Kiribati

Education for All 2015 National Review

This report was prepared by the relevant national authorities in view of the World Education Forum (Incheon, Republic of Korea, 19-22 May 2015). It was submitted in response to UNESCO's invitation to its Member States to assess progress made since 2000 towards achieving Education for All (EFA).

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Kiribati EFA 2015 Review Report

2014

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Acronyms

DFAT	Australian Department of Foreign Affairs and Trade
ECCE	Early Childhood Care and Education
EFA	Education for All
EPiK	Education Partners in Kiribati
ESSP	Education Sector Strategic Plan
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GIR	Gross Intake Ratio
GNP	Gross National Product
GPI	Gender Parity Index
JSS	Junior Secondary School
KEMIS	Kiribati Education Management Information System
KTC	Kiribati Teachers College
MLHRD	Ministry of Labour and Human Resource Development
MoE	Ministry of Education
NER	Net Enrolment Ratio
NIR	Net Intake Ratio
NIS	National Infrastructure Standards
PTR	Pupil Teacher Ratio
SS	Senior Secondary School
STAKI	Standardised Test of Achievement in Kiribati
TVET	Technical, Vocational Education and Training
UNDP	United Nations Development Program
USP	University of the South Pacific

Executive summary

General Findings

The EFA targets are being pursued with a development plan embodied in a well-designed ESSP 2012-2015 that is well matched to EFA goals with the exception of adult and youth literacy targets. It is not expected that the 2015 Millennium Development Goals related to education will be achieved and new dates for the achievement of these goals have been set within the ESSP process.

The Basic education NER and GER have been declining in recent years and the new development process has not as yet had time to reverse this decline.

The survival rate to grade 5 and 6 is low and declining. This along with dropout and repetition rates indicates some serious deficiencies in efficiency and effectiveness of the system. It is hoped that these issues will be addressed in part by the emerging curriculum and assessment development process, modernisation of school facilities and the emphasis on teacher development and school improvement processes.

Girls' participation as measured by the GPI is less than boys in primary school. However, the girls' participation rate exceeds that of boys in JSS and SS school, and the gap appears to be widening. Some further research as to the underlying cause of this phenomenon is suggested.

The formal assessment process (STAKI) and reporting in primary school is well designed and effective. It will facilitate evidence based action and decision making in the future. Girls are achieving better learning outcomes than boys. This may explain the increasing gap between girls and boys participation rates in JSS and SS.

There is need to increase quality of learning outcomes. The STAKI process provides 5 stages of student achievement and the percentage of students achieving in the lower two stages that indicate little or no effective achievement, is alarming.

Official literacy rate may not be a valid measure as it is based on a self-reporting census question. It would be more useful to use a definition of literacy derived from STAKI to arrive at a measure that could be used to drive a non-formal education adult literacy program.

The curriculum and assessment unit along with KEMIS are providing opportunities to encourage evidence based leadership and the setting of development priorities. These processes are to be encouraged and expanded as the opportunities offer themselves

A set of sound conceptual frameworks are used to underpin the work of many aspects of the MoE. These seem consistent with international trends such as Child Friendly Schools that assist in shifting the culture of education from a mechanistic approach to a supportive constructivist approach that will assist in encouraging children participation and learning in the education process.

A strategy is being developed (EPiK) to enhance engagement with development partners

including other ministries.

Currently the monitoring and Evaluation process of the ESSP and the reporting mechanism for EFA are seen as quite different function. This should not be the case. IT would be appropriate to draw data and related analysis from the KEMIS on an annual basis (based upon the current statistical digests) and these reports synthesised into an EFA report within a suitable timeframe.

Recommendations

The following are intended as suggestions for future attention. They have been derived from the text of this report and are supported by argument and data where appropriate within the report that provides the context for the offered suggestions.

- ECCE development needs to be given priority beginning with a legal framework to provide a suitable context for its development. Then, how to best manage a staged and properly sequenced, adequately resourced, context-specific set of activities preparing the ground for the introduction and development of ECCE should be considered.
- ECCE data needs to be embedded KEMIS to facilitate growth, trends and data based decision making.
- Stronger alignment between various monitoring and evaluation (M&E) frameworks - where one piece of information can be used to report against indicators and goals inside a number of M&E frameworks, such as the ESSP M&E framework and the Pacific Education Development Framework (PEDF) M&E framework.
- Include data for all sources of financial support in KEMIS to facilitate future transition to local funding.
- Introduce measures in KEMIS to monitor the level of student absenteeism and changes in student absenteeism over time.
- Develop student data base to track students' movement. Such a scheme would allocate a unique identifier to a student on enrolment and facilitate shifts in student location and hence allow resources to follow the student.
- Disaggregation of Population data by Island and district to facilitate study of variability of indicators such as NER and GER.
- Clarity of EFA targets and timelines as the 2020 targets are set and pursued.
- While it is recognised that there is a need to recognise a number of significant contributors to the education effort, there is a need to better coordinate some of the variety of participants in the education sector, especially with regard to TVET and non-formal education
- As the quality of school and teachers move from poor to fair to good to excellent the development goals to be moved to be appropriate for stage of development.
- As the teacher development model and school improvement programs impact in variable ways there will be need for a mechanism to allow differentiating development needs and activity across schools and islands.
- The problems of communication and support need to be addressed via ICT and will require suitable infrastructure to be provided. In some of the development processes being used in ESSP the role of the 'critical friend' is central to success.
- The culture of the Ministry of Education and the public service sector generally needs to be shifted and issues of staff continuity and extended leave addressed.

- Some cultural attitudes of community to education, with special reference to enrolment and attendance, need to be prioritised. This may require broadening the view of the role of education from merely a vocational orientation to one encompassing social needs and development. This might include making the relevance of school education transparent to all the community with clarity of benefits accruing to school graduates at various levels.
- Establish a well-defined measure of what it means to be literate and a valid method of measuring the newly defined literacy construct.
- There is a need for a small research unit to investigate the underlying causes of some trends such as boys' education, learning differences, class size variations etc.
- Conduct further research into access, enrolment, drop out, survival/completion and transition and develop targeted interventions to well defined problems based on the research, including the intervention on how to best cater for those who have dropped out or otherwise disengaged.
- Identify mechanisms for teachers to gain higher qualifications and facilitate participation is such a process.
- Encourage higher qualification opportunities for primary school teachers to recognise the important role of a sophisticated understanding of developing early learning competencies.
- There is a need to have future consideration of having e-learning in the teaching and learning of the children.
- There should be more facilities to be installed in schools to maximise boys' participation in schools – playing field, playing courts, etc.
- KTC needs to train teachers on certain boyish pedagogies to keep the boys busy and enjoy school curricula hence reducing boys' dropouts.

1. Introduction

1.1 The Development context.

Kiribati provides a challenging environment for development with many factors contributing to these challenges. These include isolation and a set of 27 islands spread over 3.5 Million square miles of ocean with consequent difficulties of travel, communication, distribution of goods and resources and supervisory functions inherent in development operations. The Kiribati Development Plan 2012-2015 (KDP) provided a development framework for Kiribati which in turn provides a context for the education sector which is the basis of this paper.

A population of some 103,058 is spread across the 24 islands (in census 2010). The 24 islands are divided into four districts known as the northern district, central district, southern district and the Linnix district. The four districts largely rely on mainly subsistence activity with the addition of copra and fishing. The exception to this generality is the southern district which includes South Tarawa and hence is the centre of government activity with the resulting employment benefits. The population is growing rapidly with national annual growth rate of 2.2% and 4.4% for South Tarawa with some 50% of the population being under 20 years of age and consequently placing added pressure to the relatively scarce resources available for the education sector.

Reports indicate that Kiribati has amongst the lowest gross domestic product (GDP) in the Pacific Island region with poor prospects for employment in the formal sector, and high population densities in urban areas are contributing to an economic decline and ongoing hardship for families and households. Kiribati has one of the most mobile populations with people shifting to the urban area of South Tarawa in search of education and training, work or migration to other countries.

Kiribati has experienced slow and sometimes negative growth since the early 2000s. Economic growth, 2005 to 2008 however, the economy has to be picked up this decade, the gains are and will be modest. Current GDP is 175.7 million USD (2012) with a growth rate of 2.0% per annum and GDP per capita is estimated at1,743 USD (2012) (DFAT website). As a result, poverty and hardship are widespread throughout Kiribati exacerbated by high unemployment rates (30.6% (Kiribati 2010 Census Report)) and poor access to education and training.

It is interesting to note that there has been some debate about the suitability of the standard poverty indicator of the percentage of people living on ‘less than a dollar a day’. This has been criticized in community forums as not a sound reflection of community life as many people live on their own production and hence have little interaction with the cash economy. The Republic of Kiribati Millennium Development Goals 2007 reported that while the official poverty index value was estimated to include 50% of the population, a more suitable index was called the “Hardship Index” and reflects the status of the order of 38% of the population. This hardship index does not seem to be well defined in a statistical sense but was said to reflect a lack of opportunities including access to “better educational and economic, social services and formal employment etc.” (p. 10 Kiribati Millennium Development Goals 2007)

The government of Kiribati is a major contributor to the economy making up 47% of total

economic activity. It remains the country's primary source of employment. But owing to poor economic growth, the government has encountered substantial domestic revenue declines over the first decade of the new millennium and hence created a reliance on donor spending and use of the Kiribati reserve fund. This support cannot be sustained and has contributed to a government dependency on external technical assistance, expertise and human resources. External grants make up more than 25% of GDP, making it one of the highest proportions in the Pacific Region. Collectively, Kiribati's poor economic performance and donor dependency has seen Kiribati sustain high fiscal deficits amounting to about 30% of GDP (p 1. KEIP Phase 1).

The multilateral banks have advised the government of the need to reduce unnecessary public expenditures to strengthen the country's fiscal position. This includes efforts to privatize public enterprises to strengthen the potential for more robust private sector activity. These are bold expectations as reform of public enterprises is unlikely whilst so many I-Kiribati are reliant on employment with the public sector. As social security provisions are quite weak in Kiribati and most public sector employees are obliged to retire at 50-years of age, public sector employment is a fact-of-life likely to remain for some time.

Owing to these major economic constraints, Kiribati rates poorly on most economic and social indicators. Indeed, recent UNDP Human Development Indicators place Kiribati in a very precarious situation. As a result, hardship and poverty is increasing across the many island settlements and is particularly severe in the urban areas of an overpopulated South Tarawa. Limited employment, and poor prospects for employment growth, has maintained a cash economy which is best described as small and one that does not enable the government much scope to enforce taxation regimes. Taxes account for around 20% of total government revenue.

Despite these constraints, Kiribati has access to a vast ocean area making the sea one of its most valuable and easily accessible resources. The ocean makes up one of the largest maritime economic zones and an estimated 80% of households make a living through fishing. Commercial fishing also makes a solid contribution to the economy and government revenues. It results in the ready employment of graduates from Kiribati's technical and vocational education and training (TVET) colleges concerned with education and training in commercial fishery and maritime trade disciplines.

Other viable industries that contribute to international trade are coconut fibre and other coconut products. The other valuable resource for Kiribati is its people. A relatively young population, high fertility rates and improving health indicators should provide a solid basis for the ongoing economic development of the country. Owing to a relatively weak education sector, there is limited human capacity and poor prospects for strengthening this valuable human resource base unless significant changes are made to the structure, function and performance of the education sector.

A persistent theme in the many recent reports on the Kiribati context is the difficulties facing the country in the economy, education and health, the environment and general living conditions. Attempts to address these issues in recent years seem to have only been partially successful with unemployment and poor access to quality education continuing to being significant impediments to progress.

1.2 The Context of Education Development and Education Sector Challenges

The Basic Education system in Kiribati is defined to consist of the first 9 years of schooling made up of primary school (grades 1 to 6) and junior secondary school (grades 7 to 9). These years of basic education are supplemented by 4 years of senior secondary schooling undertaken in grades 10 to 13. Only the primary and junior secondary components of schooling are compulsory and free. While the basic education is free of school fees there are other expenses that act as impediments to school attendance such as travel, uniforms and equipment such as exercise books pens. However, there are also children who may be asked by their families to do chores like collecting coconuts in the morning hence causing them to come late to school or even discouraging them to attend school. Attendance at the non- compulsory senior secondary schools attracts the requirement of school fees. Organisationally, these three school sectors are supported by different management units within the Ministry of Education.

Early childhood education is not managed or supported by the MoE. Rather preschools are provided by church, private and community organisations and there appears to be no coherent structures synthesising either the definition of appropriate infrastructure standards, curriculum or teacher development. While currently the ministry has no formal involvement in ECCE there are indications that it is beginning to engage in activities in the sector with the current Education Sector Strategic Plan committing to identify resources needed for pre-schools, provide training and professional development for ECCE teachers, and to develop a new legislative base for ECCE. At the time of writing a budget allocation had not been made for this activity, nor had administrative responsibility been allocated within the Ministry. However, it is understood that UNICEF was committed to providing support in this area of activity, and current negotiations were underway.

Most post school education (including TVET) is under the management of the Ministry of Labour and Human Resource Development (MLHRD). This education activity is provided by the Kiribati Teachers College (managed by MoE), Kiribati Institute of Technology, the Marine Training College, Fisheries Training Centre, Kiribati Nursing College, Kiribati Institute of Technology and the Police Training Centre. Experience suggests that graduates from some institutions tend to gain immediate employment while those from other institutions have difficulty in gaining immediate employment. However, this needs to be confirmed and it is proposed to conduct a tracer study to more thoroughly map graduate employment success This is especially needed in the Kiribati Institute of Technology specialty areas of carpentry, automotive skills, electrical technology, accounting and business. In addition MLHRD seeks to work with industry to better match course offerings with demands for skills.

School graduates seeking a higher education need to qualify for entry into the University of the South Pacific, other regional and international universities (and through scholarships), the Australia Pacific Technical College, and the local institutions. Pathways to technical and further education and higher education are only possible in Kiribati for grade 12 and grade 13 school graduates. This results in a large pool of 15-24 year olds seeking formal or informal sector employment when school access proves to be problematic.

Access to higher forms of Education is not equitably provided across Kiribati. Only primary schools, and to a lesser extent junior secondary schools, are widely spread throughout the 24

islands of the country. The more senior and specialised education opportunities seem to be located in the urban concentration of South Tarawa. This is reflected in the notion of the 'Hardship Index' referred to above in which communities refer to a lack of access to educational opportunities.

In this section the context of education in Kiribati has been described and in the next section this context is related to the EFA and the related millennium goals.

1.3 Major Policies, Strategies and Interventions for Education and Learning

Kiribati has been actively involved in the Education for All programs since 1995 and as a consequence has had a series of strategic plans that have outlined the priorities for education development and strategies for addressing the priorities. A significant impetus to this process was provided in 2008 when Kiribati held a national education summit that identified 6 goals and 41 strategies to address challenges facing the education sector. These goals and strategies were operationalized by an Education Sector Strategic Plan (ESSP) for 2008 to 2011. Following a review of the 2008-2011 Education Sector Strategic Plan a number of priority issues were identified that are the guiding framework for the Education Sector Strategic Plan Phase II 2012-2015.

The goals presented in ESSP II 2012-2015 are designed to support the "vision for the future of Kiribati schools" as:

> Nurturing our children and young people in Kiribati to become wise and responsible citizens able to adapt to, and participate in their changing world.
> (P. 4. *Ministry of Education Sector Strategic Plan 2012-2015)*

The seven goals are as follows:

1. All primary and secondary students are using high quality, coherent and relevant curriculum that caters for the needs of all children in Kiribati.
2. Children are studying and learning in an environment conducive to learning.
3. All children in Kiribati are taught by committed, competent and effective teachers supported by effective school leadership.
4. Evidenced-based policy and planning frameworks are applied for the achievement of quality education outcomes.
5. All children and young peoples' rights to education are protected and school sector management is improved by a strengthened legislative framework.
6. A strong mutual collaboration mechanism exists between the Ministry and its key stakeholders.
7. Effective and efficient services are provided to schools to support the delivery of quality education for all students in Kiribati.

