

## **Annex 4 - Education and Training Sector**

### **Introduction**

1. As of 2000, all children in the Maldives have access to the first seven years of formal schooling, one of the landmark achievements of the country. Provision of education to over one-third of its population is by no means a minor achievement for the Maldives: Students are scattered over 199 inhabited islands and a school is available in all these islands. Education is tuition-free from pre-school through higher secondary schooling. In 2004, there were 63,300 students enrolled in the primary grades, 26,141 in the lower secondary grades, and 1,622 in the higher secondary grades. Secondary schools are available in atoll capitals and in the larger islands with high population. In 2004, there were 225 schools with primary classes, 117 lower schools with secondary classes, and 15 schools with higher secondary classes. Postsecondary education and skills training is provided mainly by the Maldives College of Higher Education (MCHE) through its various faculties. MCHE has five campuses spread throughout the country. MCHE offers academic programs, long-term training programs, and short-term training programs. MCHE receives requests from atoll chiefs for short-term skills training.

### **The Government's Immediate Response**

2. The Government's response to the tsunami has been swift and impressive. At the national level, the Government created a National Disaster Management Center that immediately collected information on the status of the affected islands and regularly updates them. The Center is also coordinating assistance received from various groups, including governments and private individuals.

3. As part of the Government's overall response in the education sector, the Ministry of Education (MOE) set up the Post-Tsunami Task Force in Education (Task Force) to collect information on the damages sustained by schools and to support the efforts to open the affected schools for the new school year. In view of the damages received from the tsunami, the Government delayed general school year opening from 9 January to 25 January. However, the Government started classes in 4 schools on 9<sup>th</sup> January as scheduled for grades sitting national examinations in May 2005.

### **Methodology of Damage and Needs Assessment**

4. **Consultations and Site Visit.** The Mission visited three islands in Thaa atoll: (i) Madifushi, a severely damaged island; (ii) Buruni, which is also badly affected but less people were displaced; and (iii) Vilifushi, which was among the worst hit and could not be reached because it was totally deserted and had to be aerially surveyed from the sea plane. The Mission interacted with the head teacher and some community members in the islands visited. The Mission held discussions with members of the Task Force of the MOE, Ministry of Finance and Treasury officials, and UNICEF staff.

5. **Methodology.** The data on immediate assessments carried out by the Task Force and other relevant documentation form the basis for this report's observations. With a view towards meeting the needs of the education system to begin the academic year on 25 January, the Task Force in Education undertook immediate assessments of schools in the affected islands. MOE sent out teams to survey the damage. By school opening date of 25<sup>th</sup> January all affected schools had been visited and the short-term assessment report completed on 26<sup>th</sup> January. However, the assessment was undertaken using rapid assessment methodologies and was not comprehensive, thereby necessitating small adjustments as new information is received from islands.

## Damage Assessment

### A. *Classification of Schools According to Damages Sustained*

6. The Task Force classified 315 schools in the country (including pre-schools) according to the extent of damages attributed to the tsunami. This is to facilitate targeting and prioritization of needs. The criteria used to categorize schools are in Table 1.

**Table 1. Classification of Schools According to Damages**

Grade	Criterion	Number of Schools Total = 225	Number of Students Affected
A	A No damage A+ Displaced students enrolled in the school; temporary classrooms and teacher accommodation required on identified islands	199 (63%)	46,001
B	No structural damage, no damage to boundary wall; 5-10% across the board for furniture, equipment and teaching materials; 10% repair and repainting	52 (17%)	12,148
C	C 30% damage to furniture, equipment and teaching materials on ground floor, 10-30% damage to boundary wall and some structural damage to buildings and toilets; 30% rewiring and repainting C+ Flooding of ground floor; destruction of boundary wall (50-100%); structural damage to buildings and toilets, 50-100% furniture and equipment damaged/destroyed; 50-100% rewiring and repainting	55 (17%)	14,613
D	Total replacement of school including equipment and furniture; rebuilding accommodation for the headmaster and teachers where applicable	9 (3%)	1,875

Source: MOE Post-Tsunami Task Force

7. Damage to the physical infrastructure caused by the tsunamis is limited to the atolls; Malé’s facilities were spared, but are experiencing increased immigration from displaced atoll communities and the resultant overcrowding.

