority. Moreover, WFP staff providing capacity-building support to SAFMU are physically separated from their counterparts, just as SAFMU is physically separated from the rest of the MoSBE. Both of these situations are less than ideal and further undermine the perception of a government-owned and managed school feeding programme.

102. **Monitoring Data**. As observed in various places of this evaluation, data limitations are significant and negatively affect the way in which the school-feeding programme can be managed in ways that ensure outcomes and impacts are achieved and maximized.

103. **Resource Levels**. Another important factor that has affected implementation of the school feeding programme and with that the extent to which it could generate outcomes and impacts is resource shortfalls, especially since the global financial crunch. High food prices on international markets presented the CO with a double challenge: the increasing operational costs of the school feeding programme in relation to the reduced quantity of food commodities and the need to monitor the impact of the price surges on food security of communities (WFP/Gambia, 2008; WFP/Gambia 2010). Details of resource shortfalls were set out in Section 1.3 above and their effect on the value transfer to households is discussed in Section 2.3 above. From the information provided, resource shortfalls of 10-20 percent per annum, or more in some cases, are not uncommon in The Gambia and any consequent reduction in the value transfer serves to diminish the incentive for households to send their children to school.

104. **Funding Model**. Until 2009, WFP used a resource allocation model to allocate the funds for food, logistics, direct support costs and the other direct operational costs to development projects. While the model used different parameters to allocate the resources, these did not necessarily take into consideration specific CO or project requirements or situations. Consequently, development projects had certain maximum levels within which a CO had to maintain its project support costs. Smaller COs, in particular, faced difficulties funding even one additional international staff from the project budget. Nonetheless, the tasks and workload in a small CO are similar to those of a larger sized CO (advocacy; vulnerability studies; monitoring; and other project management aspects such as- development of tools; coordination etc) but with much fewer staff. Since 2009, WFP resources are now allocated on a case-by-case basis, taking into consideration the CO/project specific requirements. However, once allocated to a CO, certain positions (and in turn certain tasks) may still not be filled if funding is not available.

[43] MoBSE at all levels is not in a position to make independent decisions on the management of the programme and some decisions (e.g. the selection of clearing agents for imported food supplies) does not involve MoBSE at all.

3.3. The Interaction between Factors

105. In practice, households weigh up a number of other factors in addition to these direct financial costs and benefits, and factors such as the value they place on education, income, religious values, food vulnerability, quality of teaching in school, school facilities etc. will play an important part in any decision to enrol their children in school.

106. For households with low incomes and at the "margin" in terms of valuing the other factors described above and currently are not sending their children to school, the incentive of the value transfer is likely to act as less of a magnet for school enrolment in the face of the additional education costs that must be incurred.

107. A household that values education in its own right and is relatively well off (compared with the poorest households), whose local schools are of good quality with good facilities etc. and that would likely send their children to school even in the absence of school meals (e.g. Household 1), the "willingness/ability to pay" would be at least equal to the education costs they would incur (D1,429) and the net value transfer would be the full value of the school meal (i.e. D1,710). However, for those households that place a lower value on other factors, have low incomes and are food vulnerable (e.g. example Households 2 and 3 whose "willingness to pay is D249 and D Zero respectively), the decision to send their children to school must weigh up the value transfer and education costs in light of their "willingness/ability to pay". In these theoretical examples, the net value transfer for Household 2 and Household 3 would be D510 and D281 respectively. Once the decision is taken to enrol their children and the "education costs" incurred, the extent of the value transfer will be critical in determining whether in fact the benefits for households do indeed outweigh the costs.

108. Pipeline breaks (and the other factors which act to reduce the value transfer described earlier in this section) can be extremely influential in this respect, particularly, for example, under the current situation in Gambia where half-rations are being applied and the gross value transfer is closer to D855 than D1,710.

109. As mentioned above, the most vulnerable group in the school feeding sample had a higher percentage of households not sending their children to school and these households are likely to have a lower "willingness/ability to pay". The PSIA 2009 report indicates that approximately 48 percent of households not sending their children to school chose not to do so for religious reasons and 26 percent did not because they were needed to work or it was too expensive to do so, which would similarly be reflected in a reduced "willingness/ability to pay". Within the context of enrolment levels in The Gambia, which have increased significantly over the period covered by this impact evaluation, the ability of the value transfer of the school meal to act as a magnet for these remaining households appears limited due to the strength of these other factors acting to reduce households' "willingness/ability to pay".