(Ministry of Education Sector Strategic Plan 2012-2015)

These 7 goals are supported by 37 strategies that are designed to assist in achieving the goals of the ESSP.

The preface to the ESSP reasserts the Kiribati Ministry of Education commitment to the

Millennium Development Goals and the six Educations for All goals. In addition it reflects regional commitments made to various Pacific education forums since 2000. This design process has contributed to an orderly and integrated development plan. Central to this plan has been the EFA indicators that have been used as a measurable guide to progress in the education sector.

This ESSP II 2012-2015 has become the guiding framework for the MoE development initiatives and the challenge is for this framework to be interpreted in the context of the EFA framework which is the subject of this report. This task is attempted via the 'EFA Implementation Matrix' presented in section 3 below which attempts to map the 37 implementation strategies onto both the EFA goals and the ESSP II 2012-2015 goals to indicate the relationship between them.

1.4 The Relevance of EFA within the Country Context

In the next section the numerical EFA indicators are presented and discussed. They indicate a variable development profile and a continued relevance of EFA policy and processes. In spite of considerable commitment to EFA ideals by Kiribati officials, there appears to be much progress to be made and in some areas declining indicator values represent changing conditions and counter intuitive trends. It needs to be noted that there appear to be some anomalies in the population data that remain unresolved at the time of writing. These anomalies may be impacting on the enrolment rate indicators in a way that needs further interpretation and explanation. However, the overall position is that it is unlikely that the Millennium Development Goal of all children receiving basic education by 2015 will be achieved and the MoE has reset the objective to 80%. The time line being considered has been extended so that it is hoped "all children achieving functional literacy and numeracy after 6 years of basic education" by 2020. (ESSP 2012-2015, p.5)

2 Tracking Progress

2.1 Early Childhood Care and Education (ECCE)

As discussed earlier the development of ECCE has been a vexed question within the Kiribati context. However, the ECCE sub-sector will be discussed in terms of the conceptual framework provided in the *Analytical Framework for the National EFA2015 Reviews in Asia Pacific*, (2013), which provides four building blocks to be analysed with a view to determining efficiency and effectiveness of the system. These building blocks will be discussed in turn.

There is no legal framework in Kiribati to guide and develop the ECCE sub-sector or to give authority to the MoE to take development action in the ECCE sub-sector. In 2010 a paper was prepared by UNICEF that was to lead to the formulation, acceptance and development of the ECCE sub-sector. In particular the 2010 paper was prepared as a component of the ESSP 2008-2011 project. It made references to student equality, preschool registration, and reporting and infrastructure development. This process was never implemented and it is now proposed to proceed with the formalisation of the ECCE sub-sector in the 2014/2015 time period under the current ESSP.

All current provision for the ECCE sub-sector has been made by agencies outside the MoE and here has been no systematic data collection made to monitor progress or needs of the sector. The Kiribati Education Management Information System (KEMIS) does not collect data with respect to ECCE, due to the fact that ECCE schools are not yet registered under MOE. Rather, the data that exists is collected and stored by the ECCE sub-sector coordinator as part of their job. However there is a positive mood now towards the inclusion of ECCE under the umbrella of MOE.

Table 2.1a reflects this data and provides an enrolment time series for nine years. This time series is also presented graphically to assist in interpretation. The graph indicates considerable decline over the early part of the period under review period with some improvement of the trend over the last three years. This indicates a need for revitalisation of the sector if the benefits of preschool as a preparation for the basic education system are to be realised.

Table 2.1a: Gross Enrolment Ratio – Early Childhood Care and Education by Gender, 2005 - 2012

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	51%	59%	32%	36%	29%	27%	34%	33%	35%
Male	51%	51%	31%	32%	29%	26%	33%	32%	32%
Total	51%	55%	32%	34%	29%	27%	34%	32%	33%
GPI	1.00	1.16	1.03	1.13	1.00	1.04	1.03	1.03	1.09

(Source KEMIS Statistical Digests2005 to 2013)

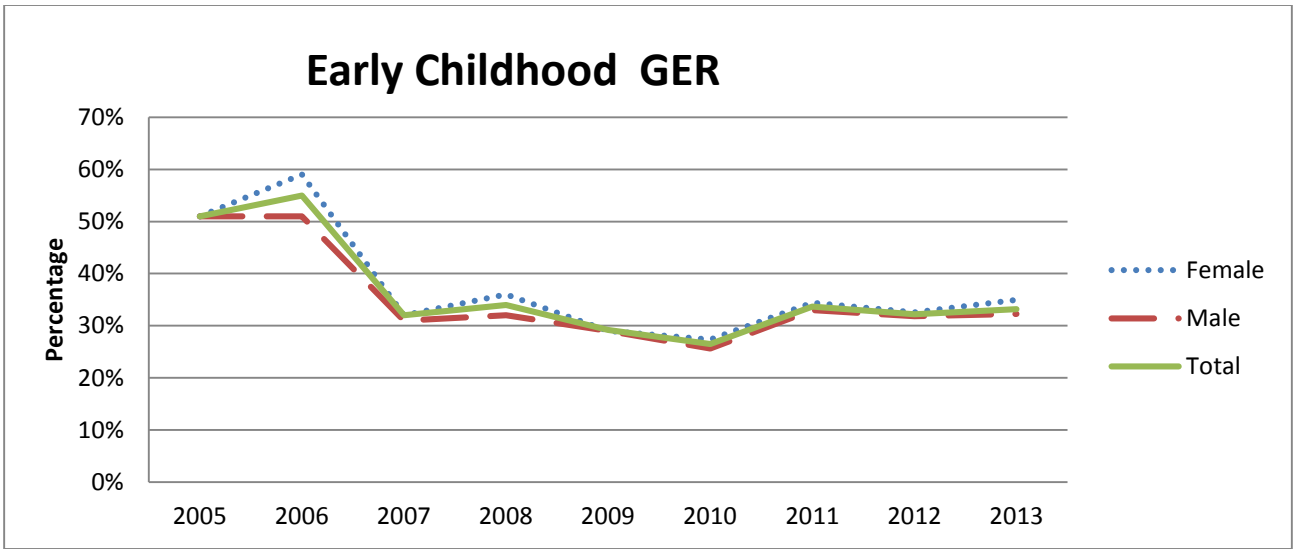

Figure 2.1a

Table 2.1b provides information with regard to the percentage of new primary school enrolments who have attended ECCE programs. The accompanying graph indicates a fall in this indicator in the early 2000's with a significant recovery in recent years. This is a similar pattern to the GER for ECCE and tends to triangulate the data. However, the trend across the 9 year time period for the recovery at the end of the period that does not quite recover the ground lost in the earlier years, confirming the need for significant effort in this sector

Table 2.1b: National Average Percentage of New Entrants into Primary School who have Attended Early Childhood Education Programs, by Gender, 2005 - 2013.

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	71%	75%	68%	54%	65%	53%	71%	68%	76%
Male	68%	80%	72%	56%	67%	56%	67%	65%	74%
Total	70%	77%	70%	55%	66%	54%	69%	67%	75%
GPI	1.04	0.94	0.94	0.96	0.97	0.95	1.06	1.05	1.03

(Source KEMIS Statistical Digests2005 to 2013)

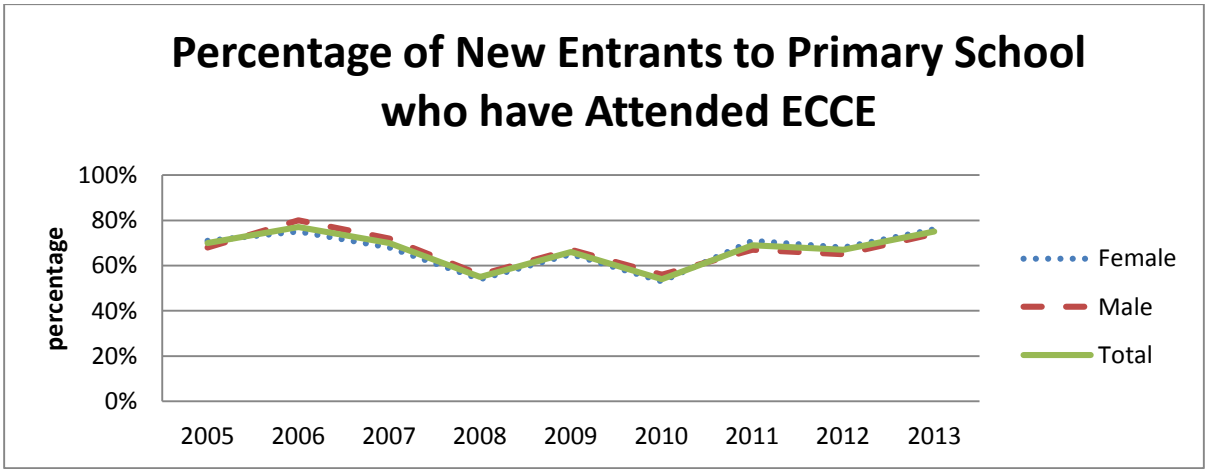

Figure 2.1b

This data was disaggregated by district in search of patterns of disadvantage with respect to preschool access. This is represented below in Graphical form. The pattern of attendance would appear to be quite chaotic, to such an extent that we might question the validity of the data. The first of these anomalies is the percentage rate of above 100% in three of the reported indices. Secondly the violent fluctuations such as the District South and the District Linnix around 2009 to 2011 need further explanation. A check of the data base confirmed the accuracy of these data in terms of the stored data, however, these kinds of fluctuations need to be checked for validity in a timely fashion. This would be very much facilitated by a well-resourced Early Childhood coordinator within the MoE.

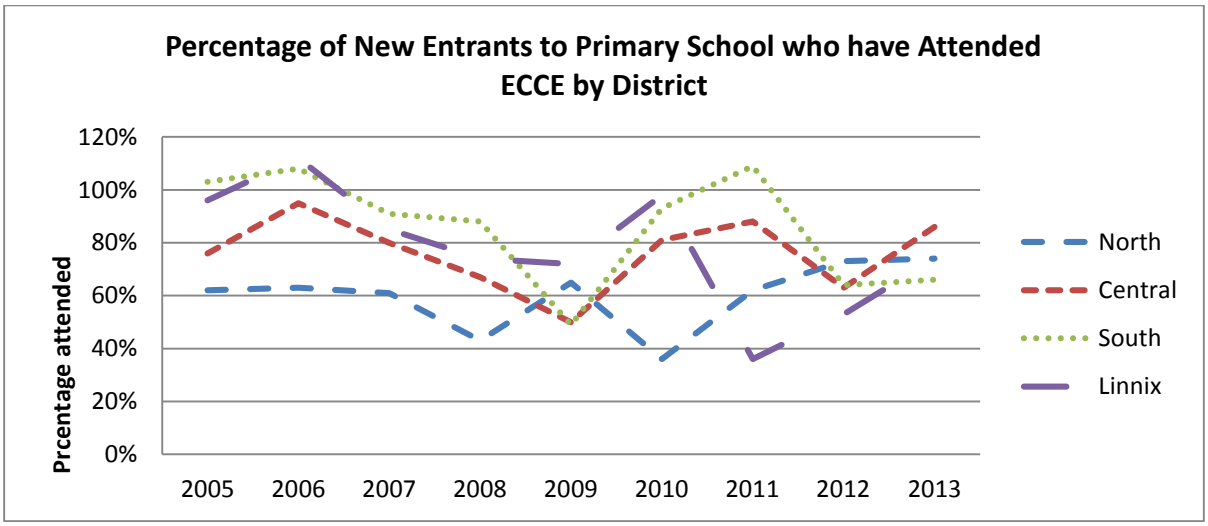

Figure 2.1c
(Source KEMIS Statistical Digests2005 to 2013)

The ECCE development process is envisaged to be a two pronged strategy with a focus on identifying and clarifying the components of ECCE development. These components consist of teacher standards, language policy, curriculum, facilities, data collection and management, management and reporting, at the school, island and national level. The supporting activities to facilitate this development will be organised at three levels. These are the legal jurisdiction of ECCE consisting of a legal act and regulations, a policy framework rewrite that explores implementation strategies and priorities and the management of the sector consisting of governance and operations. The legislation to determine jurisdiction and recurrent funding responsibilities is a priority.

Unfortunately the only data collected by the MoE in Kiribati is the enrolment data reported above that is disaggregated by gender. In 2010 there was a survey conducted of the ECCE sub-sector. It indicated that there were 225 preschool distributed across each of the 24 islands of Kiribati. Of these 225 preschools 75 were private (church) and the remaining 150 were described as community preschools that are operated by local communities.

The 2010 survey indicated that of the 360 preschool teachers approximately 28 (8%) had some formal training. The largest number of trained teachers came from the Kiribati Teachers College (KTC) which stopped training preschool teachers approximately 10 years ago. Others were trained at USP, Australia, New Zealand and a range of colleges linked to

the Catholic Church. The balance had a variety of school based backgrounds ranging from primary school graduates to Senior High school graduates. It is emphasised that there are no preschool training courses offered in Kiribati currently and that for students to receive such training they have to go to places overseas such as Fiji. There are a series of short training courses conducted in Kiribati reported in the 2010 survey that presumably are designed to improve teacher quality and capacity.

Pupil/Teacher Ratio (PTR) in pre-primary education as of 2010 was 14:2 (source: survey conducted by UNICEF 2010). However there is considerable variability in this ratio across islands. P/T ratios range between 6:4 (Onotoa) and 42:2 (Makin).

75 of the preschools have classrooms and the rest use Maneaba (local meeting halls) as classrooms. Only 38 preschools reported having toilets and there was no data on the availability of running water or hand washing facilities.

As can be seen from the Gender Parity Indices (GPI) reported above the girl population is well represented in the preschool cohort.

There is currently zero public expenditure on preschool education as the preschools are provided by either, church or the community. Public expenditure is here defined to mean the national government as the source of funds.

Currently there is no formal coordination or prescribed standards for preschool facilities, curriculum or teacher qualifications. The ECCE sub-sector has been explicitly allocated to a donor (UNICEF) to undertake the development program outlined above. As was noted above the initial phases of ECCE development are included in the current ESSP and approaches to the task are to be discussed by a "Education Partners in Kiribati" (EPiK) process which consists of a group representing all stakeholders and is designed to enhance efficiency, effectiveness and sustainability of the development process. Inherent in this process is the coordination of the development partners with ESSP priorities.

2.2 Universalization of Primary Education

In this section is presented the important indicators related to access and participation in the primary schools of Kiribati. The data has been extracted from the Kiribati Education Management Information System (KEMIS). The data from this system is derived from an annual survey of schools and a set of population counts usually provided by the Kiribati census that is conducted every five years. Unfortunately, these population data have been very problematic. Three sets of population data have been studied and applied to the calculation of four important indicators. Each of these produced very different indicator values. As an example the Net Enrolment Ratio for 2013 varied between 73% and 98% across the three sets of population data. The 73% NER was based upon a set of population figures derived from projections of the 2005 census. The Secretariat of the Pacific Community (SPC) felt that these projects were too high and led to a deceased NER even though several experienced people within the MoE felt the indictor values were consistent with their estimations.

