

**THE HALO TRUST/WORLD VISION  
INTERNATIONAL/ROYAL  
NETHERLANDS GOVERNMENT  
MINECLEARANCE AND SURVEY  
PROGRAMME  
NAMPULA PROVINCE  
MOZAMBIQUE**

**FINAL REPORT  
FOR WORLD VISION  
INTERNATIONAL**

USAID Project reference # 656-0235-G-00-7003-00  
Government of Holland Project reference MZ014501  
Demining in Nampula Province, Mozambique  
Period of report 01 January 1997 - 31 April 1999

## References.

- A “The HALO Trust/World Vision Demining and Survey Team, Nampula Province, Mozambique” (project proposal dated 01 December 1996)
- B “The HALO Trust/Govt of Holland Demining and Survey/UXO teams, Nampula Province, Mozambique (project proposal dated 20 August 1997)
- C “The HALO Trust/World Vision International Integrated Mineclearance Project, Nampula Province, Mozambique (project extension proposal dated 01 March 1999)
- D “The HALO Trust/World Vision/USAID Demining Operation in Nampula Province, Mozambique - Year One 6-Month Report”
- E “The HALO Trust/World Vision Mineclearance and Survey Programme, Nampula Province, Mozambique - Interim Report”
- F “The HALO Trust/World Vision/Royal Dutch Government Mineclearance and Survey Programme, Nampula Province, Mozambique - Third Interim Report”
- G The HALO Trust/World Vision/Royal Dutch Government Mineclearance and Survey Programme, Nampula Province, Mozambique - Year Two Report”

## 1 Introduction

1 1 This report provides a final overview of activities undertaken by the HALO Trust under the World Vision International (WVI) / Royal Netherlands Government (RNG) Nampula Province Demining Project between 01 January 1997 and 30 April 1999. All details of proposed activities and expenditures have been previously reported upon, excepting the final 4-month extension period (See references A to G above)

1 2 Included are the following annexes,

- A Summary of completed and on-going demining tasks
- B Summary of emergency clearance work
- C Nampula Prioritised Provincial Demining Work Plan (PPWP)
- D Financial Statement (01 Jan to 30 April 1999) World Vision International

## 2 Background

2 1 HALO began a two year demining programme funded by World Vision in Nampula Province in January 1997. The original project objectives were as follows,

a “The establishment of a 26-man strong team to provide mineclearance, unexploded ordnance disposal (UXO) and survey support to the Government, NGO’s and other organisations in Nampula”

b “To add to the processes leading to a normalisation of life by reducing the threat of death and injury, and through the provision of support to projects related to rehabilitation and development”

2.3 In June 1997, HALO reviewed the operational situation in the light of completed coarse level one survey of Nampula's mined areas, and concluded that to fully achieve the original project goals on a provincial scale, extra mineclearance and survey assets would be required. To that end, a proposal which outlined the requirement to raise a further half demining team and dedicated mobile Survey/UXO element was presented to the RNG in August 1997.

2.4 The objective of raising the extra RNG-funded assets was as follows,

“To establish a 13-man demining team and mobile survey/UXO element to complement existing USAID/WVI assets in order to maximise the effects of HALO's Nampula Province demining programme over the currently agreed 2 year project lifespan”

2.5 The RNG project start date was set for 01 November 1997. The contract was not however signed until 16 December 1997. This gave an effective project start date of 01 January '98. It was agreed with RNG donor representatives that reporting related to the Dutch-funded programme would be brought in line with the established WVI programme timetable, and that due to the entirely complementary nature of the 2 programmes, that a single report would be produced to cover all aspects of the 2 combined projects rather than each in rather irrelevant isolation.

2.6 In mid-February 1999, WVI reported to HALO that some \$90,000 of the original grant remained unspent, and invited HALO to submit a proposal to extend the project. This was done through Ref C above. The aims of this extension were as follows,

“Manual mineclearance teams - To provide a further 4 months of funding in support of the existing WVI/USAID-funded manual mineclearance teams”

“Mechanical Mineclearance System (MMS) - To fund the purchase of a Bomford-Turner vegetation cutting unit as a complementary asset for the MMS programme which will be established by HALO in Nampula Province during 1999”

2.6 Whilst this final report relates principally to the WVI element of the project, and in addition to summarising the first 2 years of the project, also reports on the four month extension, a full description of activities including all elements, both WVI and RNG funded is included for the reasons stated in para 2.5 above.

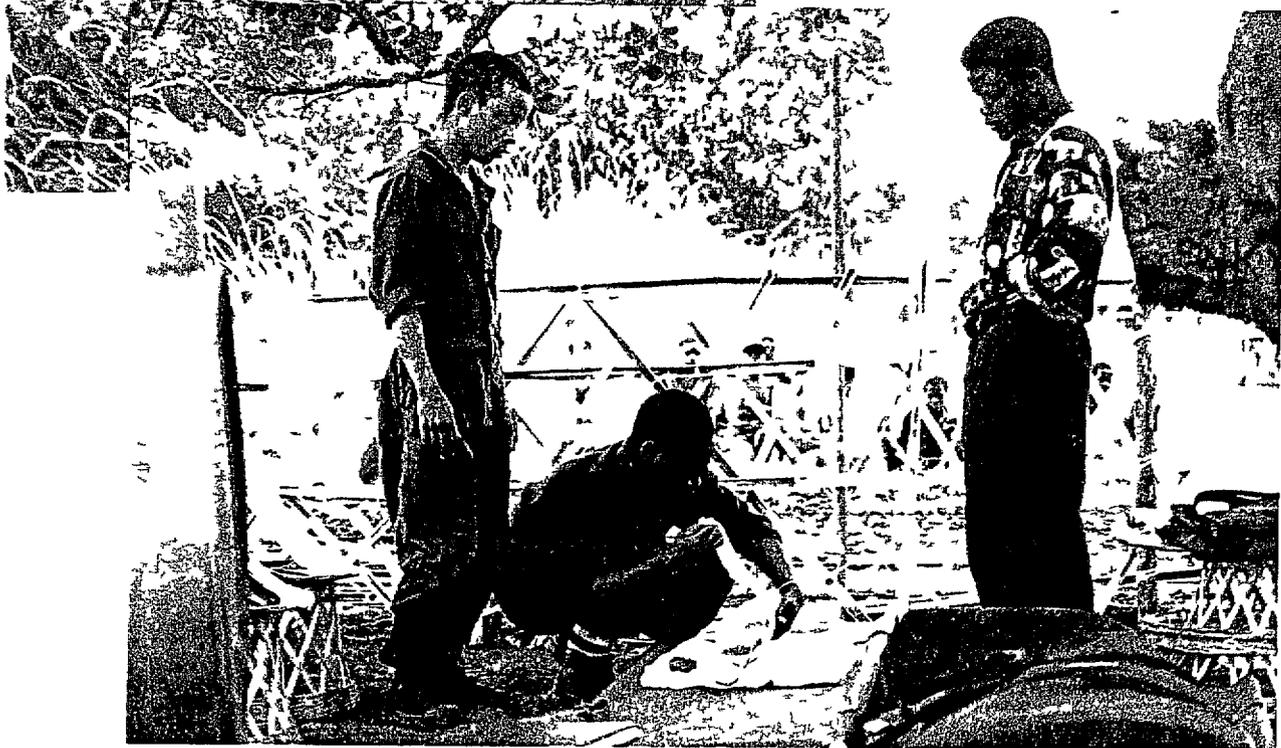
### **3 Achievements**

3.1 Over the 28 month life of the project, the following notable achievements have been made,

- ◆ **Establishment of a fully functioning office and administrative set up in Nampula city to support demining, survey and UXO operations**
- ◆ **Creation of a fully Mozambican management and operational structure which functions effectively with only part-time expatriate monitoring**

Training

Deminer training under way under careful expatriate and Mozambican guidance



HALO Mozambique's Senior Medic oversees the retaining of paramedics Here a demining team medic practices the administration of an intravenous drip

- ◆ Purchase and importation of all WVI and RNG programme equipment
- ◆ Fielding of WVI-funded mineclearance team from 28 July 1997
- ◆ Fielding of the RNG-financed mobile survey/UXO team from 01 January 1998
- ◆ Training and deployment of the RNG funded demining team by mid-March 1998
- ◆ Clearance of 1,117 explosive items including 801 mines and 316 items of unexploded ordnance in only 21 operating months
- ◆ Clearance of 93,581 square metres of ground
- ◆ Maintenance of a province-wide UXO service which has effectively responded to 62 call outs for urgent assistance, leading to the disposal of 278 explosive items
- ◆ Made significant progress with the Nampula Province Prioritised Demining Work Plan
- ◆ Instituted a coherent and structured re-survey plan for Nampula Province to define and refine present and future demining work plans
- ◆ Maintained regular contact and effective liaison with all stake holders in Nampula Province through monthly reporting to the Government, donors and World Vision, and through the quarterly convened provincial demining forum

#### 4 Demining Operations

4.1 Over the full reporting period, the teams worked on 9 tasks 7 were of a provincial priority, and relate to the PPWP which was endorsed by the Governor of Nampula in July 1997. In addition, 2 emergency tasks were undertaken in support of WVI road rehabilitation projects.

