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Report on the Review of UNOCHA's Mine Action Programme for Afghanistan

Geneva International Centre for Humanitarian Demining
GICHD

Report on the Review of UNOCHA's Mine Action Programme for Afghanistan

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Foreword

This report was prepared by a team of four consultants – Khan Mohammad, Qadeem Tariq, Ted Paterson and Bill van Ree – appointed to review the impact of the Mine Action Programme for Afghanistan.

The report includes the views, opinions and recommendations of the Review Team. The information in this report does not represent the policies or opinions of the donor group (CIDA, DFID, and the Government of Japan) that commissioned the review.

We would like to thank the many people who openly and candidly provided briefings, information, and documentation needed to compile this report. In particular, we acknowledge the assistance provided by the mine action community in Afghanistan. This review would not have been possible without their wholehearted support.

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Abbreviations and Acronyms

ACBAR	Agency Coordinating Body for Afghan Relief
ACBL	Afghan Campaign to Ban Landmines
AETF	Afghan Emergency Trust Fund
AMAA	Afghan Mine Awareness Agency
AMAL	Afghan Mine Action League
AMVIS	Afghanistan Mine Victim Information System
ANCB	Afghan NGOs Co-ordination Bureau
AP	Anti-personnel
APB	Afghan Programming Body
ARCS	Afghan Red Crescent Society
AREA	Agency for Rehabilitation and Energy Conservation in Afghanistan
ARI	Ansar Relief Institute (Iran-based mine awareness organisation)
ASG	Afghan Support Group
AT	Anti-tank
ATC	Afghan Technical Consultants
BAC	Battle Area Clearance
BBC AEP	British Broadcasting Corporation, Afghan Education Projects
CAP	Common Appeal Process
CBMC	Community Based Mine Clearance
CDAP	Comprehensive Disabled Afghan Programme
CIDA	Canadian International Development Agency
DAFA	Demining Agency for Afghanistan
DC	Demining Course
DDG	Danish Demining Group
DFID	Department for International Development (UK)
DMC	Department of Mine Clearance, Government of Afghanistan
DMIT	Doctrine, Monitoring and Investigation Team
DPDC	Demining Pre-Deployment Course
EOD	Explosive Ordnance Disposal
FAO	Food and Agriculture Organisation of the United Nations
FMF	Foreign Military Funding (US State Department programme)
FMU	Field Medical Unit
GAI	Greater Azra Initiative
GICHD	Geneva International Centre for Humanitarian Demining
HALO	Hazardous Area Life Support Organisation
HI	Handicap International
ICBL	International Campaign to Ban Landmines
ICC	Islamic Co-ordination Council
ICRC	International Committee of the Red Cross
IDP	Internally displaced person
IMSMA	Information Management System for Mine Action
IOM	International Organisation for Migration
ISMA	International Standards for Mine Action
LAN	Local Area Network
LEP	Landmine Education Programme
MA	Mine Awareness
MACA	Mine Action Centre for Afghanistan
MAMIS	Mine Action Management Information System

MAPA	Mine Action Programme for Afghanistan
MCPA	Mine Clearance Planning Agency
MDC	Mine Detection Dog Centre
MDG	Mine Dog Group
MDS	Mine Dog Set
META	Monitoring, Training and Evaluation Agency
MSF	Medicine sans Frontiers
MTT	Monitoring and Training Team
NGO	Non-governmental Organisation
NOVIB	Netherlands Organisation for International Development and Cooperation
ODP	Office for Disaster Preparedness, Government of Afghanistan
OMAR	Organisation for Mine Clearance and Afghan Rehabilitation
P.E.A.C.E.	Poverty Eradication and Community Empowerment
PEI	Polio Eradication Initiative
PI	P.E.A.C.E. Initiative
ProMIS	Programme Management Information System
PCP	Principled Common Programming
PSC	Programme Support Cost
RCB	Regional Coordinating Bodies
RMAC	Regional Mine Action Centre
SAC	Survey Action Centre
SCA	Swedish Committee for Afghanistan
SEIS	Socio-economic impact survey
SIMAA	Socio-economic Impact of Mine Action in Afghanistan
SWABAC	Southwestern Afghanistan and Baluchistan Association
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNMAS	United Nations Mine Action Service
UNOCHA	United Nations Office for the Coordination of Humanitarian Assistance to Afghanistan
UXO	Un-exploded Ordnance
WHO	World Health Organisation

1.0 Executive Summary

1.1. Purpose

1. The donors funding this review (CIDA, DFID and the Government of Japan) have provided in the region of US$ 30 million to the MAPA over the past ten years. Prior to providing additional funds, these donors require further evidence of programme impact and recommendations on the future development of the MAPA. The objectives of the review are as follows:

a) To determine the benefit of mine action in Afghanistan to date in terms of:

- humanitarian and socio-economic impact
- technical effectiveness
- management efficiency
- political considerations
- effective, efficient and transparent use of funding

b) To recommend changes to improve the efficiency and impact of MAPA;

c) To consider options leading to a UN exit strategy.

1.2. Overview

2. A combination of sound strategic and operations planning, good management, good fortune and hard work on the part of MAPA organisations and agencies has attracted consistent financial assistance and support from the donor community. This has contributed to the development of what is internationally recognised as the most successful UN coordinated mine action programme in the world. We believe that the MAPA has the potential to continue as a benchmark for international best practice in capacity development and service delivery in mine action.

3. However, the MAPA needs to make some fundamental changes to its vision and strategic plans if it is to maintain its leading position. These changes include:

a) new ways to develop and implement mine action at the community, district, and national levels;

b) strategies to minimise risks associated with the future transition to a national mine action under a recognised government.

c) Human resource management strategies that will:

- provide the framework for recruitment of qualified nation staff to manage the mine action programme with minimal international adviser assistance;

- promote individual and organisational capacity development;
- assist in identifying an appropriate cadre of international staff, supported by shorter-term consultants to address specific capacity development and technical issues.

4. This report identifies many of the strengths and weaknesses of the MAPA as a whole and of many of the organisations that make up important elements of the MAPA. It provides recommendations to take advantage of identified opportunities. It also highlights risks associated with current or future strategies, and provides guidance on risk mitigation strategies.

1.3. Socio-economic impact

5. Demining in Afghanistan has yielded very significant economic and humanitarian benefits. The monetary value of net benefits achieved in 1999 is estimated by the draft Socio-economic Impacts of Mine Action in Afghanistan (SIMAA) report to be over $90 million, or about $4.60 in benefits for each dollar expended. The evidence suggests demining continues to deliver benefits that substantially exceed expenditures.

6. At the same time, overall demining productivity has been falling and salary structures imply that operating costs will rise over time. As well, much of the high value land that can be cleared with existing technology has already been demined, while effective coordination with other development actors will remain difficult until a recognised government can advance a development strategy that commands donor support. Together these trends imply erosion in net social and economic benefits over time.

7. To counter this erosion, MAPA needs to introduce measures that reduce costs, increase productivity, promote effective coordination with other development actors, and allow for greater refinement in setting priorities.

1.4. Technical effectiveness

8. The MAPA continues to search for ways to improve technical effectiveness. The programme has achieved remarkable improvements in safety, perceived as its major weakness during the 1990s. There are short-term trade-offs between safety and productivity, but high safety standards provide an anchor for incremental productivity improvements over the long-term and must not be sacrificed.

9. Technical aspects that could increase productivity include:

a) improving the quality assurance process for dogs used during survey and area reduction activities;

b) increasing the number of explosive detection dogs;

c) improving the productivity of the current number of dogs by:

- re-examining their allocations to tasks and organisations;
- re-examining the use of dogs in the survey process to reduce the risk of under-utilisation of dogs on survey teams;

d) modifying procedures and work practices for backhoe teams, including support team requirements for backhoes and introducing two-shift operations;

e) reviewing the use of the front-end loader (FEL) and rock crusher technology in agricultural land clearance to analyse the cost-benefit ratio and environmental impact of this process. Options to review include the use of this technology on residential land and irrigation systems, which promise greater socio-economic benefits than does rainfed agricultural land;

f) developing national standards for mine action in Afghanistan.

1.4.1. Management

10. Improvements in management offer the most significant opportunities to boost MAPA productivity and effectiveness. The UN could contribute to improved management through:

a) implementation of the proposal to transfer responsibility for the MACA from UNOCHA to UNDP;

b) modifying its human resource management strategy for the MACA and RMACs to:

- recruit national staff with appropriate project management skills supported by staff with the technical skills in demining.
- provide staff with professional development training, allowing them to develop the skills needed to assist the eventual national mine action authority in assuming control of MAPA.

c) restructure relationships between MAPA and the Afghan NGOs to increase competition, providing incentives for cost reductions not easily achieved in the current organisational culture;

d) develop the national standards for mine action, providing a sound basis for transition to the national authority while allowing some flexibility for individual organisations to implement changes without having to rely on the slow response from an overworked MACA technical adviser network.

11. The MAPA implementing partners could promote improved management through:

a) training and development of senior and middle management staff;

b) critical examination of their overheads and pricing structures to develop alternatives for maintaining programme outputs in an environment of reduced international aid funding.

1.5. Effective, efficient, and transparent use of funding

12. Over the past three years, UNOCHA has made changes to increase transparency in the use of Afghan Emergency Trust Fund (AEFT) funding, ensuring that a greater portion of the programme support costs (PSC) deducted from AETF contributions are used to support the MAPA. However, UNOCHA still uses PSC deductions (13% of donations made through the AETF) to subsidise other activities. We believe the UN should find a solution to transferring responsibility for the management of MAPA from UNOCHA to UNDP. However, in doing so, the UN and the donor community will need to resolve how to maintain appropriate levels of coordination and operations support, as is currently provided through UNOCHA.

13. The report includes other findings that should improve efficiency in expenditures. These include:

a) The need for the MAPA organisations to carefully review their policies and practices—and particularly salary structures—with a view to minimising economic rents and, hence, the likelihood that malfeasance might become a problem in the future;

b) The need for the MAPA to restructure its contractual arrangements with the Afghan NGOs in a way that will encourage the NGO management teams to develop innovative ways to reduce costs and become even more competitive.

1.6. A UN exit strategy

14. The future of the MAPA as a national institution remains uncertain, which has contributed to UNOCHA retaining a programme management approach based on a team of international staff. While highly successful to date, we believe it now would be appropriate for UNOCHA to develop nationally recruited staff to assume greater responsibility for the management of the programme. A strategy for development of a team of nationally recruited staff should include:

a) The development of competency profiles for each member of the mine action management team and specific plans for the further development of individual skills and organisation capacity;

b) A review of the skill profiles for MAPA's internationally recruited staff, particular attention to that for the “Field Coordinator” positions with the view to recruiting staff with operations management and management capacity development expertise, with less emphasis on technical demining skills;

c) The documentation of operations management SOPs to assist in specifying work practices and guiding mine action management staff in the MACA and the RMACs. The development of clear and concise SOPs will also aid in the implementation of the capacity development work plans;

d) All technical advisers in both UN and NGOs should develop capacity development plans identifying the competencies required of the people and organisations, current competency levels, and steps needed to bridge any gaps. The advisers should report regularly on progress in implementing these plans.

e) Increased use of short-term consultants to fill the gaps in the skill set of the current technical advisory team.

1.7. Conclusion

15. The MAPA has made significant progress in addressing hazards and reducing the risks associated with living and working in one of the world's most severely contaminated countries. In doing so, MAPA has delivered substantial social and economic benefits. However, there are untapped opportunities for enhancing the programme's efficiency and effectiveness.

16. Foremost among these opportunities are measures to reduce costs or increase productivity, thus enhancing benefit-cost ratios and allowing more to be achieved within current resource levels. This report recommends some specific measures in this direction. More fundamental are recommendations for a new relationship between UNOCHA/MACA and the implementing NGOs. These recommendations are designed to enhance incentives for the NGOs to improve performance steadily over time, capitalising on the great talents of NGO managers and staff.

17. Given any level of efficiency, MAPA's effectiveness can be enhanced by better targeting its scarce resources to tasks promising higher socio-economic payoffs. This is not a simple task in a country lacking the most basic social and economic data, but the recent SIMAA study provides a good start.

18. Effectiveness can also be enhanced by better coordination with other development actors. Our recommendations in this regard are designed to make MAPA a more responsive, 'demand-led' programme.

19. As well, in common with other initiatives supported by the international community, MAPA's future is far from certain. At some point, which cannot be predicted with confidence, a recognised national government will assume responsibility for mine action in Afghanistan. This future transition poses risks that the Afghan mine action capacity will be severely diminished. However, steps can be taken in the short-term to increase the likelihood that MAPA's performance capacity will be sustained. Our principal recommendations in this regard are to encourage the continued evolution of the Afghan NGOs into independent organisations, operating within clear framework for accountability, quality assurance, and workplace safety.

20. Collectively these recommendations should assist the MAPA partners in maintaining both donor support and their position in the forefront of the global mine action community.

2.0 Background

1. Afghanistan remains as one of the world's most heavily landmine-affected countries. Mine action operations started in Afghanistan after the Geneva accord 1989. Today, the Mine Action Programme for Afghanistan (MAPA) is one of the largest mine action programmes in the world. During the past 11 years donor countries have provided more than US$ 150 million for mine action operations in Afghanistan. However, before approving further funds, a group of donor countries/agencies required further evidence of the programme's impact and productivity.

2. The group of donors[1] appointed a team of four consultants to review the programme and make recommendations on its future. The terms of reference for the Review Team are included in Annex A.

3. Spending most of its time inside Afghanistan, the Review Team undertook its mission from 26 October 2000 to 7 December 2000. During the course of their mission, the Review Team travelled to Islamabad, Kabul, Jalalabad, Kandahar, Herat and Peshawar. The process of the review included the following:

a) meetings with management staff of MAPA, mine action NGOs and government authorities

b) a detailed review of all administrative and operational standing operating procedures (SOPs)

c) visits to field operations and mine affected communities, and

d) meetings with other national and international NGOs and UN Agencies.

4. Logistics and security considerations constrained the selection of geographic focal areas. Team members could only visit communities and minefields within a few hours drive from Kabul, Jalalabad, Kandahar, and Herat, as they had to be back in those centres before nightfall. However, because many of the activities of mine action organisations have focused on urban centres or their defensive perimeters, there remained ample choice and these limitations did not compromise the objectives of the review.

5. Before its departure from Islamabad, the team prepared a list of the general categories of communities and minefields to visit (urban, peri-urban, rural, Kuchi, etc.). Final selections of communities and minefields for visits were made following the team's arrival in each of the four centres, resulting in advance notice of one to a few days. We made a number of these visits without senior representatives from the RMACs or mine action NGOs in attendance. In a few cases, the Review Team happened on work sites and mine-affected communities through serendipity, with no advance notice. An Itinerary of the mission is included in Annex B. Annex C lists the documents reviewed during the course of the mission.

[1] This review is funded by CIDA, DFID and the Government of Japan.

3.0 Humanitarian and socio-economic impact[1]

3.1. The nature of socio-economic benefits from mine action

6. Mine action provides risk reduction benefits, which have both humanitarian and developmental (or socio-economic) ramifications, plus other, 'purely economic' benefits.

7. Many in the humanitarian and development communities balk at conflating the two types of benefits, as this requires a monetary value to be placed on human life and suffering. Therefore, until recently, most attention has focused on risk reduction to achieve humanitarian objectives.

8. In the past year, cost-benefit studies have attempted to document the economic benefits accruing from mine action, focusing mainly on clearance. These calculate the ratio of clearance costs to quantifiable benefits—chiefly economic production from cleared land and economic infrastructure, and from the labour of returnees and others who can resume their livelihoods.[2]

3.2. Evidence from Other Countries

9. Some typical findings from other mine affected countries include:

a) Clearance of economic infrastructure (roads, power lines, etc.), irrigation works and irrigated land, and built-up areas often offers high economic returns, even in poor countries.

b) Clearance of rain-fed agricultural land in poor countries generally yields modest or negative returns because agricultural productivity is low. The economic case for widespread clearance of such land often is dependent on future yield increases and, therefore, on efforts to foster prosperity in the specific geographic region (e.g., a rural development programme).

c) Achieving good economic returns over the longer term depends critically on cost control and improving demining productivity.

d) The case for mine action to reduce risks from mine incidents rests principally on humanitarian or rights-based arguments.[3]

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[1] This section summarises a large amount of evidence from:

- the mission itself;
- the recent draft report from the 'Study of Socio-economic Impacts of Mine Action in Afghanistan' (SIMAA) commissioned by the World Bank & UNDP; and
- socio-economic assessments of mine action in other countries, which are more fully elaborated in Annex E.

Specific mission findings are reported in Annex F. In addition, issues relating to coordination with other humanitarian and development actors are addressed in Annex I.

[2] It also is likely that economic production and the ability to resume livelihoods are reasonably good proxies for other, less-quantifiable socio-economic benefits accruing from mine action.

[3] Cost-effectiveness analysis could still be used to evaluate risk reduction by compare costs of alternative ways of achieving the same humanitarian outcome (e.g., reducing deaths by *x* number) without attempting to place a monetary value on the outcome. See also Annex D.

3.3. The socio-economic impacts of the MAPA

3.3.1. Mine Clearance[1]

10. In 1998-99, MCPA undertook a socio-economic impact survey (SEIS) to identify the economic impacts of mine clearance. The principal focus of this was economic production, although some data were collected on cost reductions in transportation and health services, induced investment, and the reduced need for expenditures on refugees.

11. In 2000, the World Bank and UNDP engaged an international economist and local counterpart[2] for The Study of Socio-economic Impacts of Mine Action in Afghanistan (SIMAA). Using SEIS data supplemented by secondary sources, plus limited surveys in Afghanistan, the SIMAA team prepared eight cost-benefit case studies of agricultural land and farming systems, plus two case studies each for clearing residential areas and roads. These provided net present value estimates of the benefits from clearing these land types. The SIMAA team also calculated costs for different clearance technologies (manual, mechanical, and dog) and prepared a matrix of benefit-cost ratios for land type-clearance technology combinations, plus a rough estimate of the overall economic benefits from demining in 1999.

12. Among the key findings outlined in the draft SIMAA report[3] are:

a) Total benefits from clearance in 1999 are estimated at about $117 million. After deducting costs of $25.5 million, the net benefit was $91.5 million, giving a benefit-cost ratio of 3.6;

b) Clearance of irrigation works yields the greatest average net benefit, followed by residential areas and roads, then agricultural land. Clearance of grazing land yields marginal net benefits, stemming mainly from risk reduction;

c) Clearance by dogs is always most cost-effective where conditions allow their use. The relative advantage of dog groups is particularly pronounced for residential areas,[4] roads, and agricultural land;

d) Mechanical clearance is less cost-effective and should be used only when manual teams or dog groups cannot safely complete the task;

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[1] Clearance-related activities account for 90%+ of expenditures by implementing partners.

[2] The counterpart is an engineer with extensive work experience in statistics. He has no formal training in economics.

[3] The draft report has been submitted for review by the Steering Committee (UNDP, World Bank, and MACA/UNOCHA representatives). Upon approval by the Committee, the draft will be distributed more widely for comments. A final report will then be completed in early 2001.

[4] This finding should be treated with caution. Dogs are employed on areas that do not need excavation or removal of debris, which tend to be very slow and inherently dangerous aspects of demining in residential areas. Tasks with significant elements of this kind of work are normally cleared using manual and mechanical demining techniques.

e) In 1999, the average clearance cost per m^2 was about $0.75, rather than the $0.60 reported by MAPA;

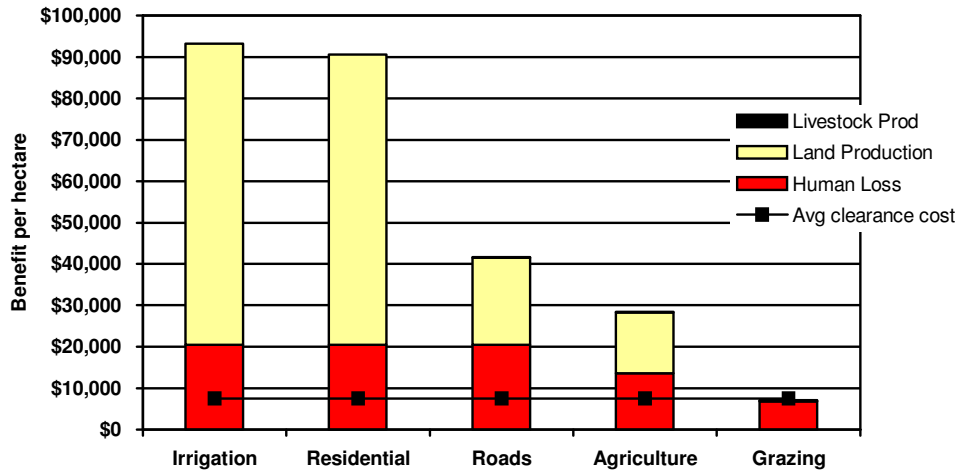
f) Battlefield clearance costs averaged about 3.4 cents/m^2;

g) There appear to be significant differences in unit costs across agencies, even when the comparison is limited to manual teams;

h) There are substantial differences in economic returns arising from clearance in different parts of the country, particularly for agricultural land and irrigation works.

13. Some key results are summarised in the following graphs and table:

Clearance Benefits by Land Type (Simple avgs. of case studies)

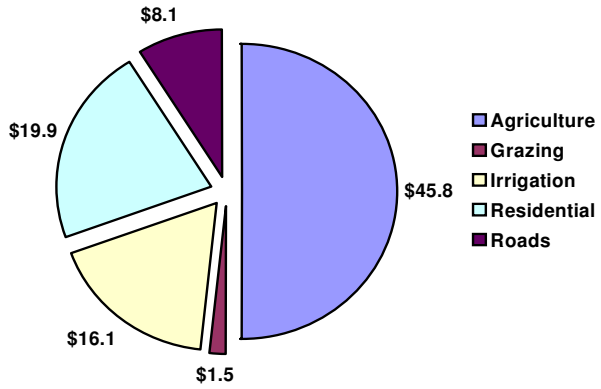


Benefit-Cost Ratios[1] (Simple Averages from SIMAA Case Studies)

	Clearance technique		
Land type	**Manual**	**Dog**	**Mechanical**
Agriculture	1.23	9.43	0.44
Grazing	0.10	1.40	(0.80)
Irrigation	8.31	29.43	4.36
Roads	1.70	11.35	0.65
Residential	1.80	24.15	0.60

[1] This ratio is calculated as [total benefit - total cost]/[total cost]. Therefore, any positive number indicates the benefits exceed the costs.

Net Benefits from Demining by Land Type (in US $millions)



14. The economic returns reported for mine clearance are extremely high, far exceeding the estimate of the SEIS ($150 million in gross benefits since the programme inception). The overall benefit-cost ratio of 3.6 implies an economic rate of return of 47 percent per annum, while that for clearing irrigation works by dog groups—29.43—suggests an annual return of 400 percent![1]

15. These estimates may be modified after comments are considered.[2] The Review Team anticipates the overall estimate of net benefits will be reduced somewhat, but will remain strongly positive.