The 2010 census data was considered to be rather erratic and produced an NER for 2013 of 98%

and for earlier years NERs of greater than100%. Hence the SPC advised that the 2010 census data should be subjected to a "smoothing operation" to suppress the 'bumpiness' of the population data. When this was done the NER for 2013 was 91%. It was decided to accept the advice of the SPC and use the smoothed population data in this analysis.

A significant limitation of this data is that while it could be disaggregated by gender, the population data was not available in a disaggregated form by District or Island. This is very unfortunate in the context of this analysis as it has been reported that there is a significant drift of population to South Tarawa with a resulting overcrowding of schools and large class sizes. It is difficult to study this phenomenon without data disaggregated by district. It would be helpful if future iterations of the KEMIS process facilitated such disaggregation.

In this section a number of indicators are presented. Where appropriate, the indicator tables are supported by a time series and to facilitate interpretation graphs are provided. An overview of this data is that over the last four years there has been a slight decline in the overall enrolment rates but in some instances there has been a slight improvement in the enrolment rates for female students. This has also had the effect of improving the gender parity indices.

The first set of indicators reported here are the Intake Ratios for primary school, both Gross (table 2.2a) and Net (table 2.2b), and the Enrolment ratios for primary school. Both the Gross and Net intake ratios indicate a slight improvement in trend since 2010, with tendency to a Gender Parity Index (GPI) greater than 1 indicating girls are availing themselves of education services at a greater rate than boys. It is probably too early in the implementation of the ESSP for these trend changes to be a result of these interventions.

Table 2.2a: Gross Intake Rate (GIR) in primary education, by sex

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	118%	112%	95%	88%	87%	107%	111%	116%	123%
Male	121%	110%	94%	92%	92%	105%	114%	113%	112%
Total	120%	111%	94%	90%	89%	106%	112%	114%	117%
GPI	0.98	1.02	1.01	0.96	0.95	1.02	0.97	1.03	1.10

(Source KEMIS Statistical Digests2005 to 2013)

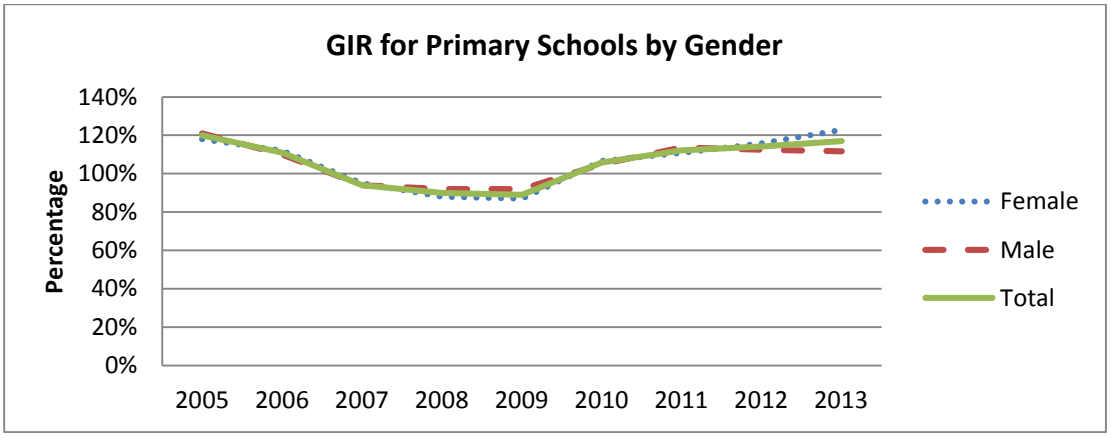

Figure 2.2a

Table 2.2b: Net Intake Rate (NIR) in Primary Education, by sex

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	93%	87%	73%	75%	66%	82%	82%	85%	91%
Male	95%	84%	73%	74%	70%	83%	84%	76%	82%
Total	94%	86%	73%	74%	68%	82%	83%	80%	87%
GPI	0.98	1.04	1.00	1.01	0.94	0.99	0.98	1.12	1.11

(Source KEMIS Statistical Digests2005 to 2013)

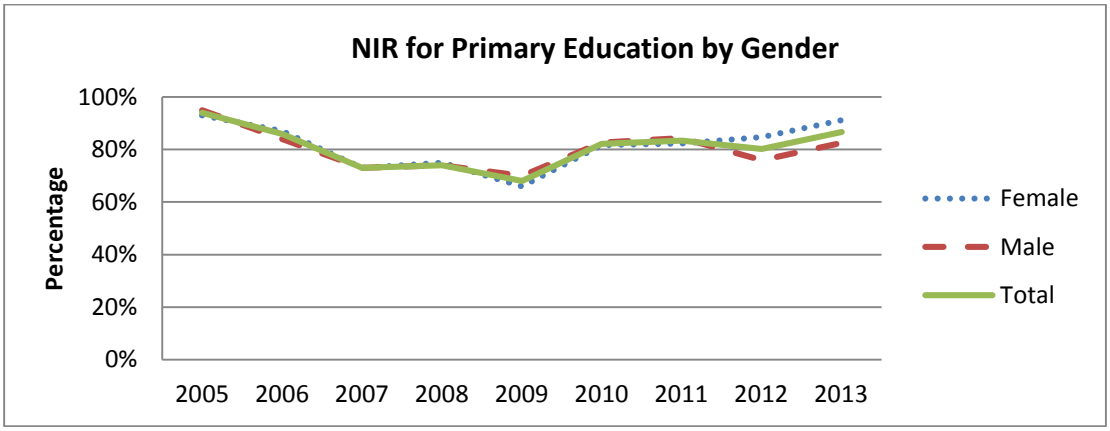

Figure 2.2b

The trends in GER (table 2.2c) and NER (table 2.2d) are very similar; however we must be conservative in their interpretation. It can be seen that they both declined between 2005 and 2009, and again between 2010 and 2013. Separating these two trends is a large jump between 2009 and 2010. This was the point in the time series discussed above when the basis of the population data was changed. So, while we can be relatively confident of the validity of the two trend directions, we cannot conduct direct comparisons across the 2009/2010 divide. The trend directions were confirmed by declining enrolment numbers across the period.

Table 2.2c: Gross Enrolment Ratio (GER) in Primary Education, by Gender

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	106%	102%	100%	100%	95%	105%	102%	98%	96%
Male	105%	104%	99%	100%	94%	109%	108%	105%	102%
Total	105%	103%	99%	100%	94%	107%	105%	101%	99%
GPI	1.01	0.98	1.01	1.00	1.01	0.96	0.94	0.93	0.94

(Source KEMIS Statistical Digests2005 to 2013)

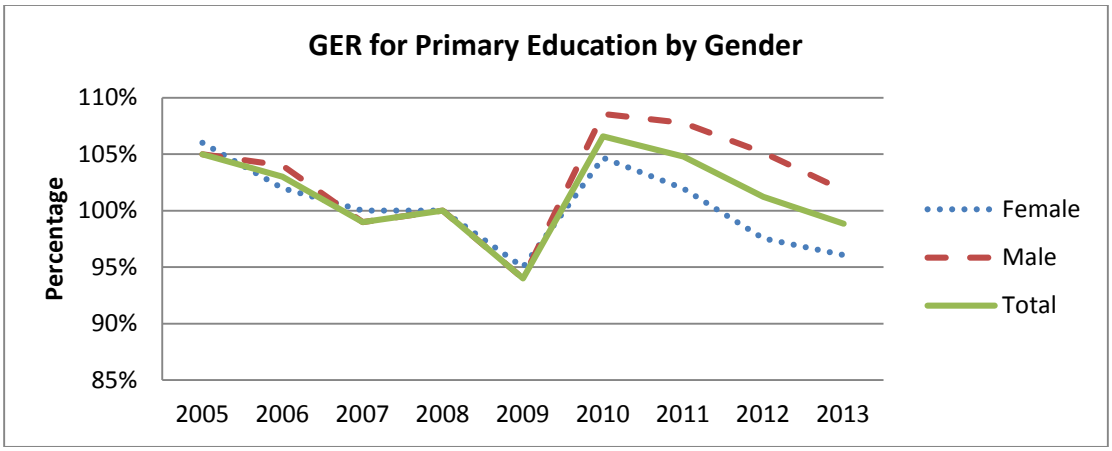

Figure 2.2c

Table 2.2d: Net Enrolment Ratio (NER) in Primary Education, by Gender

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	98%	94%	93%	93%	88%	96%	94%	88%	89%
Male	96%	95%	91%	92%	87%	100%	97%	93%	93%
Total	97%	95%	92%	93%	87%	98%	96%	91%	91%
GPI	1.02	0.99	1.02	1.01	1.01	0.96	0.97	0.95	0.96

(Source KEMIS Statistical Digests2005 to 2013)

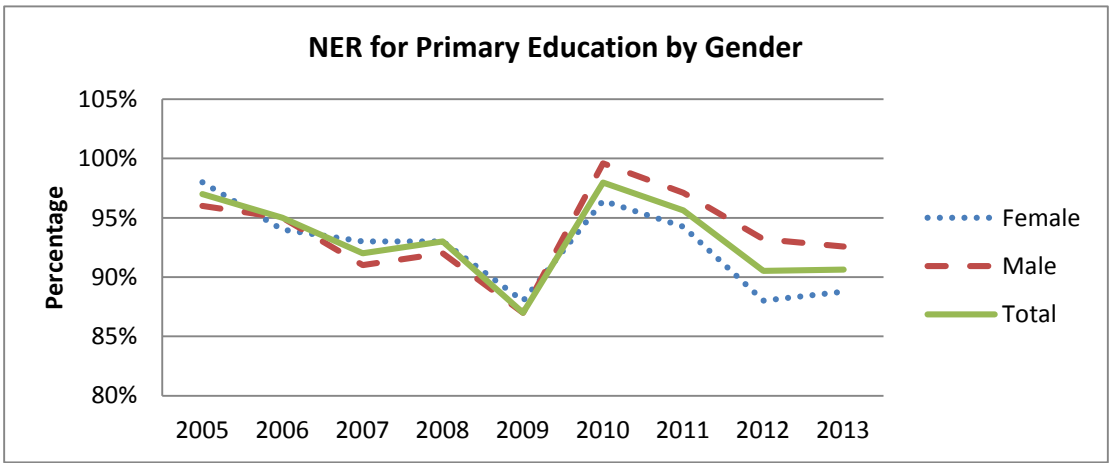

Figure 2.2d

It is to be hoped that the introduction of the new language policy and curriculum along with the associated teacher development and School Improvement Program (SIP) will halt this slide and this alarming trend will be reversed. Specifically, the SIP includes the District Education Officer, along with community representatives, directly targeting families with out of school children. The trend for the NER is similar for both boys and girls. Of some concern is the shift in GPI between the early years of the time series and the later years. The recent years indicate a lower rate of engagement in education for girls than boys. The change across the 2009/2010 years is so sudden that it is suspected that it is a result of the population count rather than a change in cultural attitudes.

Thus far enrolment rates have been discussed. It is now proposed to consider some aspects of effectiveness and efficiency by considering promotion rates, repetition rates, dropout rates and transition rates to junior secondary school (JSS).

Repetition rates have improved over the last four years as can be seen from the graph below. The pattern continues of the highest repetition rates in grades 1 and 6 with boys tending to repeat a class more than girls. The continuing high repetition rate in Grade 1 may be reduced by more investment in preschool places and relevant preschool teacher training.

The high repetition rate in class 6 could be a function of two causes. The first is the possibility of satisfying requirements for transition to junior secondary school and the second is the availability of a junior secondary school to attend especially on the smaller more remote islands. This might indicate a need for some alternative arrangements for the provision of higher levels of education in the more isolated regions. A more systematic investigation into this issue is needed.

Table 2.2e: Percentage of Primary School Repeaters, by grade and Gender for 2013

2013	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Female	2.28%	1.97%	1.14%	0.65%	1.14%	1.12%
Male	2.87%	1.56%	1.81%	1.36%	0.86%	4.91%
Total	2.58%	1.76%	1.48%	1.01%	1.00%	3.00%
GPI	0.79	1.26	0.63	0.48	1.33	0.23

(Source KEMIS Statistical Digests2005 to 2013)

The repetition rate over the last four years has declined as can be seen from the graph below. This is an interesting trend but it may be a little early to attribute the improvement to the impact of the ESSP activities. It does of course reflect an improvement in effectiveness and efficiency of the system as it indicates fewer resources are required to produce a primary school graduate. In fact one student repeating involves an additional 16% of resources being allocated to that student's primary education based on an addition one sixth of resources required for each additional year on schooling. If strategies such as an expanded and effective preschool system can be implemented, it would be expected to assist in reducing this cost burden.

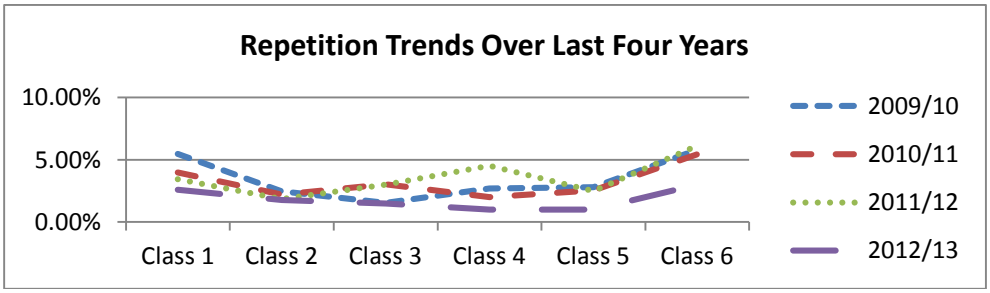

Figure 2.2e
(Source KEMIS Statistical Digests2005 to 2013)

The repetition rate, together with dropout rates, is the determinants of the survival rate. These data on promotion and dropout rates (table 2.2f) seem a little haphazard with some apparent inconsistencies in the tables that need further exploration and explanation. The dropout rate in

grade 1 and 2 should be reduced by the introduction of the new language policy that requires a focus on the local language in the initial years of schooling.

Table 2.2f: Promotion and Drop Out Rate (PR) in Primary School, by Grade

2012	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Promotion	89%	93%	99%	85%	89%	112%
Repetition	3%	2%	1%	1%	1%	3%
Dropout	8%	5%	0%	14%	10%	-15%

(Source KEMIS Statistical Digest 2012)

There has been in the past some cultural resistance to education reported by senior education officers including the Minister, with reports received of a lack of acceptance or understanding of the need to make basic education compulsory. This is probably a reflection of the perceptions of the relevance of education to island life styles. The components of the ESSP referred to below in section three will need to address these issues explicitly. It should be noted that cultural shifts are difficult to achieve and take a long time to achieve. Hence it is probable that such issues as survival rates will not be completely resolved in the near future.

Tables 2.2g and 2.2h and their accompanying graphs present the situation with respect to the survival rates in primary school. They present a situation of a serious decline in the number of children reaching grade 5 and grade 6, only 72.6% of children who begin grade 1 surviving in the education system to grade 5. Grade 5 is often seen as the minimum level that needs to be reached to achieve minimum levels of numeracy and literacy. Not only is the survival rate currently low but it seems to be in a decline. Strategies to support and implement the new compulsory regulation of the education legislation will have to be implemented to reverse this decline. However, such strategies cannot be expected to be effective if the school experience is not seen to be relevant and engaging for children.

Once again it is noted that the survival rate for girls is better than that for boys.