4.2 Five tasks have been completed, with a further two suspended as a result of operational restraints. Two tasks are currently on-going. HALO has thus effectively directed the use of assets in direct support of the Government and all agencies, in order to assist development and move towards the eradication of the major currently identified mines concentrations and problem sites. For details of individual tasks and progress with the PPWP, see annexes A and C.

4.3 Whilst not an absolute indicator of the success of a mineclearance project, it is nonetheless to be noted that all teams have found mines (including the Survey/UXO team), and that a total of in excess of 1,100 explosive items have been cleared, including over 800 mines. This is a testament to the accuracy of the original province-wide survey which took place over the first 6-months of 1997 during the project set up phase, and which had as its aim the identification of the main mines affected sites in Nampula Province. It should further be noted that these mines and items of UXO have been cleared in only 21 operating months.

## **5 Mobile tasks and provincial re-survey**

5.1 HALO has since February 1997, maintained its province-wide UXO call out service which has responded to no less than 62 requests for assistance over the project lifespan. This has led to the safe disposal of 278 explosive items. Details of individual tasks are given at Annex B.

5.2 The Survey/UXO team is now a permanent and formalised element since the addition of RNG funding at the start of 1998. It is a most important addition, and it is interesting to note that in neighbouring Zambezia Province where HALO's DfID-funded demining project is now in its sixth operating year, work of this nature has continued almost unabated whilst the numbers of mines cleared has steadily fallen with the near completion of major provincial priority tasks. A similar pattern of activity can be anticipated in Nampula. This further underlines the importance of the teams' existence, since it is of great benefit to the confidence of Government, NGO's and business alike to know that a rapid and effective response is available should they encounter random mines or items of UXO.

5.3 In addition, the survey/UXO team has fulfilled 2 further vital roles in providing technical/training support to the demining teams, and also in being able to deploy to independently clear small areas. For instance, during March and April 1998, the Survey/UXO team was attached to the WVI and RNG-funded demining teams which combined forces to continue with Phase One clearance at the Murrupula Hospital site. The experience of the senior Survey Supervisor was invaluable in this process, whereby he trained a junior Supervisor who subsequently assumed independent control of the team at Murrupula.

5.4 The Survey/UXO team has also tackled 2 mineclearance tasks, one in support of World Vision and the other on the Mucarre/Murrupula power lines in support of the national power institution, EDM. 457 anti personnel mines were cleared from around the base of 17 electricity pylons during 6 months work. Full details of these tasks are given at Annex A.

5.5 Whilst the ten tasks identified in the July 1997 PPWP have kept the demining teams fully occupied since operations started in late July 1998, and much work still remains to be completed, as of early April 1999, the Survey/UXO team has deployed in its other primary role in order to conduct minefield survey.

5.6 HALO has always placed absolutely the highest priority upon survey as the driving force behind project development. Thus, in April 1999, a new phase of provincial re-survey was initiated across 3 of the 4 provinces in which HALO operates in Mozambique. This began with a week-long centralised survey course run in southern Niassa Province. This was attended by all senior operations staff and survey team supervisors who were revised in survey technique and given further guidance with regards HALO's survey modus operandi.

5.7 The Nampula Survey/UXO team thus returned to the province in mid-April, and embarked upon a coordinated plan of provincial re-survey. This will see the team visiting each district in turn, armed with existing Shaman data base information. The aim is to meet district officials to discuss known sites and possible task prioritisation, and then to visit as many accessible sites as possible. Each site visited will then be reported upon, either as a task of provincial or district priority, or, as no longer having a problem. Before leaving the district, the

team will re-visit the administration in order to discuss their findings and re-assess priorities

5.8 All information collected is then input into HALO's internal mined area database, and reported on to CND. All data from individual districts is then discussed by the programme manager and senior operations staff, and either mineclearance tasks added to the existing PPWP for agreement with the Governor, or a District Demining Initiative (DDI) Work Plan drawn up in the light of the priorities outlined by district authorities. By the end of April 1999, work in Mogincual and Meconta Districts was complete. 23 sites were visited and 2 DDI tasks identified.

## **6 The Provincial Work Plan (PPWP)**

6.1 Prior to the start up of demining operations in late July 1997, HALO was able to complete coarse level one survey of the 124 areas recorded in the Nampula Province mined area database. This resulted in the identification of 10 key sites including bridges, village centres, roads, power lines and water pipelines which were adversely affected by the real or perceived threat of mines. After consultation with Provincial Government, World Vision, the donor and other stakeholders in Nampula, a Prioritised Provincial Demining Work Plan (PPWP) was defined whereby the 10 sites were sorted in relation to priority of clearance. Whilst providing a clear framework for HALO's mineclearance, the plan remains entirely flexible and may be immediately adjusted to respond to changing circumstances whereby tasks can be elevated or reduced in priority at short notice. This flexibility was demonstrated through the emergency support provided on 2 occasions to WVI during 1998. The plan also allows for the inclusion of additional tasks not originally identified, but which may come about by direct request or as a result of continuing survey work (see para 5.8 above).

6.2 The PPWP identified 3 bridges, 3 road sections, 2 village centres, 1 section of electricity power line and 1 section of water pipeline which required early clearance. To date, HALO has completed 2 of the 3 road sections, has work on-going (or has completed phase one clearance) at both village centres and the electricity power lines, and has suspended or has work on-going at 2 of the 3 bridges. Therefore, only 3 of the original 10 tasks of a provincial priority originally identified still remain to be tackled after only 21 months of actual mineclearance operations.

## **7 Government relations and reporting**

7.1 HALO continues to foster strong and effective relations with the provincial authorities through regular liaison visits from the Programme Manager to the Commander of the Provincial Police who has been appointed as the Government's Demining Representative. The Police Commander has responsibility for the channelling of call out and demining requests from Provincial Government to HALO, whilst the Programme Manager reports formally to the Demining Representative on a monthly basis regarding all operational matters. The effectiveness and strength of this relationship can be noted in particular, through the high proportion of call out tasks initiated through requests from the provincial police command.

7.2 In addition, HALO and World Vision have convened a provincial forum of stakeholders comprised of government, NGO representatives and the private sector on a quarterly basis. This enables HALO to report on progress with demining operations, and for individuals or

organisations to raise any queries they may have regarding mineclearance matters. It is important to note however, that HALO maintains its open door policy, and that any interested party with a request relating to any mineclearance matter can address it directly through the Nampula office, and is not obliged to wait for the quarterly meeting.

7.3 In addition, HALO's Nampula Province Programme Manager has maintained regular contact with both Mr Arno Ambrosius, the RNG representative in Nampula, and Mr Renato Gordon, WVI Nampula manager, whilst the Country Manager reports monthly to Mr Ambrosius, WVI, and the Second Secretary at the Royal Netherlands Embassy in Maputo.