3.4. Sustainability

110. A set of 8 quality assessment standards, which are aspirational in nature, have been developed to guide the design and implementation of sustainable school meals programmes and these standards have been drawn on in order to assess the current status of the school feeding strategy in The Gambia. A more detailed assessment of

the status and progress made in the areas covered by the standards is provided in Annex 7 and this section provides a brief summary.

111. The main points that arise from this analysis are as follows:

- There is currently no documented and agreed strategy developed for moving towards a nationally run school feeding programme, although both government and the CO are fully aware of its importance;[44]
- While references to school feeding exist within various national and education policy and strategy documents, these are limited and there is no documented vision for school feeding for the future;
- Additional funding possibilities appear limited given the macroeconomic situation in the country and the already high level of funding provided by the donor community to education;
- A unit within the MoBSE has been established and is responsible for implementation of school feeding on behalf of the government. However, capacity is limited (see paragraph 101), though improving. High quality management and Monitoring and Evaluation (M&E) systems have been developed with strong support from WFP and integrated into government structures at national and regional levels, but issues remain with respect to the quality of data and information provided;
- Targeting is based on rural areas being the most food insecure and having the lowest enrolment rates, but flexible in times of crisis (it is noted that WFP is currently providing VAM capacity to improve targeting information and develop national capacity in this area;
- The country is a net importer of food with limited possibilities identified to date for local purchasing;
- Strong partnerships have been developed across the sector in terms of both policy and operational co-ordination. WFP's status as a strong partner for government is reflected in its selection as Lead In-country Donor for semi-annual joint education partnership co-ordination and review meetings; and
- Community capacity to support implementation is limited (but again growing with support from WFP in the form of training and food management tools.

112. WFP has been involved in supporting school feeding in The Gambia for 40 years. However, the country remains at a very early stage with regard to the Government assuming responsibility for the design, support and management of a programme aimed at meeting the needs of the part of the population that is most food vulnerable. The overall assessment is that the status is "limited" and significant inputs are likely to be required over the medium term to prepare the country for a "handover", particularly given Gambia's severe fiscal constraints. However, with the recently increased WFP/CO staffing levels and a firm commitment by CO leadership, considerably greater efforts have been made to strengthen the capacity and sustainability of Government ownership of the existing program, and WFP's recently articulated Quality Standards will facilitate this effort even further.

[44] A documented approach is essential as a management tool against which to monitor progress and assist both CO and MoBSE management in moving forward in developing a sustainable SF programme in Gambia.

4. Conclusions and Recommendations

4.1. Overall Assessment

113. **Educational Outcomes and Impacts.** The validity of the evaluation's findings in terms of the educational outcomes and impacts of school feeding have to be read with caution: data is limited and inconsistent/self-contradictory, so that it does not lend itself to rigorous analysis and conclusions. At national level, gross enrolment ratios stayed more or less constant between 2003 and 2009, but the different regions showed increases and drops in gross enrolment. The finding of the evaluation's household survey showed that at least in one of the regions, gross enrolment ratios were rising in schools benefitting from school feeding as compared to an overall decline in that same region. Net enrolment has overall improved during the evaluation period, including for girls enrolment which reached parity in 2004, which however cannot be solely attributed to school feeding as a large number of other initiatives took place during the early part of the decade. Reported attendance rates are highly unreliable and contrast the findings of the evaluations survey work, which showed that attendance rates are higher in schools without school feeding. This finding is counter-intuitive and not confirmed with qualitative feedback from various stakeholders.[45] School feeding's contribution to improved learning could not be demonstrated, given the overall poor test results of students in the Gambian education system, which both teachers and head teachers and the evaluation team attributed to other factors than school feeding.

114. **Nutritional Outcomes and Impacts.** There is clear evidence that the school meal contributes to students' minimum daily nutritional requirements when they are in school and are able to contribute, and there is some evidence from household respondents that students are more attentive and energetic because of the meal. It is also clear that the meal is perceived as being beneficial by all those interviewed, including many government employees who benefited from school feeding and cannot imagine it not being available to children now in school. However, there is also substantial evidence that many school staff are benefiting from school meals without contributing, while children unable to contribute are either denied the meal or stigmatized in a variety of ways for not contributing. Statistically significant greater numbers of students enrolled in schools with school feeding received deworming medication than did those in without school meals (69 percent vs. 52 percent). Based on household surveys, 2 percent of school feeding students and 3 percent of non-school feeding students were having difficulty seeing at night, a measure of night blindness and a proxy indicator for vitamin A deficiency. A 1 percent prevalence or above of night blindness in a population indicates a serious situation. The HDDS survey showed that only 58 percent households benefiting from school feeding consume vitamin A-rich foods as compare to 78 percent households that do not have children in school feeding programmes (a significant difference $p<.001$). The planned ration has a relatively low level of vitamin A fortification at 21 percent of RDA and the actual ration (averaging 78 percent 2001-2009 and 50 percent in 2010) had even less, 16 percent and 10 percent of RDA respectively. These findings suggest a need for continued implementation of strategies to address vitamin A deficiency for children of all ages, together with NaNA, UNICEF and other partners, and may warrant a review the ration composition for school feeding as well as further nutrition surveys of school-aged children.