8. As indicated in Table 1, a positive feature is that 63% of schools in the atolls have been spared, with minimal or no damage but 14% of these schools (A+ category) require provisions for displaced students. Displaced families have relocated to neighboring islands (“host islands”). These islands will require additional classrooms to “receive” this influx of additional students. The number of displaced households is still indicative as displaced families continue to move from one island to another. However, this classification based on MOE’s rapid assessment can facilitate a targeted approach and some degree of prioritization. MOE’s priority has been to address repair, reconstruction and rehabilitation issues for schools in the A+, B, C, C+ and D categories (45%) in order to make them functional.

## Nature of Damages

9. **Physical Infrastructure.** An observation made during the field visit and corroborated by other agencies and MOE is that even in the Category D islands, while community-built residences have collapsed in most cases, the basic structure of school buildings is intact. The damages in these cases include collapsed boundary walls, toilets, and septic tanks, among others. Although some buildings may be intact, they may have developed cracks or their foundations made unstable; technical assessments are ongoing with the assistance of a team of Australian volunteer engineers. The greater damage on school provisions and equipment (textbooks, stationery, uniforms, blackboards, library books, computers and printers), school records, and teaching and learning materials due to flooding is across the board. If these were not swept away, these were observed in the visited islands to be completely damaged by the flooding and rendered unusable. While schools have started on 25 January 2005 with the basics required to become functional, *replacement of these provisions for the about 74,637 affected schoolchildren becomes an immediate priority along with the repair and rehabilitation of damaged school facilities and construction of temporary/additional classrooms in host islands.*

10. **Depletion of Human Resources.** A significant impact of this disaster could be the loss of a large number of trained, expatriate teachers who have been the backbone of the schools in the atolls. There are 5,239 teachers, 35% (1,830) of whom are expatriates; in secondary schools, expatriates comprise about three-quarters. These teachers, who are largely from India and Sri Lanka, were away at the time of the tsunami for annual vacations and may themselves have been affected in their countries and/or may be feeling insecure about returning to Maldives. At the time of school opening on 25<sup>th</sup> January, only about 60% of expatriate teachers reported to work. *Ensuring teacher availability and training of teachers becomes therefore yet another immediate priority.* MOE has recruited 200 trainees from the Faculty of Education to meet the immediate gap but their in-service training and medium-term replacement remain key concerns.

11. **Psychosocial Impact.** A significant impact of the disaster is psychological trauma, particularly among the vulnerable children and adolescents. In the field visit, it was observed that the community was already showing remarkable resilience, even in situations where they had lost their lifetime savings; however, some children and adolescents were observed to be roaming around aimlessly and demonstrating behavioral problems related to anxiety and insecurity. *Providing group counseling and getting children back into a school routine as early as possible, which can itself serve as a healing process, tops the list of immediate priorities.*

## Needs Assessment

1. Relief and recovery in the education and training sector has been targeted towards ensuring that **all school age children get back into school no later than January 25, 2005**, including those studying in the 37% schools that are damaged. Damaged schools have to be made functional and effective. This would require: (i) setting-up learning spaces/temporary classrooms and other additional spaces in host islands/schools and running double shifts; (ii) repair of damaged buildings and classrooms, provision of water, sewage and sanitation facilities, boundary wall reconstruction, etc.; (iii) provision of teaching and learning materials, furniture, and other school supplies; and (iv) ensuring adequate number of teachers in position appropriately trained not only to teach but also to serve as student counselors.

12. Additional local teachers will need to be deployed to take the place of expatriate teachers who are yet to return. As the first readily available teachers are the students at the Faculty of Education of the

Maldives College of Higher Education who are not yet fully trained, regular professional support and monitoring have to be extended to them during the school year.