3.3.2. Maintaining and enhancing socio-economic returns

16. SIMAA findings reinforce the Review Team's own assessment that mine clearance in Afghanistan delivers significant economic returns as well as humanitarian benefits. To date, donor funding to MAPA appears to be money well spent.[3] What is the prognosis for the future?

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[1] By way of comparison, the minimum economic return deemed acceptable for a World Bank project is 12 percent per annum, while projects funded by bilateral donors—and humanitarian projects in general—are thought typically to achieve lower economic returns.

[2] The calculations rest on certain key assumptions, including:

- No value is placed on farm labour inputs because "this labour is considered to have little alternative employment" within Afghanistan and, by convention, their alternative incomes while refugees outside Afghanistan are not counted;
- The production contribution of an economically active person is estimated at $1,500/year, and leisure time is similarly valued at $1,500/year.
- On average, each km^2 of land cleared reduces the number of mine victims by 13/year.

The first two assumptions raise the return from economic production on agricultural, irrigation, and grazing land because an important input cost—agricultural labour—is not valued. The second and third assumptions together result in fairly high returns via risk reduction.

[3] More specifically, MAPA's performance on this measure appears to be very good, but not optimal. In particular:

- about one-third of all land demined from 1994-99 was grazing land, which promises significantly lower returns on average than other land types;

17. Evidence from evaluations in Afghanistan and elsewhere[1] suggests three broad strategies for enhancing the impact of mine action:

a) Reducing unit costs through lower cost structures and/or increased productivity;

b) Tighter targeting on land and infrastructure that promises higher socio-economic returns;

c) Better coordination with other development actors so clearance compliments other planned investments.

3.3.2.1. Productivity & Costs

18. The Review Team was unable to obtain sufficiently reliable data to make a comparative analysis of productivity across NGOs (see Annex K, paragraphs 15-18). The following table is based on 1999 data presented in the draft SIMAA report. Its findings make no adjustments for the type of land cleared, the clearance difficulty, reliability of the output, or the costs of providing teams with mobile capacity.

NGO=>	ATC	AREA	DAFA	OMAR	HALO	MDC
Area cleared 1999 (ha)	663	38	295	348	165	1,688
Operating Cost (US$ '000)	$5,649.81	$187.81	$2,851.23	$1,965.5	$1,458.55	$2,952.98
Cost/m^2 (US$)	$0.85	$0.49	$0.96	$0.56	$0.88	$0.17

Source: SIMAA, Annex 2, table 1.

19. The table suggests mobile teams (ATC, DAFA) are more expensive to maintain than teams based in the community (OMAR, AREA). It also highlights the significant cost advantage of the explosive detection dogs.

20. The overall productivity trend, measured in m^2 cleared per team hour, appears clearly to be falling (see graph). This trend is not explained by shifts in the mix of land types being cleared: it likely stems from more rigorous enforcement of safety procedures coupled with the tendency to first clear the easiest and most accessible land within each land type.

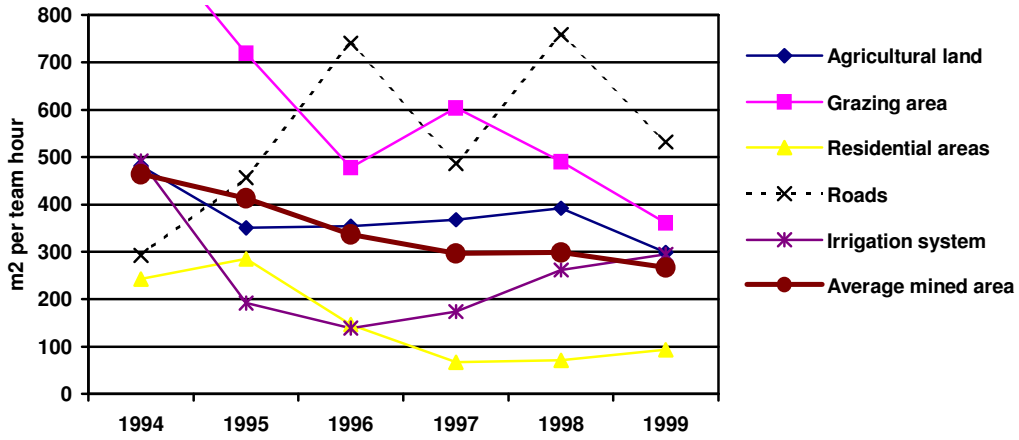
21. At the same time, the salary structures adopted by NGOs are certain to push costs per team-hour higher over time.[2]

- overall cost effectiveness could have been increased with more dog teams.

[1] See Annex E for an elaboration.

[2] These UNOCHA-approved salary scales feature 10 annual increments, generally of 10% each, meaning seniority alone will provide cumulative increases of 150% or more to base salaries. The SIMAA team calculated that salary and benefit costs accounted for 54% of total costs for manual demining teams in 1999.

Average Clearance Rates per Team Hour: 1994-1999

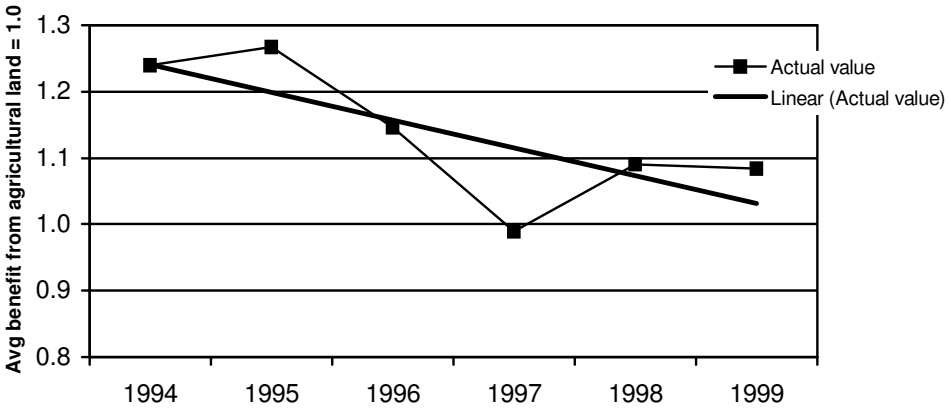


Source: SIMAA, table 11.2

3.3.2.2. Tighter targeting

22. MAPA's performance on this measure has been good, although not optimal for maximising economic returns.[1] However, better targeting in early years (see graph), means high value land will be demined more quickly (see table). Average benefits per hectare demined are likely to fall over time.

Targeting Index: 1994-99



Note: This Targeting Index is the benefits (as calculated for 1999 in the SIMAA report) from the mix of land actually demined in a year, divided by the benefits that would have accrued had all the hectares demined been agricultural land. The higher the index for any year, the more targeted clearance has been on higher value land. The 'Linear (Actual value)' line depicts the trend.

[1] It must be noted that MAPA's goal does not seem to be to maximise economic or socio-economic returns. Rather, it seems to be pursuing a mixed objective including accident mitigation and what might be termed "insurance", or compensation of communities and households for the losses imposed by mine contamination.

	Square km of high priority land		
Land Type	**Cleared 1990-2000**	**Remaining**	**% cleared by end 2000**
Grazing land	63.1	131.7	32%
Agricultural land	83.0	149.6	36%
Roads	26.9	32.3	45%
Residential	26.6	13.6	66%
Irrigation	7.5	3.1	71%

Source: SIMAA, tables 6.3, 7.2, 8.3, 9.2, 10.1

3.3.2.3. Better coordination with other development actors

23. Investments by other development actors (UN agencies, NGOs, government) will tend to increase the rate of economic growth in the target sector, region, or community. Demining that complements other development projects will, on average, yield future benefit streams that are higher than would accrue in communities or sectors that are not benefiting from development investments.

24. While MAPA organisations have made some effort to coordinate their activities with those of other development actors, the absence of a recognised government makes coordination particularly challenging in Afghanistan.[1]

3.3.2.4. Summary

25. Demining in Afghanistan has yielded very significant economic and humanitarian benefits; an assessment buttressed by evidence from community visits, discussions with UN agencies, NGOs and government officials, plus the findings of the draft SIMAA report. The evidence suggests demining continues to deliver benefits that substantially exceed expenditures.

26. At the same time, overall demining productivity has been falling and salary structures imply that operating costs will rise over time. As well, much of the high value land that can be cleared with existing technology has already been demined, while effective coordination with other development actors will remain difficult until a recognised government can advance a development strategy that commands donor support. Together these trends imply erosion in net benefits over time.

27. To counter this erosion, MAPA will need to introduce measures that reduce costs, increase average productivity, promote effective coordination with other development actors, and allow for greater refinement in setting priorities.[2]

[1] See Annex I3, paragraphs 15-41 for an extended discussion of coordination issues.

[2] This report contains recommendations concerning each of these issues.

3.3.3. Risk reduction

3.3.3.1. Mine incidents - data collection, analysis, and reporting

28. MAPA reports regularly on mine awareness inputs (e.g., expenditures), intermediate outputs (numbers of mines destroyed, community committees established, etc.), and final outputs (hectares cleared; people trained). Their reports are widely available and often cited. It has also reported statistics on presumed outcomes (e.g., people resettled) and impacts (e.g., numbers of mine incidents and victims). Unfortunately, these latter statistics are incomplete because:

a) parts of the country are inaccessible due to security problems;

b) not all clinics have maintained statistics on mine victims;

c) different agencies have maintained different reporting systems;

d) many incidents go unreported because the victim died before reaching a clinic or—for those injured—was not taken to a clinic.

29. MCPA, ICRC, and others have analysed these data. Clearly the problem is huge, with thousands of victims each year, but robust trends are hard to discern. This is due to a combination of factors;

a) continuing conflict, resulting in sudden shifts in the pattern and severity of risks;

b) large and fluctuating population movements; and

c) the use of different data sets.

30. Because we do not have adequate data to determine the pattern of accidents, deaths, and injuries in the past, and compare this to changes in the level of risk exposure, we do not know firmly how much these have declined over time and whether any decline is continuing or accelerating. As well, we simply do not know what proportion of any estimated decline in harm should be attributed to mine action and its various components. Some of these uncertainties are illustrated by the following preliminary findings from ICRC's analysis of mine/UXO victim data from the past two years:[1]

a) the majority of landmine victims were military personnel;

b) some unknown proportion of civilian mine accidents were from landmines laid by landlords to protect their poppy fields;

c) some unknown proportion of civilian mine accidents were from landmines laid to pursue feuds;

d) a significant proportion of mine victims were killed or injured while travelling;

[1] Source: Mr. Dawar, Programme Manager, Data Collection, Mines Department, ICRC Afghanistan.

e) more civilian deaths and injuries are now caused by UXO than by landmines.

31. These findings suggest a more complex picture than previously assumed. As well, we do not have comparable analysis of mine and UXO accidents from earlier years, so we cannot analyse trends. Further, the 1998 evaluation of mine awareness (CIET, 1998, p. vi) found evidence that:

a) mine incidents fell significantly from 1993 to 1997 in communities not receiving direct mine awareness training, but

b) mine incidents increased in communities where direct mine awareness training was offered.[1]

32. In brief, we do not adequately understand the causes and trends of mine/UXO incidents in Afghanistan, and how past mine awareness, survey, clearance, and BAC activities have reduced risks to the civilian population.

33. Still, the risk reduction benefits from mine action in Afghanistan appear higher than those for many other countries because of the large numbers of deaths and injuries, which may be 6,000+ each year.[2] In particular, Afghanistan has suffered from severe contamination in urban and peri-urban areas. Clearance of mines and UXO from such densely populated areas, coupled with extensive mine awareness services, has undoubtedly reduced the toll from what it would otherwise have been.

34. Collection, analysis, and dissemination of victim data are improving. ICRC has built significant capability within its Mines Department in Kabul, and has negotiated a Memorandum of Understanding with UNOCHA on data sharing. A working group (MAPA, HI, ICRC, WHO) formed in February 2000 has led to a new Afghanistan Mine Victim Information System (AMVIS) with two data collection components:

a) medical facilities, led by ICRC;

b) community-based, led by HI.[3]

35. HI will lead the coordination body within MAPA, and will dedicate two expatriates and, eventually, eight field officers to this project.

36. A computerised database system has not been developed for the AMVIS, but IMSMA would be adequate if this is adopted by MAPA.

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[1] These surprising CIET findings might be explained in part by effective targeting of mine awareness services to those communities facing new mine threats in 1995-97 (e.g., Kabul city), but without comparable follow-up surveys this is simple conjecture.

[2] The draft report from the Socio-Economic Study estimated an annual average of 13 victims per km^2 of high priority mined land. Our own calculations based on data provided in that report suggest the estimated 'human loss' benefit (i.e., from reduced accidents) resulting from 1999 clearance operations were about $30 million in present value terms.

[3] Community-based research to date suggests about half of all victims died or did not report to a medical facility.

3.3.3.2. Demining incidents - data collection, analysis, and reporting

37. There is complete data on demining incidents, which rose to an alarming rate by the mid-1990s but started dropping in 1997 as the MAPA partners enforced adherence to SOPs more tightly.[1]

3.3.4. Victim Assistance

38. About 30 organisations provide some form of assistance to mine and UXO victims. The bulk of this is orthopaedic services (prostheses, crutches, wheelchairs, physiotherapy, etc.). The first major initiative was the ICRC Orthopaedic Project, which began in Kabul in 1988 to serve amputees and war-wounded. Starting in 1995 it began offering services to non-amputees and non-war wounded. It now comprises five centres (Kabul, Mazar-e-Sharif, Heart, Jalalabad, and Gulbahar) and registers about 6,500 new cases each year.[2] Similar programs are managed by Sandy Gall Afghanistan in Jalalabad and by Guardians in Kandahar.[3]

39. The orthopaedic centres also offer a variety of social re-integration services for the disabled, including employment (most of their staff are disabled), micro-credit, education, vocational training and apprenticeship. Similar services are also provided by the Comprehensive Afghan Disabled Programme (CDAP), which operates a community-based rehabilitation programme for the disabled in sixty-six districts.[4]

40. As is the case in most mine-affected countries, the organisations involved in victim assistance within Afghanistan are moving to an integrated public health approach. This aims to build sustainable public health capacity to address the needs of all disabled, rather than just mine or other war victims. This is an appropriate strategy. Because of these efforts, mine and UXO victims—and other disabled persons—in and around the major urban centres have reasonable access to the basic medical and rehabilitative services they require. This is an impressive achievement in a country as poor as Afghanistan. The challenge will be to expand the coverage beyond the urban centres and to sustain these achievements once there is a functioning government, which donors will expect to cover the recurrent costs for public health services.

41. MAPA partners also provide victim assistance services via mine awareness training, which includes information on the rudiments of first aid for victims (first responder training). There may well have been cases in which such training helped save a victim's life, but informants met during the mission were unable to confirm any such cases.

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[1] Discussion on demining incidents is included, starting at paragraph 102.

[2] From statistics provided, it appears about 1200 civilian mine/UXO victims per annum have registered in recent years.

[3] This latter organisation has been experiencing financial problems since the cancellation of EU-ECHO funding following the disagreements between the Taliban authorities and the NGOs in August 1998. HI has agreed to assume responsibility for the orthodics operation from 2001.

[4] CDAP is part of the UNDP P.E.A.C.E. Initiative, described more fully in Annex I.

42. A few amputees met during community visits reported that they received special food allotments from the ARCS. These allotments were sporadic, restricted to urban areas, and not targeted specifically to landmine victims. It appears few victims receive any support (income or in-kind) from the government or humanitarian agencies.

43. A number of humanitarian and development agencies have been assisting to widows and female-headed households. Such programmes appear to have limited geographic scope and are not targeted to households that have lost a member to landmines. The Review Team did not uncover an estimate of what percentage of affected households have received such assistance, but the impression is of very limited coverage outside Kabul and, perhaps, a few other urban areas.

3.3.5. Other potential benefits

3.3.5.1. Environmental

44. Mine contamination can have significant impacts on local environments. In a few cases (e.g., minefields in forested areas), these impacts may be positive by delaying unsustainable resource exploitation. More often, by restricting access to certain areas, mines and UXO will force more intensive exploitation of natural resources in uncontaminated land. In Afghanistan, contamination of fields and irrigation systems has also contributed to significant deterioration of important agricultural microenvironments (e.g., orchards).

3.3.5.2. Political

45. MAPA and the individual mine action organisations enjoy a high profile and significant public support in Afghanistan, and among Afghan refugees. The Review Team heard no allegations that MAPA partners work in a partisan fashion, although Taliban authorities recently arrested some ATC staff members, supposedly on grounds that they were in communication with the Northern Alliance.[1]

46. MAPA organisations, through the ACBL, have also been successful in raising local awareness about the Ottawa Convention and the International Campaign to Ban Landmines (ICBL). Taliban authorities issued an edict in 1998 imposing a total ban on the production, use, stockpiling, and transfer of anti-personnel landmines in Afghanistan.[2]

3.3.5.3. Regional

47. In some cases (e.g., Mozambique, Cambodia), the most important international benefit accruing to mine action has been to allow the repatriation of large refugee populations, which previously had placed enormous burdens on neighbouring countries and, in some cases, the international donors.

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[1] No charges were laid, and they since have been released.

[2] Before its expulsion from Kabul, the Rabbani government had indicated its support for a ban on the use of landmines, but did not give legal effect to this. As well, there are reports of continued use of landmines by Taliban forces.

48. Mine action in Afghanistan certainly has contributed to the return of many Afghan refugees, although large numbers remain in Pakistan and Iran.[1] Mine and UXO contamination remains a significant, but far from the most important, constraint on the return of refugees.[2]

3.3.5.4. ICBL

49. In recent years, mine action success stories have helped maintain momentum for an international ban on landmines. However, recent stories concerning corruption in some mine action programmes might also dampen public support for the ICBL and related mine action.

50. Afghanistan mine action organisations, and the ACBL in particular, have played a very significant role within the ICBL movement. The ACBL chairs ICBL's Survey Working Group. Progress made in Afghanistan was given high profile when Landmine Monitor 2000 was released in September. A number of innovations introduced and achievements made by MAPA (e.g., use of dogs, rapid indigenisation) have been cited as 'best practice' in comparative studies of mine action programmes.

3.3.6. Potential negative impacts

3.3.6.1. Cultivation of Narcotics

51. MAPA has a documented policy requiring landlords to sign an agreement that cleared land will not be used for poppy cultivation. However, MAPA does not have legal remedy to enforce this policy except for suspending operations in that community or district. UNDCP-Jalalabad informed the Team that considerable amounts of demined land in some districts of Nangarhar province had been used for poppy cultivation in the past. We received similar information during the community visits in Kandahar, with local farmers admitting to poppy cultivation on land cleared by MAPA.

[1] Estimates suggest a peak of six million refugees, and perhaps four million returnees. With the natural increase in refugee populations over the past generation, perhaps 2.5 million Afghan refugees remain in Pakistan and Iran. (UNDP 2000, p. 7)

[2] Anecdotal evidence suggests landmines and UXO were a more significant constraint to repatriation in the mid-1990s. This in turn suggests that clearance—particularly of roads and urban areas—has lessened the perceived risk among many refugees.

52. The decree issued by Taliban authorities in July 2000, banning poppy cultivation, seemed to be strictly in force in all districts visited the Review Team.[1] A number of farmers had already planted wheat, while others were looking for good wheat seed, which was difficult to obtain because of the increased demand. Some villages reported that many residents had returned to Pakistan following the ban, because they could not hope to earn enough from other crops to meet their debt obligations. Clearly, the public impression is that the authorities are committed to enforcing the decree.[2]

3.3.6.2. Land Disputes

53. Land disputes have become a common problem in some of the Afghan communities.[3] However, none of the disputes in the communities visited was attributed to mine clearance. We selected samples from the registers of demining requests that are maintained in the RMACs. These included records of clearance requests outstanding because of land disputes and "enmity". MAPA's SOPs state that such land is not to be cleared. This policy seems to have avoided situations where ownership disputes might prevent the use of cleared land.

3.3.6.3. Misuse of explosives, mines and other munitions

3.3.6.3.1. MAPA

54. Taliban authorities have raised concerns that MAPA agencies have been involved in illegal or inappropriate collection and storage of mines, munitions, and explosives. We found that some demining organisations (MDC specifically) have been collecting and storing mines and munitions to train explosive detection dogs. Other agencies have on occasion collected mines and munitions to be made free from explosive and subsequently used in training of both demining staff and in mine awareness education classes.

55. Accusations of inappropriate collection storage and use of explosives have prompted the MACA to develop changes in policies and procedures for the transport, storage, handling, and accounting for mines and explosives. These changes should reduce the risk of further accusations of inappropriate or illegal use of explosives and munitions.

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[1] The Team heard unconfirmed reports of gun battles over poppy cultivation between the Taliban authorities and local farmers in remote parts of Shinwari district of Nangarhar.

[2] The mission visited communities in Khogiani, Sorkh Rod, and Behsud districts, which are ranked 4th, 13th, and 22nd respectively in the national rankings of areas under poppy cultivation in 2000. (UNDCP 2000, p. 11) These communities all are reasonably accessible and residents clearly felt the ban would be enforced.

[3] The Mayor of Kabul City blamed the Russians for two main problems as the aftermath of the long civil war—landmines and land disputes

3.3.6.3.2. Taliban and other authorities

56. There have been a number of explosive and munitions incidents caused by poor handling, storage, and transportation procedures used by Taliban and other authorities in Afghanistan. These incidents have caused significant property damage, injuries, and death. The MAPA has offered to provide assistance on developing appropriate policies and procedures for the storage, transportation, and handling of explosives. Authorities have not accepted these offers.

57. MAPA staff have also claimed an increasing tendency for Taliban authorities to restrict demining organisation autonomy in destroying mines and munitions. They claim the Taliban military authorities are attempting to examine munitions found during the demining process to identify munitions that may be useful for their needs.

3.3.6.3.3. Communities

58. There is anecdotal evidence that people use mines and improvised explosive devices as weapons and deterrents during property and other disputes. The MAPA has clear policies and procedures that minimise the risk of their involvement in these disputes. The Review Team believes that the policy is appropriate.

3.3.7. Security

59. Landmines and UXO are but two of many problems that lead to a sense of insecurity among Afghans, and which still cause large numbers to seek refuge in neighbouring countries. The Review Team's overall impression is that, until at least the mid-1990s, fear of landmines was one of the principal factors preventing the return of refugees and IDPs to their communities, and inhibiting those resident in mine contaminated areas from travelling and undertaking other normal activities. Other concerns now predominate, such as insecurity of livelihoods due to the drought and the country's general economic condition, and risks to the health of household members in the absence of public services.