7.4 On all occasions, satisfaction has been expressed in all quarters with the liaison process.

## **8 Personnel - Local and International staff**

8.1 As at 30th April 1999, the total complement of local staff is as follows,

### Headquarters Staff (USAID/Dutch) (11)

- 1 Operations Manager
- 1 Administrator
- 1 Driver/mechanic
- 1 Radio operator/storeman
- 1 Cook
- 2 Drivers
- 4 Guards

### Demining Team (USAID) (34)

- 2 Supervisors
- 3 Assistant Supervisors
- 21 Deminers
- 5 Paramedics
- 1 Driver
- 2 Cooks

### Demining Team (Dutch) (12)

- 1 Trainee Supervisor
- 8 Deminers
- 2 Paramedic
- 1 x Driver

### Survey/UXO Team (Dutch) (6)

- 1 Supervisor
- 2 Deminers
- 1 Paramedic

1 Driver  
1 Cook

8.2 USAID therefore funds 34 field staff and the RDG 18. The headquarters element is joint funded between the 2 donors in proportion to the number of field staff being supported by each donor. The total staff complement is presently 63 with the commitment outlined in the 2 project proposals being 62. A further 7 operational staff are due to be added in the coming months with the addition of the joint USAID/RNG mechanical support to manual mineclearance (MMS) system.

8.3 The project has from the outset been the responsibility of senior Mozambican national staff who were for the first few months, advised by an expatriate resident in Nampula. Day to day running of the programme remains very much in Mozambican hands, but is complemented by regular monitoring and advisory visits from expatriate staff. Over the full reporting period, 9 separate expatriate staff have directly committed time to the project through monitoring and evaluation visits to Nampula. The original Programme Manager, Sr Aderito Ismael took a short break from HALO due to family reasons in January 1999. He will be returning to HALO as the Survey Officer in September 1999.

8.4 In March 1999, it was decided that progress made by Mozambican national staff was sufficiently well advanced for the project to no longer require a dedicated manager. This change came hand in hand with the appointment of Sr Joaquim Cigarro as the Provincial Operations Manager. This means that on a day to day basis, the project is run by Sr Cigarro and Sr Rogerio Lobo, the Senior Administrator. This process is working well, with Mr Gerhard Zank (HALO Nampula and Niassa Programme Manager) being able to split his time between Nampula and Niassa Provinces.

8.5 Expatriate input into the programme has therefore altered significantly away from direct control, and towards a senior advisory/training role whereby HALOs very capable senior Mozambican staff are increasingly encouraged to play an active role in strategic decision making. This reduction in direct senior managerial input is a very encouraging sign for the future development of the project into the DDI and Provincial Demining Fire Brigade phases.

## 9 Equipment

9.1 **Vehicles** - Maintaining a serviceable fleet of vehicles remains a high priority, since mineclearance operations rely entirely upon a minimum of 1 working vehicle per site. To this end, a full time driver/mechanic is now employed within the headquarters set up. His role is to carry out routine maintenance, and also to occasionally travel to resolve problems which may arise with the field-based vehicles. He is currently being assisted by Mr Cameron Milne, a highly experienced mechanic and vehicle fleet manager who is contracted by HALO for 6 months. His role is to assess and train Mozambican workshop staff, and to introduce improved systems for routine vehicle maintenance and the procurement of spare parts and tools.

9 2 The vehicle fleet now comprises the following,

<u>Vehicle</u>	<u>Quantity</u>	<u>Donor</u>
Landrover 130 Tdi Pick Up	02	USAID
Land Cruiser	01	USAID
Landrover 130 Tdi Pick Up	01	RNG
Landrover 110 Tdi Hard Top	01	RNG
Mercedes 1517 4x4 truck	01	UNHCR (loan)
Toyota Dyna 4-ton truck	01	Dfid (loan)

9 3 No vehicle accidents were registered during the reporting period

9 4 **Radios** - A total of 10 x USAID and 8 x RNG funded VHF Motorola radios have been purchased, and are currently in use. In addition, 5 x Codan HF radios have been procured. 3 were funded by USAID and 2 by RNG. All minor radio repairs continue to be effected in-country by trained HALO local staff. This has had a significant effect upon overall radio serviceability, and has minimised demining down time caused by faulty radios.

9 4 **Detectors** - 10 x Ebinger 420H metal detectors were purchased and imported under the RNG programme. In addition, 20 x Ebinger 420s1 units were purchased under the USAID-funded project. HALO continues to run its programme of in-country detector repair which is carried out by technically trained local staff. An alteration in the design of the Ebinger detectors in use in Nampula also means that most repairs can now be effected by simple replacement of a central electronics module. No major problems have been reported with detectors over the reporting period, and the increased capacity for local repair has both reduced demining down time, and the cost of sending detectors to South Africa or Europe for repair.

9 5 **Generators** - 2 x 5kva Honda diesel generators and a single 10kva Lister generator were also purchased and imported. The former were USAID-funded, and the latter purchased with RNG funds. These generators are used in bush demining camps to provide electricity for lighting at night, and also for the recharging of metal detector batteries. The generators are maintained in the field by vehicle drivers, and are returned to Nampula for regular servicing and repairs by HALOs mechanic.

9 6 **Bomford-Turner vegetation cutter** - This unit is an integral part of HALOs MMS system, and is used to cut vegetation to ground level ahead of either manual or Mine Detection Dog (MDD) operations. Experience from HALO operations in Cambodia has indicated that rates of manual clearance can be increased by up to 60% following vegetation removal. One unit was purchased with funds made available under the WVI 4-month extension. It will be imported with the MMS system in mid-1999.

## 10 Medical, accidents and insurance

10 1 **Medical** - Each HALO mineclearance or survey team is supported by locally recruited medical staff. Their primary role is to provide immediate life-maintaining care in relation to traumatic injuries sustained during the course of mineclearance operations. Their secondary role

is to provide day to day health care for the demining teams in the bush

10 2 All the HALO Nampula medics were originally trained in May 1997 during the visit to Mozambique of Dr James Colville. Dr Colville is a member of the HALO medical panel, and a senior consultant with considerable trauma management experience. Thereafter, in April 1998, Dr Tim Cheatle, a senior consultant surgeon visited Nampula and trained and assessed all HALO's Mozambican medical staff during a week-long training concentration. This type of support from senior UK-based trauma specialists is a regular part of the annual training cycle for not only medical, but also all senior supervisory and expatriate staff. It is an opportunity to formally retrain in skills which are rarely required to be put into practice, and to update on improvements in HALO medical SOP's. During his visit, Dr Cheatle introduced the new system of comprehensive trauma and First Aid packs which have now been standardised and introduced into all of HALO's mineclearance programmes worldwide.

10 3 Dr Cheatle also recommended that Sr Santos Marove, a very experienced and highly capable medic be promoted into the role of Senior Medic. After consideration, this was actioned in July 1998, and since then, Sr Marove has fulfilled his new role to a very high standard. He has taken on the regular retraining and assessment of all HALO Mozambique's medics, supervises the regular rotation of medics through the provincial hospital emergency rooms, and is now responsible for advising the Country Manager on all matters medical. This is a most positive development, and has already resulted in a noticeable improvement in the proficiency of HALO's medics.

10 2 **Accidents** - On May 14th 1998, deminer Carlos Chimporta was slightly injured when he inadvertently struck a PMN anti personnel blast mine whilst excavating metal contaminated soil in the Mecuburi minefield. HALO's subsequent internal accident investigation revealed that the mine had possibly been laid so as to deliberately defeat clearance. Immediate alterations to demining SOP's were effected to counter this most unusual tactic, and all necessary re-training carried out prior to the resumption of clearance operations. The accident was fully reported to WVI, USAID, the RNG and CND who independently investigated the incident in early June. No claim was processed for compensation due to the extremely slight nature of Sr Chimporta's injuries.

10 3 On 11th November 1998, Assistant Team Supervisor Saide Raul accidentally detonated an M969 anti personnel blast mine whilst excavating contaminated ground at Tower 228 on the Mucarre/Murrupula power lines task. Unfortunately, Sr Raul was not wearing his protective visor in the correct fashion, and lost his right eye as a result of the blast. The incident was fully reported to both donors and CND. Sr Raul has effected a full recovery, and in February 1999 was paid \$5,000 compensation in relation to his injuries,

## **11 Current Matters arising**

11 1 **HALO Mechanical Mineclearance System (MMS)** - The principal factors currently slowing completion of minefield clearance in Nampula Province are naturally ferrous or magnetised soils which preclude the use of a mine detector, dense vegetation in areas unused by humans for many years, and minefields which are spatially much larger and contain fewer mines than the initial survey information suggested.