Table 2.2g: Survival Rate to Grade 5 in Primary Education

	2007	2008	2009	2010	2011	2012	2013
Female	114.40%	90.70%	98.30%	100.00%	93.80%	70.60%	75.45%
Male	104.70%	89.80%	80.20%	82.30%	87.40%	76.90%	69.90%
Total	109.50%	90.10%	88.80%	90.70%	90.50%	73.60%	72.60%
GPI	1.09	1.01	1.23	1.22	1.07	0.92	1.08

(Source KEMIS Statistical Digests2007 to 2013)

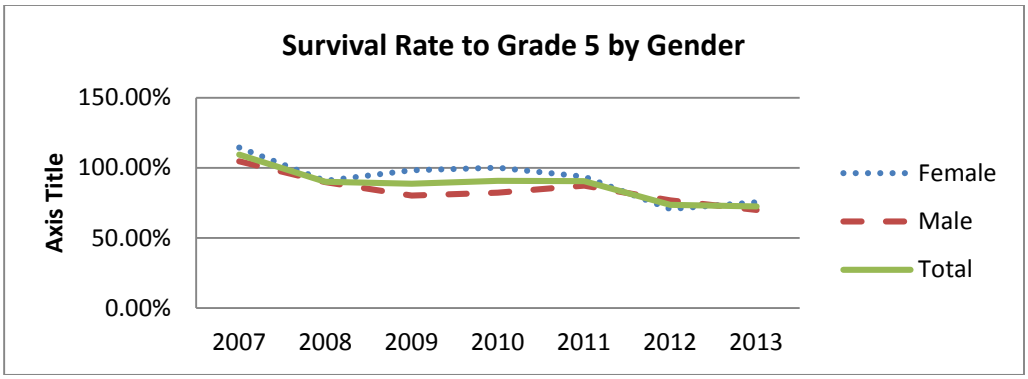

Figure 2.2g

Table 2.2h: Survival Rate to Grade 6, by Gender

	2010	2011	2012	2013
Female	100.0%	93.80%	70.60%	69.80%
Male	82.30%	87.40%	76.90%	62.20%
Total	90.70%	90.50%	73.60%	65.80%
GPI	1.22	1.07	0.92	1.12

(Source KEMIS Statistical Digests2010 to 2013)

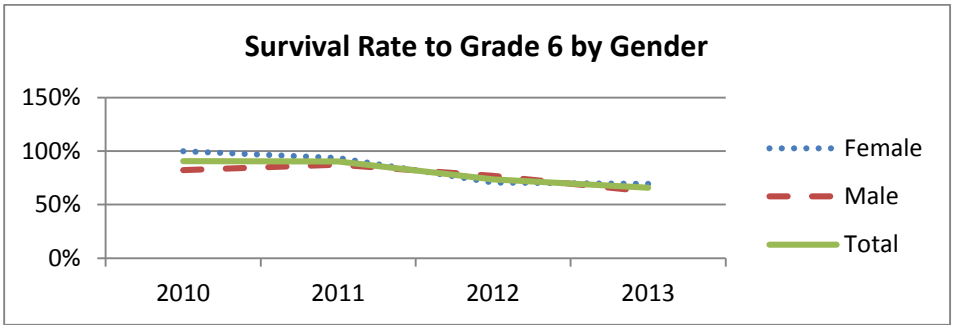

Figure 2.2h

The above efficiency indicators impact on the enrolment rates for Junior Secondary School (JSS). This is the second component of basic education in Kiribati. In table 2.2i the transition rates for 2010 to 2013 are provided as they have been extracted from KEMIS.

Table 2.2i: Transition Rate from Primary to Junior Secondary Education, by Gender

	2010	2011	2012	2013
Female	101.70%	102.10%	88.60%	107.30%
Male	101.00%	99.90%	93.60%	98.10%
Total	101.30%	101.10%	90.80%	103.00%

(Source KEMIS Statistical Digests 2010 to 2013)

However, these transition rates from grade 6 to the first year of JSS seem very high and with repetition rates of 3 % seem difficult to achieve. In fact some tentative investigations suggest that these transition rates are of the order of 82% for boys and 94% for girls in 2013. Once again girls are performing better than boys, but the indicators values need significant revision.

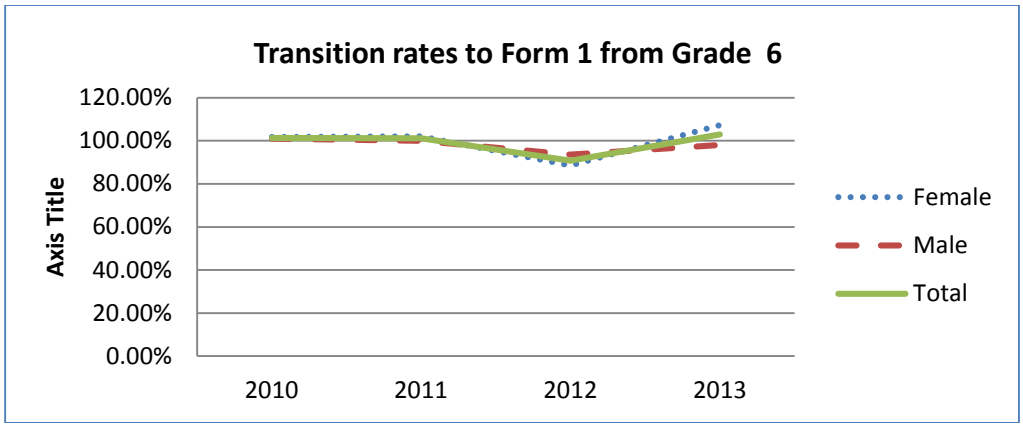

Figure 2.2i

The GER and NER for the 24 JSS and the 9 combined schools are reported in tables 2.2j and 2.2k. The significant features of these two tables is the jump in values between 2009 and 2010 due to the revised population data and the widening gap between the rate of girls enrolment and the rate of boys enrolment. Both indicators for girls have been fluctuating in recent years, while the same indicators have been in decline for boys in the same period. It might be considered necessary to investigate this dichotomy further in an attempt to identify the cause of the difference and to develop differential strategies to address the difference.

More generally the NER for all students in JSS is only 69% which seems very low for a component of basic education that has been determined as a compulsory component.

Table 2.2j: GER for Junior Secondary Schools, by Gender

GER	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	110%	109%	103%	92%	88%	103%	109%	102%	108%
Male	99%	91%	91%	88%	81%	90%	87%	86%	86%
Total	104%	100%	97%	90%	84%	96%	98%	94%	97%
GPI	1.11	1.20	1.13	1.05	1.09	1.14	1.25	1.19	1.26

(Source KEMIS Statistical Digests2005 to 2013)

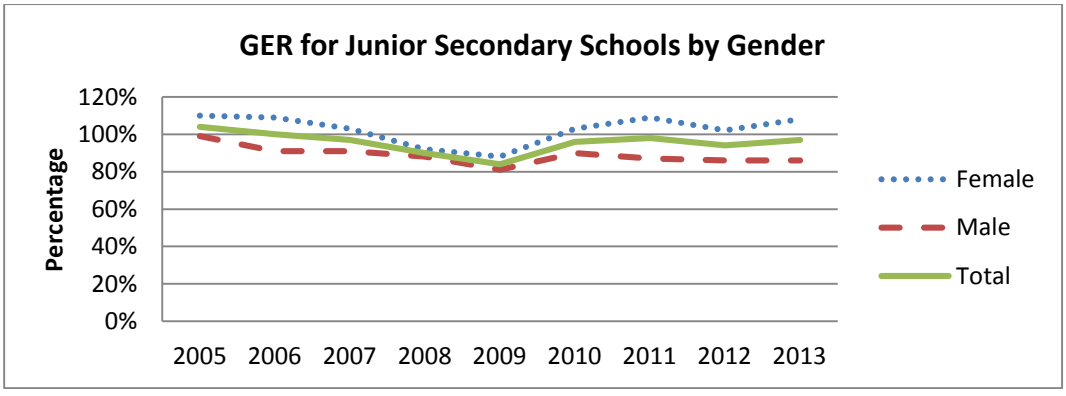

Figure 2.2j

Table 2.2k: NER for Junior Secondary Schools, by Gender

NER	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	88%	84%	81%	71%	73%	79%	81%	74%	78%
Male	80%	71%	72%	67%	67%	68%	64%	61%	61%
Total	84%	77%	76%	69%	70%	73%	72%	67%	69%
GPI	1.10	1.18	1.13	1.06	1.09	1.16	1.27	1.21	1.28

(Source KEMIS Statistical Digests2005 to 2013)

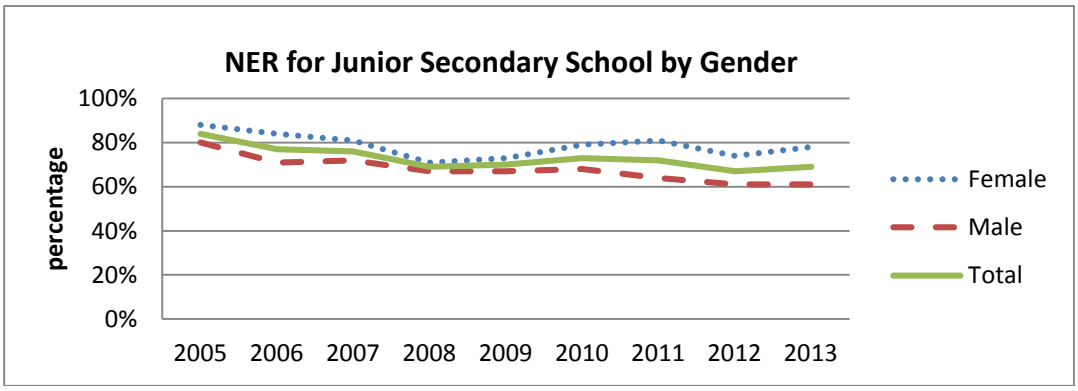

Figure 2.2k

While Senior Secondary School (SSS) is not considered part of basic education in Kiribati, the GER and NER data (tables 2.2l and 2.2m) are provided here for the sake of completeness. There are only 18 senior secondary schools in Kiribati with some islands having no senior secondary schools. The internal patterns of this data are remarkably similar to that of the junior secondary data with girls enrolment increasing and boys enrolment rate decreasing. Here is further support for the need to be able to disaggregate the data by district or island.

Table 2.2l: GER for Senior Secondary Schools by Gender

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	44%	45%	57%	60%	52%	57%	59%	62%	61%
Male	35%	35%	43%	48%	38%	46%	45%	45%	41%
Total	40%	40%	50%	54%	45%	51%	52%	53%	51%
GPI	1.26	1.29	1.33	1.25	1.37	1.24	1.31	1.38	1.49

(Source KEMIS Statistical Digests2005 to 2013)

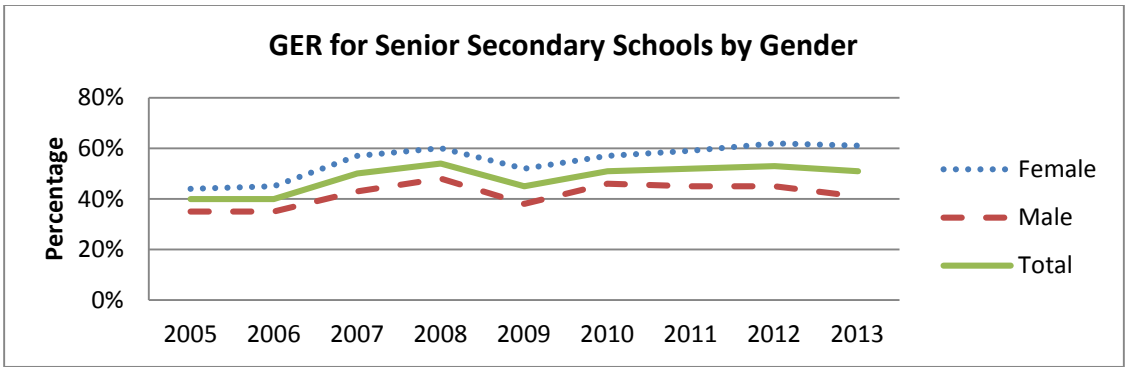

Figure 2.2l

Table 2.2m: NER for Senior Secondary Schools by Gender

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	41%	42%	52%	55%	48%	53%	54%	57%	58%
Male	32%	32%	38%	43%	35%	42%	41%	42%	38%
Total	37%	37%	45%	49%	41%	48%	47%	49%	48%
GPI	1.28	1.31	1.37	1.28	1.37	1.26	1.32	1.36	1.53

(Source KEMIS Statistical Digests2005 to 2013)

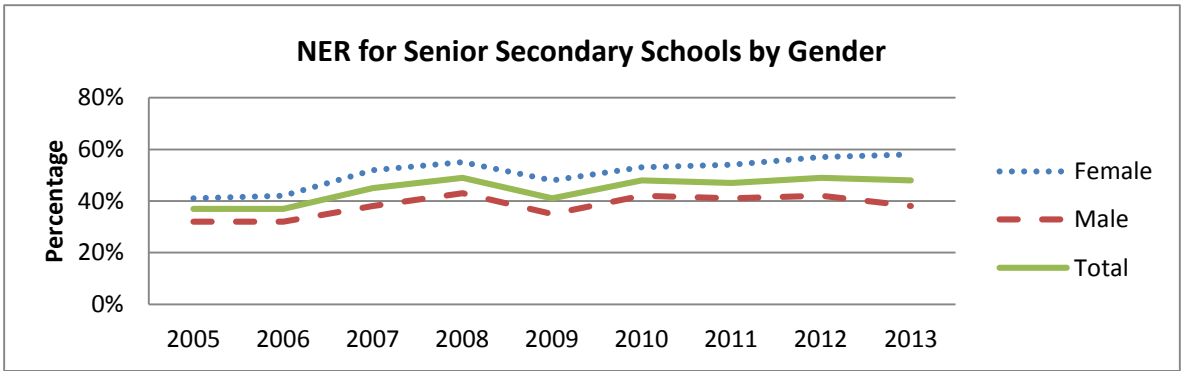

Figure 2.2m

Finally in this analysis a brief and simple synthesis is attempted by comparing indicators across school sectors. This is done by developing table 2.2n and 2.2o to compare like indicators across primary, JSS and SSS. Once again this data is presented in graphical form along with the GPI indices (as a percentage in the graphs). These data present the declining enrolment rates across the sectors for older children and the declining participation of boys as identified earlier.