60. Landmines and UXO still are seen as significant problems and it would be wrong to conclude that people feel secure in areas thought contaminated. However, most people seem to have a sense that these problems can be remedied by the MAPA. Mine action seems to have been very effective in making people feel (not secure but rather) less insecure in the face of mine contamination. Undoubtedly, part of this decline in insecurity is due to the direct benefits from clearance and mine awareness activities, but some is likely a 'demonstration effect': all Afghans seem aware of the MAPA and to have heard how it has helped communities in dealing with contamination. There is widespread sense that help is at hand.

4.0 Management

61. The succession of unstable governments following the Geneva Accords has led MAPA to develop capacity to deliver mine action services directly to the people of Afghanistan. The absence of a stable government has contributed to UNOCHA retaining the implementing and coordinating functions of a national mine action authority and national mine action centre.

62. UNOCHA provides administrative, finance and logistics support to the MACA. The MACA is responsible for project management, capacity development, technical control, quality assurance and coordination of mine action within Afghanistan. Most management functions are undertaken by international and locally recruited UNOCHA staff working in the MACA and the RMACs. Development and operation of the mine action management information system (MIS) and quality assurance functions are outsourced through projects implemented by MCPA and META respectively.

4.1. The MACA and the RMACs

63. Until December 1997, UNOCHA treated the MACA and RMACs as a "Demining Umbrella Project" funded through the AETF. This covered all MACA and RMAC activities, plus some finance and administration functions undertaken by UNOCHA-Islamabad. In January 1998, UNOCHA's management of demining was restructured so that all MACA and RMAC functions and the support provided by UNOCHA-Islamabad office, previously funded through the "Umbrella Project", would be covered by the 13% programme support costs deducted from AETF contributions. This reduced overhead costs and improved transparency in the management of the MAPA. However, donations for mine action made through the AETF provides the bulk of the Programme Support Cost (PSC) needed for UNOCHA operations, resulting in mine action funding subsidising UNOCHA coordination functions. We believe it may be time for UNDP to take responsibility for planning and implementating the transition to a national authority, which in the short term should include the management of the mine action programme and the trust fund required to support the programme.

64. We found a tendency for RMAC staff to become intimately involved in the tasking and technical supervision of individual teams, rather than trying to enhance socio-economic benefits from demining. This has two major effects at the regional level:

a) The operations and planning staff of the demining NGOs are under-employed, while the RMAC staff often are overworked[1].

[1] We believe that the RMAC staff are spending too much of their time doing the planning and supervision that should be the responsibility of the demining NGO staff. Of particular concern is the work undertaken by the internationally recruited "Field Coordinators" who focus most attention on demining activities rather than capacity development of the RMACs.

b) Each demining organisation tends to establish management and support functions in each region. While the costs of maintaining these systems are relatively low, they complicate management structures while contributing little to improved implementation of mine action. Better design and management of demining interventions may reduce the need for these offices.

65. The RMACs should shift focus to the identification of community and sectoral needs and the design and management of interventions that address these needs. This shift should result in the development and implementation of short-term and long-term community mine risk reduction plans that contribute to further repatriation and rehabilitation.

4.2. Management capacity building

66. Most UN mine action projects are focused on the development of a government's capacity to manage a national mine action programme, and of implementing agencies established to execute the mine action plan. Political instability and the lack of a recognised government with the capacity to develop a mine action authority have prevented this approach in Afghanistan.

67. Taliban authorities maintain the Department of Mine Clearance (DMC), in the Office of Disaster Preparedness (ODP), as the government organisation responsible for mine action. MACA engagement with DMA is limited to modest support – one vehicle, a VHF radio, and some office supplies. The head of the DMC is invited to participate in MAPA quarterly planning and coordination conferences, which informs the DMC of strategies, plans and progress. The DMC is the MACA point of contact with the Taliban, and assists with coordinating and resolving issues that may affect the implementation of mine action tasks. UNOCHA does not intend to expand its engagement with the ODP and DMC until there is a recognised government with a clear mandate for the management of a national mine action programme.

4.2.1. International staff and technical advisers

68. There are relatively few international staff working within the MAPA. At the time of this review, UNOCHA employed six internationally recruited staff and the Afghan NGOs employed three advisers, plus two on short-term contracts for specific projects. This is less than 20% of the number employed in the Cambodia mine action programme. Like many other mine action programmes, the internationally recruited staff in MAPA are highly skilled in technical aspects of demining and operations management, but lack skills and experience in capacity development. Detailed discussion on the internationally recruited staff is included in Annex H.

69. International experience has shown that it is difficult to recruit people with the professional profile needed to address all the training and management development needs of national mine action authorities and implementing partners. We believe that employing short-term consultants with the skills to address specific or specialist training and development needs may be a more effective approach. Further discussion is included in Annex H.

4.2.2. Implementing partners and national NGO capacity development

4.2.2.1. Governance

70. The Afghan mine action NGOs were essentially incubated by MACA/UNOCHA. While most have performed very effectively, they have yet to develop adequate structures for governance and accountability. This is a common problem among NGOs from developing countries.[1] Most NGOs in the developed world are not-for-profit corporations with members rather than shareholders. Ultimate legal responsibility rests collectively with the members, although closer oversight typically is provided by boards of directors elected at annual general meetings of members, at which time the audited financial statements are also presented. The boards discharge specific responsibilities including hiring the chief executive. The rights and obligations of members, directors, and specific officers—including the chief executive officer—are set out in corporate by-laws, thus establishing the governance structure.

71. The Afghan NGOs are not incorporated but rather registered with the Ministry of Planning in Afghanistan.[2] The registration is governed by a decree by the Taliban authorities in 1995 and recently (June 2000) revised. This decree says little about the minimum legal requirements of an Afghan NGO and leaves significant discretion with Taliban authorities. The Review Team was unable to determine whether another statute exists in Afghanistan to govern the incorporation of not-for-profit organisations.

72. Each of the Afghan NGOs has a 'charter' and a 'steering committee.' Common deficiencies with these are:

a) there is no provision for 'members' and no definition of who is eligible for membership;

b) without members, it is unclear who bears the ultimate legal responsibility for the organisation;

c) it is unclear how members of the steering committee are selected or appointed and how they might be removed from office or otherwise replaced;

d) there is no requirement for an annual general meeting at which the steering committee must give an account to the wider membership;

e) there is no requirement for an external audit of the annual financial statements;

[1] The term non-governmental organisation was first coined by the UN to signify organisations that were not (1) part of the UN system, (2) part of the public sector of a member state, or (3) for-profit businesses. In fact, the term has legal meaning in very few countries.

[2] Most are also registered in Pakistan, where they began operations.

f) in at least some cases, the specified responsibilities of the steering committee do not include hiring the executive director (chief executive officer), and there is no mention elsewhere how the executive director is engaged or removed from office.

73. In addition to these deficiencies, the charters are replete with details about operations and links to MACA/UNOCHA. Excessive detail means amendments will often be required or that the NGOs will be operating in contravention to their constitutions.

74. In short, the charters do not specify adequate frameworks for corporate governance and accountability. This has not been a serious problem to date, but is likely to be a constraint in future as the NGOs attempt to arrange funding from multiple sources and, in some cases, to operate internationally. In addition, the NGOs would benefit from technical assistance in such matters as corporate planning, project preparation, negotiation, and (especially) corporate financial management.

75. Ideally, any assistance for NGO capacity development would come directly from a donor rather than via the AETF.

76. Not all the NGOs will have the same priorities for assistance. The project might reasonable begin with a scoping phase to confirm priorities and activity plan for each of the NGOs.[1]

4.2.2.2. Operations management

77. In most cases, national NGOs have established effective and well-documented management systems. The personnel management SOP is common to all demining NGOs within the MAPA umbrella. It was developed at the request of the Afghan demining NGOs[2] who agreed to apply a common remuneration and compensation package for all demining staff.

78. NGOs have developed organisation-specific administrative, finance and logistics SOPs to ensure their financial and other management systems met the requirements of the UN, EU, and other direct funding organisations' finance and stores management standards.

79. In general, the NGOs are capable of managing relatively complex and large scale mine action projects. They also recognise and demonstrate an understanding of their weaknesses and the need for continued improvement in management. Significant improvement is not likely to come from continued on-the-job training. Therefore, members of the senior management team of each NGO should be given the opportunity to attend the senior and middle level management courses developed through the UNDP Lead Initiative to provide training to improve management of mine action programmes.

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[1] Consultants for this phase could be obtained from a number of specialist NGO capacity development organisations such as Intrac (http://www.intrac.org/) in Oxford, U.K. In addition, a donor-NGO network called the International Forum for Capacity Building (http://www.ifcb-ngo.org/) has recently been established.

[2] The Afghan demining NGO's at this time included ATC, DAFA, OMAR, MCPA and MDC. META began operations in 1997 applying the same personnel administration SOP.

80. Through a combination of foresight and good fortune, MAPA has evolved into a resilient system comprising a variety of organisations, which—individually and collectively—have demonstrated the ability to innovate, solve problems, and improve performance. Many of the individual NGOs are motivated to continue their evolution and prepare for the day when they are no longer dependent on MACA and, eventually, the Afghanistan mine action programme itself.

4.3. A UN exit strategy

81. The future of the MAPA as a national institution remains uncertain, which has contributed to UNOCHA retaining a programme management approach based on a team of international staff. While highly successful to date, we believe it would be more appropriate for UNOCHA to develop national staff to assume greater programme management responsibilities. A strategy for development of nationally recruited staff should include:

a) Competency profiles for each member of the mine action management team and work plans to assist in the development of individual competencies and organisation capacity.

b) A review of skills profiles for the internationally recruited staff of the MAPA, paying particular attention to that for the "Field Coordinator" positions, with the view to recruiting staff with operations management and management capacity development skills, with less emphasis on technical skills.

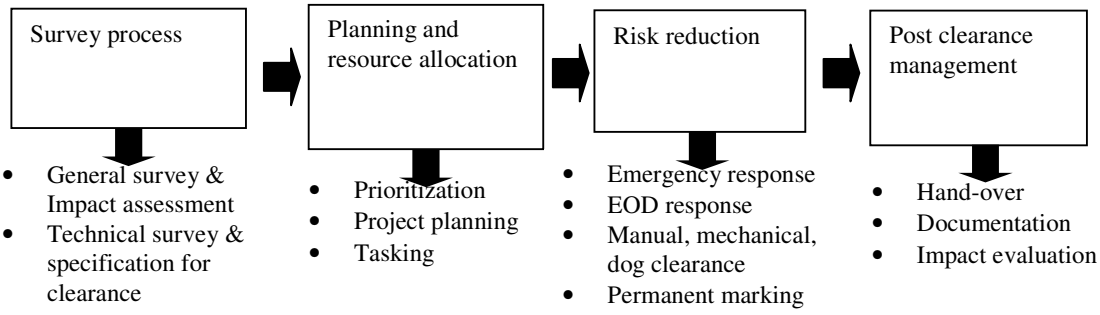
c) Documentation of operations management SOPs needed to assist in the specification of work practices and guidance of management staff in the MACA and the RMACs. The development of clear and concise SOPs should also aid in implementing the capacity development plans.

d) All technical advisers in both UN and NGOs should develop capacity development plans. These should document the competencies required of the people and organisations, current competency levels, and plans for bridging the gaps. The advisers should provide periodic progress reports.

e) Increased use of short-term consultants to fill the gaps in the skills of the current technical advisory team.

5.0 Technical aspects of demining operations

82. Elements of the technical aspects of demining are shown in the flowchart. Detailed discussion on these elements is included in Annex I.



Flow chart: Demining operations system

5.1. Survey process

5.1.1. General survey

83. The aim of the general survey process is to inform mine action intervention decisions, contributing to priority setting and the provision of base line data for programme evaluation. There has been a significant shift in management thought since the development of the MAPA survey process. We found that the MAPA and MCPA, the organisation contracted to implement the majority of survey work in Afghanistan, are generally maintaining pace with management thought, international standards, and best practice. Detailed discussion on the survey process is included in Annex I.

5.1.2. Technical survey & specifications for clearance

84. The technical survey process is used to identify the limits of the area contaminated by mine and UXO hazards and to provide a technical specification for the clearance, removal and destruction of the mine or UXO hazards. We found the processes used by the MAPA are consistent with international best practice.

85. The MAPA, like most if not all mine action programmes, is unable to achieve significant area reduction during this process (see the “Integration of area reduction into the demining process”, Annex I). The MAPA uses explosive detection dogs to assist in the technical survey to increase productivity and complete some clearance during the survey. However, the explosive detection dogs used for technical survey clear about 600 ha per year while a similar number of dogs working in MDGs clear about 1,500 ha per year. The MAPA should review the allocation of explosive detection dogs to ensure it is getting best value from the resource.

5.1.3. Management information system (MIS)

86. The MAPA demining MIS was designed and developed by the MACA and MCPA. It is based on 'FoxPro' software and includes separate databases for general survey, technical survey and clearance operations, which are linked. The MCPA MIS includes a mine victim database and a mine awareness operations database, which function separately. It is possible to link all five databases through the gazetteer village identification numbering system, common to all databases. In line with standard practice at the time of its design, the system focuses on the management of hazards and hazardous areas rather than villages or communities. The MIS does not have full geographic information system (GIS) capability, which is a major limitation.

87. The Information Management System for Mine Action (IMSMA) is an MIS developed by the UN Mine Action Service (UNMAS). The system has been piloted in both Kosovo and Yemen. It is under continuous review and development. ProMIS is a UN-led database and GIS project designed to provide a capacity to merge data from a range of sources to improve aid and rehabilitation programming decisions.

88. We believe MAPA would benefit from the IMSMA system, which would provide an MIS designed to meet the specific needs of a national mine action centre and which has a large support team providing system development and technical support. The MAPA should be conscious of the sensitivity of much of the information contained in its MIS and ensure this is adequately protected on behalf of a future recognised national government.

5.1.4. Technology mix and the tasking of implementing partners

89. We found the survey process and the management information system do not provide sufficient information to refine both strategic and task technology mix decisions.

a) At the strategic level, there is a low risk that the technology mix will result in major inefficiencies in the risk reduction system.

b) At the task level, modifications to the way land is subdivided into clearance tasks could generate improvements in resource allocation to specific tasks. A method to improve this process could be to divide clearance tasks into packages of hazardous areas suitable for a specific technology. This should reduce the need to suspend tasks because a technology is not suitable. An alternative could be for each demining organisation to develop a mix of technologies. This mix could be achieved through strategic alliances between NGOs.[1]

[1] Strategic alliances between NGOs with particular strengths in mechanical clearance technology, explosive detection dogs or manual systems could contribute to productivity improvements and reduce the management and supervisory effort required by the RMACs.

5.2. Risk reduction processes

90. We monitored a sample of teams from each demining NGO in Afghanistan. A list of these demining tasks and teams is included in Annex B, which also indicates visits undertaken at short notice as required by the Terms of Reference. Security restrictions and EOD team leave breaks prevented the Review Team from visiting an EOD team.

91. Detailed discussion on demining operations is included in Annex I (Operations management and service delivery), Annex J (Flow chart of the survey process), Annex K (Afghan implementing partners) and Annex L (Quality assurance)

92. We found that, over the past three to five years, there have been significant improvements in the work at field level. These have resulted in a continuous improvement in the output – in terms of hectares cleared – and a reduction in demining incidents.

5.2.1. Technologies used in the demining process

5.2.1.1. Manual demining

93. Manual demining continues to be the most common approach, both internationally and in Afghanistan. Despite the appearance of being very slow and dangerous, manual techniques remain the most effective approach for many of the more difficult clearance tasks (difficult terrain conditions and difficulties posed by a mix of hazardous items).

94. The MAPA has been a world leader in developing simple technologies to assist demining staff increase output by reducing time spent on activities that slow the demining process. This has been achieved through the introduction of explosive detection dogs and of mechanical systems based on commercial off-the-shelf equipment modified for demining operations.

5.2.1.2. Explosive detection dogs

95. Explosive detection dogs are a major component of the MAPA demining strategy. The dogs are used in clearance of a major portion of the road network, agricultural and grazing areas. Little is understood about the science and art of the successful application of this technology which, within the mine action community, generates considerable suspicion, rumour and debate on the reliability of dogs. As a result the Geneva Centre (GICHD) is undertaking a review of explosive detection dog procedures used throughout the world to determine how the dogs actually locate explosive devices and to develop international standards for the training, evaluation and accreditation of explosive detection dogs. The MAPA is participating in this study.

96. We found the explosive detection dog technology in Afghanistan has some quality assurance problems that have resulted in 12 missed minereports. This represents approximately 30% of MAPA's reported missed mine incidents. The MACA and MDC have undertaken corrective action to improve quality assurance procedures in MDG and MDS clearance processes, which should resolve most of these problems. MDG teams visited during this review were applying these updated procedures. The MDS teams did not apply the same level of quality assurance procedures.

97. We also found that the MAPA may not be achieving the best possible output from the explosive detection dogs. (See comments in paragraph 85).

5.2.1.3. Mechanical systems

98. Mechanical systems are used to improve productivity of manual demining. Annex I includes detailed discussions of the systems used in the MAPA.

99. We found that the innovative systems developed and used by the MAPA have made a significant contribution to improving productivity and safety within the programme. However, we found some anomalies, plus opportunities to improve the management and use of some of these technologies. These include:

a) The backhoe teams include a support staff of 12. We do not believe this is this most appropriate mix of staff.

b) Some technologies are being adapted for use on inappropriate tasks. In particular, The HALO Trust FEL and rock crushing plant is being used on clearance of grazing and agricultural areas. There is a risk that this technique:

- is an expensive option for the clearance of grazing and agricultural areas; and
- will damage the environment.

5.2.2. Safety in operations

100. The year 2000 revision of the International Standards for Mine Action (ISMA) includes more guidance on safety and occupational health than did previous series. They acknowledge that sound procedures, training and management offer the best solution to minimise risk of demining incidents. They also recognise that protective clothing should be used where risks cannot be eliminated.

101. However, the MAPA continues to debate the need for personal protective clothing and facial protection. ISMA specifies that demining staff should have protective clothing with frontal protection for eyes and faces. It also specifies that deminers have protective clothing for the body and, depending on the stance used during demining operations, the legs. The MAPA should review current policies on procedures and protective clothing to ensure these comply with current standards. MAPA should also apply a procurement process that gets this equipment into projects quickly.

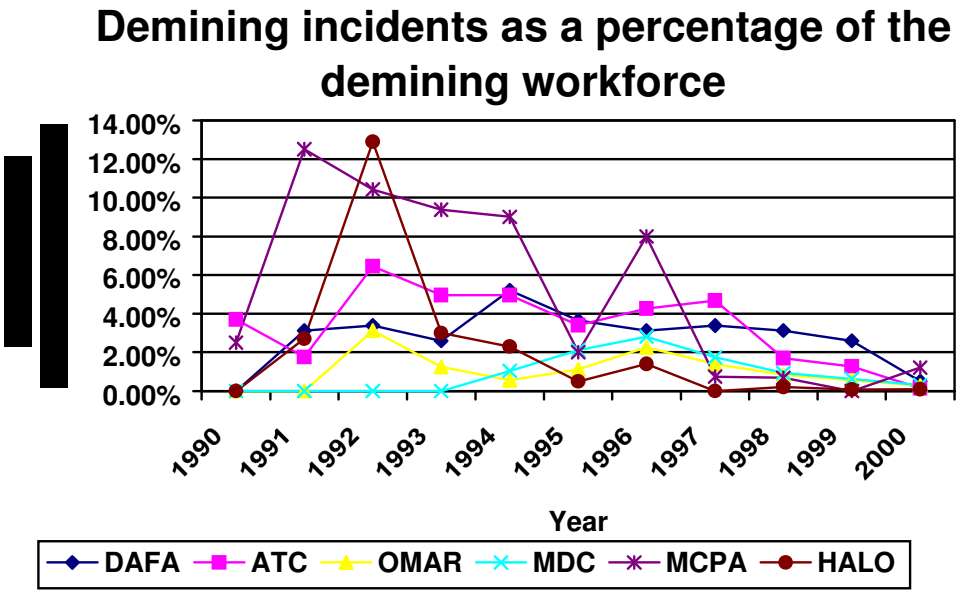
102. The MAPA accident record is reputed to be amongst the worst of any mine action programme in the world. Unfortunately, it is extremely difficult to get accurate data on demining incidents to make any meaningful comparisons that would prove or disprove this perception.

103. In 1997, the MAPA activated programmes to raise safety consciousness and reduce accidents. The result has been remarkable, as shown in the following table and graph.

Total MAPA demining incidents

Agency	1990	91	92	93	94	95	96	97	98	99	2000
DAFA	0	12	13	10	20	14	12	13	12	10	2
ATC	19	9	33	27	27	24	30	33	12	9	1
OMAR			2	2	2	4	8	5	3	2	1
MDC					2	4	8	5	3	2	1
MCPA	1	5	5	6	9	2	8	1	1	0	2
Halo Trust		1	8	3	4	1	5		2	1	2
Total	**20**	**27**	**61**	**48**	**64**	**49**	**71**	**57**	**33**	**24**	**9**

The table indicates the number of injuries resulting from demining incidents for each agency during the life of the MAPA. The graph plots the number of injuries as a percentage of the total workforce of each agency, which indicates the MCPA surveyors face the highest risk.



104. The MAPA and its implementing partners have demonstrated that efforts to improve the quality of processes and procedures, coupled with reduced pressure to achieve production targets, can reduce demining incidents.

105. In the early years of the MAPA, all demining agencies (with the exception of The HALO Trust) worked to a single set of demining SOPs. The system provided excellent control over safety standards within the Afghan NGO community, and contributed to standardised processes and equipment, simplifying UNOCHA procurement and providing economies of scale. However, this highly centralised system of trials and development processes has relied heavily on technical adviser input, and has been slow to react to the concerns of the demining NGOs. For example, trials took over four years to identify a suitable replacement for the Sheibel metal detector, the standard machine used by all MAPA NGOs.

106. In May 2000, the MACA asked the demining NGOs to develop individual demining operations SOPs. This is a positive move to devolve responsibility and authority to the demining NGOs, which should have the experience and skills to develop procedures meeting standards established by the MACA. ATC, MCPA, META and MDC have made considerable progress on developing SOPs that should meet the specifications and guidelines of the ISMA. DAFA and OMAR SOPs need more work to meet these specifications.

107. However, effective implementation of this strategy depends on the MACA developing and maintaining national standards. ISMA should form the basis for these, which should be adapted to Afghanistan's requirements. These national standards should include specifications and guidelines for documenting and maintaining organisational SOPs. They should also provide specific guidance and specifications for critical programme elements, including quality of critical outputs (cleared land, marking systems) and safety (protective equipment, transport handling and storage of explosives, etc.).

108. The MAPA needs urgently to address these issues. For example, we noticed a seemingly minor variance in the hazardous area marking systems used by The HALO Trust that has a significant impact on safety. MACA's SOP is based on two rocks (one white, one red) to mark the boundary of a mine hazard. The white rocks indicate the low risk side of the boundary, while red rocks mark the high risk or hazard side. The mine awareness messages then are quite simple – stay on the white rock side of the boundary; never step over a red rock. However, The HALO Trust marking system uses single flat rocks with opposite faces painted white and red. We found this marking to be confusing and potentially hazardous, given the national mine awareness message for recognising and using hazardous areas.