[45] This result may be overstated by the lack of data on the non-attending children who never attended (out-of-school or not enrolled children).

115. **Value Transfer Outcomes and Impacts**. The school feeding programme is the only organised social safety-net mechanism available for systematically reaching the entire country. Many households suffer severe food shortages for several months of the year. However, approaching these shortages through school feeding to alleviate household hunger in the long run has its limitations since it does not operate during the most severe "hunger season" when students are on school break and food is most scarce. The value transfer to households varies by level of household vulnerability and is influenced also by pipeline breaks, which are increasingly frequent. The estimates made by this evaluation team showed that under best circumstances, the value transfer through school meals is close to the cost of education. But 40 percent of households' most senior females estimated that school feeding reduced the amount of food consumed, with the savings allowing some households to share food with more vulnerable ones or to save for the future.

116. **External Factors Affecting Results.** The effectiveness of school feeding, i.e. its ability to generate intended outcomes, and its impact have been limited by a number of external factors beyond the control of the school feeding programme itself. Most significant among these is the quality of education, which is both seen as the main draw for children to attend school but also one of the areas requiring improvement. The findings of the evaluation were not entirely conclusive on the extent to which poverty played an important role in the decision whether children attended school or not, although the percentage of out-of-school youth among the poorest quintile is highest. The extent to which food security, and with that safety net objectives, can be attained is affected by the fact that school holidays fall into the lean season when food insecurity is highest, meaning that children do not benefit from the school meal during the time when they and their families are most food insecure.

117. **Internal Factors Affecting Results.** Among the factors that are within the control of the school feeding programme – its design, implementation and management –that affect the programme's effectiveness and impact the most are recent allocations of funding and resources that provide the CO's with sufficient capacity to update studies on food insecurity at a national level, with partners, that would allow for more precise geographical targeting. Similarly, additional resources have contributed to the CO's recent efforts in developing the capacity of a range of actors in the school-feeding process, and in using a more sophisticated monitoring system.

118. **The 8 Quality Standards.** The sustainability of the school-feeding programme – its continuation rather than the sustainability of results – showed that there are many areas in which these standards are met to only a limited extent, despite a number of significant and laudable strides the CO has made to hand management and implementation of the programme over to the Government. These observations, together with the Government's need prioritize scarce financial resources to invest in a variety of sectors, affects prospects of the Government's capacity to assume greater responsibility for funding the school feeding programme.

4.2. Recommendations

1. Government, WFP/CO and Schools/Communities. Develop, disseminate and implement a policy on children's contributions and the appropriateness and consequences of school staff eating from the school meal.

2. Government, WFP/CO. Develop a formal school feeding policy and strategy leading to eventual handover of the SFP to the Government with specific dates, tasks

and objectives.

3. WFP/CO and other Donors. Provide technical assistance and fund other appropriate activities to further develop the government's capacity in managing and implementing the ongoing school feeding programme. Areas to be considered include: resource mobilization, procurement, and long-term technical assistance within SAFMU, and possibly locating WFP staff to work alongside SAFMU.

4. Government, WFP/CO, MoBSE, SAFMU. Explore ways to transfer more authority to appropriate units within the MoBSE/SAFMU, for example, participation in and decision-making authority on tender boards for clearing agents and transport companies, and full management responsibility for food allocation and delivery within a particular set of districts or a region.