11 2 Through experience from urban clearance in Kabul, HALO has developed a simple and rapid system which can equally be applied to the problems being faced in Nampula. It is based upon a modified medium-wheeled tractor which excavates (and then inspects) all soil from the mine contaminated area to a depth of 20cm. The machine thus mechanically isolates all mines and UXO which may be present.

11 3 HALO has also made a fundamental alteration to its mineclearance modus operandi. Formerly, a clearance task was approached with a view to complete clearance in one go. Thus, the actual area to be cleared was determined by sometimes sketchy level one survey information, and subsequently modified as clearance progressed on the grounds of what was being found. Early 1999 has seen the introduction of HALO's Area Reduction Survey (ARS). This is used on sites where definitive information does not exist as to numbers or locations of mines. A 12.5m manually cleared grid is thus imposed upon the suspect area, and thus a 23% physical sample of the ground achieved. In this manner, mines are isolated and can be more rapidly cleared without the necessity to physically clear large areas which are only suspected as containing mines.

11 4 It is currently envisaged that MMS will be used most effectively to carry out ARS. The machines will rapidly excavate the ARS grid, and thus achieve the sample of the ground. Mines will therefore be identified and manually cleared. Where mines densities are very low, such as at Murrupula and Mecuburi, but very large areas are denied due to local fears, mechanical ARS and the use of mine detection dogs (MDDs) is currently being considered as an effective option. Joint MMS/MDD trials will take place in mid to late 1999.

11 5 It is HALO's belief that the provision of 2 x Volvo 4400 machines will significantly impact upon the speed of clearance in Nampula Province. Standard manual clearance could be applied to smaller minefields with low density vegetation and low soil contamination, with MMS supporting the manual teams on larger, low mine-density sites with dense vegetation and contaminated soils. Thus they will create a substantial effect by rapidly opening full access to the mined area, carrying out ARS, and cutting vegetation ahead of either manual clearance or MDDs. This would undoubtedly result in a significant increase in clearance efficiency, and thus see a marked reduction in the time required to complete the currently identified tasks in the PPWP.

11 4 On August 12th 1998, HALO submitted a full proposal to USAID and RNG for the provision of a further year of funding to support the existing assets, and to add 2 x Volvo 4400 machines in the MMS role. This proposal has been accepted, and HALO is currently awaiting the importation of the machines.

11 5 **Disruption to work** - Between the 21st September and 18th December 1998, HALO's mineclearance in the northern provinces was affected by an illegal strike led by Sr Barkly Lozane (previously HALO's Cabo Delgado province Programme Manager). This action disrupted mineclearance in Zambezia and Cabo Delgado provinces, but had little effect in Nampula where work was only partially suspended for part of September and October. No long term negative effects have resulted.

11 6 **Northern Region Mineclearance Centre (NRMC)** - At the end of April 1999, HALO moved its operational base from the original office in Nampula city, to a spacious compound

previously built and occupied by Rumdel Construction HALO has signed a 4-year lease with the owner, and will during 1999, fully develop this facility as its NRMC All central administrative and headquarters functions will move to this site from Quelimane, and in addition, full workshop, office, training and classroom facilities will be established Thus, by early 2000, this site will house HALOs Mozambique HQ, from where all provincial operations will be coordinated This is a further very important step in terms of the development of all 4 provincial programmes, and the long-term development and sustainability of mineclearance in the northern region

## **12 Financial Position**

12 1 In April 1997, the programme was audited by representatives of WVI and accountants Coopers & Lybrands Both parties declared themselves satisfied with HALO's financial controls, but requested that minor adjustments be made to accounting procedures These have been actioned

12 2 In December 1998, representatives of Deloitte and Touche (D&T) carried out a systems audit of HALO ahead of the registration of HALO with USAID as a local NGO This was an essential pre-requisite prior to HALO receiving the 1999 grant from USAID This audit identified certain weaknesses within the administrative and accounting procedures Following the visit to Maputo of HALOs Finance Officer, Mr John de Montfort in April 1999, full accounting and administrative procedures were draw up with D&T This has satisfied USAID requirements, and HALO has now registered as a local NGO

12 2 All expenditures relating to the WVI and RNG programmes have previously been reported upon up until 31 December 1999 Summaries of expenditures in relation to the WVI extension grant and RNG programme 01 Jan to 30 April 1999 are included at Annex D

12 3 The final tranche of \$84,840 in relation to the WVI extension has been requested, but has not yet been received

## **13 Summary**

13 1 The HALO Trust/WVI/RNG demining project in Nampula continues to operate effectively, and has made significant progress in all areas since January 1997 In only 21 operating months, 7 of the 10 major provincial priority mineclearance tasks defined in the 1997 PPWP have been either cleared fully, have phase one clearance completed, or have clearance on-going Over 1,100 explosive items have been disposed of In addition, RNG assets have been effectively assimilated into the project, and have made a significant impact upon its overall effectiveness Comprehensive provincial resurvey at the district level is currently on-going, and a clear plan for the future will be formulated driven by the survey findings

13 2 HALO has successfully negotiated an extension of funding for the existing assets until 31 December 1999 The nature and scale of the remaining mines problem in Nampula Province is being closely assessed, and as a result, alterations to operating practices have already been effected through Area Reduction Survey, and funding secured to implement a mechanical

support to manual mineclearance project 2 x Volvo 4400 earth moving machines are due to be imported by mid August 1999 Joint manual/MMS/MDD trials are planned for September 1999

13.3 The necessary preconditions have therefore already been created for the further development of the project beyond the current Provincial Work Plan to the District Demining Initiative, and ultimately, Provincial Demining Fire Brigade stages

### Annexes

- A - Summary of completed and on-going demining tasks
- B - Summary of emergency clearance work
- C - Nampula Prioritised Provincial Demining Work Plan
- D - Financial Summaries

**Mutuali to Malema road verges**

Supervisor    Rafael Dos Santos  
Dates            28 July '97 to 27 August '97

**1 Location**

Mapsheet      No 31 (1 250,000)  
Province       Nampula  
District        Malema  
Locality       Mutuali to Malema road

**2 Background**

During the Civil War, Malema District was reputed to have been the scene of considerable military activity. A common tactic used by RENAMO was to ambush Government convoys as they moved between the major centres of population. Where sites were repeatedly used for ambushing purposes, FRELIMO would sometimes use mines to deny the area to RENAMO. Isolated mines were also used where paths used by RENAMO met main roads.

Rumdel are a South African civil engineering company who have a contract to rehabilitate the EN-8 from Nampula city to Cuamba in southern Niassa. In June 1997, an earth moving vehicle working on the road close to Mutuali uncovered an M969 anti personnel blast mine. Further questioning of local people revealed that the road verges over a 1km stretch were feared as being mined. Rumdel thus called HALO, who confirmed these suspicions after formal survey was carried out as a part of the initial coarse survey of the province.

In late July '97, HALO thus deployed a team to carry out clearance of road verge areas between Mutuali and Malema. Since the rehabilitation of the road was a major provincial development project, this task was prioritised as number one within the Governors Prioritised Provincial Demining Work Plan.

**3 Operations**

Clearance was achieved using a mix of detectors, and excavation in small areas where metal contamination was high.

**4 Results**

15,479 square metres of ground were cleared, and a single M969 anti personnel blast mine located and safely disposed of.

**5 Summary**

The completion of this high priority task in support of Rumdel Construction and provincial authorities permitted the timely completion of rehabilitation works on the Mutuali/Malema stretch of the Nampula/Cuamba road (EN8).

**Ponte Rio Lurio**

Supervisor   Rafael dos Santos  
 Dates        09 September '97 - Task suspended 27 April '98

**1 Location**

Mapsheet    No 22 (1 250,000)  
 Province    Nampula  
 District     Namapa  
 Locality    Pone Rio Lurio

**2 Background**

Ponte Rio Lurio lies at the boundary of Nampula and Cabo Delgado Provinces. It is a major structure which carries the main Nampula/Pemba highway across the Rio Lurio. During the Civil War, Government troops defended the bridge on both sides and laid dense anti personnel minefields in order to deter sabotage attempts by RENAMO. These mines were not cleared at the end of the war and remained in the ground, presenting a major threat to the lives and prosperity of the local inhabitants and travellers to this important focal point. Over the intervening years, regular accidents to both humans and livestock were reported in relation to these mines which not only instilled fear in the local population, but denied traditional access to the river (an important dry season water source) and the banks which are fertile, well irrigated, and which were intensively farmed prior to the Civil War. The clearance of these mines was recognised as being of a high priority, and the task was listed third in the Governors' PPWP. HALO deployed to begin clearance of this site in early September 1997.