5.2.3. Equipment condition and use

109. We assessed equipment condition and use through on-site inspections, discussions with demining staff and managers, including logistic staff, and reviews of equipment maintenance records, which revealed the following:

a) Concerns about the safe working life of the Sheibel metal detector. The MAPA is undertaking a replacement programme for these detectors, replacing machines every four years. This is based on information from deminers and field trials, which indicate that the machines lose some sensitivity at about this time (further comments are included below in the section on equipment selection and procurement.)

b) Concerns about maintaining fully imported vehicles. Seven of the 12 ambulances provided in 1996 by US State Department Foreign Military Funding (FMF) are now unusable due to parts supply problems. NGOs face similar problems maintaining buses provided under the same funding arrangement. Donors and programme managers should consider limitations in the parts supply system before providing or accepting in-kind contributions.

c) Vehicles used by NGOs are up to ten years old, increasing maintenance costs. The MAPA has placed orders against its FMF funding agreement, which should provide Toyota vehicles to replace many of the older vehicles. This is a positive step in meeting high priority resource needs.

5.3. Equipment selection and procurement

110. MAPA maintains a policy of centralised procurement for all major non-expendable equipment and some non-expendable equipment, including almost all items imported into Pakistan/Afghanistan. The stated reasons for this policy include:

a) cost savings through economies of scale,

b) savings because the UN imports these items without paying import duties that NGOs would be required to pay,

c) NGOs would have difficulty importing military equipment (protective clothing, metal detectors explosives helmet and visors EOD equipment etc.); and

d) flexibility in financial management, as procurement of non-expendable equipment is adjusted to match donation cash flows.

111. During the period from 1990 through December 1997, UNOCHA used an “Umbrella Project” for financing the centralised procurement system. The umbrella project included budget lines for the personnel and operating expenses of the MACA and RMACs. In January 1998, UNOCHA discontinued the umbrella project. UNOCHA still provides a centralised procurement system with purchases made against the budgets of projects implemented by the national mine action NGOs. This system should take steps to institute greater transparency in attributing costs to specific projects and partners.

5.4. Training

5.4.1. MAPA technical demining training

112. The MAPA started as a training project. As it moved into a programme of coordinated large scale demining and, later, other mine action activities, the programme maintained a centralised training regime. MCPA and (post-1996) META have managed the training project, which includes activities that form part of the MAPA quality assurance system. The quality assurance activities include the evaluation of procedures and work practices of MAPA organisations, identifying corrective action required to maintain standards as specified in the SOPs, and providing training and advice on remedial action.

113. With the reduction in MAPA's rate of expansion and increased emphasis on quality management systems, quality assurance and quality control, META will shift its focus to quality assurance and quality control functions on behalf of the MACA. (Further discussion is included in Section on Quality Assurance, Annex L)

5.4.1.1. EOD Training

114. The MAPA places strict limitations on the size and nature of the UXO that deminers with basic training are licensed to destroy. The limitations appear arbitrary. The MAPA has very little data on the quantities, by size and type, of the munitions found in Afghanistan. With better data, the MAPA could provide training to qualify most demining staff and supervisors to deal with the bulk of the UXO found in Afghanistan.

5.4.2. MAPA management training

115. The MAPA has been very successful in establishing national organisations with the capacity to manage efficient and effective demining and mine awareness interventions. However, we believe these organisations and the MACA/RMAC programme management and coordination team would benefit from additional training.

116. Two members of MAPA attended the pilot UNDP senior management training course, developed and presented by Cranfield University. We believe META has the skills to implement a similar management course with assistance from both Cranfield University and consultants to assist tailoring the training to meet MAPA's needs. We understand the UNDP is examining options for a trial of training packages for delivery by mine action programmes. UNOCHA and the MAPA should push to be one of the programmes to test and validate this package.

6.0 The future of mine action in Afghanistan

117. Previous sections of this report have dealt with capacity at the individual, organisational, and task network levels. However, in the near future it is the broader institutional environment[1] that presents the greatest risk to sustained mine action performance in Afghanistan. The MAPA must eventually undergo three transitions:

a) Within the UN system, responsibility for supporting MAPA is likely to shift from UNOCHA to UNDP;

b) Overall responsibility for the MAPA must shift eventually from the UN to a recognised national government;

c) There must then be a transfer of capacities to national organisations, which itself entails two major issues:

- a transition from MACA to a national authority and a national mine action centre; and
- possible shifts in responsibility and capacities for implementation from the NGOs to other organisations designated by the national authority (e.g., a parastatal or other public sector body).

118. It is extremely difficult to predict the future of MAPA. As discussed in Annex H, Section H1.2, MAPA and the donor community should develop a vision and strategy for the development of the MAPA. This vision and strategy will form a framework for ensuring decisions are taken with the ultimate goal – sustaining the Afghan mine action capacity – in mind. For example, the decision of whether and when to transfer responsibility for the MAPA from UNOCHA to UNDP should be determined by which agency is best able to assist a future recognised government in formulating and implementing a plan to sustain and further develop indigenous capacity.

119. Once the vision and strategy are in place, discussions with the *de facto* authorities on the broad principles of the future mine action structure, plus transition plan options, should begin as soon as feasible to ensure future recognised authorities are fully aware of the options and potential pitfalls. Ideally, this would result in a consensus on the preferred outcome, thus raising the government's sense of ownership and the likelihood of smooth implementation.

[1] Further discussion on the institution environment is included in Annex H, Section H1.2.

7.0 Conclusions and recommendations

120. The MAPA is generally recognised to be the world's largest and most successful indigenised mine action programme. Its reputation is deserved. The international donor community, UNOCHA, international organisations and the national NGOs have worked with common goals to develop impressive productivity levels, garnering significant socio-economic benefits.

121. UNOCHA, the MAPA implementing partners, and the agencies and government authorities contributing to this review have done so in a spirit of cooperation and openness, greatly assisting the identification of the problems, opportunities for improvement, and recommended solutions included in this report. The Review Team thanks the many people who assisted the mission.

122. In the interests of brevity, the report omits some minor issues and operational details. These were discussed – with plans produced or corrective action taken – during the course of mission itself.

7.1. Improving management of service providers

123. The MAPA could improve programme management and coordination within MAPA through:

a) The implementation of new funding agreements for the NGOs that remove unnecessary restrictions on their further evolution as independent organisations. New funding agreements should incorporate the following features:

- funding on the basis of advances (as is the current pattern) rather than reimbursement after tasks are completed;
- a clear and objective basis of payment;
- a distinction between direct and indirect expenses, with the latter being treated as an overhead and reimbursed as an agreed percentage of direct expenses;
- clear policies and standards to ensure transparent accountability, including a requirement for audited financial statements covering all operations (i.e., including those funded by other donors) from each NGO that MAPA funds.[1]

[1] MACA would also retain the right to conduct its own external audits of the specific activities it funds. The audited financial statements for the consolidated operations of the NGO are to ensure all its operations are compliant with generally accepted accounting principles, to ensure the NGO is managed prudently, and to assess whether the overhead percentage is reasonable to cover necessary indirect costs.

124. MACA/UNOCHA should develop performance indicators for clearance and survey operations to allow, where feasible, the transition to performance-based funding agreements for these mine action activities. Standardised land indices would be required to assess both clearance and survey productivity, while a measure of the average differences between estimated and actual clearance times is needed to monitor survey quality. No payments would be earned for land cleared that did not pass the external quality assurance check. Strong penalties should be put in place for accidents and safety violations, so safety is not compromised.

125. In the short term, performance-based funding agreements should not be introduced for mine awareness, training, monitoring and evaluation, EOD, and testing new technologies. Payments for these activities should be based on 'actual and reasonable' direct expenses, plus a mark-up for necessary indirect expenses.

126. Innovations in funding agreements should be negotiated with each NGO, some of which may prefer their existing agreements. MACA should first assess likely impacts of these innovations by estimating how new provisions would have altered earnings during past years, had these provisions been in effect. A renegotiation clause should be included, with a mandatory trigger if key performance measures deviate beyond tolerance levels.

(See Annex I, Section I6.0 for further details on the above recommendations.)

7.2. Capacity development within MAPA

7.2.1. Afghan Staff

127. In the area of capacity development we believe there is significant opportunity to give more responsibility and authority to nationally recruited staff within the MAPA. The following steps are required:

a) UNOCHA should review its capacity development strategy for nationally recruited staff in the MACA and the RMACs. This strategy should:

- include the development of competency profiles for each member of the mine action management team;
- ensure that appropriately qualified project managers at the national and regional levels are recruited; and
- require the development of implementation plans for the capacity development strategy.

b) UNOCHA should review the skill profiles for the internationally recruited staff of the MAPA. It should pay particular attention to the "Field Coordinator" positions, aiming to recruit staff with operations management and management capacity development skills, with less emphasis on technical demining skills.

c) MACA should develop and document the operations and other management SOPs needed to assist in the specification of work practices and for guidance of mine action management staff in the MACA and the RMACs. The development of clear and concise SOPs will aid in the implementation of the capacity development plans mentioned above and strengthen the national staff's capacity for management, independent of international adviser support.

128. We also believe that UNOCHA can only reduce the number of internationally recruited staff by recruiting appropriately qualified Afghan staff. Therefore, UNOCHA should review the staffing levels for nationally recruited staff to ensure MACA has an adequate numbers of such individuals. In particular, it should examine the needs of the operations planning and operations management cells.

(See Sections 4.3 and H1.1 for discussion on the above recommendations.)

7.2.2. Internationally recruited staff

129. All technical advisers, both UN and NGO, should be required to document capacity development plans. These should identify the competencies required of the people and organisation, current competency levels, and plans for bridging any gaps. The advisers should be required to provide periodic progress reports. We believe the UNOCHA technical adviser and management team should include the following full-time posts:

a) Programme manager,

b) Operations management adviser,

c) Technical adviser - EOD and demining,

d) Technical adviser - research and development, and

e) Technical adviser – regional management (2).

130. When recruiting international staff for the Technical Adviser – Regional Management posts, UNOCHA should place greater emphasis on project management and capacity development skills, with less weight on technical skills in demining and EOD.

131. The MAPA should provide professional development training for senior management staff, with particular emphasis on training for RMAC managers and the operations planning and management staff in MACA.

(See also Annex H)

7.3. Operations planning

132. We believe the MAPA could enhance the socio-economic impact of mine action through increased focus on strategic and operations plans based on economic sectors and on communities. Building on the SIMAA study, MAPA should develop methods for planning staff to quickly assess the likely socio-economic benefits from each task. This system should help refine the long list of priority one tasks in the MCPA/MAPA mine action MIS.

133. When MCPA survey teams visit communities in areas where international or local NGOs are active, they should invite staff from those NGOs to participate in joint missions. These missions would assess how landmine and UXO contamination is constraining the community's development and set priorities for demining or other mine action activities.

(See also Annex G, Section G2.0)

7.4. Service delivery

134. We recommend an increase in MAPA's capacity to respond quickly and flexibly to unforeseen demands. This flexible response should embrace survey, BAC, EOD, and mine awareness activities. More costly mine clearance operations should still be vetted in a complete and transparent manner, but in-year flexibility still will be enhanced if observation surveys and technical surveys are done promptly.

135. We believe MAPA could engage more support from non-MAPA NGOs to assist with mine action. Many NGOs visited during this mission wanted their staff to receive mine awareness training and materials so they could provide community mine awareness services. They noted that many communities remain abandoned because of mines, and community members are not in a position to press for mine clearance via the authorities or MAPA. NGOs could help identify such cases and establish connections with the refugees from those communities.

136. MAPA, and particularly MACA and the RMACs in Kabul and Jalalabad, should place higher priority on full participation in the Greater Azra Initiative. This is needed to determine whether spatially-integrated programmes lead to better coordination with sectoral agencies and NGOs and, in particular, to greater, more specific, and more timely demands from those agencies for mine action.

137. The MACA and AREA should meet to review the coordination problems to date between AREA and other MAPA organisations, and:

a) agree on a pilot project, which may be multi-year, designed to adequately test the safety and cost-effectiveness of community-based demining (CBD) in Afghanistan, and to identify supplementary benefits, if any, arising from the participatory nature of CBD;

b) agree a strategy to obtain funding for this pilot project, including an external evaluation to inform donors and the international mine action community of the CBD experiment in Afghanistan.

(See also Annex I, Section I3.0)

7.5. Information Management

138. The MACA and MCPA should clean the data in the MIS. The MIS should be enhanced to provide drop down menus to prevent miscoding and spelling errors, plus checks to ensure critical fields are not left empty. The system should also provide a query facility to provide gross error checks, to help prevent entries implying unlikely demining clearance rates of more than 16,000m^2 (as has happened with current data entries). We believe the best option is to immediately initiate data cleanup and then convert to the IMSMA. This will result in the short-term loss of some current capabilities (e.g., management reports) but should provide significant long-term benefits, including technical support from the UNMAS funded IMSMA project.

139. The RMACs should have a GIS capability to provide district and provincial level maps displaying mine and UXO hazards. The GIS system should be based on ARCVIEW GIS software, which will make it compatible with both ProMIS and IMSMA.

140. The ProMIS project should provide general data at the district level to the MACA to enable production of maps from the current data sets. This could be achieved in a very short time (a matter of weeks) while the MACA MIS is converted to a format compatible with the IMSMA system.

141. The MAPA should adopt the recommendations of the SAC Afghanistan advanced survey mission report, which should provide continued MIS development and maintenance support from UNMAS and the GICHD for the IMSMA. (See also Section 5.1.3 and Annex K, Section K5.1)

7.6. Preparing for the transition to a national mine action authority

142. The MAPA organisations should develop:

a) a statement outlining their vision for a sustainable and capable Afghan mine action program, embracing at least the national authority, national mine action centre, and implementing organisations, plus

b) a strategy for achieving that vision. This strategy should address how future transitions (1) within the UN system, (2) from the UN to recognised national authorities, and (3) from international to Afghan management might best be implemented.

(See also Chapter 6.0 and Annex H, Section H1.2)

143. The major Afghan NGOs—perhaps operating through their umbrella organisation, the Afghan Mine Action League (AMAL)—should prepare a proposal for a capacity development project and submit this directly for consideration by donors supporting the mine action program. This project should include components for at least:

a) NGO governance;

b) accountability;

c) corporate planning;

d) project preparation;

e) negotiation skills;

f) corporate financial management.

(See also Section 4.2.2.1 and Annex K, Section K6.0)

7.7. Technical aspects of demining operations

144. The MAPA demining technical working group should review:

a) the survey task specification process with the view to improving hazardous area clearance task specification activities.

b) the support team requirements for the backhoe teams.

c) work practices to ensure that maximum benefit is achieved from mechanical systems, including consideration of a TWO-SHIFT operation;

d) the application of the FEL and rock crusher technology in agricultural land clearance with the view to analyse the cost-benefit ratio of such tasks, and likely environmental impacts.[1]

e) EOD training levels with the view to satisfying itself that current training levels and limitations are appropriate both to reducing risk during the clearance process and to providing a response that should reduce risks to the public to tolerable levels.

f) the allocation of explosive detection dogs to tasks and organisations to reduce possible under-utilisation of dogs allocated to the survey teams.

145. The MACA should implement a programme for developing and maintaining national standards for mine action. This programme should include significant input from technical staff of the mine action NGOs and from the ODP/DMC. The national staff should provide the majority of the input into this process.

146. As a matter of urgency, the MAPA should confirm national safety and occupational health standards, including standards for protective clothing. This standard should require employers of demining staff to provide protective clothing appropriate for their respective demining SOPs. We appreciate that adopting these standards will raise costs. However, as EMPLOYERS, the demining NGOs have a responsibility to provide a safe workplace for their staff and, in the case of a demining workplace, protective clothing should be provided.

(See also Chapter 5.0 plus Annex I, sections I7.0 through I9.0)

[1] The MACA and The HALO Trust should examine alternative tasks for this technology. It may be more appropriate to move the equipment to process material excavated in cities or villages that have a hazard problem, or to assist in processing material excavated during the clearance of irrigation systems.

7.8. Mine Awareness

147. The MAPA Working Group on Mine Awareness should develop a strategy to improve the quality and cost-effectiveness of mine awareness services to returnees during transit and the initial period of resettlement. Developing this strategy may require a survey in both Iran and Pakistan to assess the level of knowledge among refugees who plan to return to Afghanistan and identify specific knowledge gaps—which may vary across possible target groups. Implementing the strategy may require a new curriculum and supporting material to adequately address these specific knowledge gaps via much abbreviated training sessions.

148. UNHCR and MAPA should review existing and planned arrangements for refugees returning from both Pakistan and Iran, and agree on systems and methodologies to ensure that more complete and cost effective mine awareness (MA) training is provided to returnees. This agreement should indicate clearly the responsible officer in both organisations, and provide for periodic assessment of whether MA services to returnees are adequate and cost-effective. (See also Annex I, paragraphs 32-34).

149. Given the lack of data still limits what can be said concerning the effectiveness of mine awareness, we recommend that MAPA's Mine Awareness Working Group focus now on thinking through a plan to conduct a thorough evaluation in the future. (See also Annex G, Section G3.0)

Annex A. Terms of Reference

Department for International Development
REVIEW OF UNOCHA'S MINE ACTION PROGRAMME FOR AFGHANISTAN
TERMS OF REFERENCE

1. Background

- Afghanistan is one of the world's most heavily mined countries resulting from the period of Soviet occupation and subsequent factional fighting.
- The impact of mines on the civilian population has been significant, with productive land rendered unusable, and considerable human, social and economic cost.
- The UN Mine Action Programme for Afghanistan (MAPA) began operations in 1989. It currently comprises the UN Mine Action Centre for Afghanistan (MACA), four UN Regional Mine Action Centres (RMACs) and 15 implementing partners (the majority of which are staffed and managed by Afghan nationals). The work of MAPA includes mine awareness, training, survey and clearance.

2. Rationale

The donors funding the evaluation have provided in the region of $30 million to the MAPA over the last 10 years. Before approving further funds, these donor agencies require further evidence of the programme's impact and recommendations on how to develop the programme.

3. Objectives

a) To determine the benefit of mine action in Afghanistan to date in terms of:

- Humanitarian and socio-economic impact
- Technical effectiveness
- Management efficiency
- Political considerations
- Effective, efficient and transparent use of funding

To recommend changes to improve the efficiency and impact of MAPA
To consider options leading to a UN exit strategy

4. Mission Composition

The mission should comprise three or four members with the following skills and experience:

a) Extensive experience of the establishment of wide-scale landmine and unexploded ordnance (UXO) eradication programmes
b) Experience of capacity building at a management, training and technical level preferably in landmine/UXO programmes
c) Comprehensive understanding of the survey and clearance process including the use of mechanised techniques
d) At least one member should be acquainted with the cultural and political considerations relevant to Afghanistan
e) An understanding of general development principles and the role and priorities of mine action within a multi-sector post-conflict response

5. Timescale

Preparatory work – 6 working days (all mission team members). To include review of documentation, discussions with representatives of UNOCHA MAPA, the management of the implementing NGOs and the donor community in Islamabad and Pakistan before travelling to Afghanistan. The Team Leader should also finalize the itinerary and produce a work plan for the team.

Field evaluation – 24 working days (all mission team members). In Afghanistan, the mission should conduct field assessments of operations in urban and rural settings, areas made difficult by reason of technical, political and security considerations, different implementing organisations and the full range of clearance approaches.
Initial conclusions and recommendations – 6 working days (all mission team members). The mission will produce an initial draft of the report and provide a verbal briefing to the evaluation donors on its return to Islamabad. This phase will also allow the mission to clarify any issues or seek further information required from MAPA or other agencies.
Report completion – 6 days (internationals only). International mission to complete drafting of the report on return to home countries.
Final edits – 2 days Team Leader only. Team Leader to finalise and pass report to evaluation donors in Islamabad by email within 18 days of completion of work in Afghanistan/Pakistan.
Total work days:
Nationals = 36 days
Socio-Economist = 42 days
Technical Specialist/Team Leader = 44 days
Target timing: Start date 26/Oct/00 to mid-Dec/00.
A full post-report presentation and consultation may be required of the Team Leader by the donors. This would take place at a time and location to be arranged. Estimated 1 - 2 days.

6. Humanitarian and Socio-economic Impact

Review the relevant documentation and social surveys, including evaluations of other country programmes, especially Level One surveys conducted to establish baseline data for mine/UXO-affected areas (This documentation, wherever possible, should be made available to the mission in advance).

a) Identify selected geographical areas of focus to evaluate the impact of project implementation in the following sectors:
   - Survey and Marking of affected areas
   - Training
   - Community Mines Awareness initiatives
   - Landmine/UXO eradication

b) Comparison of impact should be included where relevant as should community perceptions of the value of each sector

c) Assess feed-back of programme impact information by all implementing agencies and the system in place to collate, evaluate, update and disseminate data

d) Evaluate MAPA coordination with non-landmine-related agencies operational in Afghanistan and the existence and effectiveness of a system to exchange mine/UXO-related information

e) Investigate potential for misuse of cleared land, especially in relation to ownership and the cultivation of narcotics

f) Evaluate specific examples of the direct and peripheral impact of landmine/UXO eradication on:
   - Repatriation of refugees and IDPs
   - The rural economy - food production, local trade, livestock etc.
   - Access to key community facilities
   - The Kuchi
   - Security

g) Comment on the response to the needs of landmine/UXO victims and their dependents and MAPA/implementing NGO's level of direct involvement and cooperation with agencies which are directly involved, especially in relation to:
   - Rescue and Evacuation
   - local first responder training
   - Surgery and prosthetic services
   - Victim rehabilitation and support
   - Support for victim dependents - especially widows and children

7. Technical Effectiveness

While looking at the following areas, comment particularly on the focus of new initiatives and developments.

a) Survey/Minefield Reduction and Marking
   - Review and evaluate the survey process with special focus on the prioritization of mined land for reduction, marking and clearance. Evaluate the process of data transfer from the survey teams to the allocation of tasks to individual implementing agencies. Assess progress in indigenisation of the survey process.
   - Assess the extent to which reduction is fully integrated into the overall survey process and the selection methods in use to identify land targeted for reduction. Examine the operational procedures for marking of suspect

and surveyed land and the time factor separating confirmation of threat by survey and physical marking of minefield perimeters.

b) Mine Clearance Operations
   - Evaluate the performance of selected manual and dog teams in rural and urban scenarios with specific reference to the following:
   - Knowledge of Standing Operational Procedures

c) Safety in Operations

d) Equipment condition and use procedures

e) Care and control of dogs
   - Utilisation of dogs and their effectiveness within the overall programme
   - Quality of Supervision
   - Effectiveness of Clearance

f) Use of available technical resources and potential for introduction of new resources

g) Interaction with local community
   - Confidence of local community in clearance process

h) Process for selection of de-miners as supervisors

i) Disciplinary procedures

j) UXO Eradication
   - Evaluate the eradication process with special attention to prioritisation, safety, quality of team supervision and response to UXO reports from the community. Assess the scale of EOD operations in relation to the existing problem. Review the use of available technical resources and the potential for introducing other resources to good effect. Give special attention to team skills development and the identification of team members as potential supervisors.

k) Quality Assurance and Control
   - Evaluate the process of quality assurance and control (internal and external) and the selection of quality assurance staff. Review the checking and reporting of survey, marking and mine/UXO clearance teams and remedial action taken in response to unsatisfactory quality control reports. Review procedures for integrating repeated faults into training programmes. Review the use of technical spot-checking as a quality assurance tool and comment on its effectiveness. Assess the procedures in place to ensure that quality assurance staff keep up-to-date with technical developments in the field. Comment on the relationship between implementing agencies and quality assurance staff.

l) Training
   - Assess the MAPA technical training operation with special focus on relevance to role and interaction with implementing agencies.

m) Mechanical Clearance Equipment
   - Identify the equipment presently in use at all stages of the survey, eradication and monitoring process. Evaluate the effectiveness and confidence factors of each piece of equipment in regular use and any relevant cost effectiveness implications. Examine the potential for increasing the use of selected equipment to increase speed, effectiveness, safety and/or cost effectiveness of specific sectors or of the overall programme.

n) Equipment selection and procurement
   - Review and comment on global equipment policies in relation to detectors, safety clothing and other common-use items. Particular

attention to be paid to maintenance, after-sales support, testing and evaluation of new equipment and the potential for local manufacture of some items.