13. **Professional Guidance:** The role of the professional guidance programme which has been initiated by MOE is to provide professional guidance and support, not only to the untrained teachers recruited from the Faculty of Education, but also for all teachers and school administrators in the country who may be working in situations where all teaching materials, teaching aids, schemes of work, lesson plans, etc. may have been destroyed and/or in situations where the number of school sessions have been increased to meet the needs of displaced students. These situations can be expected to cause a fall in the quality of teaching and learning unless measures are taken to maintain quality. As such, the professional guidance programme will twin every affected school in the country with a Male' school. Through this twinning initiative, school heads and other staff from Male' schools would visit affected schools; provide them with schemes, lesson plans, etc.; undertake informal training workshops for teachers and awareness meetings for parents; undertake demonstration lessons using active learning methods; assist and advise in the management set-up; and possibly arrange for brief attachments in Male' for staff of affected schools as a training tool. As of date, twinning initiatives have been arranged for Laamu, Meemu, Dhaalu, Thaa and Kaafu atolls with one school in Male' taking responsibility for all affected schools in its twin atoll.

14. **Counseling and emotional support** should be provided to children and adolescents to help them recover from the shock and regain confidence. This could be possible by resuming schooling immediately and seeking professional guidance for teachers and other community volunteers. When MOE staff visit the islands during assessments, head teachers/supervisors and teachers could be oriented on their additional roles as counselors. Assistance could also be sought from international professional psychological counseling institutions to train community volunteers and teachers in a cascade model to enable them to provide psychosocial support to the community in a continuous and more professional manner.<sup>1</sup> MOE has already started a school-based psychological support programme under which 1 teacher is being trained from each school to provide psychosocial intervention.

15. **Cost Estimate of Short-Term and Medium Term Needs.** The following cost estimates (see Table 2) were provided to the Mission and are still tentative and will be revised as new information is received. The estimated cost of relief and recovery, including reconstruction, is estimated range from about \$11 million to about \$15.5 million, depending on the Government's decision to replace the schools that have been completely destroyed.

**Table 2. Cost Estimate of Short-Term and Medium-Term Recovery and Reconstruction Needs in the Education Sector**

<i>Subcomponents</i>	<b>MRf (,000)</b>	<b>US\$ (,000)</b>
<b>A. Short-Term</b>		
<i>Elementary and Secondary Education</i>		
School Facilities (Semi-Permanent)	77,587	6,038
Student Supplies	41,327	3,216
Teacher Requirements	8,006	623
Professional Guidance	4,050	315
Logistics and Transport	1,910	149
<i>Subtotal</i>	<i>132,880</i>	<i>10,341</i>

<sup>1</sup> Agencies like UNICEF, Save The Children Fund, and the International Red Cross are already initiating activities in this area.

<i>Postsecondary Education</i>	2,105	165
Contingency (5%)	6,644	517
<b>Short-Term Total</b>	<b>141,629</b>	<b>11,023</b>
<b>B. Medium-Term</b>		
School Facilities (Permanent)	46,000 – 58,000	3,580 - 4,514
<b>GRAND TOTAL</b>	<b>187,629 – 199,629</b>	<b>14,603 – 15,537</b>

Note: \$1 = MRf.12.85

Assumptions: (i) costs are in proportion to the extent of damage - nil for Category A, 15% for Category B, 30% for Category C, and 100 % for Category D. Costs expected to be incurred in Category A islands acting as host islands receiving additional students are built into the costs for the islands of original residence; and (ii) an incentive of MRf.150 per month for 3 months is provided to motivate teachers to go to damaged islands.