**3 Operations**

The pace of clearance at this large site was slowed due to extremely dense vegetation, soils with a naturally high ferric content, and the presence of magnetised stones. Thus, the combined use of detectors and excavation was employed to provide the necessary level of confidence of clearance. Mines adjacent to the bridge abutments were cleared, but several small areas left uncleared as a result of technical difficulties related to dense vegetation. It is planned that the task will be completed during the latter part of 1999 with the addition of Dutch-funded mechanical assets.

**4 Results**

The clearance of 20,107 square metres of ground has resulted in the location and safe disposal of the following explosive devices,

- 47 x PMN anti personnel blast mine
- 76 x M966 bounding fragmentation mines
- 4 x RGD-5 high explosive hand grenades

**5 Summary**

The completion of the clearance of mines at Ponte Rio Lurio will have a significant

benefit upon the local population. It will remove the insidious threat of death and serious injury which has blighted this location since the laying of the mines during the Civil War, reopen safe access to fertile farming land on the banks of the river and remove the threat to local people and travellers alike who have traditionally used this spot to collect water.

**Demining team supervisors undergoing technical continuation training at Murrupula - July 1998**



**Supervisor giving lesson to his contemporaries on the Ebinger 420 mine detector. Nearly all technical instruction is now conducted by Mozambicans**



## Murrupula Hospital

Supervisor Emilio Morais/Bernardo Biquinane  
Dates 27 January '98 - 07 September '98

### 1 Location

Mapsheet No 43 (1 250,000)  
Province Nampula  
District Murrupula  
Locality Murrupula Hospital - Phase One clearance

### 2 Background

Murrupula is the capitol of the district of the same name. During the Civil War, it had a permanent garrison of Government troops who from the mid-1980's onwards reputedly came under regular attack from RENAMO. These soldiers thus fortified the centre of the community using a ring of trenches and laid anti personnel mines to deter enemy incursions. Today, these mines remain and have been the cause of human and animal casualties in recent years - the last in January '98 when a child lifted a mine he discovered whilst collecting wood. Sadly, the mine exploded some time later as the boy mishandled it at his home. In addition to the very real intimidation to the local population which these mines present, they are also denying a large area of formerly cultivated land which rings the centre of this busy rural community, thus further retarding the expansion of agriculture and housing. This task was prioritised as number 5 by the Governor in the PPWP, and had also been the subject of requests for clearance from World Vision and the Dutch Government, both of whom have development projects in Murrupula. HALO thus deployed to begin clearance of the site in late January '98.

### 3 Operations

Clearance of this site has been achieved using a combination of detectors and excavation necessitated by high concentrations of metal detritus close to the roads. Scant local information regarding the exact location, numbers or types of mines means that a large area is suspected as being affected, and must therefore be cleared prior to reoccupation by the local population. A considerable amount of ground therefore remains to be cleared.

### 4 Results

30,325 square metres of ground were cleared and the following explosive items located and safely disposed of

- 2 x PMN anti personnel blast mines
- 6 x 60mm high explosive mortar bombs
- 7 x 82mm high explosive mortar bombs
- 5 x RPG-7 anti tank rockets
- 1 x RGD-5 high explosive hand grenades
- 1 x F1 high explosive hand grenade
- 3 x AGS-17 projected grenades
- 10 x 82mm Point Detonating fuses

- 1 x 60mm Point Detonating fuse

## **5 Summary**

The completion of clearance at this site will not only remove a very real threat to the lives and safety of the local population, but will reopen traditional access to land for farming and housing which the presence of mines has restricted for many years. In addition, it will permit development projects planned by both World Vision and the Dutch Government to continue unhindered.

Phase One clearance was completed on 07th September '98. This included the highest priority area adjacent to the hospital. Phase 2 clearance will be conducted during 1999, and will involve sampling of the remaining suspect area using the level 2 survey process. This will delimit the remaining mines and thus speed the completion of clearance.

**Kazuzo/Chinga road**

Supervisor Emilio Morais  
 Dates 24th-27th February 1998

**1 Location**

Mapsheet No 43 (1 250,000)  
 Province Nampula  
 District Murrupula  
 Locality Kazuzo to Chinga road

**2 Background**

Chinga is a small district town in an area of fertile farming land which has become a focus for World Vision development projects in the agricultural sphere. However, the main access road linking Chinga and the surrounding area to the markets of Nampula had fallen badly into disrepair, to the point of becoming a real inhibition to mobility. World Vision therefore embarked upon a project to rehabilitate this access. In December 1997, HALO was called out to destroy several items of UXO and a single M969 anti personnel blast mine said to be related to an old FRELIMO forces quartel close to Chinga. Local fears regarding the presence of further mines over a 100m stretch of the road therefore lead to the suspension of rehabilitation work pending clearance. HALO thus deployed the Dutch-funded Mobile Survey/UXO team to carry out this task in late February '98.

**3 Operations**

Clearance was achieved over a three day period using a mixture of detectors and Labour Intensive Road Verification involving locally recruited labourers. This technique has been successfully applied to the clearance of hundreds of kilometres of district roads in neighbouring Zambezia and Niassa provinces.

**4 Results**

951 square metres of road were cleared and no mines or UXO located.

**5 Summary**

The completion of this small task has permitted World Vision to complete the rehabilitation of the road linking Chinga to Nampula, and in turn has resulted in greatly improved mobility between Chinga and Nampula, thus acting as a stimulus to trade and agricultural production in this fertile area of the province.

Quality Assurance

**HALO Nampula Provincial Operations Manager checking ground cleared at Ponte Rio Monapo in January 1999**



**Minefield benchmark established by demining team on the completion of phase one clearance at Mecuburi Sede, March 1999 The accurate marking and recording of areas is a vital part in the overall clearance process**

**Mecuburi Sede Phase One Clearance**

Supervisor     Rafael dos Santos  
 Dates           05 May '98 to 05 March 1999

**1 Location**

Mapsheet       No 32 (1 250,000)  
 Province       Nampula  
 District        Mecuburi  
 Locality       Mecuburi Sede - Phase One clearance

**2 Background**

Mecuburi is the capitol of the district of the same name. During the Civil War, it was garrisoned by Government troops and police who fortified the centre of the community against RENAMO incursions using a mixture of trenches and anti personnel mines. Thus, the northern side of the town centre remains ringed by mines which were not removed at the end of the conflict, and which now threaten the lives of people who's fields now adjoin the mined area. These mines have been the source of numerous human and animal casualties over recent years, the last on April 03rd '98 when a child detonated an explosive device which was dug from a field and subsequently discarded. Fortunately, she received only slight injuries, but many have not been so fortunate. This site was identified as being of high priority by HALO during survey work in May 1997, and was prioritised by the Governor as task number 6 in the PPWP. In addition to the proven deadly threat which the mines present, they are also denying a large area of agricultural and farming land. This situation is acting as a tangible negative influence upon the daily lives of people, and to the general development of this busy district town. HALO thus deployed in early May '98 to commence clearance work.

**3 Operations**

Information regarding the precise location, types, number and patterns of minelaying is scant in common with many clearance tasks undertaken by HALO in the northern region. This resulted in a very large area on the northern side of the town being regarded as unsafe, and the clearance plan therefore had to address these fears prior to reoccupation by the local community. HALO suffered a minor injury to deminer Carlos Chimporta on 14th May '98 when he inadvertently struck a mine possibly laid in a manner to deliberately defeat clearance. This matter was fully reported to USAID, the Dutch Government and CND who conducted their own accident investigation at the beginning of June.