8. Programme Management

Review the overall management structure of MAPA and its effectiveness. Special reference should be given to the following issues:

a) Management Capacity Building:
   - With special focus on the progress of any Afghan counterparts at management level and the level of responsibility and decision-making transferred to date. Where no counterparts are in place comment on the reasons and implications for eventual indigenisation of MAPA. Review also in this regard the level of formal support to the management of Afghan implementing NGO's. Evaluate the management expertise available among existing Afghan managers working within the overall programme.

b) UNOCHA:
   - Examine and evaluate the role of MAPA in relation to the overall UNOCHA programme. Comment on the operational, financial, logistical, procurement, administrative and personnel implications of full indigenisation of MAPA for UNOCHA.

c) Afghan Implementing NGOs
   - Examine and comment on the status of the Afghan NGO's and their capacity to operate outside the existing MAPA/UNOCHA structure. Comment on the potential positive and negative outcomes of Afghan NGOs becoming international.
   - Determine the continuing requirement for expatriate staff in each sector of the programme. Where a requirement exists give estimates of time-scale involved and, where relevant, policy, training and operational adjustments required to ensure eventual indigenisation of each post.

d) Comment on the work-related insurance for local mine action workers.

e) Investigate and comment on the cooperation and interaction with the wider humanitarian programme for Afghanistan and the understanding of those sectors by MAPA management.

9. Political

a) Comment on support for and attitudes towards mine action from the Taliban and Northern Alliance and any political factors at national or regional levels which have a significant impact on the effective implementation of mine-related operations.

b) Evaluate the available mechanisms within the mine action programme to keep mine-affected communities appraised of planning and progress in their area and to what extent local political, religious and social structures are involved in that process

c) Comment on the possible political and other implications for a totally indigenised programme.

d) Comment on the roles played by the International and Afghan Campaigns to Ban Landmines.

10. Future

a) Make recommendations based on the mission findings for the future improvement of the programme with particular emphases on safety, technical excellence in operations and efficient and effective use of funding.

b) Comment on the potential for full or further indigenisation of the mine action programme and any positive or negative considerations in that regard. Special focus should be addressed to the sustainable nature of management and operational structures put in place by MAPA/UNOCHA.

c) Given that donor strategy is likely to place MAPA in a position of greater competition with other sectors of the overall response in Afghanistan the mission should emphasise any areas of potential funding wastage and mechanisms to widen the funding base available to the mine action sector.

10. Reporting

The mission will provide a final report within 18 days of the completion of the field study, focussing on recommendations against the above objectives (primarily to donors but also to MAPA and implementing partners). The report layout should be presented in approximately 20 pages under the headings and sub-headings at paragraphs 4 to 10 above (additional findings should be included as additional sub-sections under the relevant headings). Any points of major dissent should be noted. Details of methodology, analysis, photographs etc should be appended in the annexes. An executive summary of 3 pages should detail the major findings, conclusions and recommendations. The report should also contain an index.

11. Roles and Responsibilities

Prior to arrival, the international team members should agree responsibilities for above sections. Within four days of arrival in Pakistan, the Team Leader should finalise a work plan for the remaining period and ensure the evaluation donors receive copies.

The Team Leader will be responsible for finalising the itinerary and tasking MAPA to arrange visits, book flights, etc. The Team Leader will also be responsible for ensuring that the first draft and final drafts of the report are completed and supplied to the evaluation donors within the stated time periods.

All team members will be responsible for invoicing their own fees and expenses.

12. Additional Notes

The mission should ensure that at least one third of visits to operational areas are either unannounced or made at short notice. This is not a deceptive policy but ensures that the mission is able to evaluate operations as far as possible without the intrusion of any special arrangements for visitors which, especially in the context of Afghanistan, may make a proper understanding impossible.

All team members should be self-sufficient in relation to personal medical requirements and funds and be prepared to operate in adverse field conditions alongside local demining teams. It is suggested that each team member should have personal accident, medical and evacuation insurance with specific cover for operating in minefields, mined areas and in security-sensitive locations in Afghanistan.

Annex B. Schedule of visits and meetings

B1.0. Meetings

City	Date	Name	Title	Organization / Department
Islamabad	26/10	Erick de Mul & Antonio Donini	UN Coordinator and Director UNOCHA Respectively	UN
	26/10	Anne Freckleton, Barnaby Willitts-King DFID; Shinabu Yamaguchi, Embassy of Japan; Peter Burkely, CIDA PSU Islamabad		Donor Review Mission Steering Group[1]
	26/10	Richard Dan Kelly and management staff	Program Manager	MAPA
	26/10	Mohammad Ershad	National Socio-economist	MCPA
	24/10	Dr. Nicholas Muller	Mines Delegate-Afghanistan	ICRC, Kabul
	27/11	Dr. Rana		WHO
	27/11	Yuh Hanyu and Yoshiyuki Yamamoto	Deputy Chief of Mission and Program Officer Respectively	UNCHR, Afghanistan
	27/11	Mohammad Sharif Baser	Mine Awareness Officer	META
	27/11	Bjorn Gildestad	Socio-economic Advisor	MACA
	27/11	Asif Karim	Head of Admin and Finance	UNOCHA
	28/11	Alfred Grimm	Head Liaison Office,	ICRC, Islamabad
	29/11	Tariq Zuberi	Procurement Officer and Flight Operations Manager	UNOCHA
	29/11	Andrew Ross	Technical Officer	ProMIS
	29/11	Knut Ostby	Senior Deputy Resident Rep	UNDP, Afghanistan
	29/11	Dr. Solofo Ramaroson	Senior Programme Officer	UNICEF, Islamabad
	3/12	Peter Slone	Food Security Consultant	FAO
Kabul	29/10	Achim Brudgam	Field Coordinator	Field Coordinator Central and Eastern Regions
	29/10	Abdul Qader	Acting Regional Manager	RMAC Kabul
	31/10	Mawlavi Hamdullah Nomani	Mayor of Kabul City	Kabul Municipality
	31/10	Mawlavi Saddudin Saeed	Minister of Planning	Ministry of Planning

[1] The Review team held several meetings with the Steering Group throughout the period of their mission.

City	Date	Name	Title	Organization / Department
	1/11	Group meeting with Regional Managers of MAPA	Regional Managers	Regional Mine Action Centre Kabul, Jalalabad, Herat and Kandahar
	1/11	Khial Shah	Managing Director & Kabul Regional Manager	AREA
	1/11	Group meeting with NGO's Directors	Directors/Deputy Directors	OMAR, MCPA, DAFA, META, ATC
	1/11	Working Group Meeting on Mine Awareness	Representatives	OMAR, ARCS, AMAA, SCF-US
	1/11	Said Mohammad Shekofteh	Project Manager	ARI
	2/11	Mohammad Shohab Hakimi and Management Staff	Director	MDC
	2/11	Lucienne Maas & Sami Hashimi	Country Program Manager, Project Manager-Children in Crisis	SCF-US
	3/11	Jan-Erick Wann and Mrs Ulla Asberg	Regional Directors	SCA
	3/11	Haji Attiqullah and key management staff	Director	MCPA
	4/11	Haji Fazal Karim Fazal and key management Staff	Director	OMAR
		Farid Elmy	Operations Manager	ATC
	5/11	Eliane Duthoit	Regional Coordination Officer	UNOCHA/UNDP
	5/11	Nur Mohammen	Manager, Mine Awareness	ARCS, Kabul
	6/11	Dr. Farid Humayoon and key management staff	Director	HALO
		Eng. Nazar Gul	Regional Manager	MAPA
	7/11	Fazel-Rabi Haqbeen	Regional Manager	ACBAR, Kabul
	7/11	Mr. Dawar	Manager, Mine Victim Data	ICRC, Kabul
	7/11	Noor-ul-Hada Ramat	Director	Demining Commission (DMC)
Jalalabad		Nazar Gul	Regional Manager	RMAC Jalalabad
	8/11	Malawi Habibibullah	Director of Planning Dept.	Government of Afghanistan.
	8/11	Ainullah and key staff	Site Supervisor	ATC
	9/11	Mohammad Yousufi	Coordinator	AREA, Mine Clearance Dept.
	9/11	Desmond Charles O'Hanan	Technical Advisor	AREA, Mine Clearance Dept.
	9/11	Mohammad Younus and key management staff	Director	META
	9/11	Group Meeting	Regional Director & NGO Representatives	ACBAR, Jalalabad
Kandahar	12/11	Abdul Ghani Asalti	Regional Manager	MAPA

City	Date	Name	Title	Organization / Department
	12/11	Ross Chamberlain	Field Coordinator Southern and Western Regions	MAPA
	13/11	Abdul Satar and key management staff	Director	DAFA
	13/11	Khalil Rahman Baheer	Regional Manager	CDAP
	14/11	Homayoon Achekzai and key management staff	Deputy Director	GUARDIANS
	14/11	Roland Nobs	Head of Sub-Delegation	ICRC
	16/11	Denis Charles and key staff	Program Director	HI
	16/11	Regional Coordintion Body Meeting	Heads of various UN Agencies/NGOs	UN Agencies and National and Int. National NGOs
	18/11	Malawi Sher Agha Rashidi	Director	Planning Depart, Kandahar
	18/11	Malawi Ali Mohammad Agha	Coordinator	QDCCU
	18/11	Fazal Mohammad Fazli	Regional Manager	UNDCP
Heart	19/11	Gul Mohammad Seddiqi	Regional Manager	RMAC Herat
	20/11	Abdul Karim	Assistant Program Manager	UNHCR, Herat
	20/11	Najibullah Hameem	Director	AMAA
	21/11	Les Johnson	Head of Orthopaedic Centre	
	21/11	Sharjjel Butt & Aqueel Merchant	Auditors (audit of OMAR for Novib)	Ford, Rhodes, Robson, Morrow
Peshawar	23/11	Kifayatullah Eblagh and key management staff	Director	ATC
	23/11	Mohamad Azam Haidri	Coordinator	ACBL
	23/11	Dr. Ghulam Farooq	Program Officer	CDAP, Peshawar
	23/11	Roy Hermann	Head of Sub Office	UNHCR, Peshawar (Pakistan)
	24/11	Sherazuddin Seddiqi and Keith Ricketts	Director and Education Coordinator respectively	BBC AEP
	24/11	Tom Muller and Nancy Hatch Dupree	Coordinator, Senior Consultant	ACBAR
	24/11	Haji Attiqullah and key management staff	Director	MCPA

B2.0. Monitoring of Demining Operations:

Region	Date	NGO	Team #	Activity	Task No.	Type Of Land	Type Of Mines	Surface Land In Sqm	Priority	District	Province
Central	2/11	MDC	MDG 1	Dog Clearance	01/01/535	Grazing/ Residential	AT/AP	103,194	One	Ward 7 (Shilsotoon)	Kabul
	2/11	MCPA	Team 13	Survey	01/01/535	Grazing/ Residential	AT/AP	Incomplete	One	Ward 7 (Shilsutoon)	Kabul
	5/11	ATC	Team 14	Manual Clearance	01/08/976	Grazing	AT	90,035	One	Paghman	Kabul
	6/11	HALO	Team 10	Mechan. Clearance	0108/331	Grazing	AT/AP	80,000	One	Paghman	Kabul
	7/11	DDG	Team 1	Manual Clearance	0101/603	Grazing	AP	52,822	One	Kabul	Kabul
	8/11	ATC	Team 11	Manual Clearance	08/08/049	Grazing/Residential	AP	56,560	One	Chaplihar	Nangarhar
Eastern	9/11	AREA	Team 2	Manual Clearance	08/14/196	Grazing	AP	56,269	Two	Surkhrod	Nangarhar
	11/11	ATC	Team 7	Manual Clearance	09/02/024	Grazing	AP	27,282	Two	Qarghai	Nangarhar
	11/11	MCPA	Team 16	Survey	09/02/027	Grazing	AP	Incomplete	Two	Qarghai	Laghman
Eastern	13/11	DAFA	Team 1	Manual Clearance	24/05//104	Agriculture	AP	22,870	One	Daman	Kandahar
	13/11	MCPA	Team 19	Survey	24/05/05	Agriculture	AP/AT	Incomplete	One	Daman	Kandahar
	13/11	DAFA	Team 3	Manual Clearance	24/05/143	Agriculture	AP	58,490	One	Daman	Kandahar
	13/11	MDC	Team 10	Dog Clearance	24/03/20	Residential	AT	150,014	Two	Shega	Kandahar
	14/11	DAFA	Team 6	Manual Clearance	24/04/224	Agriculture / Residential	AP	13,990	One	Dand	Kandahar

Region	Date	NGO	Team #	Activity	Task No.	Type Of Land	Type Of Mines	Surface Land In Sqm	Priority	District	Province
	14/11	DAFA	Team 6	Manual Clearance	24/04/233	Residential	AP	51,405	One	Dand	Kandahar
	14/11	MDC	Team 12	Dog Clearance	24/04/181	Residential	AT	99,458	Two	Dand	Kandahar
Western	20/11	MDC	Team 7	Dog Clearance	20/11/294	Agriculture	AT	102,478	Two	Zindajan	Herat
	21/11	OMAR	Team B	Manual Clearance	20/02/206	Residential	AP	1,273	One	Enjil	Herat
	21/11	OMAR	Team 1	Mechanical Clearance	20/02/266	Residential	AP	2,770	One	Enjil	Herat

Annex C. Review of documents

Andersson, N., Whitaker, C., and A. Swaminanthan. (1998). 'Afghanistan: The 1997 National Mine Awareness Evaluation.' CIET International

Bean, Phil (1995). 'Mine Clearance Operations, UNOCHA, Afghanistan: Monitoring Report to the Overseas Development Administration.' Mimeo.

Girardet, Edwards and Johnathan Walter, editors. (1998). *Afghanistan.* Essential Field Guides to Humanitarian and Conflict Zones. Geneva: International Centre for Humanitarian Reporting.

Harris, Geoff. (2000). The Economics of Landmine Clearance: Case Study of Cambodia. *Journal of International Development*, **12**(2): 219-225

Management Perspectives International (2000). 'Desk Study on the State of Knowledge of the Effects of Mine Action.' Draft Report (January 2000). Sida.

Mine Clearance Planning Agency (1999)': *Socio-economic Impact Study of Landmines and Mine Action Operations in Afghanistan 1999.'* MCPA

Overseas Development Institute (1999). *Evaluation of Danish Humanitarian Assistance: Volume 2 - Afghanistan.* Evaluation Report 1999/9. Ministry of Foreign Affairs.

Skuse, Andrew. (1999). *'Negotiated outcomes': an ethnography of the production and consumption of a BBC World Service radio soap opera for Afghanistan.* Ph.D. thesis. University College London.

United Nations Drug Control Programme (2000a): *Annual Opium Poppy Survey 2000.'* UNDCP.

United Nations Development Program (2000): *Program of UNDP Afghanistan, Program Support Document 2000.* UNDP-Afghanistan

United Nations Development Program (2000b): *The Thematic Evaluation of the UNDP P.E.A.C.E Initiative in Afghanistan 1999,* UNDP-Afghanistan

United Nations Development Program (2000c): *Study of Socio-economic Impacts of Mine Action in Afghanistan (SIMAA)*, mimeo;UNDP-Afghanistan

United Nations Development Program (forthcoming): *A Study of Socio-Economic Approaches to Mine Action,* Geneva International Centre for Humanitarian Demining.

United Nations High Commissioner for Refugees (2000)': *Greater Azra Initiative 2000.'* UNHCR

United Nations Mine Action Program for Afghanistan (1997). 'Corporate Strategy.' UN MAPA.

United Nations Mine Action Program for Afghanistan (various years). ‘Annual Work-plan.’ UN MAPA.

United Nations Mine Action Program for Afghanistan (various years). ‘Annual Report.’ UN MAPA.

Statutes, Edicts, and Decrees

Statute on the Activities of the Domestic and Foreign Non-Governmental Organizations (NGOs) in the Islamic Emirate of Afghanistan. *Official Gazette No. 781*, 20 August 1995.

Statute on the Activities of the Domestic and Foreign Non-Governmental Organizations (NGOs) in Afghanistan. *Official Gazette No. 792*, 28 June 2000.

Decree of the Islamic Emirates of Afghanistan Regarding the Ban of Poppy Cultivation. *Official Gazette No. 19, July 1999.*

'The opium and Islam and its moral and economical problems.' The Ulama Councils' Central Office

Annex D. Cost-effectiveness analysis – an illustration

1. Typically, two critical assumptions must be made when using cost-benefit techniques to analyse measures taken to reduce risks of death, injury, and illness:

a) A valuation assumption—placing a monetary value on human life and suffering;

b) An attribution assumption—attributing a change in the numbers of deaths, injuries, and illnesses to a particular action (or inaction).

2. Many reasonable people balk at valuing human death and suffering in monetary terms. Cost-effectiveness analysis avoids this issue and attempts to compare how much it costs different programs to prevent one death/injury/illness. Attribution assumptions still are required.

3. The following example looks at the Polio Eradication Initiative (PEI) to illustrate the approach. Data on the incidence of polio and, therefore, the impact of the PEI, are inadequate for rigorous analysis, so the following should be viewed as a simulation only.

4. The decline in Afghanistan's primary health care system means the country's routine immunization programme reaches less than 40 percent of children. In response, UNICEF and WHO have provided support for an Extended Programme of Immunization (EPI) and the PEI on a campaign basis.

5. Assumptions

- the analysis is done in early 1996 for the PEI to start that year and continue until the first year in which no new polio cases are reported;
- the annual cost of the PEI, plus the acute flaccid paralysis (AFP) special surveillance programme, is $4,770,000;
- the AFP special surveillance, costing $450,000 per year, will need to continue for an additional three years to 2006 to confirm that wild polio virus has been eradicated;
- the annual average of new polio cases without EPI or PEI is 2,500;
- with EPI alone, the incidence of new polio cases will fall by an average of 10 percent each year;
- with both EPI and PEI, the incidence of new cases will fall by an average of 50 percent each year, until no new incidents are reported in 2003.

Analysing until 2015, the results are:

New cases (1996-2015) - EPI alone	23,784

New cases (1996-2003) - EPI and PEI	4,980
Reduction in cases due to PEI	18,804
Cost of PEI & AFP surveillance: 1995-2006	$39,510,000
Present Value - 1995 $s @ 10% discounting	$28,566,684
Cost per polio case avoided (in constant 1995 $s)	$1519

This result could then be compared against the estimated cost of preventing deaths and injuries from UXO and landmines in Afghanistan. This, however, would require better data to understand the impacts of clearance and mine awareness on the numbers of mine/UXO accidents.

Annex E. The economics of demining

E1.0. General issues

6. A number of economic benefits arise from mine action.[1] In brief, it allows increased production from cleared land and built areas, the removal of transportation and utility distribution and supply constraints, and the return of people to resume productive activities. This increased production, coupled with a more certain future, in turn stimulate investment and future production increases. Higher production and investment allow increased consumption in general and -- for previously mine contaminated areas, communities, and families -- greater security to food and other basic goods. The clearance of transportation infrastructure also removes supply constraints on consumption and food security. Finally, demands on certain essential services such as public health decrease with the reduction in mine incidents.

7. By allowing refugees to return and general economic activities to resume, mine clearance eventually reduces the need for economic transfers through the international aid system, and contributes to the economic prospects of neighbouring countries.

8. When mine action is undertaken on a scale such as in Afghanistan, it is likely to have a number of other impacts, which are difficult to quantify but may be of great significance. First, the scale of expenditure puts significant money in people's hands, raising effective demand in areas in which mine action personnel, and their families, are present.[2] This stimulates local commerce and induces others to invest. Second, the major mine action NGOs are large, sophisticated organisations and could play an important role in the diffusion of modern administrative practices. Third, MAPA organisations employ thousands of qualified Afghans, providing substantial training and disciplined work environments. This slows 'brain drain' and builds human capital.

E2.0. Evidence from other countries[3]

9. Evidence on economic costs and benefits from other mine and UXO affected countries is just becoming available. The general findings are:

a) Clearance of roads, power lines and other economic infrastructure typically offers extremely high returns;

[1] One of these is reducing deaths and injuries. However, the economic valuation of human life and suffering is fraught with controversy, and many reasonable people find repugnant those analytic approaches that place a monetary value on human life. Therefore, we address these questions in the section on risk reduction.

[2] This benefit may have been muted in Afghanistan's case because so many mine action people maintain their families in Pakistan.

[3] This is from UNDP (forthcoming). The only published cost-benefit analysis of mine action extant (Harris, 2000) is too seriously flawed to be a useful guide.

b) Clearance of irrigation works and irrigated land often promises good returns, particularly if agricultural research and extension systems, plus irrigation management approaches, will support high capacity utilization and rising yields.

c) Clearance of rain fed agricultural land in extremely poor countries yields modest or even negative returns because agricultural productivity is low. The economic case for widespread clearance of such land generally is dependent on future yield increases and, therefore, a coordinated approach to foster rural prosperity in the specific geographic region. This typically requires a package of:

- economic infrastructure (secondary and feeder roads, water control systems, etc.),
- social infrastructure (e.g., schools, clinics),
- agricultural extension services,
- expansion of commercial or state agricultural marketing arrangements for both inputs and products,
- provision of basic public services (e.g., personnel for rural schools and clinics),
- institutional development (irrigation management systems, producer & marketing cooperatives/associations, micro-credit schemes, etc.).

d) Achieving high economic returns in the above cases, and even adequate returns for rain fed agricultural land in areas not benefiting from sound rural development investments, depends critically on continued productivity increases and cost reductions in mine clearance operations.

e) Where this would allow productive land use, surface clearance of UXO is more often justified on economic grounds as costs are far lower.