Table 2.2n: GIR and GER School sector Comparison for 2013

2013	GIR	GER Primary	GER JSS	GER SS
Female	123%	96%	108%	61%
Male	112%	102%	86%	41%
Total	117%	99%	97%	51%
GPI	1.10	0.94	1.26	1.49

(Source KEMIS Statistical Digest 2013)

Table 2.2o: NIR and NER School sector Comparison for 2013

2013	NIR	NER Primary	NER JSS	NER SS
Female	91%	89%	78%	58%
Male	82%	93%	61%	38%
Total	87%	91%	69%	48%
GPI	1.11	0.96	1.28	1.53

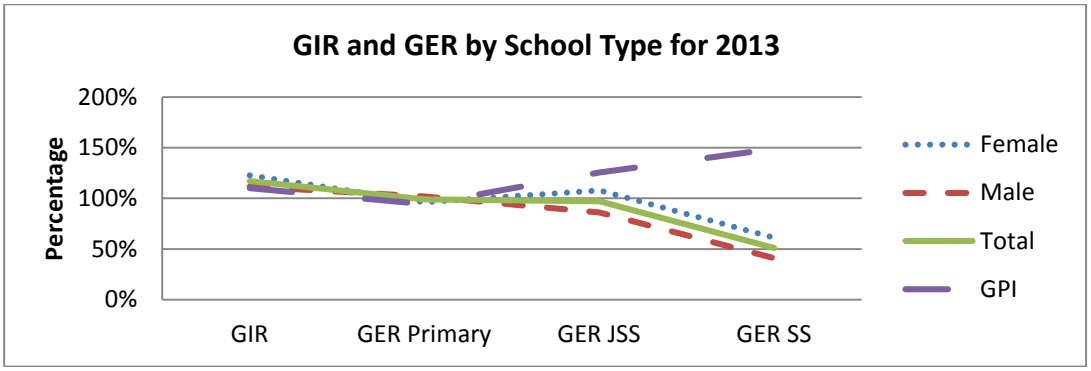

Figure 2.2n

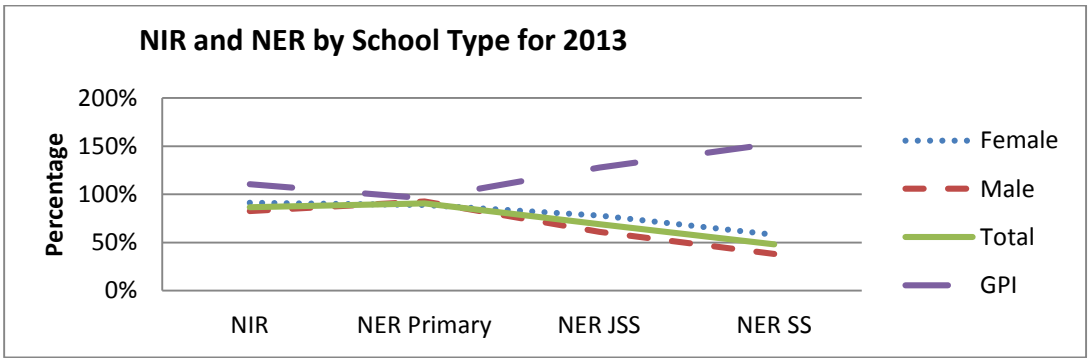

Figure 2.2o

Finally in this section, two issues of use of local language and time taken to travel to school are briefly discussed prior to moving to discuss Learning and life skills for young people and adults in section 2.3.

The percentage of primary schools offering instruction in local language(s)/mother tongue is not included in the formally collected data; however a policy has been issued with respect to this matter. It is now policy, as reflected in the curriculum documents, that initial instruction (in Grades 1 and 2) is undertaken in the local language with minimal writing. Therefore 100% of primary schools are offering (or should be offering) instruction in local language. It is hoped that this change in policy will have a beneficial impact on indicators such as literacy rates, dropout rates.

Data was collected in 2013 that described how far children travelled to school either by foot

or some form of transport. To respond to this indicator we have estimated the approximate time children would be expected to take to complete the journey.

Table 2.2p: Percentage distribution of primary school students by duration of travel between home and school

Survey Year	2013				
Distance	**Foot**	**Transport**	**Grand Total**	**Estimated Time**	**Percentage**
Less than 1 km	8303	861	9164	less than 15 minutes	43.35%
1 to 2 km	3634	2088	5722	15 minutes to 30 minutes	27.07%
2 to 3 km	956	2251	3207	30 minutes to 45 minutes	15.17%
More than 3 km	514	2533	3047	more than 45 minutes	14.41%
Grand Total	13407	7733	21140		

(Source KEMIS Statistical Digest 2013)

2.3 Learning and Life Skills for Young People and Adults

For young people and adults there are a set of TVET institutions (table 2.3a) and programs of study and skill development available that are overseen by a number of Ministries including the MoE (Kiribati Teachers College) and Ministry of Labour and Human Resource Development (MLHRD). The MLHRD reports that it is attempting to refine and better target course offerings at KIT by consulting with business and industry about their skill needs in an attempt to match its offerings to the employment needs of the country. In addition a range of non-formal education programs are supervised by the MLHRD.

Table 2.3a: Number of Technical/Vocational Education and Skills Training (TVET) Centres Young People and Adults

KSON - Kiribati School of Nursing
FTC - Fisheries Training Centre
MTC - Marine Training Centre
KIT- Kiribati Institute of Technology
KPS(PTC) - Police Training Centre
KTC - Kiribati Teachers College

Table 2.3b: Number of Young People and Adults Enrolled in TVET Programmes

	2012			2013	
	M	F		M	F
KSON - Kiribati School of Nursing	10	22		15	59
FTC - Fisheries Training Centre	85	0		64	0
MTC - Marine Training Centre	100	0		50	0
KIT- Kiribati Institute of Technology	171	106		122	147
KPS(PTC) - Police Training Centre					
KTC - Kiribati Teachers College	65	183		23	75
Total	431	311		274	281
% Females		42%			51%

(Source: MLHRD Project Report)

The table 2.3b presents the number and enrolment of TVET offerings provided by the Sector. While there is an imbalance internally in many of the TVET offerings there is an overall gender balance across the sector.

The data for this section of the report was provided by the MLHRD and consisted of one brief spreadsheet with no explanation of data sources. In addition the data provided was very incomplete. However, it was interesting to see that demand for places at the three key national institutions outstripped supply - that is, there appears to be an unmet demand for technical and vocational education and training (see Table 2.3c). Of course what is unknown is the extent of demand for the graduates of the courses.

Table2.3c: Number of Applications for a Sample of TVET Offerings

Year	**2012**		**2013**		**%**
Sex	**M**	**F**	**M**	**F**	**Average Accepted 2012/2013**
FTC - Fisheries Training Centre	517		474		15%
MTC - Marine Training Centre	807		793		9%
KIT- Kiribati Institute of Technology	233	144	639	828	30%

(Source: MLHRD Project Report)

Table 2.3d presents the staff numbers and gender balance for the post school sector with some of the data not included in the brief and incomplete spread sheet provided to the EFA committee.

Table 2.3d: Number distribution of TVET teachers/facilitators by type of TVET centre and/or programme and by sex

	No. Executive Staff				**No. Professional Staff**				**No. Facilities/Support Staff**			
year	2012		2013		2012		2013		2012		2013	
Sex	M	F	M	F	M	F	M	F	M	F	M	F
KSON - Kiribati School of Nursing	0	2	0	2	2	7	2	7	0	2	0	2
FTC - Fisheries Training Centre	0	3	0	3	10	1	10	1	8	4	8	4
MTC - Marine Training Centre	7		7		34		34		14		14	
KIT- Kiribati Institute of Technology	2	1	2	1	13	9	16	9	10	8	11	7
KPS(PTC) - Police Training Centre*												
KTC - Kiribati Teachers College*												

(Source: MLHRD Project Report)

(* No data provided in the MLHRD report)

The Ministry of Labour and Human Resource Development (MLHRD) had established a relationship with some of the non-formal TVET / education providers such as NGO, Government ministries, and individuals to consolidate data on trainings offered, type of training and number of graduates per training etc. The first consultation was held in May 2014 between MLHRD and the following sectors:

1. Tourism & Hospitality: Kiribati Catering, Cleaning and Sanitizing Services (KCCSS)
2. Agriculture: Agriculture Department, Ministry of Environment, Land and Agriculture Development (MELAD)
3. Fisheries Sector: Ministry of Fisheries & Marine Resources Development (MFMRD)
4. Health & Community Services : Kiribati Family Health Association (KFHA), Women's National Body – Aia Mwaea Ainen Kiribati (AMAK), Kiribati Red Cross, Tungaru Security Services
5. Business & Finance: Tamaroa Business Advisory & Accounting Services (TBAAS)/ KCCI /ILO certified trainer on Start & Improve Your Business (SIYB)

The following is an itemised list of the providers of training course for youth and young adults, along with the nature of the providing group and the target group. It will be noticed that there is no adult literacy provider in the list:

1. The Kiribati Catering, Cleaning & Sanitizing Services is an NGO offers trainings on catering, cleaning, sanitizing, room decorating and room services. Target group: young men and women

2. Department of Agriculture is a government department under the MELAD offers training on agriculture to assist people in outer islands. Target group: People in outer islands.

3. Ministry of Fisheries & Marine Resources Development is Government department offer trainings to its fisheries assistants to be placed in outer islands and do fisheries awareness programs and preservation methods to maintain our marine resources. They have offer training on outboard repair with the assistance of Fisheries Training Centre & the Secretariat of the Pacific Community. Target groups: fishermen and young men

4. Kiribati Family Health Association is a leading NGO service provider in advocating reproductive health care and in fostering the rights for all individuals in Kiribati, but it also conducts short training with KHFA young volunteers to become peer educators and community advocates. Target group: young people and families

5. Aia Mwaea Ainen Kiribati (AMAK) is an umbrella body for women delivers trainings to enhance professional development for women on sewing, agricultural activities, handicrafts and cooking. Target group: Both older and young women.

6. Kiribati Red Cross is an NGO provide training to its members on basic first aid skills course and life- survival skills.

7. Tamaroa Business Advisory & Accounting Services (TBAAS) is a private training services associated with Ministry of Commerce, Industry and Cooperatives and the Kiribati Chamber of Commerce and Industry (KCCI) to offer training on how to "Start and Improve Your Business" (SIYB) and the application of some of the Accounting Packages.

8. Tungaru Security Services is one of the security companies, offers pre-employment

training on the roles of a security guards such as securing workplaces and premises, escorting VIP, self-defence, customer services, etc. Target group: Both women and men.

9. Alcohol Awareness and Family Recovery (AAFR) is a Catholic agency offer trainings to provide help and continuous support for men, women and their families and the youth who face hardships from alcoholism and domestic violence so that they may recover from or be better equipped to fight the problem drinking and live a better life in peace, prosperity and harmony.

Unfortunately at the time of writing no statistics were available indicating the penetration there organisation had in the community, the breadth of their impact or their effectiveness. However is important to note that no provision has been made within the sector to enhance youth or adult literacy rates which are reported in the next section.

2.4 Adult Literacy

Literacy rate for people aged 10 or more is reported in the 2010 Census as being 97.7%. However, these are a self-reported estimate based on a census question. The notion of literacy reflected here lacks a definition of what it means to be literate and hence is of little use. The MoE conducts Standardised Tests of Achievement in Te Kiribati (vernacular) in grades 4 and 6 each year. It has been reported that in Year 6 2013 21% of Boys and 11% of girls were judged to be "critically below the expected level of achievement" while 4% of boys and 1% of girls were reported to show "no evidence of achievement" in language tests. These might be better estimates of literacy as they can be defined by the criteria reflected in the test items. It would be interesting to investigate the issue of whether or not these low achieving students at grade 6 level can be expected to significantly improve literacy skills

2.5 Gender Parity and Equality

In this section it is proposed to consider the issue of gender equality in the education sector. Throughout the discussion thus far the matter of gender parity has been reported upon when it is relevant and when data was available. This was especially true in the section on Universalisation of Primary Education above. In the earlier discussion trends in gender parity were pointed out and detailed evidence given to support the trends. It is not proposed here to repeat this discussion, but rather to gather the evidence together here in an attempt to identify and general, or global patterns that could be of use.

It will be recalled that earlier in the discussion it was not possible to calculate GPI by district due to the lack of disaggregated population data. In the tables below (2.5a and 2.5b) the number of females as a percentage of the total population, both nationally and by district is presented. This indicator must not be compared directly with the GPI due to a difference in definition. The GPI compares the percentage of the population of girls enrolled with the percentage of the population of boys, thus taking into account differences in the number of boys with the number of girls in the population. Here this difference is not accounted for; however it is possible to conduct some investigation at the district level where some trends are evident. Table 2.5a confirms the higher percentage of girls in the higher levels of schooling.

Table 2.5b shows that this trend is consistent across three of the districts, with District Central being the exception. It would be interesting to explore the reasons for this change from the general pattern. It may be a matter of access or it may be a matter of alternative opportunities being available for older girls in District Central.

Table 2.5a: Females Enrolled as Percentage of Total Enrolment by Level of Education for 2013

2013	Female enrolments	Male Enrolments	% Female
Primary	7326	7357	49.9%
Junior secondary	3842	3196	54.6%
Senior Secondary	2798	1947	59.0%

(Source KEMIS Statistical Digest 2013)

Table 2.5b: Females Enrolled as Percentage of Total Enrolment by District 2013

2013	Primary			JSS			SS		
	Female	Male	% Female	Female	Male	% Female	Female	Male	% Female
District North	4811	4756	50.3%	2551	2060	55.3%	2025	1399	59.1%
District Central	796	832	48.9%	115	72	61.5%	340	260	56.7%
District South	990	1042	48.7%	557	466	54.4%	228	147	60.8%
Linnix	729	727	50.1%	319	299	51.6%	205	141	59.2%

(Source KEMIS Statistical Digest 2013)

A similar analysis was conducted to explore gender balance among teachers. Table 2.5c shows that females dominate the primary teacher ranks with steady decline in representation taking place in the more senior levels of schooling. In some cultures the lack of significant participation by males in the primary school teaching service is seen as problematic due to the lack of male role models. This matter needs to be considered in this context and appropriate strategies developed to address the issue and support any decision made.

Table2.5c: Female Teachers as Percentage of Total Number of Teachers by Level of Education for 2013

2013	Female Teachers	Male Teachers	% Female
Primary	531	121	81.4%
Junior secondary	223	146	60.4%
Senior Secondary	112	113	49.8%

(Source KEMIS Statistical Digest 2013)

The pattern is continued when the gender participation data is disaggregated to district level where differences are quite stark especially in District Central. A graph of this disaggregated

data is presented to aid interpretation. It needs to be asked what the causal factors of this data are and what the effects are. Is there a set of underlying policy issues that cause these changes across the system?

Table 2.5d: Females Teachers as Percentage of Total Number of teachers by District and School Sector2013

	Primary			JSS			SS		
2013	**Female**	**Male**	**% Female**	**Female**	**Male**	**% Female**	**Female**	**Male**	**% Female**
District North	305	67	82.0%	122	74	62.2%	71	69	50.7%
District Central	70	16	81.4%	32	32	50.0%	12	18	40.0%
District South	97	27	78.2%	35	24	59.3%	17	13	56.7%
Linnix	59	11	84.3%	34	16	68.0%	12	13	48.0%

(Source KEMIS Statistical Digest 2013)

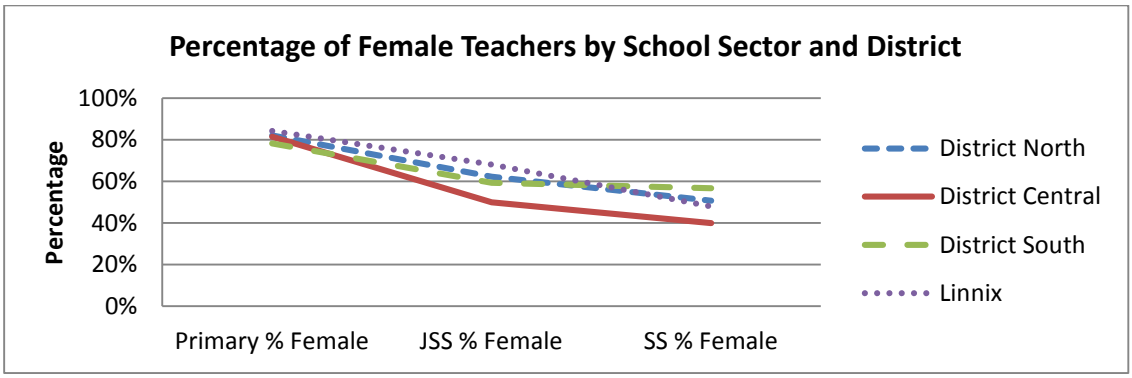

Figure 2.5d

Table 2.5e: Percentage of Female Senior Education Officers in MoE Offices

	F	M
Kiribati Teachers College Principal	1	
Senior Library	1	
Curriculum Development and resource Centre Director	1	
Examination and assessment – Senior Assessment Officer	1	
School Improvement Unit Primary – Senior Education Officer	1	
Financial Management Unit		1
Junior Secondary Schools		1
Senior Secondary School	1	
Statistics Support Information Management Unit – Senior Statistics Officer		1
Total	6	3
Percentage	66.7%	33.3%

(Source KEMIS Statistical Digest 2013)

While data on percentage of female school principals was not available, the distribution of senior officers in Table 2.5e show that females are well represented at senior management levels within the education sector.