**4 Results**

15,564 square metres of ground were cleared and the following explosive items located and safely disposed of,

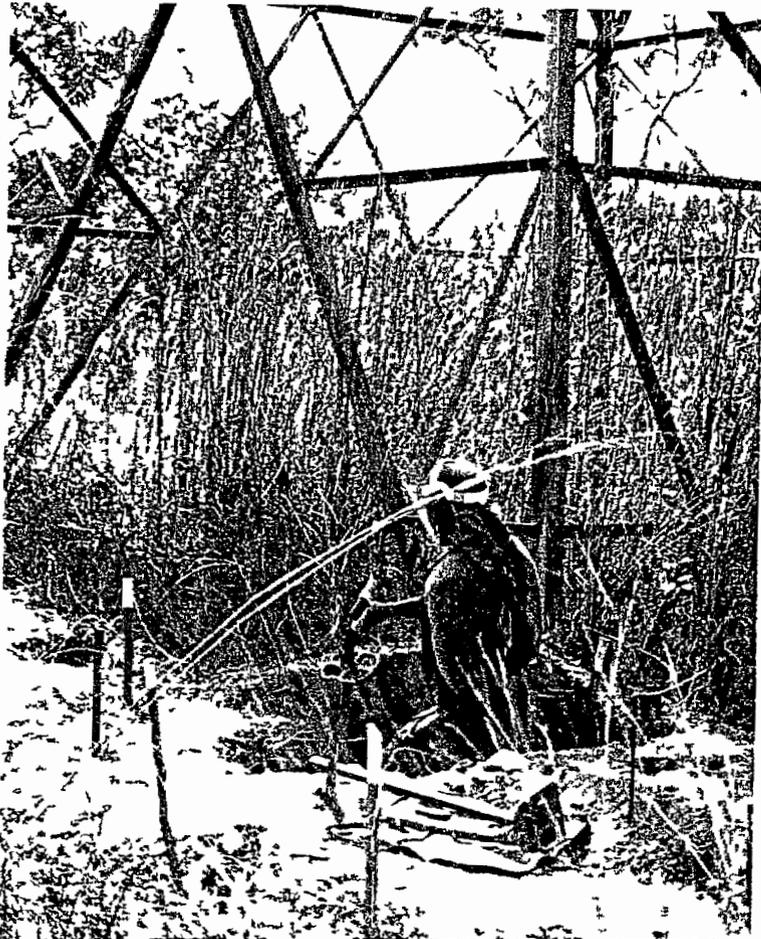
- 16 x PMN anti personnel blast mines
- 440 x 7 62mm calibre rifle ammunition

## 5 Summary

The completion of Phase One clearance at Mecuburı Sede has released a large area of agricultural land on the northern side of the town, and restored traditional access to water and wood gathering areas beyond the mined area. In addition, it has provided vital information about the location, types and numbers of mines laid which will be used during the latter 2 phases of clearance. This will provide clear guidance, and assist in substantially reducing the time required to fully complete the task.

Mucaire Power Lines

Deminer clearing ground around the base of tower 222



Red painted sticks indicate the location of mines destroyed at the base of tower 220 Up to 40 x M969 anti personnel blast mines were laid around the base of each tower to prevent sabotage during the Civil War

**Mucarre/Murrupula Power Lines**

Supervisor Emilio Morais  
 Dates 04 June '98 - Suspended March '99

**1 Location**

Mapsheet No 39 (1 250,000)  
 Province Nampula  
 District Murrupula  
 Locality Mucarre/Murrupula Power Lines

**2 Background**

Murrupula District is reputed to have been much affected during the Civil War by RENAMO military activity. One frequent target of the organisations' sabotage were the high-tension electricity power lines which run from the border with Zambezia at Mucarre to Murrupula and beyond to Nampula. To prevent attacks, Government forces mined around the base of 34 of the steel towers which support the electricity lines. It is reported that up to 45 x M969 Portuguese anti personnel blast mines were laid in an area 10m x 10m at the base of each of these towers. Today, these mines remain long after the military imperative has passed. Instead, they now threaten the lives and well-being of the rural population which lives in the shadow of the power lines, and are retarding vital replacement and rehabilitation work planned by the national power company (EDM) required to improve the currently erratic power supply to the city of Nampula. This clearance task was recognised as being of a high priority in June 1997 when HALO conducted coarse survey work in Nampula Province prior to the start up of mineclearance operations. It was viewed in a similar light by the provincial government and prioritised as number 8 in the PPWP. HALO thus deployed the Dutch-funded Mobile Survey/UXO team to begin clearance operations in early June '98.

**3 Operations**

Due to the restricted nature of the mines at the base of each tower, only one demminer can safely work on each at any given time. The Survey/UXO team has thus had its complement of demminers raised to 4 for the duration of this task which means that up to 4 towers can be cleared simultaneously using a combination of detectors and back up excavation. The task was suspended in March '99 due to problems relating to poor wet season access. At that time, 17 of the 34 towers had been cleared.

**4 Results**

To date, the clearance of only 4,217 square metres of ground has lead to the detection and safe disposal of the following explosive items,

- 457 x M969 anti personnel blast mines

**5 Summary**

The completion of clearance work along the Mucarre/Murrupula power lines will

simultaneously remove a substantial existing threat to the local population and reopen unrestricted safe access to enable EDM to carry out vital and long-overdue rehabilitation and upgrading works. The execution of this task by the Mobile Survey/UXO team is a further vindication of HALO's on-going policy to maximise operational flexibility and reconfigure existing assets to best suit the task in hand.

## Muecate to Imala road

Supervisor    Bernardo Biquwane  
Dates            21st-24th September 1998

### **1 Location**

Mapsheet      No 33 (1 250,000)  
Province        Nampula  
District        Muecate  
Locality        Muecate to Imala road

### **2 Background**

During the Civil War, Muecate District was reputedly the scene of much military activity by both Government and RENAMO troops. The latter were known to regularly use certain tracks and paths in the area between Muecate town and Imala, and at several points, these paths cross the main Muecate/Imala road. FRELIMO forces attempted to deny RENAMO the use of these crossing points by laying anti personnel mines along the verges of the road.

Today, local fears of these mines remain and HALO was called to this area on a previous occasion to destroy 2 x M969 Portuguese anti personnel blast mines which were located by locals. World Vision have a large development project in Nampula Province. One of the focus areas is Muecate District where much emphasis is being placed upon the regeneration and development of agriculture. As part of this strategy, rural roads are being rehabilitated in order to improve general mobility and so provide a catalyst to the marketing of produce.

The road from Muecate to Imala is one such project. There were however fears that a 50m stretch of the road was mined where an old RENAMO crossing point existed. HALO thus received a direct request for assistance from World Vision in Nampula to clear this small area in order to allow road rehabilitation to continue.

### **3 Operations**

Clearance was achieved over a four day period using a mixture of detectors and Labour Intensive Road Verification involving locally recruited labourers. This technique has been successfully applied to the clearance of hundreds of kilometres of district roads in neighbouring Zambezia and Niassa provinces.

### **4 Results**

544 square metres of road were cleared and no mines or UXO located.

### **5 Summary**

The completion of this small task has permitted World Vision to complete the rehabilitation of the road linking Muecate to Imala, thus acting as a stimulus to trade and agricultural production in this fertile area of Nampula province.

**Ponte Rio Monapo**

**Machambas cultivated right to the edge of the mined area on the western side of Ponte Rio Monapo**



**4 x Portuguese M969 anti personnel blast mines prepared for demolition**



**Ponte Rio Monapo**

Supervisor     Bernardo Biquiwane  
 Dates            02 November '98 - On-going

**1 Location**

Mapsheet       No 34 (1 250,000)  
 Province       Nampula  
 District        Monapo  
 Locality       Ponte Rio Monapo

**2 Background**

Ponte Rio Monapo spans the Monapo river close to the district town of the same name. It carries the main Nampula to Nacala road, and was of considerable strategic significance during the Civil War. As a result, it was protected from RENAMO sabotage by FRELIMO forces who between 1982 and 1986 laid a dense anti personnel minefield on both banks, and either side of the bridge. Local information received by HALO during the technical survey of this site suggested that up to 600 mines had been laid in 4 distinct areas around the bridge abutments. These are Soviet POMZ-2 fragmentation, and Portuguese M969 anti personnel blast mines.

Today, a proportion of these mines remain, and continue to adversely affect the lives of people living close to the bridge. They deny full access to this locally important dry season water source, and prevent the unrestricted use of formerly intensively cultivated fertile and well irrigated land close to the river. In addition, DNEP have plans to carry out essential rehabilitation work and repairs to the bridge structure once the clearance is concluded.