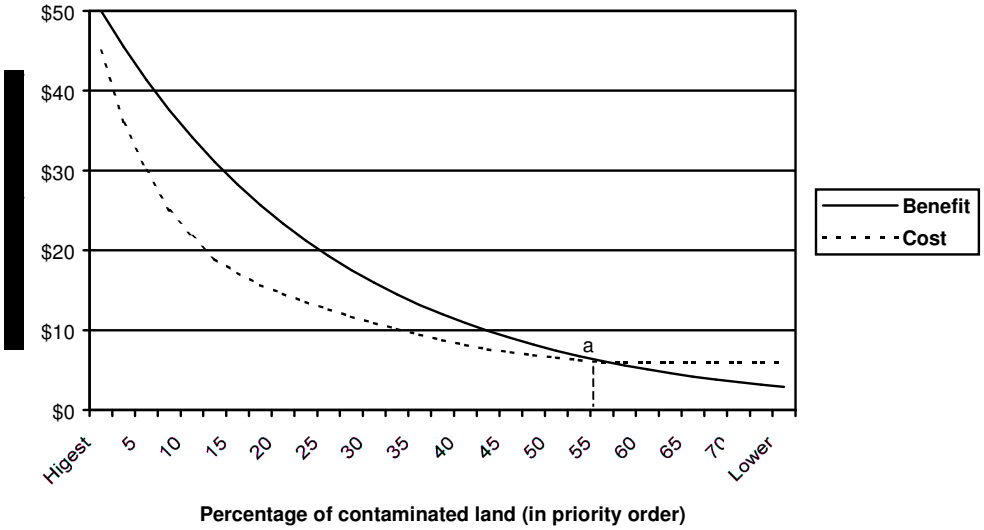
f) Tightly focused clearance of key community economic infrastructure (bridges, water points, etc.) often yields high returns.

E3.0. A stylised picture of a national mine action programme

10. The general time pattern of economic benefits and costs of mine clearance in a country is depicted in Chart 1. Initial costs (expressed in dollars per hectare of land cleared) typically are very high due to start-up costs plus additional capacity-building expenditures. Costs fall rapidly as basic operations and programme management functions are established and indigenised, and continue declining at a slower rate as local management continues to tune techniques to local conditions and introduce productivity-enhancing innovations.

11. Typically, benefits per hectare of cleared land are also high in the initial years because clearance focuses on critical economic infrastructure and other high priority tasks. Benefits fall as high priority tasks are completed and clearance assets are assigned to land with lower economic value.

Chart 1: Costs & Benefits of Mine Clearance



12. At some point (indicated by point 'a' in the chart), the cost of clearing land starts to exceed the economic benefits, and there is no further economic justification for clearance.[1] Whether this happens sooner or later depends on a variety of factors, including:

a) the productivity and wealth of the country, which largely determines the economic value of land;

b) the pattern of mine contamination (i.e., whether mines have been laid principally in roadways, urban areas, and other economically productive areas);

c) clearance costs, and whether mine clearance organisations can reduce these over time;

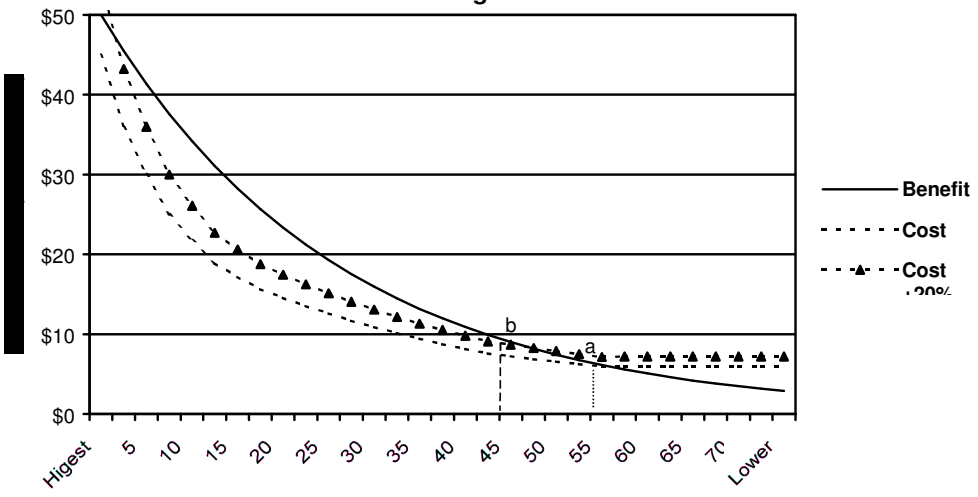
d) the rate of economic growth in the nation, sector (especially agriculture and rural economy), and mine contaminated communities.

13. Mine action organisations must accept the first two factors as given. However, these organisations have significant control over their costs, and it is important they (1) avoid early decisions that imply increasing costs over time (e.g., via salary structures) and (2) strive continuously for productivity increases.

[1] This is an extreme simplification. In practice, many of the economic benefits cannot be quantified. Therefore, cost-benefit analysis captures the benefits it can, and notes the other benefits. Policy-makers then determine how much they value these unquantified benefits.

14. Chart 2 depicts the effect of higher clearance costs. Costs now exceed economic benefits at point 'b' when, in this example, 45 percent of all contaminated land has been cleared.

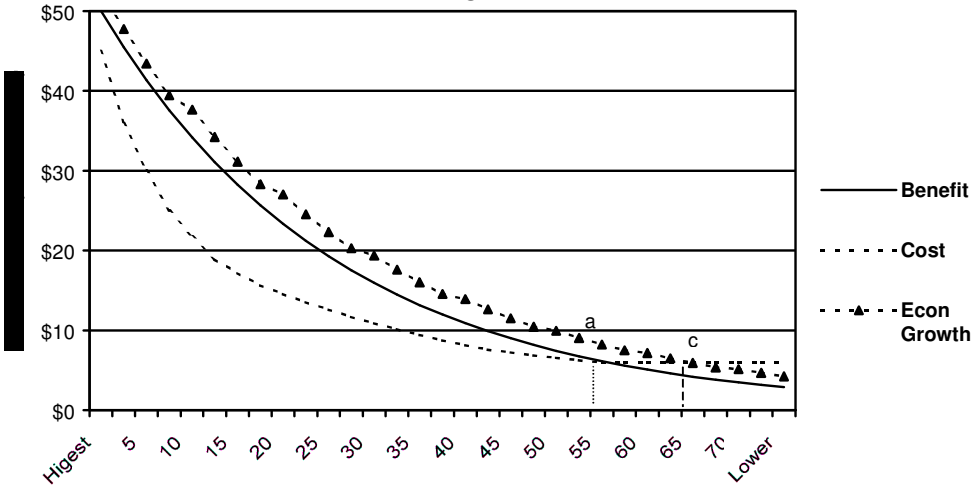
Chart 2: Effect of Higher Clearance Costs



15. Mine action organisations have little control over the rate of economic growth. However, they can focus their efforts on rapidly sectors, regions, and communities. This is more likely to occur where the government and development agencies are making significant investments. Therefore, economic benefits from mine action will be higher when clearance complements other development investments.

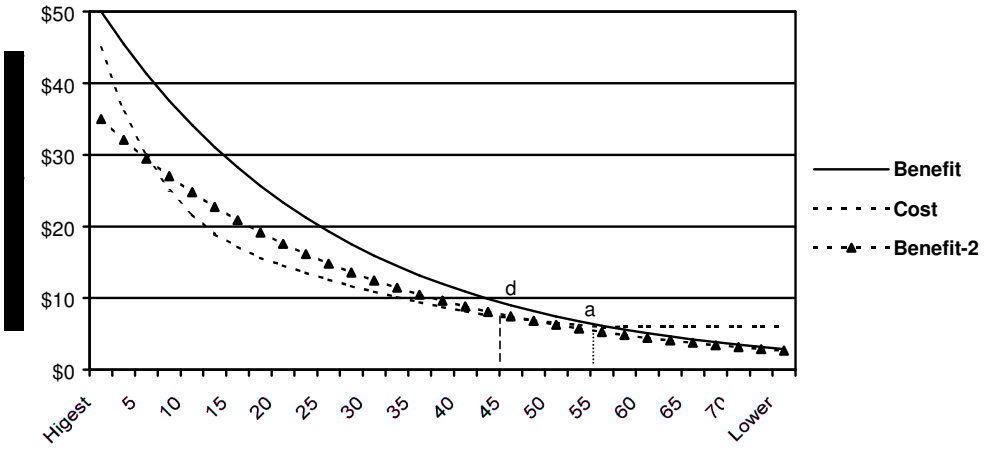
16. Chart 3 depicts the effect of higher economic growth. The benefits line rotates up and to the right. In this example, benefits exceed costs until point 'c', at which 65 percent of contaminated land will have been cleared.

Chart 3: Effect of Higher Economic Growth



17. Mine action organisations also have significant control over the criteria used to set priorities. Poor targeting reduces the benefits accruing during the early stages of mine action program, as is depicted in Chart 4. The benefit line (labelled 'Benefit-2') drops, particularly toward the left. Unless targeting is improved, the economic impact of clearance could turn negative at point 'd', when (in our example) only 45 percent of contaminated land is cleared.

Chart 4: Weak Targeting of Clearance



18. Thus, there are three principal means for mine action organizations to improve economic benefits arising from their activities:

a) Reduce their clearance costs;

b) Coordinate their activities well with other development agencies; and

c) Improve their targeting by refining the criteria used in setting priorities.

E4.0. Analysing alternatives

19. Economic analysis is concerned not only with the absolute benefits stemming from an activity, but also with alternative uses for scarce resources. The potential benefits from mine action should be compared with those that might stem from alternative humanitarian and development expenditures.

20. There typically are many options to mine clearance in countries with abundant land. In many parts of Afghanistan however, topology and water systems make these alternatives technically infeasible. Another potential solution -- rapid and widespread increases in agricultural productivity to garner more from uncontaminated land -- is administratively infeasible given the current political situation and the resulting inadequacies in the state's capabilities. As such, international transfers via the aid system or permanent settlement of Afghan refugees in countries of refuge are, in many cases, the only alternatives in general to mine action in the near future. These options are costly and may not lead to a sustainable solution.

21. While there is no universal substitute to clearance to deal with Afghanistan's mine contamination problem, at the micro level there often are alternative means to address the specific problems arising from mine/UXO contamination in a specific community.

Annex F. Impacts of demining - specific examples

F1.0. Repatriation of refugees and IDPs

F1.1. Mine/UXO clearance

22. According to UNHCR, the most common reasons now cited for not returning by refugees in Pakistan are (in order):

a) continuing security concerns;

b) limited opportunities to earn income (now aggravated by the drought and the ban on poppy cultivation);

c) the absence of public services, particularly education and health;

d) mine contamination.[1]

23. This suggests that continuing mine and UXO contamination remains a significant, but not the most important, constraint on the return of refugees in general. However, anecdotal evidence from community visits suggests landmines and UXO were a more significant constraint to repatriation until fairly recently. Clearance—particularly of roads and urban areas—lessened perceived travel and resettlement risks.

24. There remain many heavily contaminated communities. Refugees from these specific communities would certainly view mines and UXO as a more serious constraint due to the direct danger posed and because the contamination limits farming and other income earning opportunities. Informants in virtually all communities visited stated that many current residents would not have returned had clearance not occurred. Where significant contamination remains, informants claimed most refugees would return if the land were cleared (see Box). At the same time, the mission was told that many returnees had again left for Pakistan because of the difficult economic prospects occasioned by the drought and—in Nangarhar—the ban on poppy cultivation.

[1] Source: Yoshiyuki Yamamoto, UNHCR-Islamabad.

TEXTBOX: MIRWAIS MENA
Mirwais Mena is a Hazara community just west of Kandahar city. Its 1,000 to 1,200 families left for Iran when the war started. Spontaneous repatriation started after the communist collapse, but local commanders killed a number of Hazara, and the remaining early migrants returned to Iran or left for Pakistan. Increased security following the Taliban capture of Kandahar has allowed some to return to the general area since 1996, but only four families are now living in Mirwais Mena itself. This, in part, is due to extensive mining of residential and agricultural land, but also because land disputes with some tenant farmers (occupying what agricultural land is unmined) remain unresolved.

The community *malik* first approached the authorities about two years ago to request demining, and followed-up with three reminders. He was told the community was not a priority, apparently because there would be few beneficiaries—it seems the possible return of thousands of community members from Iran and Pakistan was not considered. Then, about a year ago, he learned 'a class fellow' had become an MCPA supervisor. He approached the supervisor and the technical survey process started this year. One minefield (35,000 m^2) has been cleared, work is underway on a second (55,000 m^2), and three more have been surveyed. Of late, there has been additional pressure for rapid clearance. Following an explosion outside the Kandahar City police station, municipal authorities have instructed Hazaras living in the city proper to leave.
END TEXTBOX

25. The drought has also resulted in a marked increase in the number of IDPs, and the Ministry for Martyrs and Returnees has established new camps. It does not always check with MAPA to ensure these are located in safe areas. In at least one recent case—the 'Minarets Camp' in Herat—a camp was sited on UXO contaminated land. NGOs working to set-up the camp notified the RMAC in Herat after coming across UXO. Fortunately, an MCPA survey team was able to clear the site before any accidents. This is at least the third time an IDP camp has been sited on contaminated land. Such repeated oversights are of concern, but MACA and the RMACs have been in frequent touch with this Ministry and it is hard to see what other steps they could usefully take.

F1.2. Mine awareness

26. The majority of informants who had been refugees in Pakistan stated they received mine awareness training before returning. Informants invariably said the mine awareness was helpful but, given Afghan standards of hospitality, it seems unlikely they would have voiced criticisms with foreign visitors present.

27. All mine awareness NGOs view both returnees and IDPs as priorities for direct mine awareness (MA) training. In addition, mine clearance teams are asked to provide MA sessions after completing their normal work if there are new returnees in the local community.

28. The mission was not in a position to assess the adequacy of past MA training, but the current situation with respect to returnees during transit home is worrisome given the rather haphazard coordination between MAPA organisations and the UNHCR, and among the MA NGOs themselves. Returnee numbers[1] far exceed the capacity of these NGOs given current approaches used for direct training, with sessions generally scheduled for two hours. Taliban edicts against videos and photographs depicting people limit some of the obvious alternates. At the same time, it is not clear what MA services returnees actually require during their transit, or whether their needs are common or disparate. Large numbers of refugees have already received MA training in Pakistan and, to a lesser extent, Iran. Many Afghans have learnt a good deal about how to cope with mine contamination from the *New Home, New Life* radio soap opera from the BBC AEP.

F2.0. The rural economy

F2.1. Farming systems

29. On six days, the Review Team visited rural villages and spent another three days visiting peri-urban communities. Most communities were in the defensive belts around cities, and suffered extensive landmine and UXO contamination. In all cases, community informants expressed gratitude to the deminers, whose efforts had allowed many refugees to return, mainly to resume farming. The impact of mine clearance on the lives of residents in these communities clearly has been immense. Most informants said the surveyors and deminers have been very professional and had sought information from community members. Informants all said they trusted the judgement of the mine action personnel. The broad assessment of MAPA by community informants, and by the Review Team, is very positive. However, the Team did come across situations where the impact of demining, while positive, was probably not optimal. There are opportunities to improve priority setting at the community level. Achieving such improvements will require good knowledge of the local rural economy and, particularly, its farming systems.

30. About 85 percent of crops are produced on five percent of the country's arable land. This production is heavily dependent on irrigation. Farmers grow grain and other staples for household consumption, and high-value crops (fruit, vegetables, poppy) for the market. Almost all farm households keep livestock, which feed on crop stubble supplemented by wider grazing and fodder crops. Sharecropping is widely practised in some regions. Many rural households earn income from handicrafts and other non-farming activities.

[1] In 2000, there often are over 1000 returnees/day registering with UNHCR in both Iran and Pakistan.

31. In short, rural livelihoods in Afghanistan are based on complex farming systems, and all components of these systems (crop and livestock production, input and output markets, community-managed water systems, non-farm rural industries, etc.) must be considered to ensure livelihoods are adequate and sustainable. For example, demining of cropland and irrigation works for a community may not allow households to resume permanent residence if roads to regional markets are not open or if adequate grazing land is not cleared to allow the build-up of livestock holdings to viable levels. When addressing a community's constraints, MAPA should be concerned with more than simple clearance of land and infrastructure; rather, it needs to know that its actions—combined with those of other agencies and the community's own efforts—will make it possible for the residents to resume viable livelihoods.

32. For example, the Review Team visited communities in Khogiani and Sorkh Rod districts of Nangarhar. Demining allowed perhaps 40 percent of all households to return from Pakistan. They grew staple crops coupled with poppy to supplement incomes. The recent ban on poppy cultivation resulted in the immediate return of many to Pakistan, as they cannot sustain themselves without the income from poppy. In part, this seems due to loans they had taken from opium dealers, which they cannot afford to repay. For most, the best alternative crop would be wheat, but they need improved seed—which was unavailable at planting time—for this to be a viable option.

33. To avoid situations in which rural livelihoods became dependent on poppy cultivation, both micro-credit and improved seed are needed when refugees return. Micro-credit would allow farmers to resume production without resort to loans from narcotics dealers, and improved seed would then allow these farmers to service their loans and feed their families.

34. In Dand district of Kandahar, the Review Team visited communities where demining had opened land for production, but the karez irrigation systems remained blocked (residents were afraid to clean the tunnels because these were mined). Because this was good land close to a major market, the community had purchased drilling equipment for boreholes, bringing some of the land into production using pumped water. However, costs were much higher, the water table was falling due to the drought, and much of the land remained uncultivated. In Dand, the farming system comprised land and water from artesian wells. Land clearance alone was not sufficient to restore the farming system. In this case, clearing perhaps 90 percent of the contamination has led to far less than 50 percent of the potential benefits—demining the irrigation system would likely pay handsomely in terms of additional agricultural production and induced resettlement.

35. It will not be possible for MAPA personnel, and particularly the surveyors from MCPA, to inform themselves sufficiently about the nuances of rural economies, which vary from one locale to another. In many cases, however, there are people who are familiar with local farming systems. Various UN agencies, and particularly the FAO and the UNDP-ARRP programme, would be good sources of information. However, the greatest expertise is likely to reside with staff in the international and Afghan NGOs that work closely with rural communities, often for extended periods. Joint community assessments with staff from these NGOs would almost certainly result in more informed decisions concerning the sequencing of tasks.

36. Efforts to seek assistance from these sources might also pay dividends in terms of letting the NGOs know where and when mine clearance will take place. If such joint assessment missions took place well in advance of the actual demining, the NGOs would be in a position to plan accordingly. Over time, closer relationships with the NGOs should ultimately result in more concerted efforts by the NGOs to keep MAPA informed about their plans.

F2.2. Transportation and Trade

37. For thousands of years, trade has loomed large in Afghanistan's economy. Afghan farmers typically produce staples for household consumption and higher value crops for the market. Urban consumers are very dependent on road transport for food and other products. The well being of most Afghan households is, to a significant degree, linked to transportation. Accordingly, clearance of roads typically brings significant benefits to even those Afghans who do not travel.

38. The visit to the peri-urban community of Chelsetoon, near Kabul, highlighted the importance of roads. The community first requested clearance after some accidents in crop and grazing land surrounding the village. However, it then asked that the road south be cleared first to allow access to wood, potatoes, and onions from Logar, about 80-90 km away.[1] Once this was done in 1997, the community requested clearance of its orchards and irrigated cropland. This now has been cleared and demining is continuing on grazing land, some of which will be used to build a new village.

39. The importance of transport was also made clear in our meeting with the Sharwal (i.e., mayor) of Kabul. The city's public works priority is the construction of truck parks and markets in all districts to facilitate the shipping, handling, and sale of food from the countryside, plus basic consumer goods. This is necessary to reduce the cost of living in urban areas, which is one of the country's principal peace dividends. The Sharwal emphasised the importance of mine action organisations being aware of municipal priorities, as clearance plans should allow public works to proceed as planned.

[1] Nothing is shipped from the community to Logar. Instead, farmers in Chelsetoon sell produce in Kabul.

F2.3. Access to Social Infrastructure

40. Blocked access to social infrastructure (clinics, schools, community centres, etc.) was not reported as a problem in communities visited by the Review Team. This seems principally due to the dearth of such facilities and—where clinics or schools do exist—the fact that many are not operating because of the ban on women's employment or the absence of public servants. Some villages visited had new community centres, built after mine clearance. UN agencies and other organisations require clearance certificates before scheduling construction projects in mine affected communities.

F3.0. The Kuchi

41. Most of the mine awareness organisations target Kuchi for direct mine awareness training during the seasons they migrate close to major centres.[1] The demining NGOs also say their teams provide MA training in the afternoons when Kuchi are close by the clearance sites.

42. The Review Team visited a number of Kuchi compounds around Kandahar. All said they were aware of the danger of mines and UXO, and had heard of accidents involving other Kuchi. However, very few said they had received mine awareness training.

43. The Review Team feels the MAPA organisations are aware of the special risks faced by Kuchi, and that they devote reasonable resources to address these risks. However, the Team is not in a position to assess the results achieved by these efforts.

[1] The most intensively mined areas surround the urban centres. As well, these are where the mine awareness NGOs are based.

Annex G. Increasing socio-economic impact[1]

G1.0. General

44. There are three broad strategies for increasing the socio-economic impact of mine action in a country:[2]

a) Increase cost efficiency;

- Increase output (m^2/hr) of demining organisations, and/or
- Reduce costs

b) Refine the criteria used in setting priorities;

- First clear the land and infrastructure that offers the greatest potential for production and risk reduction

c) Improve coordination with other development agencies so demining complements other investments.

- Focus on growing communities, sectors, and regions.
- Ensure the potential production and risk reduction benefits are realised as quickly as possible.

45. To date MACA has used mainly 'command-and-control' approaches with the NGOs. This places a significant burden on MACA, which must review and approve many basic administrative matters (salaries, headquarters facilities, etc.) relating to operational efficiency. This leaves less time to deal with the more difficult issues concerning effectiveness and impact.

46. Beyond instituting obvious changes such as the design of the demining team (see Box), we believe the MACA should leave further productivity and cost-control measures to the ingenuity of the Afghan NGOs, and focus increasingly on the effectiveness issues—priority setting and coordination with other development organisations.