Source: MOE Post-Tsunami Task Force Estimates, Maldives College of Higher Education

[S1]

		MRf	USD
1	SCHOOL FACILITIES	153,836,565.75	11,971,717.18
2	STUDENT SUPPLIES	26,740,407.55	2,080,965.57
3	PROFESSIONAL GUIDANCE & TEACHER REQUIREMENTS	978,625.00	76,157.59
4	CONSTRUCTION	24,136,615.00	1,878,335.80
5	TRANSPORT	5,018,230.00	390,523.74
6	LOGISTICS	15,063,309.80	1,172,242.01
7	CONTINGENCY	45,154,750.62	3,513,988.38
8	TOTAL	<b>270,928,503.72</b>	<b>21,083,930.25</b>

Exchange rate: \$1=Mrf 12.85

16. **Government Strategy to Meeting Short-Term Needs.** The above cost estimates reflect the Government’s strategy for the immediate to the short-term. MOE is focused on providing the necessary learning and teaching materials, textbooks, school supplies, basic school equipment, and uniforms, among others to enable schools and students to start the school year. MOE is presently distributing these materials to the affected islands. In the host islands to which families have relocated, space constraints attributable to the increased number of students is planned to be met by building additional semi-permanent classrooms. When families are relocated back to their home islands, these rooms will be used for school-related activities. MOE will undertake repair and rehabilitation in Category B and Category C schools.

17. The shortage of teachers resulting from the tsunami is being met by the deployment of untrained teachers, mostly student-teachers in various professional courses in the Faculty of Education. The Government is also establishing teaching support relationships (“twinning”) between the larger schools, in Malé, and the affected schools. The “mentor” school will extend regular technical support to the staff of the affected schools.

18. To address the psychosocial needs of schoolchildren, the Government has started the training of 1 teacher from every affected school to undertake psychosocial interventions in their schools.

19. **Comments on the Cost Estimates.** The unit cost used for calculating the cost of semi-permanent classrooms is on the high side and will need to be rationalized vis-a-vis the design specifications. Construction can be moved towards becoming more community-based and community groups/education committees could be constituted to manage the funds and oversee construction, if not construct the schools themselves. To facilitate this, the committee members could be trained in some basic construction quality indicators. International experience on this has shown a significant decline in unit costs and better quality. There may be savings from expatriate teachers salaries to the extent that they do not return[S2].

### **Donor Response and Financing Immediate and Reconstruction Needs**

20. The Government has initiated discussions with various development partners, notably the World Bank and the UNICEF. *Commitments*, to date, *amount to an estimated \$10 million*, which fulfills a large percentage of the immediate requirements. Development partners and NGOs have also initiated relief work. The commitments obtained as of 13 January 2005 are as follows:

- World Bank will provide \$2.63 million from its Third Education Training Project.
- UNICEF will be providing goods and services valued at about \$7.4 million. UNICEF will support child-friendly education for pre-school through grade 7, through its Quality Education Program, and will provide for: (i) improvements in the physical environment, including cleaning-up, construction, repairs, water, sanitation and environmental improvement; (ii) teaching and learning materials. UNICEF has, in fact, started delivery of “school-in-a-box” kits that include student and teacher materials, school supplies, and recreational materials, among others; (iii) teacher training in “active learning methodology;” (iv) establishing child-friendly classrooms; (v) strengthening community development and participation; and (vi) strengthening supervision systems.
- UNICEF and UNFPA, in partnership with international NGOs will address psychosocial needs of communities, including schoolchildren. UNICEF, Save the Children Fund, and the International Red Cross have already initiated activities in counseling.
- The Australian Government is providing technical assistance to analyze the stability of foundations and construction integrity of affected schools. UNICEF is providing technical assistance for a comprehensive needs assessment of the school sector.
- Procurement of office equipment to replace those damaged by the tsunami in the postsecondary education will be partly met from the Postsecondary Education Development Project of the Asian Development Bank.

### **The Medium- to the Long-Term**

21. **Medium- to Long-Term Strategy.** The Government’s current education sector strategy follows the vision laid out in Maldives Vision 2020. MOE has an education master plan that covers the period of 1996 through 2005 and will soon develop a master plan to cover the decade from 2006 until 2015[S3]. The targets to be achieved under Maldives Vision 2020 includes: (i) ten years of formal schooling will be the minimum standard throughout the Maldives, and good quality tertiary education will be established in the country. A system for the provision of technical skills for achieving and sustaining social and economic development will also be established; and (ii) the youth of the Nation will be participating fully

in the Nation's progress and prosperity, and will have the opportunities they need to achieve their full potential.