This site was identified as requiring clearance during HALO's June 1997 coarse minefield survey of Nampula Province, and was ranked by the Governor as the fourth priority task (of 10) in July the same year.

**3 Operations**

Demining has proceeded using a combination of detectors and excavation. The lower areas of the minefield are periodically inundated during the wet season, and thus parts of the area are now covered with extra deposits of silt and sand. This has led to the discovery of mines up to 40cm below the current ground surface, and has thus necessitated the use of excavation. The eastern bank of the river also exhibits laterite soils which have precluded the use of detectors. Vegetation is dense in all areas.

**4 Results**

To date, 4,815 square metres of ground have been cleared and the following mines detected and safely disposed of,

- 25 x POMZ-2 anti group fragmentation mines
- 160 x M969 anti personnel mines

## 5 Summary

The completion of this high priority task in direct support of provincial government and the local population will once again open unrestricted access to this locally important dry season water source, and to fertile formerly intensively cultivated farming land. In addition, the mines are reputed to have been the cause of both human and animal casualties over recent years, and their removal will eliminate this insidious threat to the local population and travellers alike. It will also permit unrestricted under bridge access for DNEP who have rehabilitation and repair works planned.

**The HALO Trust Nampula**  
**CUMULATIVE SUMMARY OF ACTIVITY AS AT 30 April 1999**

Ser. No	Task Location	Rpt. No.	District	Start Date	Finish date	Sq m. Cleared	Road km	AG mines	AP mines	AT mines	UXO	SAA
1	Mutuali-Malema road	15	Malema	28/07/97	27/08/97	15,479			1			
2	Ponte Rio Lurio/Namapa	71	Namapa	09/09/97	Suspended	20,107		76	47		4	
3	Murrupula Hospital Phase One	984/104	Murrupula	27/01/98	17/09/98	30,325			2		34	
4	Kazuzo/Chinga rd (LIRV)		Murrupula	24/02/98	27/02/98	951						
5	Mecuburi Sede Phase One	967/036	Mecuburi	05/05/98	05/03/99	15,564			16			440
6	Mucarre/Murrupula Power Lines	985/101	Murrupula	04/06/98	Suspended	4,217			457			
7	Muecate/Imala road		Muecate	21/09/98	24/09/98	544						
8	Ponte Rio Monapo	924/072	Monapo	02/11/98	On-going	4,815		25	160			
9	Mecuburi Sede Phase Two (ARS)	967/036	Mecuburi	05/04/99	On-going	1,559						
<b>TOTALS (demining teams)</b>						<b>93,561</b>	<b>0</b>	<b>101</b>	<b>683</b>	<b>0</b>	<b>38</b>	<b>440</b>
<b>Mobile Team Nampula</b>						<b>20</b>		<b>1</b>	<b>12</b>	<b>4</b>	<b>278</b>	<b>2,750</b>
<b>Grand Totals</b>						<b>93,581</b>	<b>0.0</b>	<b>102</b>	<b>695</b>	<b>4</b>	<b>316</b>	<b>3,190</b>

30

**Summary of UXO call out work - Year One (01 January to 31 December 1997)**

<b>Date</b>	<b>Request from</b>	<b>Location</b>	<b>Item destroyed</b>	<b>Remarks</b>
01 Feb '97	Local Police	Murrupula	4 x RPG-7 1 x F1 Grenade 1 x POMZ-2 1 x B10 HEAT	Collected from local people and stored in police station
04 Feb 97	Local Police	Mangane/Nacala Velha	4 x 82mm HE mortars 1 x F1 Grenade	Items located by ex-soldier in Mangane water supply station
13 June '97	Rumdel Construction	Malema/Mutuali road	1 x.M969 AP blast mine	Mine was located during construction works and reported to HALO
27 Aug '97	Local Police	Malema	1 x 81mm Illum mortar	Reported by local people and stored by Police
28 Aug '97	Local Police	Malema/Mutuali	19 x 85mm HE 3 x 85mm AP 1,500 x 12 7mm SAA 500 x 7 62mm SAA	Removed from old tank in the centre of Mutuali village
09 Sep '97	Local Police	Namapa	8 x 82mm HE mortars 1 x F1 Grenade	Items reported around the village to the Police, who stored them
17 Sep '97	Local Police	Meluco (Cabo Delgado)	1 x Improvised AT mine	Mine reported by locals to Police who informed HALO
18 Sep '97	Local Police	Meluco (Cabo Delgado)	1 x 82mm HE mortar 1 x 60mm HE mortar 2 x RPG-7 4 x F1 Grenades	Reported by local people and stored by Police
23 Sep '97	Local school	Namapa	1 x 82mm HE mortar bomb	Child found playing with the bomb in a classroom

08 Oct '97	Local community	Namapa	1 x OZM-4	Mine reported very close to main Nampula/Pemba road by local people
10 Oct '97	Local school	Namapa	2 x F1 Grenades	Grenades found by children in old latrine at school
16 Oct '97	Local school	Namapa	24 x 82mm HE mortars	Reported to and located by HALO in area of school latrine as above
22 Oct '97	Local Police and community	Moma	22 x HE submunitions	Contents of air-delivered cluster bomb which failed to operate
22 Oct '97	Local Police	Moma	1 x Cluster bomb fuse/bursting charge	Removed from a local home where the owner planned to make a cooking pot from the nose of the bomb
02 Dec '97	World Vision	Chinga	1 x M969 AP blast mine	Mine uncovered during WV road rehabilitation work Destroyed by HALO allowing work to continue

**Totals:**

Call outs, 16  
Explosive Items destroyed, 103, plus 2,000 rounds of small arms ammunition

**Summary of Emergency Clearance Work - Year Two (01 January to 31 December 1998)**

<b>Date</b>	<b>Request from</b>	<b>Location</b>	<b>Items destroyed</b>	<b>Remarks</b>
31 Jan '98	Local people and Handicap International	Toma de Agua, Murrupula	1 x RPG-7 anti tank rocket	Rocket reported close to water pump in village centre
17 Feb '98	Local people and Handicap International	Namiata, Nampula	1 x 81mm HE mortar bomb 2 x 82mm HE mortar bomb	Items found by local 4m from main Nampula to Quelimane highway
20 Apr '98	Handicap International	Zona de Lima, Kazuzo	1 x PMN AP mine 3 x F1 HE grenades	Mine was discovered by locals with 3 grenades laid as booby traps
04 May '98	World Vision	Aristides, Muecate	2 x M969 AP mines	Mines located by HALO during a survey of the Muecate/Imala road for WV
05 May '98	Provincial Police Commander	Regulo Tarrua, Ribaue	1 x M969 AP mine	Mine in old Ribaue/Murrupula road reported to police by local
07 May '98	Police Command, Moma	Moma	1 x M969 AP mine	Mine removed from a machamba and stored by police
07 May '98	Police Command and local people	Moma, Km 6	44 x 81mm HE submunitions 1 x 60mm HE mortar bomb	Submunitions from a blind cluster bomb dropped 6km from Moma
07 May '98	Police Command and local people	Moma, Km 6	1 x 81mm HE submunition	As above
23 May '98	Handicap International	Meconta Sede	1 x 82mm HE mortar bomb	Reported to HI by local people in Meconta
23 May '98	Rumdel Construction	Nacata, Malema	1 x RPG-7 anti tank rocket	Located and reported by road rehabilitation workers
25 May '98	World Vision	Moiane, Gile	1 x RPG-7 anti tank rocket	Located by a local working in a machamba
26 May '98	Provincial Police Command, Nampula	Regulo Tarrua, Ribaue	1 x M969 AP mine	Mine removed from a machamba by local people and stored in the Regulo's house