[1] The following discussion uses the term 'socio-economic benefit' in a common sense manner without trying to define the term more precisely, for three reasons. First, greater precision is useful mainly when data can be measured on the same scale – usually financial which normally leads to the 'economics' dominating the 'socio.' Second, data are so sparse and poor in Afghanistan that high precision would be spurious and, perhaps, dangerous. Third and most important, MAPA and its international supporters have not opted for a precise goal statement, relying instead on fairly general statements of objectives embracing economic benefits, threat reduction, and what might be termed 'insurance' (i.e., compensating people for the loses imposed by mine contamination). The Review Team endorses this common sense approach, particularly as the SIMAA report indicates the quantifiable economic benefits are more than adequate to justify continued support of MAPA.

[2] See Annex E, 'The Economics of Demining,' for a more complete treatment.

TEXTBOX: THE DESIGN OF THE DEMINING TEAM:

The structure and operating procedures of the first demining teams in Afghanistan was based on a military model of a combat engineering platoon. In most cases, the Afghan NGOs have used this model for the past 11 years. The MAPA has made significant changes to the operating procedures used by these teams resulting in dramatic increases in output. For example the demining team average output for agricultural land increased from 0.2 ha/month in 1990 to more about 2.5 ha/month in 1999.

The management structure is one aspect of the demining team design that remains unchanged. Each team has six management and supervisory staff (team leader, assistant team leader, four section leaders). In the combat engineering platoon, the platoon sergeant (assistant team leader of the demining team) is responsible for administration and, in the absence of the commander, command of the platoon. In combat situations, the commander is likely to spend some time away from the platoon, conducting reconnaissance and planning new tasks.

The same logic was applied when the assistant team leader was included in the organisation of the demining teams. It was envisaged the demining teams would be very independent organisations and operate in isolated areas. This is not the case, demining teams generally operate as part of demining site organisations. Why then do we need assistant team leaders in demining teams?

a) Site office staff provides logistics and administrative support.
b) Section leaders can cover short-term absences of team leaders.
c) Maintaining records of demining operations is not an onerous task as the pace of operations is slow.

Eliminating the assistant team leader post would reduce supervision cost across the mine action programme by more than US$ 21,000 per month.

End Text Box

47. This strategy is feasible because the Afghan NGOs have developed into capable organisations. It offers real hope that the cost-effectiveness of MAPA can be maintained and enhanced because opportunities remain for the NGOs to increase outputs and/or reduce costs if faced with the right incentives. Where possible, MACA should specify what it is willing to pay for certain levels of performance and leave it to the NGOs to determine the most cost-efficient way to achieve the targets. NGOs would still earn the agreed payment if they manage to come under budget, creating a strong incentive for cost-control. For example, some NGOs might decide to share regional office facilities with other organisations, while others will expand programming to garner economies of scale. Similarly, the various NGOs might employ different strategies to reduce salary costs. So long as the NGOs have strong incentive to control costs, MACA need not involve itself with administrative details and need not impose the same solution on all.

48. This shift in approach would require two major changes: 1) new contracting instruments governing the relationship between MACA and the NGOs; and 2) the development of national standards, consistent with ISMA, that would assist in setting benchmarks for safety and quality, with specific focus on demining activities. It also is desirable that the Afghan NGOs continue their evolution into 'true NGOs.' These issues are covered in detail in the section, "The Future of Mine Action" (starting at paragraph 117, page 29).

G2.0. Effectiveness and impact of demining

49. Clearance produces an intermediate output—uncontaminated land and infrastructure—that makes possible the final desired results (more production, more secure livelihoods, etc.). Enhancing results requires that mine action organisations (1) focus their demining assets to create the greatest potential benefit and (2) take reasonable steps to ensure this potential is realised.

50. Concerning the first issue, the draft SIMAA report confirms that demining in Afghanistan creates the potential for significant economic benefits. As such, its priority setting process is adequate to achieve a very positive socio-economic return. However, priority setting does not seem to be optimal, even using a broad definition of 'socio-economic benefits.' For example, it is difficult to understand why grazing land has amounted to 25-40 percent of clearance when, on average, such land yields the lowest benefits in terms of both economic return and risk reduction. As well, clearance of irrigation systems, roads, and residential areas yields higher returns—both economic and risk reduction—than offered by most agricultural or grazing land. Other than tasks avoided for technical and safety reasons, it would have been possible to have completed all priority irrigation, residential, and road tasks by this year had efforts been focused on activities with the highest potential payoffs.

51. It seems a part of the reason for this apparently sub-optimal prioritisation has been ignorance concerning the potential benefits accruing from different types of land. If so, the SIMAA study should go far in addressing this problem. However, figures showing average returns by land type and clearance technique are not entirely adequate for determining whether a certain piece of land or infrastructure should be cleared as a priority. The final decision must be determined after analysis of survey data.[1] However, our impression is that RMAC planning focuses more on the management of demining teams than on maximising socio-economic benefit, as:

a) The RMACs develop operations plans that focus on demining teams and tasks rather than communities or hazard areas identified during general survey operations.

b) The RMACs tend not to develop strategic or operations plans for affected communities. Rather they react to requests and pressures from communities to complete tasks that may be a local priority but are unlikely to maximise the socio-economic impact of the programme.

c) The RMACs could not demonstrate the decision processes used to select or reject requests for demining assistance.

[1] Survey data should be collected and recorded during general, observation, or technical surveys. General survey information is used to assist in planning technical survey missions. Observation missions collect data and analyse requests from the public for demining assistance. They are used to determine the nature and extent of a mine or UXO hazard and the potential socio-economic return resulting from demining. Unlike technical survey missions, observation missions do not mark or reduce the size of the contaminated area.

52. The socio-economic impact achieved by MAPA will also be enhanced if mine clearance can be better coordinated with other development investments. Ideally, MAPA's work would be 'demand led'—responding to clear priorities set by national and international development agencies.

53. Unfortunately, Afghanistan lacks a recognised government and neither UN sectoral agencies nor the development NGOs are able to provide adequate direction to MAPA. Without such direction, there are real limits to how close MAPA could come to setting 'optimal' priorities. It lacks the specialist knowledge required to differentiate between—say—many types of agricultural land or to know which irrigation systems can readily be rehabilitated. It does not know where and when other agencies will make investments that could attract more refugees back to their original communities or boost agricultural productivity. It is not aware of entire communities living as refugees who would return if their lands were cleared. More fundamentally, it cannot work jointly with other agencies to solve problems that are beyond the capacity of any one organisation working alone.[1]

54. One approach to addressing this problem would be for MAPA to expand its socio-economic research function so it could make increasingly refined choices among alternative tasks. This would require a significant investment in skilled personnel and data acquisition, and is not recommended.

55. An alternative approach would be for MAPA to develop an outreach capacity to strengthen links with potential partners (NGOs and UN agencies). Rather than asking for input (which the sectoral agencies and development NGOs cannot now provide) when required in the MAPA annual cycle, MAPA might adapt its processes to better support the planning timetables of potential partners. This might entail an RMAC representative sitting-in as a resource person when an NGO develops its annual work plan. Another simple approach would be for the socio-economic analyst to regularly visit agency and NGO headquarters to discover (1) what information they have and (2) which of their priorities are complicated by mine/UXO hazards. The socio-economic analyst would serve as a broker. On one hand he would obtain information from other agencies and see this gets to the appropriate people within MAPA: on the other he would identify what problems contamination pose for these agencies and put them in touch with the MAPA person who can help them solve these problems. Such an approach is likely to pay significant dividends over time.

[1] An example here might be a major programme to rehabilitate traditional irrigation systems, which can yield extremely high returns. FAO and the NGOs working in agriculture have largely avoiding investing in systems that are mined, and MAPA lacks the equipment needed to clear some of the mines from these systems. If a number of irrigation systems could be rehabilitated once cleared, it would warrant investing in specialised clearance equipment.

G3.0. Effectiveness of Mine Awareness Activities

56. The effectiveness of mine action in terms of reducing civilian deaths and injuries from mine/UXO accidents remains unclear. This will always and everywhere remain a difficult issue, but progress toward greater understanding of the Afghan situation is hampered because data on incidents and victims is incomplete. The AMVIS and the MOU on information sharing between ICRC and MAPA represent two important steps forward.

57. While one cannot be precise about the current effectiveness of mine awareness, it is possible to identify obvious gaps and approaches that are unsustainable. For example, returning refugees do not appear to get adequate mine awareness training in spite of significant resources devoted to this effort. Second, the curricula used by the mine awareness agencies do not give adequate attention to the dangers posed by UXO, particularly as more civilians now are killed and injured by UXO than by landmines. More generally, direct mine awareness training is not a sustainable option for meeting the future needs for the bulk of the Afghan population, while the BBC AEP clearly is a cost-effective channel for reaching large numbers of those at risk.

58. Given the lack of data still limits what can be said concerning the effectiveness of mine awareness, we recommend that MAPA's Mine Awareness Working Group focus now on thinking through a plan to conduct such an evaluation in the future. This evaluation plan will need to start with the ultimate questions—what mine awareness activities work, and for which target groups? It then needs to document:

a) the data needed to answer these questions,

b) which of these data are available now or will be via AMVIS, and

c) how the missing data will be obtained.

The Working Group then needs to plan and budget for this evaluation. The planned assistance from UNICEF would add real value in this area.

Annex H. Internationally recruited staff and technical advisers

59. The internationally recruited staff have a dual role as line managers for UNOCHA/MAPA and as capacity development advisers for nationally recruited staff and the national NGOs. The international team within MACA includes:

a) Programme Manager (UN)

b) Deputy Programme Manager (UN) (vacant post)

c) Mine Awareness Adviser (UN)

d) Training and Technical Adviser (UN)

e) Research and development (In-kind – Swedish Military)

f) Field Coordinator (UN)

g) Field Coordinator (UN)

60. This team has focused on line management functions and capacity development of the NGOs. This strategy has strengthened the implementing partners at the expense of developing management capacity at the national level. Two factors influence the adoption of this approach:

a) The purely technical skill profiles of the staff selected to provide advice and assistance to the national staff in the RMACs.

b) Lack of a recognised government with the mandate to develop a national mine action authority.

61. The MACA Regional Coordinators are very competent technical staff who focus on field level supervision and coordination of demining activities rather than development of skills in strategic and operational planning and management. This focus has resulted in the following:

a) the nationally recruited staff responsible for line management functions within the MACA system have received limited on-the-job training and no formal training in project management;

b) the MACA and RMACs lack documented SOPs that specify work practices and provide guidance to their staff.

c) the MACA does not have a clearly articulated strategy or work plans for the development of competencies of national staff working in the MACA or the RMACs.

d) the MACA field coordinators and RMACs focus on management and quality assurance at the task level, essentially adding a redundant layer of supervision to the management and quality assurance of demining and mine awareness teams.

62. The risks associated with this strategy include:

a) the MACA and RMACs will continue to rely on international staff.

b) the MACA may recruit staff with inappropriate professional profiles to meet national capacity development needs.

c) the MACA may not be able to develop appropriate competencies among its current national staff, who could contribute to improved management and reduced personnel costs, both in the short term and during the period when the programme develops the capacity of the mine action authority established by a recognised government.

63. The MAPA NGOs employ internationally recruited staff and technical advisers to provide support not available from the MACA and the RMACs. These staffing levels vary from time to time. At the time of this review, international members of the national demining NGOs included a Technical Adviser - Demining (AREA), a Technical Adviser - EOD (ATC), a Trials Manager (ATC) to manage trials of mechanical clearance provided through an in-kind contribution from the government of Japan, and an accountant (OMAR) under the terms of a funding agreement.

64. None of the technical advisers could provide a capacity development work plan. However, a review of progress to date and discussions with the technical advisers determined that:

a) the Technical Adviser–Demining (AREA) has completed most of the work needed to establish the project. He should not be required beyond May 2001;

b) the Technical Adviser EOD (ATC) was unable to estimate when ATC would be able to work without a full time EOD adviser; and

c) the internationally recruited staff employed for specific projects or to meet the requirements of specific funding agreements did not have specific capacity development obligations.

65. Evidence from other countries suggests it is difficult to recruit people with professional profiles meeting all requirements for programme management and capacity development. An alternative could be to employ an absolute minimum full time management/technical adviser staff, and provide general and specialist capacity development assistance through short-term consultants with skills complementary to those of the full time team.

H1.0. A UN exit strategy

66. The future of the MAPA as a national institution remains uncertain, which has contributed to UNOCHA retaining a programme management approach based on an international team. While highly successful to date, we believe that it would be more appropriate for UNOCHA to focus on developing national staff to assume greater responsibilities for the management of the programme. A strategy for development of a team of nationally recruited staff should include the following:

H1.1. Short term needs

a) The development of position profiles that allow the UN to classify the posts at an appropriate level (National Professional Officer Level) and recruit suitably qualified project managers, supported by demining and EOD technical staff.

b) The development of competency profiles for each member of the management team and plans outlining how individual competencies and organisation capacities will be developed.

c) A review of the skill profiles for internationally recruited staff of the MAPA, paying particular attention to the "Field Coordinator" positions, with the view to recruiting staff with operations management and management capacity development skills, with less emphasis on technical demining skills.

d) The development and documentation of operations management SOPs needed to specify work practices and guide management staff in the MACA and the RMACs. The development of clear and concise SOPs will also aid in the implementation of the capacity development plans.

e) All technical advisers in both UN and NGOs should document capacity development plans. The plans should identify the competencies required of the people and organisations, the current competency levels, and plans for bridging any gaps. The advisers should be required to provide periodic progress reports.

f) Increased use of short-term consultants to fill the gaps in the skills of the current technical advisory team.

H1.2. Medium to longer term needs

67. Many things are required for effective organisational performance. First, the organisation must have the requisite capacity, stemming from individual skills, sound management systems, and adequate resources. Second, it and its staff must be motivated to pursue its mandate. Finally, an organisation's performance may be enhanced or constrained by the actions of other organisations with which it must work. For mine action organisations, this requires working well with others in the MAPA family to achieve operational effectiveness. However MAPA must also coordinate effectively with other humanitarian and development initiatives if it is to achieve its potential in terms of socio-economic impact. These various challenges can be grouped into four levels, and performance development[1] entails identifying and resolving performance constraints arising in any or all of these levels:

a) individual - staff must have the requisite skills and experience.

[1] In the UN system, what we have termed performance development is often termed 'capacity development.' The term capacity building is now generally used more narrowly to refer to actions at the first two levels.

b) organisational - the organisation must have a clear mandate, lines of authority and responsibility must be well defined, and systems must be in place for effective management control and performance measurement.

c) task network - organisations must exchange information and coordinate activities with other organisations that have broadly common objectives.

d) institutional environment - the country's constitutional, legal, and regulatory structure, together with social norms, establish an incentive structure that may or may not reward achievements and penalise malfeasance and performance shortcomings. As well, the performance of aid-financed organisations is strongly influenced by the international aid system.

68. Other sections of this report have dealt with capacity at the individual, organisational, and task network levels. However, in the near future it is the final level—the institutional environment—that presents the greatest risk to sustained mine action performance in Afghanistan. The MAPA must eventually undergo three transitions:

a) Within the UN system, responsibility for supporting MAPA is likely to shift from UNOCHA to UNDP;

b) Overall responsibility for the MAPA must ultimately shift from the UN to a recognised national government;

c) There must then be a transfer of capacities to national organisations, which itself entails two major issues:

- from MACA to a national authority and a national mine action centre; and
- possible shifts in responsibility and capacities for implementation from the NGOs to other organisations designated by the national authority (e.g., a parastatal or other public sector body).

69. With such a sequence of decisions, there is a danger the various decision-makers involved will focus only on the immediate issue facing them; not factoring-in the influence their choices may have on the subsequent decisions. For example, it is natural for policy-makers to seek the best risk-return ratio from any decision. However, with interlocking decisions made by different people, it may be better to accept more risk at an early decision point if this increases the likelihood that a preferred option will be selected at the final stage (or decreases the likelihood of an unpalatable final outcome). If those responsible for the initial decision first develop a vision of their preferred future and a strategy to achieve that outcome, this danger can be reduced.

70. In broad strokes, the possible final outcomes for an Afghan mine action program are outlined in the following decision matrix:

		National Authority & Centre	
		Weak	**Capable**
Demining Organisations	**NGOs**	Poor outcome	Ideal outcome
	Public	Worst outcome	Fair outcome

71. The combination of a weak national authority and mine action centre coupled with an attempt to absorb the existing mine action NGOs and their trained personnel into the public sphere would be a disastrous outcome; almost certain to cause existing capacity and donor goodwill to evaporate. A capable national authority and centre with the existing mine action NGOs as implementing partners would preserve existing capacity and (likely) garner continued donor support. Other possible outcomes might range from poor to workable.

72. MAPA partners should develop a vision and strategy to provide a framework to ensure decisions are taken with the ultimate goal—sustaining mine action performance—in mind. For example, the decision of whether and when to transfer responsibility for the MAPA from UNOCHA to UNDP should be determined by which agency is best placed and able to assist a future recognised government with the formulation and implementation of a plan to develop sustainable indigenous capacity.

73. Once the vision and strategy are in place, discussions with the *de facto* authorities on the broad principles of the future mine action structure, plus transition plan options, should begin as soon as feasible to ensure future recognised authorities are fully aware of the options and potential pitfalls. Ideally, this would result in a consensus on the preferred outcome, raising the government's sense ownership and the likelihood of smooth implementation.

Annex I. Operations management and service delivery

I1.0. Survey

I1.1. General survey

1. In 1993, the MAPA undertook a national general survey and assessment of the impact of landmines. This identified more than 455km^2 of contaminated land, including 113 km^2 considered as high priority for clearance. This survey provided guidance for the allocation of mine action resources and assisted in establishing the MAPA demining[1] management information system (MIS). MAPA has continued to develop its demining MIS, updating information from the initial survey by collecting data on areas not accessible at that time and obtaining new information from returnees. The estimate of mine hazardous areas now stands at 915 km^2, with about 330 km^2 of high priority land remaining to be cleared. In 1996, a separate accident and victim database was developed. The MAPA uses this data to inform the demining and other mine action planning processes. The MACA uses general survey information to develop annual work plans and RMACs should use this data to develop strategies for mine action at provincial and district levels.

2. In 1997/1998, MCPA undertook a further socio-economic impact survey (SEIS) to assess the impact of landmines and the benefits accruing to the mine action programme. Further discussion on this aspect of the general survey process and measuring socio-economic impact of the MAPA can be found in Annex E.

3. Unfortunately, the MAPA MIS presents reports and other data in a series of tables, which are difficult to use for planning and ineffective for informing non-experts in MIS or mine action management. The RMACs do not produce or maintain district and province level maps showing current information on mine or UXO hazards. As a result, very little regional, provincial and district level mine hazard information is readily useable to inform demining management, other agencies or the public. The ProMIS system has the data sets needed for quick and dramatic improvements in the presentation of this type of information.

[1] The 2000 revision of the International Standards for Mine Action (ISMA) defines the demining element of the mine action sector to include survey and mine and UXO clearance.

I1.2. Technical survey

4. There is a perception that the technical survey is undertaken to provide an inventory of tasks that can be prioritised for permanent marking or clearance. This is not how the process is applied in Afghanistan. Priorities are based on the information established during the collection and continuous updating of general survey data. The technical survey teams then investigate reported hazards and develop a technical specification and subsequent plan for the risk mitigation process (clearance or permanent marking). The MAPA has accredited two organisations to undertake technical surveys – MCPA and The HALO Trust. The Review Team did not have the opportunity to observe The HALO Trust teams. The procedures and work practices applied by MCPA were both logical and sound. The survey report formats meet guidelines specified by ISMA and provide relevant information for the tasking and management of demining operations.

I1.3. Integration of area reduction into the demining process

5. To be successful, area reduction[1] requires staff with a thorough knowledge of the tactics and techniques used during the conflict and of technologies and sampling procedures that are more cost efficient than those used in the clearance process. This process includes sampling techniques that identify the limits of the tactical minefield, reducing the need for expensive and slow clearance of land that does not contain hazards.

6. Most mine action programmes rarely achieve significant area reduction because:

a) the technologies used in area reduction are rarely much cheaper or more efficient than those used during clearance,

b) mine action managers are unable to accept risks associated with releasing land declared 'safe' using a sampling process.

7. The MAPA approaches ”area reduction” at two levels:

a) clearance undertaken during the technical survey process, and

b) tasking MDGs to clear Category C[2] areas, AT hazards, and minimum metal mine hazards. In essence, areas reported as 'area reduction' are cleared during the survey process.

[1] Area reduction is an element of the hazardous area risk management strategy. Ideally, the process should reduce the hazardous area indicated by local people to areas that actually contain hazards, thereby optimising use of the programmes limited demining resources.

[2] MAPA groups hazards into three levels or category of risk, which are defined as follows:
Category A. Areas where mines could be visually seen.
Category B. Areas where mines could not be seen but mines have been found during the survey operations.
Category C. Areas where mines can neither be seen nor have they been found during the survey, but locals would not use the area unless it has been checked.

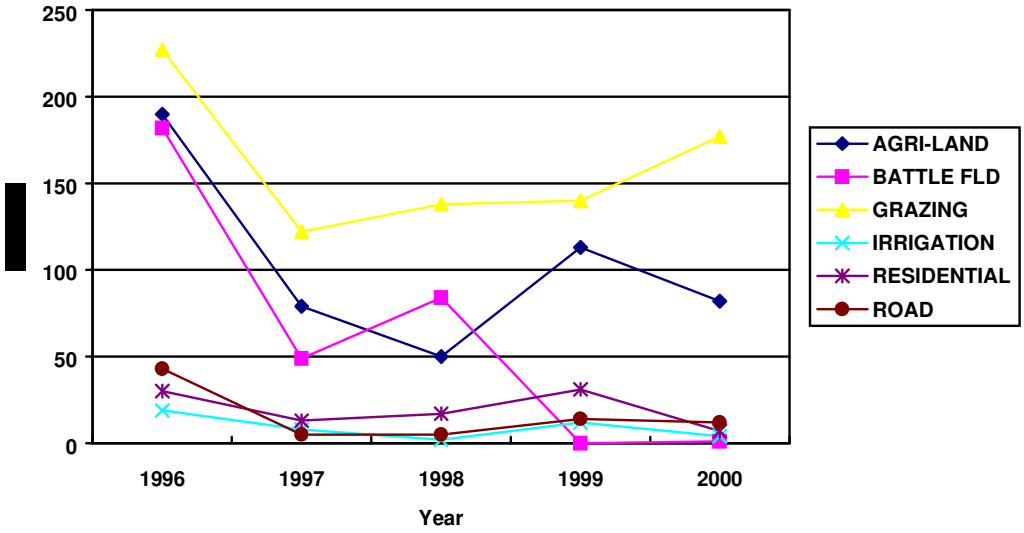
I1.4. Clearance undertaken during the survey process.

8. MCPA technical survey teams generally include a Mine Dog Set (MDS)[1] to assist in clearing task boundary lanes.[2] Any additional search capacity of the MDS is used to clear small amounts of the hazardous area while the remainder of the survey team completes its marking, measurement, and recording tasks.

9. During the past four years MCPA, with the assistance of MDSs, has cleared 1,164 hectares during the survey process. The graph "Area cleared during technical survey", below, indicates current trends.