To complete this section on gender access and equity a summary is provided of the gender parity indices calculated and presented in section 2.2. They are gathered together in summary form and an abbreviated time series is presented. In general, the table indicates that girls are engaged in school education at a higher rate than boys. The exception to this trend is the primary school where boys seem to have an initial advantage. The reasons for this initial advantage have not been made clear but may be associated with distance from school in some settings, or the availability of facilities may impact on rates of gender participation differentially. As mentioned in an earlier section, the apparent advantage for girls in the later years of schooling may be associated with a wider range of employment and other forms of training being available for boys. Thus this apparent advantage for girls may in fact be a result of another form of disadvantage.

Table 2.5f: Summary of Gender Parity Indices for EFA Indicators

Indicator	2007	2010	2013
GER ECCE	1.02	1.03	1.08
Preschool experience before grade 1	0.94	0.95	1.03
GIR	1.01	1.01	1.1
NIR	1	0.99	1.11
GER Primary	1.01	0.96	0.94
NER Primary	1.02	0.97	0.96
Survival to G5	1.09	1.22	1.08
Survival to G6	na	1.22	1.12
GER JSS	1.13	1.14	1.26
NER JSS	1.13	1.16	1.28
GER SS	1.33	1.24	1.49
NER SS	1.37	1.26	1.53

2.6 Quality of Education

In this section some dimension of the quality of the education being provided is discussed. It is common in some developing countries that as the education system expands the available resources to support the expansion are spread thinly and as a result the quality of education declines. To investigate this matter it is proposed to provide data with respect to three forms of input into the system namely finance, infrastructure and teachers and to consider some data with respect to student achievement in primary school, namely mathematics and language examination results for year 6.

The finance data has some limitations. The material presented in Table 2.6a, 2.6b and 2.6c represents the government's contribution to recurrent expenditure. It appears that the government does not contribute capital expenditure in the sector at all. Rather capital expenditure and over development funds are contributed by donor agencies and managed by implementing partners. Unfortunately these funds are not recorded in any central

location nor are they a component of the KEMIS. Hence, the finance discussion is limited to reflections on the government's contribution and the implications for growth and orderly delivery of services to the sector

Table 2.6a outlines the recurrent expenditure on education as a percentage of GNP. It can be seen that this seems to vary widely with a minimum value of 5.43% in 2005, a maximum of 11.46% in 2007 and a current value of 8.09%..Such values and fluctuation must make planning difficult, with the ability to plan across the period of the ESSP a real challenge. Further, 80% of recurrent expenditure is used to support teacher salaries.

Table 2.6a: Total public expenditure on education as a percentage of GNP by Sector

	2005	2006	2007	2008	2009	2010	2011	2012
Primary	2.31%	4.81%	4.53%	4.40%	3.90%	3.96%	4.89%	3.89%
Junior Secondary	1.34%	2.82%	3.29%	3.20%	2.90%	2.82%	3.50%	2.85%
Senior Secondary	1.78%	3.71%	3.64%	3.40%	2.80%	1.20%	1.73%	1.35%
Total	5.43%	11.34%	11.46%	11.00%	9.60%	7.98%	10.12%	8.09%

(Source KEMIS Statistical Digests 2005 to 2013)NB this table does not include TVET

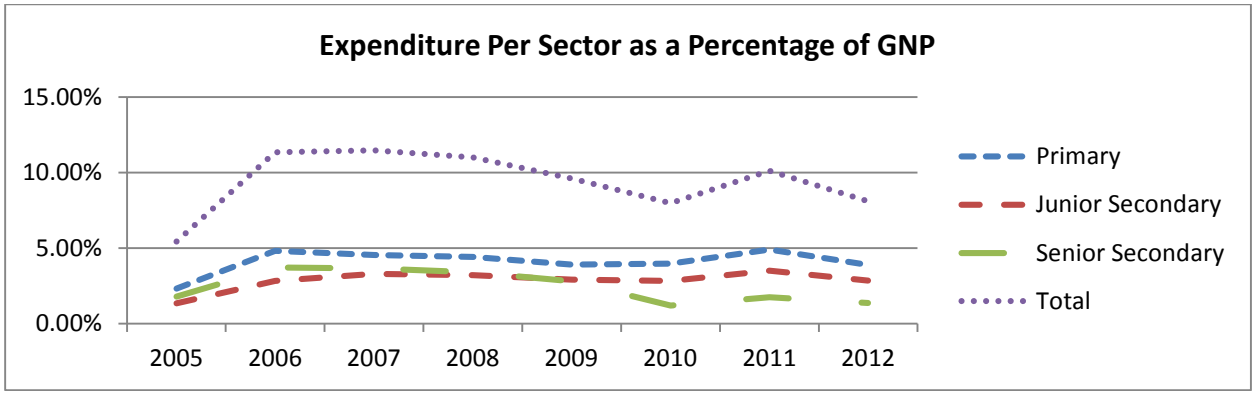

Figure 2.6a

Table 2.6b provides recurrent expenditure per pupil as a percentage of GNP per capita. This time series indicates a similar pattern of fluctuation as the above, however what stands out here is the sudden and large increase in secondary school expenditure in 2007 followed by a steady decline to more normal levels in the subsequent years. It is understood that this sudden jump was caused by a large secondary school scholarship program being funded by the MoE. These funding arrangements were later changed and the service was delivered by another agency. While the apparent level of funding seemed to decline it may be that it in fact remains but is booked to another agency. This of course makes any well considered analysis difficult and adds further weight to the call for a centralised and systematic financial data base to be added to the KEMIS.

Table 2.6b: Public recurrent expenditure per pupil as a percentage of GNP per capita by Sector

	2005	2006	2007	2008	2009	2010	2011	2012
Primary	28.10%	28.77%	27.60%	26.60%	29.34%	25.23%	26.26%	26.68%
Junior Secondary	17.60%	18.00%	44.60%	46.10%	51.70%	41.28%	41.36%	43.20%
Senior Secondary	20.84%	21.46%	76.90%	68.80%	43.69%	26.20%	30.49%	28.27%

(Source KEMIS Statistical Digest 2013)

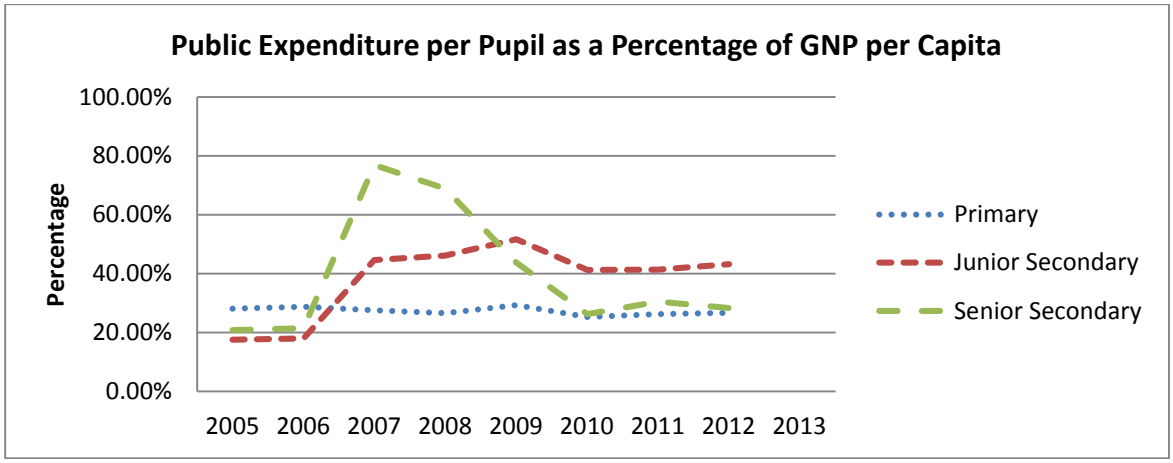

Figure 2.6b

A feature of Table 2.6b and Table 2.6c is the relative expenditure between the three sectors. While it appears that the senior secondary school and primary school now attract a similar level of funding, they also received considerably less per pupil than JSS pupils. This may be illusory as the SSS pupils pay school fees and hence additional funds are available to support the sector.

The differences across the sector shown in Table 2.6c can in part be explained by the school fees matter, but it needs to be noted that the primary school is a 6 year program with a larger number of students. The other two sectors are three years systems hence it can be argues that the JSS sector with 34.9% of MoE expenditure is more liberally funded than the 47.5% of MoE funds allocated to the primary schools.

This pattern of expenditure reflects the MoEs pattern of priorities.

Table 2.6c: Expenditure per Sector as a Percentage of MoE Expenditure

	2005	2006	2007	2008	2009	2010	2011	2012
Primary	36.56%	36.74%	35.60%	36.10%	37.80%	48.97%	47.79%	47.52%
Junior Secondary	21.29%	21.54%	25.90%	26.60%	28.10%	34.94%	34.24%	34.90%
Senior Secondary	21.54%	28.27%	28.60%	28.30%	26.80%	14.87%	16.88%	16.54%

(Source KEMIS Statistical Digests 2005to 2013)

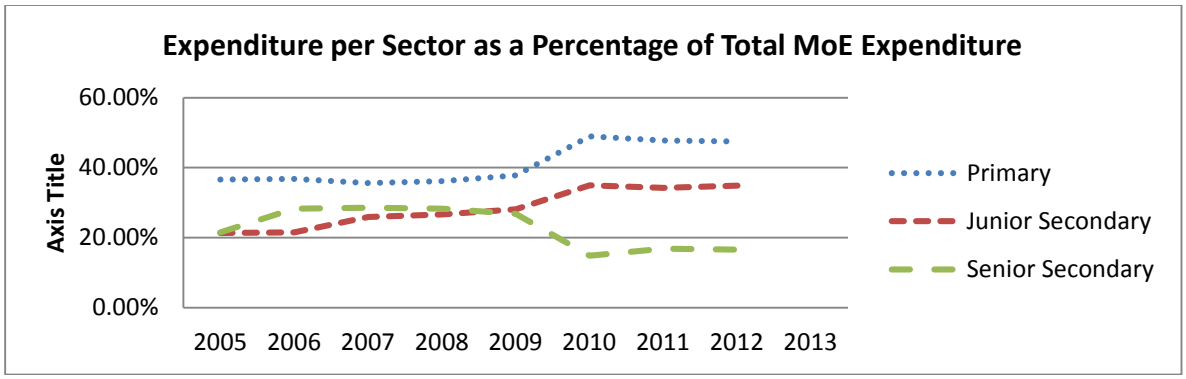

Figure 2.6c

The next set of inputs to be discussed in the context of quality is the teachers. It is proposed to look at the data for pupil teacher ratio, teacher qualifications and teacher certification.

Table 2.6d shows a consistent pattern of PTR for the past nine years with little change or improvement in that time. It could also be considered to be quite a satisfactory situation. However, in table 2.6e that PTR are disaggregated by district and it can be seen that there is considerable variability across the districts with District Central and District South being advantaged. There is not a great shift in these ratios with the exception of a recent decline in the ratios for Linnix and district Central and a recent rise in the JSS ratio for District North. Is this a result of the drift of population to the capital of Tarawa discussed earlier in this report?

Table 2.6d: Pupil/Teacher Ratio (PTR)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Primary	25	27	25	25	25	25	25	23	23
Junior Sec	18	19	18	17	18	17	19	17	17
Combined JS/SS	18	16	18	19	30	27	22	17	16
Senior Sec	15	15	n.a.	18	12	n.a.	n.a.	15	18

(Source KEMIS Statistical Digest 2013)

Table 2.6e: Primary and Junior Secondary Pupil/Teacher Ratio by District

	Primary			
	2010	2011	2012	2013
District North	27.4	26.3	25.4	25.7
District Central	19.5	21.9	19.6	18.9
District South	18.4	19.3	18.9	16.4
Linnix	26.8	27.7	23.5	20.8

Junior Secondary			
2010	2011	2012	2013
21.2	27.4	22.4	23.5
14.4	12.8	13.9	12.3
15.9	16.7	15.0	17.3
18.5	17.1	16.3	12.4

(Source KEMIS Statistical Digests 2010 to 2013)

Table 2.6f presents the highest qualification of teachers by school sector. It can be seen that the higher qualifications such as bachelor's degrees are almost totally reserved for secondary teachers. While this is a common practice and is predicated on the need for specialist subject content speciality. However, in recent decades education has become an academic specialty in

its own right. It would seem appropriate that the primary system recruits highly qualified graduates for specialty areas such as literacy development, numeracy development and school administration and development. Thus it would be desirable for these important and highly sophisticated skill sets to be supported by highly qualified practitioners.

Table 2.6f: Percentage Distribution of Teachers by Academic Qualification, Level of Education

Highest Qualification	Primary	JSS	Senior Secondary	Combined schools
1 Year Certificate	5%	1%	0%	1%
1 Year Diploma	6%	1%	2%	5%
2 Year Certificate	24%	44%	8%	1%
2 Year Diploma	4%	12%	3%	5%
3 Year Certificate	30%	19%	10%	11%
3 Year Diploma	29%	19%	5%	8%
Bachelor of Education	o%	1%	42%	34%
Bachelor of Technology	0%	0%	2%	5%
Diploma of Education	0%	1%	17%	12%
Dip Math Teaching	0%	0%	2%	0%
Dip.Primary Education	2%	1%	2%	1%
Dip Teaching English as a Second Language	0%	0%	2%	2%
Master of Education	0%	0%	3%	0%
Teacher Certificate	3%	2%	2%	14%

(Source KEMIS Statistical Digest 2013)

Table 2.6g indicates that there are many unqualified teachers and uncertified teachers in the system. For qualified teachers are those who have met the required qualification for teaching in that certain level like JSS or SSS. Certified teachers refer to those who have been trained and awarded with a qualification in teaching and/or education. This teaching or education qualification must be at a level of undergraduate and above.

Table 2.6g: Percentage of Trained Teachers who are certified to Teach according to National Standards by Level of Education for 2012 and 2013

Percentage of Qualified Teachers by School Type, 2007 - 2013.							
School							
Type	2007	2008	2009	2010	2011	2012	2013
P	92%	89%	93%	96%	96%	96%	96%
JS	82%	90%	94%	92%	91%	91%	93%
CS	90%	37%	35%	40%	48%	48%	66%
SS	66%	64%	65%	64%	62%	62%	65%
Total	84%	83%	85%	86%	85%	85%	87%

Percentage of Certified Teachers by School Type, 2007 - 2012.							
School							
Type	2007	2008	2009	2010	2011	2012	2013
P	91%	87%	92%	94%	94%	94%	94%
JS	79%	86%	91%	91%	90%	90%	89%
CS	36%	16%	16%	22%	25%	25%	38%
SS	36%	35%	40%	40%	38%	38%	39%
Total	76%	74%	78%	80%	78%	78%	60%

(Source KEMIS Statistical Digests 2012 and 2013)

The issue of adequacy of infrastructure is now considered. It will be recalled that the government funds allocated to education used to support recurrent expenditure, with 80% being spent on teacher salaries. Capital expenditure is supported by donor funds and school repair and maintenance is provided by the local community. The government has been active in identifying suitable standards for school infrastructure by establishing a set of National Infrastructure Standards (NIS) that provide a framework to analyse the adequacy or other wise of the current school buildings and facilities. To provide an indication of the challenge facing the Kiribati education system this paper will provide an outline of some features of the primary school infrastructure as reported by schools in 2013.