29 May '98	Police Command and local people	Mecuburi	3 x 82mm HE mortar bombs 3 x RPG-2 anti tank grenades 3 x F1 HE hand grenades	Items recovered from an old trench on the northern side of the town and stored by the police
13 July '98	World Vision	Murrupula	1 x Pt-M1-BA-III AT mine	Located by WVI road rehabilitation workers
15 July '98	Local people	Kazuzu, Murrupula	1 x F1 grenade	Found by child 30m from her house Reported to local administration
16 July '98	Provincial police	Km 6, Moma	1 x 81mm HE mortar bomb	Suspected aircraft bomb reported by local
16 July '98	Provincial police	Km 6, Moma	1 x cluster bomb fuse	Removed from the house of a local Was intended for use as a cooking pot!
16 July '98	Local people	Chef Mulewa, Nemetil	1 x M970 smoke grenade	Reported by local trained in mines awareness
08 Aug '98	Provincial police	Muripo, Malema	1 x OZM-3 AG mine 2 x AP mines	Discovered by locals in area of old army camp
17 Aug '98	Traffic police	Murrupula Sede	1 x 82mm HE mortar	Located 25m from local school
19 Aug '98	Provincial police	Cabo Zacarias, Murrupula	1 x M969 AP mine	Discovered by local on island in Ligonha river Probably washed downstream
27 Aug '98	Provincial police	Nampula	7 x 82mm HE mortars 10 x F1 grenades 10 x RGD-5 grenades 1 x M970 smoke grenade 8 x RPG-2 grenades	Reported to police in Nampula city by locals from various localities
15 Oct '98	Provincial police	Liupo, Mogincual	1 x RPG-7 AT rocket	Located by local people and reported to police
22 Oct '98	Local people	Monapo Sede	1 x M969 grenade	Located by local man in his machamba and taken to police

30 Oct '98	District administration	Iapala, Ribaue	4 x RGD-5 grenades 4 x F1 grenades 1 x M970 grenade	Discovered by workers rehabilitating local health post
6 Nov '98	Provincial police	Monapo Sede	3 x RGD-5 grenade 1 x RG42 grenade 1 x RKG-3 AT grenade 1 x AGS-17 grenade	Located at industrial site which had been used as a barracks
7 Nov '98	World Vision	Morane, Gile	1 x 60mm HE mortar bomb	Located by local man close to his house
7 Nov '98	Local police	Maua, Gile	1 x 60mm HE mortar bomb	Discovered by student in the grounds of a local school
25 Nov '98	Provincial police	Monapo Sede	1 x RPG-7 AT rocket 6 x F1 grenades	Items handed in by locals from various locations to Monapo police
9 Dec '98	Provincial police	Monapo Sede, Monapo	1 x M962 grenade	Found by local people on the site of an old army camp
11 Dec '98	Provincial police	Chinga, Murrupula	1 x 60mm HE mortar bomb 1 x RPG-7 AT rocket	Found in a machamba by a local man
15 Dec '98	Provincial police	Anchilo, Meconta	1 x M970 grenade	Discovered by local as he was digging his machamba

**Totals;**

Call outs, 33

Explosive Items destroyed, 147

**Summary of Emergency Clearance Work - Project Extension (01 January to 30 April 1999)**

Date	Request from	Location	Items destroyed	Remarks
27 Jan '99	Local Police	Nipuete	1 x M969 AP mine	Mine reported by local people to police
27 Jan '99	Local Police	Murrupula	1 x 82mm HE mortar bomb	Mortar bomb found in machamba and brought to police station by local people
06 Feb '99	Local Police	Tarua	1 x M969 AP mine	Mine reported by labourer working on World Vision funded rehabilitation of the Chinga/Ribaue road
22 Feb '99	Local Police	Murrupula	1 x PRC73 hand grenade	Grenade located by a local farmer in his field
03 Mar '99	Local Police	Mucarre	1 x M969 AP mine	Reported to local police by workers from CARE
11 Mar '99	Local Police	Namialo	26 x 82mm HE mortar bombs	Hidden cache located by local children
12 Mar '99	Local Police	Namialo	1 x 82mm HE mortar bomb	Located by local farmer in a machamba Disposed of by Survey/UXO team during re-survey work
16 Mar '99	Local Police	Corrane	1 x F1 hand grenade	As above
19 Mar '99	Local Police	Corrane	1 x 60mm HE mortar bomb	As above
20 Mar '99	Local Police	Natiquir	1 x M970 smoke grenade	As above
22 Mar '99	Local Police	Mecua	1 x RPG-7 anti tank rocket	As above
13 Apr '99	Local Police	Mauio	1 x 60mm HE mortar bomb	Located close to footpath linking Regulos house to local church
29 Apr '99	Local Police	Liupo	1 x RPG-7 anti tank rocket	Brought to local police by farmer who had dug rocket from a machamba

**Totals,**

Call Outs, 13  
Explosive items destroyed, 38

**Updated Nampula Province 1998/1999  
Prioritised Provincial Demining Work Plan - as at April 1999**

Task Priority	Location/Client	District	Description	Area (m2)	Time	Remarks
1	ENB Malema /Mutuall road DNEP/Rumdel Construction	Malema	M969 AP blast mines in road verges	15,479	4	Task Complete August 1997
2	Kazuzo/Chinga road World Vision	Murrupula	Short road section feared Rehabilitation work was halted temporarily	951	1	Task Complete February 1998
3	Ponte Rio Lurio Provincial government	Namapa	Dense AP minefield protecting bridge at inter provincial boundary	19,819	31	Task suspended April 1998
4	Itoculo/Nacala Velha road ECMEP	Nacala Velha	3 km of road suspected as being mined rehabilitation work halted	33,000	6	LIRV task 25 men + 50 labourers
5	Murrupula Sede Phase One Provincial government/World Vision and Dutch Government	Murrupula	Defensive minefield ring around town centre is now retarding the development of agriculture and expansion of housing	30,000	30	Phase 1 clearance completed Sept '98
6	Mecuburi Town Phase One Provincial government	Mecuburi	Defensive minefield laid to protect former barracks Effects of mines as above	16,000	30	Phase One completed April 1999
6	Mecuburi Town Phase Two ARS Provincial government	Mecuburi	Defensive minefield laid to protect former barracks Effects of mines as above	12,500	16	Task on-going 12 men
7	Ponte Rio Monapo Provincial Government	Monapo	Dense AP minefield laid to protect strategically important bridge Mines now threaten local people and travellers, and are retarding agriculture and limiting access to a locally important water source	5,000	16	Task on-going 25 Men
8	Ligonha/Mucarra Power Lines EDM	Murrupula	AP mines laid at the base of 34 high tension towers Mines are threatening the local population and preventing vital rehabilitation work planned by EDM	8,000	25	Task suspended February 1999
9	Nacala water pipeline Provincial Department of Aguas	Nacala Velha	AP and AG mines along 8km of water pipeline Mines continue to threaten the local population, are denying access to the pipeline and therefore retarding rehabilitation work	40 000	40	25 men + MMS
10	Ponte Rio Ligonha DEP	Ribaue	Mines laid to protect bridge at provincial boundary Mines continue to threaten the local population and deny free access to this locally important water source and fertile agricultural land	15 000	15	25 men + MMS
<b>Totals</b>			<b>Work remaining as at April 1999</b>	<b>105,500</b>	<b>93</b>	

**HALO TRUST/ WORLD VISION  
FINANCIAL STATEMENT**

**EXTENSION PERIOD (JANUARY TO APRIL 1999)**

All figures in US\$	BUDGET	EXPENDITURE
BUDGET LINE	\$	\$
<b>Personnel</b>		
Expatriates	7,200	6,966
Local Wages	28,000	26,088
<b>SUB TOTAL-Personnel</b>	<b>35,200</b>	<b>33,054</b>
<b>Bomford Turner Vegetation Cutter</b>	<b>20,000</b>	19,989
Deminers Kit (Tools, Uniforms)	600	1,581
Deminining Stores (Explosives)	1,600	1,462
Medical	400	553
<b>SUB TOTAL</b>	<b>2,600</b>	<b>3,596</b>
Vehicle Maintenance	4,000	4,561
Fuel	2,400	2,525
Food	400	359
<b>SUB TOTAL</b>	<b>6,800</b>	<b>7,445</b>
<b>TRAVEL</b>	<b>2,400</b>	<b>4,420</b>
Location Costs	4,000	3,656
House Maintenance	1,000	222
Office Costs	3,200	2,733
Communications	800	1,163
<b>SUB TOTAL</b>	<b>11,400</b>	<b>7,774</b>
Insurance	2,000	1,722
Admin Support @ 9%	6,840	6,840
<b>TOTAL</b>	<b>84,840</b>	<b>84,840</b>