22. **Issues for Medium- and Long-Term Planning.** In connection with this disaster, the Mission recommends that the following issues be considered during the development of the next Master Plan:

- Reviewing and revising school and teacher training curricula and learning and teaching materials to include knowledge, safety and precautionary measures, and coping strategies relating to natural calamities, including tsunamis, earthquakes, and cyclones; first aid, health education, and sanitation and hygiene; and life skills, including communication skills;
- After third-party evaluation, expanding UNICEF's initiatives in active learning methodology to all schools and include it in teacher training. The approach allows for better internalized learning, development of communication skills, development of competencies through "hands-on" experience, and more wholesome personality development.
- Including schools in a disaster management plans as "shelters." The tsunami disaster has demonstrated that the construction quality and standards of schools are strong enough to withstand its impact.

24. The Mission also recommends:

- strengthening and expanding educational facilities in focus islands, including building residential schools for students from smaller islands;
- increasing the number and strengthening the capacities of Maldivian teachers and thus reducing the dependence on expatriate teachers;
- improving the overall quality of education at all stages and moving towards a self-managed system of school assessment, which would be more relevant in the geographical context of the Maldives; and
- establishing atoll resource centers and strengthening their facilities and faculties to support more decentralized and need-based training, which could facilitate continuous training and professional development of teachers.

### **Next Steps**

25. To complement Government's efforts to reopen and reconstruct schools, the Mission recommends the following to be considered as next steps.

- Detailed assessments of repair and reconstruction needs of each affected school, particularly on the technical aspects, have to be accomplished. Some may pose safety risks to students and teachers.
- The role of the community in school civil works should be considered, not only in management and monitoring, but also in actual construction itself. This will not only contribute to increasing ownership of education, but it will also help provide jobs that are sorely needed.

**Summary of Recovery and Reconstruction Needs in the Education and Training Sector**

Priority	Issue	Resource Needs	Commitments
<b>Short-Term</b>			
1. Replacement of school furniture and equipment	Assessment of the precise needs by school and island are ongoing.[S4]	Procurement is ongoing to meet the opening of the school year.[S5]	<ul style="list-style-type: none"> <li>• UNICEF will provide goods and services and support for civil work valued at about \$7.4 million.</li> <li>• WB will provide from the Third Education and Training Project about \$2.6 million.</li> <li>• ADB will provide about \$0.1 million from the Postsecondary Education Development Project for relevant postsecondary equipment needs.</li> </ul>
2. Replacement of teaching and learning materials, and provision of school supplies			
3. Construction of additional semi-permanent classrooms			
4. Ensuring adequate number of trained teachers	The expected number of teachers for the school year, including student-teachers, are still less than pre-tsunami levels.	“Attachments” between Malé-based and larger schools, and affected schools will be put in place for the former to provide technical support.	
5. Providing psychosocial support to affected schoolchildren	Teachers, and school personnel and some community members need to be trained in counseling [S6].	Technical assistance	<ul style="list-style-type: none"> <li>• UNICEF and UNFPA, in partnership with NGOs, will provide both community- and school-based psychosocial support.</li> </ul>
6. Developing more comprehensive rehabilitation plan, including technical assessment of affected standing school infrastructure	Many school-buildings may have seemingly received minor damages. However, given the geology of the atolls and the extent of flooding, structures need to be examined for their stability and integrity, particularly their foundations.	Technical assistance	<ul style="list-style-type: none"> <li>• An Australian technical assistance team is already going around the country to assess the foundations of school buildings.</li> </ul>
<b>Medium-Term</b>			
Replacement of six completely damaged [S7]schools.	Assessment still to be made.	\$3.6 to \$4.5 million[S8]	