Table 2.6h shows that only 13 schools have reported having an inadequate number of classrooms. However, some 53 % of the rooms are either in fair or poor condition and hence require some remedial work.

Table 2.6h: Adequacy of classroom Numbers and Classroom Condition

		Adequate Classrooms			Condition			
	Number Schools	**Number**	**%**	**Number Classrooms**	**Good**	**Fair**	**Poor**	**No Data**
District Central	19	19	100%	82	49%	27%	24%	0%
District North	43	34	79%	323	32%	24%	32%	13%
District South	23	23	100%	125	42%	28%	15%	15%
Linnix	8	4	50%	43	28%	16%	56%	0%
Total	93	80	86%	573	36%	25%	29%	10%

(Source KEMIS Statistical Digest 2013)

Table 2.6i outlines the adequacy of water supplies to primary schools. A national standard has been established that requires water tanks to be provided in the absence of piped water. The table shows that only 7 out of 93 schools currently meet this standard and that 33 primary schools have no water supply.

Table 2.6i: Primary School Water Supply Adequacy

		Water Supply			Tank Capacity Complies		
	Number Schools	With piped water	With Tank	Tank Capacity supplied	No of Schools	% Schools	% Pupils
District Central	19	0	11	6	3	15.80%	12.50%
District North	43	0	29	12	0	0%	0%
District South	23	0	16	9	3	13%	9%
Linnix	8	0	4	1	1	12.50%	0.70%
Total	93	0	60	28	7	8%	3%

(Source KEMIS Statistical Digest 2013)

There is a legal requirement that toilet facilities are provided at the rate of 1:40 for girls and 1:60 for boys. Further hand wash facilities should be located in close proximity to these facilities. Table 2.6j indicates that only 7 schools comply with the boys standard and 5 schools comply with the girls standard.

Table 2.6j: Compliance of Toilet and Hand Washing Facilities in Primary Schools

		Boys		Girls		Staff	
	Number Schools	Compliant	%	Compliant	%	Compliant	%
District Central	19	2	11%	2	11%	9	47%
District North	43	3	7%	1	2%	10	23%
District South	23	2	9%	2	9%	10	43%
Linnix	8	0	0%	0	0%	0	0%
Total	93	7	8%	5	5%	29	31%

(Source KEMIS Statistical Digest 2013)

Thus far in this section quality of the education system has been reflected on through the lens of a set of inputs. Of course the ultimate test of a system is the quality of the output. In this case one such output can be investigated by considering student learning via the report of a set of Standardised Test of Achievement in Kiribati (STAKI) that were conducted in 2013. The STAKI report provided a set of useful tables that indicates the proportion of boys and girls that achieve in a set of five levels ranging from "working above expected level" to "no evidence of achievement". Table 2.6k provides a summary of this data for Grade 6

The exam report made some general observations with regard to the literacy results that are mentioned here in summary form.

- There has been a decline in performance since 2011.
- Girls continue to outperform boys and
- 77% of students are working at or above the 'minimally accepted level'

With regard to Numeracy the report said:

- There has been a small improvement of performance since 2011
- 56% of students are working at a level that is at or above the minimally accepted level and
- Girls are outperforming the boys.

The table below (2.6k) shows that girls are significantly outperforming boys. It may be the case that this difference in performance is part of the explanation for the much higher enrolment rates for girls in the JSS and SSS.

Interestingly, the urban area of South Tarawa is performing worse than the other three districts. Overall there is clearly need for a significant increase in student performance since 53% of children are working below the expected level in literacy and more alarmingly 80% of children are working below the expected level in numeracy

Table 2.6k: Percentage of pupils who have mastered nationally-defined basic learning competencies (in particular literacy, numeracy) by grade 6 and by Gender

2013 Year 6 Kiribati Performance in National Exam in Te Kiribati	**No evidence of achievement or critically below expected level**	**Working towards expected level**	**Working at or above expected level**
Total	23%	30%	47%
Boys	32%	32%	35%
Girls	14%	28%	57%
Line Islands	21%	38%	41%
Central	14%	32%	54%
Southern	13%	30%	57%
Northern	24%	32%	44%
South Tarawa	29%	27%	44%
2013 Year 6 Numeracy Performance in National Exam in Numeracy	**No evidence of achievement or critically below expected level**	**Working towards expected level**	**Working at or above expected level**
Total	44%	36%	20%
Boys	53%	32%	15%
Girls	36%	40%	24%
Line Islands	52%	34%	14%
Central	40%	35%	25%
Southern	35%	39%	26%
Northern	45%	34%	21%
South Tarawa	46%	37%	17%

(Source: STAKI Report 2013)

To provide an assessment of longitudinal progress in student learning outcomes the 2013

STAKI report provides a table reporting the percentage of students achieving in the top two performance bands, that is "working above the expected level" or "working at the expected level".

Table 2.6l: Percentage of students performing in the top two Levels 2007 to 2013

Year 6	English	Te Kiribati	Numeracy
STAKI 2013	23%	50%	20%
PILNA 2012	23%	NA	34%
STAKI 2011	22%	60%	18%
STAKI 2009	32%	56%	16%
STAKI 2007	14%	49%	17%

(Source: Staki 2013 National Report)

The table shows fluctuating changes in performance with some improvement evident between 2007 and 2013. However it must be made clear that the mechanisms to ensure valid comparisons between years were not made transparent and thus any claims of improvement must be treated with caution.

The PILNA reference in the table reflects performance in the 2012 Pacific Island Literacy and Numeracy Assessments. The results from this process are consistent with the internal assessments for English and considerably better for Numeracy.

2.7 Summing up

There has been much useful data collected and tabulated by KEMIS and the EFA committee is grateful to the staff of this important unit. Some data gaps have been identified in the preparation of this section of the EFA report and it will be necessary to address these issues in future iterations of the data collecting process. This especially important with regard to integrating ECCE and finance data into the KEMIS

It will also be useful if some of the data can be disaggregated by district as an issue was identified in discussion that the drift of the population to the urban areas is having an impact on some indicators such as pupil teacher ratios. It has also been noted that the urban area of South Tarawa has performed worse in the national exams than the more distant districts. This is very unusual as in most countries the rural areas perform worse than the urban areas. More explanation is warranted with regard to this phenomenon.

Another issue that was continually referred to in discussions with both Ministry officers and teachers is the issue of student absenteeism. Unfortunately there does not seem to be any systematic collection of data with respect to this matter. However it is noted that the School Leadership and Management Handbook refers to developing reporting mechanisms for both student and staff attendance. This process should be developed and the data collated to allow for the impact of attendance on student progress to be studied.

With regard to general trends, it is of considerable concern that the NER has been declining over the last four years making it virtually impossible to achieve the MGD 2 by 2015. It has been noted in the report that the 2012-2015 strategic plan has set other goals to be achieved by

2020. In addition the survival rate to grade 5 is showing a declining trend, especially with regard to boys. The examination achievement in year 6 may explain the gender difference in the survival rate and the very different participation rates between gender in JSS and SS.

The gender parity indices are generally close to 1. In the cases above 1 they are indicating that the girls are engaging in education more consistently than boys. Recent trends in primary NER however indicates a decline in GPI

There seems to be work needed in addressing teacher quality, especially in the primary school that appear to have a lower qualification profile for teachers than the JSS and Senior secondary sectors. It will be seen in the next section that the ESSP 2011-2015 has commenced a significant project to address this issue.

3. Review of EFA Strategies and Sector Management

3.1 Assessment of EFA Strategies

In the introduction to this report it was discussed how there was a need to synthesise the 6 EFA goals with the MoE's 7 goals and 37 strategies that formed the implementing component of the ESSP 2012-2015.

The matrix below is the attempt of this paper to undertake that analysis task. It sets out the EFA goals in the horizontal axis and the ESSP goals on the vertical axis. The implementing strategies are summarised in the cells of the body of the matrix and their position is the attempt by this reviewer to reflect the interaction between the two sets of goals.

Table 3.1a: Mapping of ESSP 2012-2015 Goals to EFA Goals Using Implementation Strategies

ESSP 2012-2015 Goals	**EFA Goals**					
	ECCD	**Universal Basic Education**	**Meeting needs of Youth and Adults**	**Adult Literacy**	**Gender Equality**	**Quality of Education**
1.Quality, Coherent, Relevant curriculum		Develop quality, coherent and relevant curricula.	Clearer pathways to TVET and Life skills in JSS. Nationalise year 12 curricula.	Development of language policy. Improved curriculum for I Kiribati and English	Curricula check for gender bias EFA indicators of gender parity calculated and published.	Phase in of new curricula Setting national assessment benchmarks In-service Teachers on new curricula
2. School Environment Conducive to learning	Identify resources needed for pre-schools.	Identify resources needed for schools.			All students physically and emotionally safe.	Provision of infrastructure to satisfy national standards. Implement facilities maintenance schedule. Implement SIP. Improved asset and resource management.
3. Teachers are committed, competent	Provide training and professional development	All teachers to acquire minimum TSS.	Training of untrained senior secondary	Improved teacher capacity		Move to decentralised model teacher in-

and effective	for ECCE Teachers	Improve language teaching skills	teachers			service. Development of National Teacher Qualifications Framework.
4. Evidenced based policy and planning applied		Monitoring achievements Identifying remedial action. Identifying and rewarding excellence. Emphasis on Inclusive education.		Using national examinations to monitor student learning.	Monitoring achievements Emphasis on Inclusive education.	Monitoring achievements Financial planning. Evaluate KEMIS. Emphasis on Monitoring and Evaluation.
5. Children's rights protected by Legislative framework	Develop new legislative base for ECCD.	Develop new legislative base for education.	Develop new legislative base for education.		Develop new legislative base for education.	
6. Collaboration between Ministry and stakeholders		Develop Collaborative to improve community awareness.			Develop Collaborative to improve community awareness.	Develop Collaborative to improve community awareness. Improve timely flow of information.
7. Effective and efficient services support schools	This ESSP goal addresses the context in which the EFA and other ESSP goals are addressed. • Review MoE structure and mode of operation. • Devolve some responsibilities of MoE to schools • Use SIP to build capacity and empower schools and Head Teachers • Build team work and professional peer review • Undertake audit of current Capacity to identify structural, training and recruitment needs.					

It can be seen from this matrix that early childhood education is only an emerging interest of the Ministry of Education, with commitment being made to initial policy development and some preliminary teacher development. It is worth noting that a document has been located entitled *Kiribati Early Childhood Care Education Policy Ministry of Education (2010).* This was a product of the ESSP 2008-2011, and while accepted by the MoE it has not been acted on or operationalised. It is envisaged that this policy statement will form the basis of ECCE initiatives in 2014 with an initial policy review being undertaken to support a move towards preschool registration and licensing in order to facilitate a grant system if a budget line can be established. In addition the Kiribati Teachers College is to be approached with regard to establishing an early

childhood teacher training program. However, prior to all this, a legislative context must be established and hence an act needs to be presented to parliament along with the required implementing regulations to facilitate progress in the ECCE sub- sector.

While the ESSP makes little or no reference to the needs of youth and adults, the matrix analysis allows us to see some commitment to the area. This is reflected in the proposed attempts to better articulate pathways between JSS and TVET that are the responsibilities of separate Ministries. Additionally, the work on developing the non-compulsory Senior Secondary School component has been interpreted here as contributing to the welfare of youth. However, the EFA goals associated with Youth and Adults are usually associated with those that are out of school or suitable employment. In addition, a focus is often placed on developing literacy among adults in an attempt to provide better conduits of information to mothers, and to broaden employment opportunities. These activities are often undertaken in a non-formal education sector. The strategies identified in the matrix are all located within the formal education sector and there appears to be no commitment from MoE to improve literacy rates among out of school youth and adults.

The other four EFA Goals are being addressed by improving the quality of curriculum by making it more coherent and relevant. This along with other strategies such as improving teacher competencies and increasing community engagement in schools it is hoped will lead to improved EFA indicator values, reduced absenteeism and improved learning outcomes.

The seventh ESSP goal is associated with the support services provided by the MoE. These strategies are seen as crosscutting activities that will impact all the EFA goals by facilitating the delivery of assistance and resources to schools.

In the next section some of the strategies are described briefly as enabling factors and presented along with some constraining factors provided by the section leaders within the MoE

3.2 Enabling and Constraining Factors

Key to the enabling process to address the objectives set out in the ESSP is the external aid being provided by various donors. This process is organised well under the auspices of Kiribati Education Improvement program (KEIP) that not only provided resources but also supports adequate coordination across the aid sector to ensure an orderly and professional support process.

A new education act has been passed by parliament but not yet operationalised. The Legislation is designed to provide the broad legislative context for running the school system:

> Currently the regulations and associated guidelines required to support some of these key functions are either weak or no-existent. This situation severely limits the Ministry's authority to enforce key policies such as compulsory attendance, teacher registration, function and powers of school committees' accreditation of schools, etc.
> (P. 13. *Ministry of Education Sector Strategic Plan 2012-2015*)

The Kiribati Education Management Information System (KEMIS) has progressed well since its

inception and initial design. The KEMIS unit produces a Kiribati Education Statistical Digest annually and was responsible for producing most the indicator values in section 2 of this report. There are considerable opportunities for its further development, especially in areas such as a student data base that would allow tracking the movement of students from school to school by the use of a unique numerical identifier for each student. In addition, the integration of various data base components that are currently not linked by a coherent set of linking variables thus prevents some forms of detailed analysis. Goal 4 of the ESSP (evidenced-based policy and planning) indicates that a "stock take" of this crucial planning tool needs to be undertaken to identify "what needs to be done to strengthen" KEMIS.

Adoption of Child Friendly School model to assist in addressing many of the issues providing challenges for the Kiribati education system Primary School Rehabilitation Plan.

The National Curriculum and Assessment Framework (NCAF) reflects principles of child centred active learning and contains the policies and guidelines for the content, structure and delivery of the national curriculum for primary and secondary schools in Kiribati. It is an ambitious and substantial document that has the potential to change the nature of schooling in Kiribati and at the same time address major issues such as supporting a shift towards universal education, by improving the coherence and relevance of the school experience of children.

> The Kiribati National Curriculum and Assessment Framework (NCAF) identifies the elements that are fundamental to quality learning and teaching in all Kiribati schools. The framework establishes the principles that give direction to learning and teaching. It identifies the learning areas and essential skills to be developed by all students. It reinforces the values and attitudes that underpin Kiribati society. It outlines key policies including the Language of Instruction policy and the Assessment policy. It gives directions for the development of national syllabuses that define in greater detail the knowledge, skills, values and attitudes for each learning area. It helps ensure the progressive flow of learning throughout schooling and the alignment of the Kiribati curriculum standards to regional and international benchmarks.
> (P. 6. *National Curriculum & Assessment Framework*)

The document takes a useful view of curriculum shifting the focus from merely a list of content to be covered to a wide ranging view of all experiences and underlying pedagogical philosophy that is expected contribute to the learning experience and processes. Hence there is an integrated approach that merges various aspects of teaching and learning such as lesson activity and assessment.