5. Government, WFP/HQ & CO, MoBSE, SAFMU. Identify strategies for the ongoing SFP for more precise targeting of the most vulnerable and most food-insecure. In addition to tighter geographic targeting based on food insecurity indicators consider other targeting options related to educational achievement and nutrition objectives, such as:

- Providing meals to schools successfully pursuing Whole School Development, which would support the Government's efforts to improve educational quality;
- Reaching younger children through supporting a greater number of ECDCs may be a potent way of addressing both nutritional and educational objectives (links to recommendation 7);
- There are substantial and long-lasting benefits to individuals, communities, families and societies for girls completing senior secondary school. Perhaps school meals or take home rations would serve as an incentive for increased attendance at this level, although it is not clear whether there are a sufficient numbers of schools and qualified teachers to accommodate more girls/students at this level.

6. WFP/CO: Advocate with NaNA and UNICEF and other agencies addressing the underlying causes of malnutrition to collect data on school-aged children's anthropometric status, including Vitamin A deficiency and anaemia prevalence in school-aged children. Continued implementation of strategies to address Vitamin A and other micronutrient deficiencies for school-aged children is required and it may warrant a review the ration composition for school feeding.

7. WFP/CO and MoBSE. WFP/CO should cooperate with and support the ECD unit in conducting a baseline study of ECDCs. They have agreed to include measures (or questions) of the impact of school feeding in their study, which would allow for meaningful comparisons of schools benefiting from school feeding with those not benefiting, as well as provide WFP/CO with valid pre-post comparisons. Instruments used in this study have been forwarded to the ECD unit for consideration.

The following recommendations are not within WFP's area of responsibility, nor directly related to school feeding, but are likely to contribute to improvements in educational quality and accountability.

8. West African Examinations Council - Gambia (WAEC). Report national assessment test results at the school level rather than at the student level and report school-level results to communities, in comparison with other similar schools. If

communities don't know how their schools compare with other similar schools, they cannot appropriately put pressure on low-performing schools to improve. Provide schools, cluster monitors and Regional Education Directorates with test-based information on the areas of higher and lower performance for each school, along with suggested strategies for improving areas of weakness. Kenya's approach to reporting test results is an excellent model.

9. WAEC and MoBSE. Test teachers on content knowledge appropriate for grade-level content and teaching skills needed to teach primary grade subjects. A number of such tests of high quality are already developed for these purposes.

Acronyms

AGR	Annual Growth Rate
BCS	basic cycle school
BCG	Boston Consulting Group
BESPOR	basic education support for poverty reduction
CAADP	Comprehensive African Agriculture Development Programme
CO	Country Office
CRR	Central River Region
CSB	Corn Soya Blend
CSR	Country Status Report
D	dalasi
DfID	Department for International Development (UK)
DoSE	Department of State for Education
EB	Executive Board
ECDC	Early Childhood Development Centre
ECOWAS	Economic Community of West African States
EFA	Education for all
EMOP	Emergency Operation
FAO	Food and Agriculture Organization of the United Nations
FFE	Food for education
FIOH	Friendship In Our Hands
FMC	Food Management Committee
FTI	Fast Track Initiative
GASFP	Global Agriculture and Food Security Program
GBOS	Gambia Bureau of Statistics
GDP	gross domestic product
GER	Gross Enrolment Rate
GNAIP	Gambia National Agricultural Investment Programme
HDDS	Household Dietary Diversity Score
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HQ	Headquarters
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
LBS	lower basic school
LGA	local governing areas
M&E	Monitoring and Evaluation
MEPID	Ministry of Economic Planning and Industrial Development
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MoBSE	Ministry of Basic and Secondary Education
MOU	Minute of Understanding
MTEF	medium-term expenditure framework
NaNA	National Nutrition Agency
NEPAD	New Partnership for Africa's Development
NER	Net Enrolment Rate
NGO	non-governmental organization
OE	Office of Evaluation
PRA	Participatory Rural Appraisal

PROGEB	Regional Project on Sustainable Management of Endemic Ruminant Livestock in West Africa
PRSP	Poverty Reduction Strategy Paper
PSIA	Poverty and Social Impact Analysis
RED	Regional Education Directorates
RDA	Recommended Daily Allowance
SAFMU	School Agriculture Food Management Unit
SD	Standard deviation
SF	School Feeding
SFP	school feeding programme
SOWC	State of the World's Children
SPR	Standard Progress Reports
SSS	Senior Secondary School
THR	take-home ration
TOR	Terms of Reference
UBS	Upper Basic School
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
URR	Upper River Region
US$	United States Dollar
VAM	Vulnerability Analysis and Mapping
VT	Value Transfer
WAEC	West African Examinations Council
WFP/CO	World Food Programme/Country Office (Gambia)
WFP HQ	World Food Programme Headquarters

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