A sub-unit of the Curriculum Development and Resource Centre is the Examinations Unit that conducts a national assessment system in grade 4 and 6 (Year 4 and 6). This is being used in evidenced based teacher development activity and a useful and insightful report is provided with results disaggregated by gender, district, and school. In addition attempts are made to indicate performance relative to previous years. The Exams Unit also prepares National Examination papers for Years 9, 11 and 12 while the Year 13 students receive Regional Examination papers set by SPBEQ and USP in Fiji.

As noted above, the NCAF incorporates a language policy that reflects international best practice. Home language is used for development of initial literacy with a gradual introduction of English in later years. Such practice is hoped to improve literacy rates and to enhance the relevance of the school experience in early years and thus reduce dropout rates.

Teacher Service Standards developed and integrated into a teacher appraisal and improvement framework. Of particular note in the teacher and appraisal system is the existence of explicit development pathways for teachers, the facilitation of competency based assessment of teachers and national standards of teachers being explicitly measured and evaluated, thus supporting the identification of teacher in-service priorities.

School Improvement Plan (SIP) Handbook has been designed and provides a very useful model for devolving responsibility for school quality and development to the local and community level. The manual for SIP indicated that it is

> about transforming an ordinary school into a quality school... it has all the information.... needed as an instructional leader to guide other as well as yourself to transform your school into one that is child-friendly and conducive to the teaching and learning processes.
> (P. 1. School Improvement Plan (SIP) Training for Head Teachers, Principals and School SIP Committee Members)

The SIP handbook incorporates a number of conceptual frameworks to support its work. Among these in the notion of Action Research which is a well tried and sophisticated approach to professional development

To achieve the ESSP 2012-2025 goals there are of course a number of significant constraints. To explore these constraints each of the leaders of the MoE management units was asked to contribute their thoughts with regard to factors they felt were inhibiting progress with regard to implementing the strategies embedded in the ESSP. There were, as expected, much repetition in the responses and so it was decided to synthesise the reports in a form of content analysis by discussing the constraints under six headings.

- Lack of critical mass. The small size of the population Kiribati results in a limited number of people and staff to draw upon and a limited resource base to provide the required infrastructure. This is similar to the notion of there being no economies of scale to benefit from. You need one curriculum for one hundred thousand people or 1 million people.
- Isolation of islands. This was mentioned by many people and it manifested itself in communication difficulty and often days spent travelling to the outlying islands. It was pointed out this isolation impacts on the ability to communicate, even with modern internet, to deliver in-service development, to monitor development progress and to deliver resources in a timely fashion. It is presumed therefore that such isolation would also impact on schools ability to reverse the communication process and seek help in interpreting new curricula and seek additional support for struggling teachers or the implementation of SIP activities. It is well recorded in the literature that the change

process requires support to be available at critical times. This is often referred to as using a critical friend to assist in reflection on progress and the resolution of challenges.

- Budget Constraints. Lack of both resources and maintenance programs due to a lack of budget facility was a recurring theme and is impacting on progress. Reference was made to large and expensive items, such a printing machinery and library and archive facilities, and to smaller consumable items. Budget complaints are of course a constantly recurring concern and impact on the pace at which change can occur.
- Current Teacher Quality. This is of course a constraint otherwise there may be no need for teacher development to be a major focus of the EFA and ESSP processes. However it is not just a matter of 'teaching ability' but also problem exist with teacher attendance, staff lateness and general professional behaviour. This is part of the teacher service standards and will be addresses in the teacher appraisal process with Principals being empowered; it is hoped, to take action if necessary under the new education legislation. There were some comments received with regard to the processes of teacher appointment and principal selection. It was observed that these tasks were undertaken by administrators with no understanding of the professional implications of their decisions. There was also a call for training of librarians to be facilitated to improve quality.
- MoE staffing policies. Some staffing policies in the MoE were questioned and it was argued that they are impacting on 'institutional memory'. These policies include retirement at 50, long periods of accrued leave being taken resulting in many positions filled by acting officers, or worse, no replacement at all. It is hoped that many of these issues will be resolved by action taken under strategies to address Goal 7 of the ESSP. This will involve the improved delivery of services to schools by the central Ministry and the devolution of responsibility to district and schools as appropriate.
- Absorption of Change. All of the above have the potential to impact upon a more general construct that can be seen as a constraint in this context. The constraint is the notion of how fast can people and institutions absorb change. This notion in inferred in the response of the Kiribati Teachers College when its reporter said:

> Accreditation of KTC – need for institutional strengthening in all areas staff qualifications, programs, facilities/resources, policies, management structure etc. This is slow, (there is a) need for financial and technical support to make this move forward.

Things are slowly moving forward as some lecturers are undergoing professional training at USP centre in Kiribati funded by DFAT through KEF. In 2013, the PP13 (Pacific Partnership 2013) did some renovations to the KTC dormitories.

Despite all the happenings, there is still frustration of the change process and the pace at which it can be expected to happen. The ESSP 2012-2015 is a very ambitious plan and the change in the education culture and professional expectations is immense. At what pace can we expect this change to happen. It is noted that the SIP time line has a three year duration. What progress can we expect in that first cycle and how many cycles would it be reasonable expect for a school to achieve the standards expected by the ESSP and its related policy documents.

3.3 Lessons Learned and Best Practices

The timing of this report is inconsistent with a quality report on lessons learned and best practice

due to the review of the current ESSP beginning later in the year, hence there is an absence of systematically collected and analysed data on progress made this far. However, some emergent themes have been reported that are indicative of some important lessons being identified and that might be accepted a best practice.

To provide a template against which to evaluate the emergent themes, it is proposed to call upon the work of Mourshed et al's *How the world's most improved school systems keep getting better.* In this the authors argued that they have identified 4 stages of school system development and that there are two types of interventions. These are stage dependent interventions and cross stage interventions. Only the first two stages are mentioned here as they are the stages relevant the current status of Kiribati development.

The first stage involves moving the school system from "Poor to Fair" and the focus is on supporting students on achieving basic literacy and maths, scaffolding low-skill teachers and fulfilling basic student needs. The second stage, moving from "Fair to Good", involves consolidating system foundations, including high quality performance data, ensuring teacher and school accountability and creating appropriate financing and organisation models along with quality pedagogy models.

The lessons learned are listed in the balance of this section.

New curriculum and its impact on attendance. The new curriculum, with its broad definition, wide range of teacher support mechanisms and child centred approaches (quality pedagogy models) has already been observed to be having a positive impact of school attendance. The 2011 review of ESSP identified attendance to be a significant problem and teachers in some schools are indicating that the students in early years of primary school where the new curriculum has been introduced are attending school more consistently and not leaving the school grounds at the first opportunity.

Use of quality performance data. The availability of national performance data from the Examinations unit is being used to motivate teachers of the need to improve the quality of learning by providing comparative performance indices that indicate a need for improvement in some schools and classrooms. This, in a few early cases has provided a very real and useful motivation for teachers to take part in per group activity aimed at enhancing the experience and learning outcomes of students.

The provision of scaffolds to support teacher and schools in their development pathways. Some MoE officers have already observed that while developmental models have been designed and implementation training has been provided, not all schools seem to be actively supporting the implementation. One supervisor observed that "it was no good giving goals and issuing orders". Rather there was a need for professional staff to be self-motivated and for a clear pathway of development made apparent to them. There was identified a need to provide strategy pathways, "critical friends" (a critical friend can be thought of as a supportive mentor) and regular reporting dates. In addition it is necessary to provide strong and widely accepted conceptual frameworks to give clarity to the direction and the purpose of the development journey.

Mourshed et al argue that “the cross stage interventions are made up of six interventions that occur at all stages of development but are implemented differently at each stage. These are revising the curriculum and standards, ensuring appropriate reward structures for teachers and principals, building technical skills of teachers and principals, assessing students, establishing data systems and facilitating improvement through the introduction of policy documents and education laws”. While we can point to examples of all of these activities being embedded in ESSP 2012-2015, it is important to realise that they are not finite activities that we can expect to end and not be concerned with after the current ESSP cycle. Rather the completion of the current activity will generate another set of needs and development imperatives that will be required to be addressed in the next cycle. This situation raises the important issue of sustainability. The current implementation mechanisms are largely supported by external assistance. Plans need to be made that will allow for ongoing funding support provided either internally or externally.

4. Emerging challenges and government priorities to 2020

4.1 Major Emerging Development Challenges

The Review of ESSP 2012-2015 begins at the end of 2014. It is this process that will establish the emerging challenges and future government priorities. It should also be noted that the current ESSP sets goals for the period up to and including 2020. These Goals and targeted outcomes are supported by MoE and major donors. They state that the overall goal is, for:

> All children to have access to relevant and quality education by 2020.
> ESSP 2012-2015

This is supported by a statement of

> Targeted outcomes for 2020 are:
> 100%of Kiribati school children achieve functional literacy and numeracy after six years of basic education and are equipped with the skills to continue to the next stage of education; and
> A comprehensive inclusive education system adequately funded and effectively managed providing quality basic education to all I-Kiribati children
> ESSP 2012-2015

The work of Mourshed et al reported above will provide a guide as the next phase of development and the precise set of goals and strategies will depend on the perceived progress that has been made. As the Mourshed model indicates, different strategies will be required depending upon whether the education system is perceived to be poor, fair or good. It can also be expected that different schools, islands and districts can be expected to make different progress in the initial years of ESSP activity, that is, like children, there will be unequal learning outcomes. This creates a challenge for the MoE as it will need to develop different strategies to reflect the various level of school achievement. The models of teacher assessment and School Improvement Programs designed will help facilitate catering for these individual differences since they devolve much decision making to the schools and communities most affected.

4.2 Implications for Future Education Development

The Minister for Education has begun to develop a long term vision that requires a shift in the very purpose of education. She is of the view that the current emphasis is on mechanical learning of literacy and numeracy together with preparation for employment. This emphasis is consistent with Mourshed et al's stage 1. She hears much criticism of the education system that even those that are outstanding achievers are not able to find jobs at the end of the process "What is the purpose of going to school" is the often raised question. The minister is developing the opinion that the focus of the purpose of education needs to be broadened to include:

> Applying knowledge, acting independently and helping ourselves, how can we better cater for diversity of attitude, spirit, our internal selves and social activity. How can our aspirations be different and be developed in the education system.
> Minister for Education 2014

5. Conclusions and Recommendations.

A summary of the major conclusions of this report are offered in point form in this section and will be followed by a set of suggestions for consideration within the MoE of possible activities that might further enhance the development process.

5.1 Conclusions

The EFA targets are being pursued with a development plan embodied in a well-designed ESSP 2012-2015 that is well matched to EFA goals with the exception of adult and youth literacy targets. It is not expected that the 2015 Millennium Development Goals will be achieved and new dates for the achievement of these goals have been set within the ESSP process.

The Basic education NER and GER have been declining in recent years and the new development process has not as yet had time to reverse this decline.

The survival rate to grade 5 and 6 is low and declining. This along with dropout and repetition rates indicates some serious deficiencies in efficiency and effectiveness of the system. It is hoped that these issues will be addressed in part by the emerging curriculum and assessment development process, modernisation of school facilities and the emphasis on teacher development and school improvement processes.

Girls' participation as measured by the GPI is less than boys in primary school. However, the girls' participation rate exceeds that of boys in JSS and SS school, and the gap appears to be widening. Some further research as to the underlying cause of this phenomenon is suggested.

The formal assessment process (STAKI) and reporting in primary school is well designed and effective. It will facilitate evidence based action and decision making in the future. Girls are achieving better learning outcomes than boys. This may explain the increasing gap between girls and boys participation rates in JSS and SS.

There is need to increase quality of learning outcomes. The STAKI process provides 5 stages of student achievement and the percentage of students achieving in the lower two stages that indicate little or no effective achievement, is alarming.

Official literacy rate may not be a valid measure as it is based on a self-reporting census question. It would be more useful to use a definition of literacy derived from STAKI to arrive at a measure that could be used to drive a non-formal education adult literacy program.

The curriculum and assessment unit along with KEMIS are providing opportunities to encourage evidence based leadership and the setting of development priorities. These processes are to be encouraged and expanded as the opportunities offer themselves

A set of sound conceptual frameworks are used to underpin the work of many aspects of the MoE. These seem consistent with international trends such as Child Friendly Schools that assist in shifting the culture of education from a mechanistic approach to a supportive constructivist approach that will assist in encouraging children participation and learning in the education

process.

A strategy is being developed (EPiK) to enhance engagement with development partners including other ministries.

Currently the monitoring and Evaluation process of the ESSP and the reporting mechanism for EFA are seen as quite different function. This should not be the case. IT would be appropriate to draw data and related analysis from the KEMIS on an annual basis (based upon the current statistical digests) and these reports synthesised into an EFA report within a suitable timeframe.

5.2 Recommendations

The following are intended as suggestions for future attention. They have been derived from the text of this report and are supported by argument and data where appropriate within the report that provides the context for the offered suggestions.

- ECCE development needs to be given priority beginning with a legal framework to provide a suitable context for its development. Then, how to best manage a staged and properly sequenced, adequately resourced, context-specific set of activities preparing the ground for the introduction and development of ECCE should be considered.
- ECCE data needs to be embedded KEMIS to facilitate growth, trends and data based decision making.
- Stronger alignment between various monitoring and evaluation (M&E) frameworks - where one piece of information can be used to report against indicators and goals inside a number of M&E frameworks, such as the ESSP M&E framework and the Pacific Education Development Framework (PEDF) M&E framework.
- Include data for all sources of financial support in KEMIS to facilitate future transition to local funding.
- Introduce measures in KEMIS to monitor the level of student absenteeism and changes in student absenteeism over time.
- Develop student data base to track students' movement. Such a scheme would allocate a unique identifier to a student on enrolment and facilitate shifts in student location and hence allow resources to follow the student.
- Disaggregation of Population data by Island and district to facilitate study of variability of indicators such as NER and GER.
- Clarity of EFA targets and timelines as the 2020 targets are set and pursued.
- While it is recognised that there is a need to recognise a number of significant contributors to the education effort, there is a need to better coordinate some of the variety of participants in the education sector, especially with regard to TVET and non-formal education.
- As the quality of school and teachers move from poor to fair to good to excellent the development goals to be moved to be appropriate for stage of development.
- As the teacher development model and school improvement programs impact in variable ways there will be need for a mechanism to allow differentiating development needs and activity across schools and islands.
- The problems of communication and support need to be addressed via ICT and will require suitable infrastructure to be provided. In some of the development processes

being used in ESSP the role of the 'critical friend' is central to success.

- The culture of the Ministry of Education and the public service sector generally needs to be shifted and issues of staff continuity and extended leave addressed.
- Some cultural attitudes of community to education, with special reference to enrolment and attendance, need to be prioritised. This may require broadening the view of the role of education from merely a vocational orientation to one encompassing social needs and development. This might include making the relevance of school education transparent to all the community with clarity of benefits accruing to school graduates at various levels.
- Establish a well-defined measure of what it means to be literate and a valid method of measuring the newly defined literacy construct.
- There is a need for a small research unit to investigate the underlying causes of some trends such as boys' education, learning differences, class size variations etc.
- Conduct further research into access, enrolment, drop out, survival/completion and transition and develop targeted interventions to well defined problems based on the research, including the intervention on how to best cater for those who have dropped out or otherwise disengaged.
- Identify mechanisms for teachers to gain higher qualifications and facilitate participation is such a process.
- Encourage higher qualification opportunities for primary school teachers to recognise the important role of a sophisticated understanding of developing early learning competencies.
- There is a need to have future consideration of having e-learning in the teaching and learning of the children.
- There should be more facilities to be installed in schools to maximise boys' participation in schools – playing field, playing courts, etc.
- KTC needs to train teachers on certain boyish pedagogies to keep the boys busy and enjoy school curricula hence reducing boys' dropouts.

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