10. During 1999, the survey teams supported by 33 MDS cleared about 308 ha. An examination of the output trends revealed that the same number of dogs used in MDGs could clear 600–900 ha. annually. The MAPA should examine the cost benefit of using dogs in the survey process.

Area cleared during technical survey



I1.5. Progress in indigenisation of the survey process

11. Both agencies authorised to undertake technical surveys apply standards as specified by the MACA and provide data to the MAPA demining MIS. The HALO Trust undertakes technical survey for tasking and management of its own demining assets. MCPA undertakes technical survey to meet MACA or RMAC requirements relating to all other demining agencies.

[1] The MDS comprises two explosive detection dogs and dog handlers supervised by a set leader.

[2] Boundary lanes that define and mark the perimeter of a hazard areas are cleared of mines and UXO, and normally are one metre wide. Their purpose is to warn of the presence of the hazard and to provide a known safe area for clearance teams to access the clearance task.

12. MCPA is a totally indigenous organisation. The Halo Trust (Afghanistan) project is essentially indigenous. The project is monitored by HALO Trust head office technical staff, who undertake periodic needs assessment missions and provide technical assistance and training when required.

I2.0. Planning and resource allocation

I2.1. Prioritisation of mined land for demining

13. RMAC managers are responsible for prioritisation decisions. Current management thought argues that this process should strive for the maximum socio-economic impact from available resources. In practice, the RMACs generally respond to requests for urgent assistance from agencies, local authorities and the public. The RMACs do not have management systems that would allow them to determine the socio-economic implications of prioritisation decisions. The risk with this approach is that:

a) a close review of the socio-economic benefit achieved from individual demining interventions will reveal anomalies, raising questions about the validity of the prioritisation process.

b) the programme is not optimising the use of its resources.

I2.2. Data transfer from the survey teams

14. A flowchart of the data transfer process is included in Annex J. The output of the technical survey process is a marked clearance task[1] and a detailed specification for clearance.[2] The documented process appears sound.

I3.0. Planning, coordination and resource allocation

I3.1. Coordination with non-mine action organisations

15. The term coordination embraces different issues, including (in order of ambition):

a) Simple information exchange to identify gaps and overlaps;

b) Joint assessments and evaluations, so different agencies devise plans using a common base of information;

c) Agreement on common objectives;

[1] MAPA uses the term “minefield” to describe each “clearance task”. The term minefield could be misleading because the SOP for technical survey places restrictions on the area to be included in a single clearance task. While this restriction assists prioritisation decisions and the management of clearance assets, it does not identify the full extent of the known or suspected hazard in an area. This process could contribute to confusion regarding the logic applied to establishing priorities within a district or areas surrounding a village.

[2] The MAPA does not use the term specification for clearance to describe the survey report.

d) Coordinated programming, so actions by different agencies are of complementary scales and undertaken in logical sequence.

16. Coordination also takes place at different levels (headquarters, operations, etc.). A common observation is that, for Afghanistan, coordination in the field is more effective than between headquarters.

I3.2. UN Agencies

17. The UN has long been criticised in Afghanistan and elsewhere for poor coordination among its agencies. Such coordination generally is difficult because:

a) the agencies have different mandates, leading to 'mandate protection and mission creep',

b) funds typically are scarce, leading to inter-agency competition,

c) most UN agencies depend on implementing partners (in Afghanistan, often international and local NGOs), which strive to promote their own priorities and interests, and

d) UN funding comes from bilateral and pluri-lateral donors, which pursue their individual objectives and apply different policies and procedures.[1]

18. From 1988-92 in Afghanistan, UNOCA was charged with responsibility for coordinating humanitarian and development assistance. It had significant resources and, therefore, leverage through the Afghan Emergency Trust Fund (AETF). After 1992, following its placement within the new UN Department for Humanitarian Affairs (DHA), the renamed UNOCHA was restricted to humanitarian activities and the provision of common facilitation services. The UNDP became coordinator for rehabilitation and development activities.

19. In 1997 two new attempts at coordinating UN activities converged in Afghanistan:

a) a field-driven process, currently known as Principled Common Programming (PCP).

[1] Overseas Development Institute (1999) has an extended discussion on both UN and NGO coordination for Afghanistan programmes.

b) the UN-wide Strategic Framework, under the Deputy Secretary General, which aims to encompass the UN's assistance, human rights, and political objectives into an overall strategy;

20. The former effort entailed the merging of the UNDP Resident Coordinator and the UNOCHA Humanitarian Coordinator into one position and the creation of 'a mechanism for establishing the assistance community's priorities, programmes and projects...'. These are submitted to an overall Afghan Programming Body for compilation into a more coherent and thematic Common Appeal (CAP).[1] This mechanism centres on Regional Coordinating Bodies (RCBs) that bring the UN agencies and NGOs together on a regular basis. A variety of thematic and sectoral working groups feed into the RCBs.

21. The PCP still depends on consensus. Agencies and NGOs retain their individual mandates, policies, and procedures, and most can obtain funding outside the CAP. Therefore, the mechanisms cannot enforce common interpretations on the agreed principles or construct a common programme. The RCBs and working groups serve principally as mechanisms for sharing information and provide opportunities to foster good relations between individuals that might in turn enhance cooperation on the ground.

22. The PCP process represents an incremental improvement on previous practice. Short of more root-and-branch reform of the global development system, such incremental improvements are, realistically, the best that can be hoped for in a country still lacking a recognised government.

23. The ProMIS system further facilitates information exchange, although its potential remains far from fully exploited. Increased capacity for the visual presentation of data on district maps would greatly enhance the utility of this system and encourage all agencies to increase their commitment to a standard GIS approach for data exchange.

24. For mine action in particular, far better coordination is effected, in part, because Afghanistan's mine action community receives most of its funding via the AETF, giving MACA significant financial leverage to bolster moral suasion.

I3.3. NGOs

25. The RCBs also facilitate coordination between MAPA organisations and the broader NGO community, although most NGOs believe the preoccupations of UN agencies dominate this mechanism.

[1] These reforms generally have been encouraged by the donors, which themselves meet with UN agencies within the Afghan Support Group (ASG), formed in 1997.

26. All NGOs met by the Review Team expressed strong support for mine action and concern over the recent funding cutbacks. However, many feel that MAPA could provide better support for their operations. Non-MAPA NGOs in the Eastern Region see the Mine Action Working Group operating principally for mine action organisations, rather than for all agencies and NGOs whose work is affected by mine and UXO contamination. Technical, rather than developmental, issues dominate the discussions. Most NGOs find MACA's annual planning processes too rigid, and want MAPA to widely distribute quarterly progress reports and—especially—maps of mine contamination and clearance (both completed and planned). Some suggested the need for extra rapid response teams to assist NGOs with unforeseen mine/UXO problems that hamper their operations. The evaluation team agrees with this concept, particularly as UXO is now recognised as a major problem in Afghanistan.

27. NGOs have themselves established five coordinating bodies

a) ACBAR (Afghan NGO, founded in 1988, to co-ordinate both international and Afghan NGOs based in Peshawar;

b) ANCB (Afghan NGOs Co-ordination Bureau), founded in 1991 to promote the interests of Afghan NGOs;

c) ICC (Islamic Co-ordination Council), founded in 1985 and based in Peshawar;

d) SWABAC (South-Western Afghanistan and Baluchistan Association), founded in 1988 in Quetta (now working from Kandahar) to coordinate NGOs based in Baluchistan and south-western Afghanistan;

e) NGO Forum, formed recently in Kabul with only international NGOs as members.

28. Mine action NGOs are members in these umbrella bodies, as follows:

NGO	ACBAR	ANCB	SWABAC
AREA	**X**	**X**	
ATC	**X**	**X**	
DAFA			**X**
HI	**X**		**X**
MCPA	**X**	**X**	
MDC	**X**		**X**
SC-US	**X**		

I4.0. Limitations of existing coordination mechanisms

29. While useful, existing mechanisms—even if strengthened—can only provide a second-best solution. The UN and NGOs lack the mandate and nation-wide presence required to formulate and implement an effective strategy for national development. Widespread and pressing needs mean that hard decisions must be made to focus scarce resources coherently to assist specific communities, sectors, and geographic areas to overcome multiple constraints that keep them in poverty. Far greater resource mobilisation by an Afghan state is even more important, as donor assistance will never provide resources on a scale to match the country's problems. Only a national government with a strong developmental focus can achieve what is required, including the coordination of international assistance to align this with national priorities. In the absence of such a government, other development actors must be realistic about what can be achieved via enhanced coordination among themselves. For example, the Poverty Eradication and Community Empowerment (P.E.A.C.E.) Initiative represents an effort to go beyond information exchange toward joint programming, and illustrates how difficult it is to put this into practice.

TEXTBOX: THE P.E.A.C.E. INITIATIVE (PI)

The Poverty Eradication and Community Empowerment (P.E.A.C.E.) Initiative represents an effort to improve coordination among five distinct programmes, all receiving core funding via UNDP:

- Afghanistan Rural Rehabilitation Programme (ARRP), executed by UNOPS;
- Comprehensive Disabled Afghan Programme (CDAP), executed by UNOPS;
- Rebuilding Communities in Urban Areas (RCUA), executed by UNCHS-Habitat;
- Crop Production executed by FAO (FAO-CP); and
- Livestock Development, executed by FAO (FAO-LD).

The distinct projects had been running for three years before the commencement of the PI in 1997. To achieve tighter coordination, all were to feature two 'unifying elements' (poverty alleviation; community empowerment) and promote two broad goals (peace-building; good governance) by focusing on three sub-objectives (food security; access to social services; access to livelihood opportunities).

To improve impacts given limited funding, it was decided to further target limited geographic areas (23 districts and six urban areas), selected principally on accessibility and security, plus ethnic and political balance, rather than development potential. In fact, the five projects still operate in different -- albeit overlapping -- geographic areas, as indicated in the following table.

	ARRP	RCUA	CDAP	FAO-LD	FAO-CP
Kandahar	5 districts	Kandahar city	6 districts	56 districts	10 districts
Farah	5 districts	Farah	4 districts		6 districts
Badakhshan	2 districts		2 districts		4 districts
Balkh	1 district		5 districts		
Bamyan	3 districts	Bamyan			7 districts

In addition, the three projects using community mobilisation (ARRP, RCUA, CDAP) maintained different approaches, and no common guidelines could be agreed for the various micro-credit and revolving fund components.

Still, the PI was seen as a step forward and is being extended until the end of 2003. This future phase will feature three sub-programmes (reintegration of returnees; food security & sustainable livelihood; basic social services), designated Regional Offices (i.e., those housing

the designated Regional Team Leaders—not common offices for all PI projects), common facilities and services 'that can be shared', and full-time regional Community Liaison Officers to 'facilitate community mobilization services by all PEACE partners.'
END TEXTBOX

30. As well, mine clearance—far and away the major mine action component—is extremely site specific. Few UN agencies and NGOs develop their future activity plans with enough spatial specificity to be useful for mine action planners. Exchange of district-level agency work plans is simply not sufficient for MAPA, which requires information at the community level.

31. With these inherent limitations in mind, the impact of mine action would likely increase if UN agencies and NGOs made greater demands on MAPA. Perhaps because there are so many needs, many agencies seem simply to avoid mine-contaminated communities, thus minimising potential risks.[1] An alternative approach would see agencies and NGOs select communities strategically, to maximise development benefits, and then press MAPA for early clearance of selected communities that happen to be mine contaminated. MAPA's programme would then become more 'demand-led' and it would have greater assurance that its efforts will be complemented by other development investments, thus raising the returns to mine action.

32. There are also clear examples where coordination failures lead to inefficient mine action. An obvious example is the provision of mine awareness (MA) services to refugees returning from Iran, where:

a) ARI provides training on the Iranian side,

b) OMAR provides training and information on the Afghanistan side of border crossings, and

c) AMAA provides training in the Herat camp, where the returnees spend one night before transport to their provinces of origin.

33. Even with this triplication of effort, it seems many returnees do not receive adequate—or perhaps any—MA. ARI reports that, on a number of occasions, returnees are rushed across border assembly points, allowing no time for proper MA sessions. Returnees typically then hurry to the trucks transporting them to the Herat overnight camp, so OMAR teams do not have time for proper sessions. They are not even in position to focus attention on the returnees missed by ARI because there is no communication between the two NGOs. Finally, the numbers arriving at the Herat camp[2] for one evening far exceed AMAA's capacity.[3]

34. The safety of returnees is a UNHCR responsibility, which also arranges transportation via the IOM or, for returnees from Pakistan, a family travel grant. While communication and transportation difficulties abound, improvements to this process could be achieved.

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[1] For example, agencies and NGOs often require a mine clearance certificate before a community will be included in their programming plans.

[2] These have averaged over 1,300 this year.

[3] AMAA stopped operations in September 2000 due to lack of funding. It would resume if funding were received.

I5.0. Partial solutions to coordination problems

I5.1. Better exchange of information

35. The Programme Management Information System (ProMIS) offers great potential for improved information exchange between MAPA and other humanitarian and development organisations. It is of particular relevance to mine action, which is spatial in nature. NGOs in particular have emphasised their desire for maps depicting the status of contamination and clearance. Providing these would certainly motivate these NGOs in turn to supply ProMIS with accurate and up-to-date information, and perhaps to make greater efforts to feed-into MAPA's annual planning process.

I5.2. Spatially-integrated programmes

36. The Greater Azra Initiative (GAI) attempts to foster closer cooperation among humanitarian and development agencies in districts that, heretofore, have not received significant assistance. As such, it aims to attract more aid to those districts as well as manage that aid to greater effect. Initiated by UNHCR and the Embassy of Japan in 1997, its initial focus was to improve reintegration assistance to refugees returning from Pakistan by 'bridging the gap' between humanitarian and development assistance. A task force comprising UNHCR, UNDP, FAO, UNOPS, WHO, WFP, and MAPA agreed on joint assessments, planning, missions, etc., to be coordinated by a full-time Programme Coordinator working within UNHCR. Funding from the Government of Japan ($2.2 million for 1998-99 and $3.4 for the second joint programme, starting 2000) played a catalytic role.

37. The pilot phase focused on the Azra district and Tezin area, while the expanded second phase covers three 'first target' and three 'second target' districts. UNDCP and a number of NGOs (AG BAS-Ed, IRC, CARE International, DACAAR) joined as partners and a Steering Committee, meeting monthly, has been established. Programme components are:

- Baseline survey
- Voluntary repatriation
- Returnee monitoring
- Community organisation
- Shelter reconstruction
- Potable water
- Agricultural system rehabilitation
- Livestock development
- Income generation
- Education
- Health & sanitation
- Mine action
- Infrastructure

38. While it is too early to evaluate fully, the GAI's tighter geographical focus may encourage participating agencies to address the needs of mine-affected communities, rather than avoiding these communities until clearance has been done. If so, this will lead to more demand-led mine action, which would be a boon to MAPA.

I5.3. Community-based approaches (AREA)

39. The concept of community-based demining originated in 1995 with Austrian funding to the Agency for Rural Development of Afghanistan (ARDA). The approach was picked-up by Agency for Rehabilitation and Energy Conservation (AREA) from late 1997, and it runs two community-based demining teams in Nangarhar as part of its broader integrated community development programme. AREA uses participatory approaches and engages people from the community to undertake the clearance, paying them $20/month—far less than 'professional' deminers make.

40. At present, AREA faces the following constraints, and the full potential of this community-based approach is yet to be known.

a) While participatory approaches are designed to identify and act upon the community's own development priorities, AREA's funding is mainly tied to specific services or target groups (e.g., concrete beams for residential reconstruction for current year returnees). Therefore, it can animate the community to identify 'demand-led' initiatives, but is itself limited to 'supply-led' assistance. It is hard to believe that communities in crisis will not be tempted to adjust their priorities to access whatever assistance is on offer.

b) Mine clearance programmes entail significant management overheads and, therefore, economies of scale. AREA cannot fully exploit these when operating two clearance teams; it believes the same management structure could support up to eight teams. Unless expansion is funded, MAPA may not be able to determine whether community-based clearance is cost-effective.

c) Regardless of the approach employed, mine clearance is costly and should be restricted to high priority land. For some reason, AREA has been assigned to work on lower priority minefields, while manual, dog, and mechanical teams are assigned to clear high priority land nearby.

41. Community-based demining is an intriguing concept, but certain safety and cost-effectiveness questions remain unresolved. The potential benefits, including the virtuous circle arising from the growth in community confidence once it has successfully addressed one of its own development priorities, suggest the experiment is worth pursuing at least to the point where its potential can be properly evaluated.

I5.4. Taliban authorities

42. We found the Taliban authorities supportive of the mine action programme. They expressed appreciation of the support from the international community and of the work undertaken by the MAPA. Most authorities said they facilitated rather than directed the work of the mine action programme. Despite this we heard anecdotal evidence of local authorities pressuring MAPA to modify plans to meet their demining priorities. Minor conflicts over priorities are not unexpected. It would be naïve to believe these would not arise and, in certain cases at least, the authorities are right to bring pressing needs to the attention of MAPA. In general, pressure from authorities to undertake tasks that do not meet MAPA criteria seems not to jeopardise the integrity of the work planning process, and disagreements seem to be resolved through dialog between authorities and RMACs.

43. One constant criticism of MAPA by the authorities is that mine action is too expensive, and MAPA should be able to achieve more with its funding. High salaries for deminers and, especially, executives of the local NGOs seem a particular concern.

I6.0. Looking to the future

44. The further evolution of the national implementing partners could entail one of more of the following:

a) managing mine action projects internationally;

b) supplying goods and services to the international mine action community from Afghanistan;

c) implementing non-mine action development projects within Afghanistan;

d) the provision of other public services (e.g., technical training) within Afghanistan.

45. Some of the NGOs have already taken steps in these directions.[1] Some in UNOCHA and the donor community are concerned about risks arising from such steps and the implications for MAPA. The Review Team believes the further evolution of the NGOs into independent organisations should be encouraged as this will increase the likelihood the NGOs will survive the future transitions facing MAPA, thus preserving a decade of donor investment in capacity development. Short-term risks to MAPA are manageable because five large NGOs give sufficient redundancy within the system—the failure of one demining NGO would not spell disaster. Medium-term risks can be reduced by a parallel effort at NGO capacity development (discussed in Annex K, Section K6.0).

1 MCPA has mine action contracts in Yemen and Northern Iraq. ATC manages a number of small humanitarian and development projects in Afghanistan. MDC is considering the expansion of its breeding and training programs to supply mine dogs internationally. META would like to develop management training courses for other mine action programs. OMAR has plans to establish technical training institutes.

46. How can this further evolution be facilitated? A key will be the development of new contracting instruments[1] that:

a) focus on the results desired by MACA and its supporting donors,

b) provide incentives for the NGOs to pursue those results with vigour, but

c) allow them greater flexibility to manage their own affairs within a broad policy and regulatory framework set by MACA.

47. Such contracting instruments should incorporate the following:

a) funding on the basis of advances rather than payments after tasks are completed;

b) a clear and objective basis of payment;

c) a distinction between direct and indirect expenses, with the latter being treated as overhead and reimbursed at an agreed percentage of direct expenses;

d) clear policies and standards for transparent accountability.

48. For the latter, MACA should specify the need for audited financial statements covering all operations (i.e., including those funded by other donors) from each NGO it funds.

49. The 'basis of payment' is likely to be the principal challenge. This could be for 'actual and reasonable' direct expenses, coupled with an overhead percentage to cover indirect costs, such as headquarters expenses. Where feasible however, attempts should be made to develop performance-based approaches, as these provide greater incentive to improve cost effectiveness.

1 In UN terminology, 'funding agreements' typically are used for engaging NGOs and 'contracts' are used for commercial operators. Both funding agreements and contracts are 'contracting instruments.'

I6.1. Contracting for Mine/UXO Clearance and Survey

50. Performance-based funding should be feasible for clearance NGOs. This will require development of estimates for clearance rates by land type so a single 'standardised index of area cleared' can be calculated. The Review Team hoped to provide a 'first-cut' index for further refinement by MAPA, but the data quality in the survey database is too poor to allow even a rough calculation.[1] The SIMAA study did develop such an index, but further work is needed. Therefore, the following table should be treated as an illustration only to demonstrate how to construct such an index (here called 'units of flat agricultural land equivalent' or ALE units).

	Conversion	Slope Adjustments[2]		
Land Type	**Weight**	**10%**	**20%**	**30%**
Agricultural	1.00	less 5%	less 8%	Less 10%
Battlefield	0.03	less 5%	less 8%	Less 10%
Grazing	0.65	less 5%	less 8%	Less 10%
Irrigation	1.35	less 8%	less 10%	Less 12%
Residential	2.80	less 8%	less 10%	Less 12%
Road	0.75	NA	NA	NA

Thus, a package of 1,000 m^2 of flat land from each of the land types would be 6,580 ALE units.

51. The 'basis of payment' should also incorporate very strong incentives for safety and clearance quality.

52. Once such an index is constructed and tested, it could form the basis for negotiating contracts/funding agreements between MACA and the clearance NGOs. The NGOs would earn an agreed amount, covering both direct and indirect costs, for each standardised land unit cleared. There would be no payment for land that does not pass the external quality assurance test and a penalty for accidents and safety violations. If a clearance NGO completed its quarterly target with time to spare, MACA could sign a supplementary agreement for additional clearance if funds are available. To allow such flexibility, MACA should only contract for, say, 90 percent of its budget limit in any quarter. Over time, a higher proportion of total funding would go to those NGOs that can clear most cost-effectively, while the less efficient NGOs would shrink.

1 We attempted to calculate productivity trends and comparisons between the estimated and actual clearance times. We found that fewer than 25 percent of the 3550 records of minefields surveyed by MCPA contained data in all the necessary fields and lacked obvious data errors. It is very unlikely this 25 percent of records comprise a representative sample of the total population, and therefore any results obtained from analysing these would be incorrect. We are uncertain whether earlier studies (e.g., Horwood, 1997) used this same data set and, if so, corrected the errors before analysis.

2 Other adjustments may be required for the density of metal fragments and for vegetation.

53. Such a system will depend critically on the time estimates for clearance. To motivate improvements in this area, the MCPA contract might feature incentives for reducing the average difference, in absolute value terms, between estimated and actual clearance times.[1] This would have to be evaluated at the end of each quarter or year, so the incentive might be in the form of a bonus payment for estimation accuracy. The contract should also provide penalties for accidents during survey operations and for mis-specification of clearance technology (e.g., assigning manual teams to tasks that require mechanical approaches).

54. Clearance using new technologies should be excluded from such performance-based approaches to contracting, as reasonable estimates could not be generated. Similarly, there may be tasks that are inherently difficult to estimate (e.g., clearance in residential areas or clearance of certain types of irrigation works). Work on such tasks should also be reimbursed based on "actual and reasonable" direct expenses, coupled with an agreed overhead to cover indirect expenses.

I6.2. Contracting for Mine Awareness

55. Currently there is no satisfactory performance indicator for use as a basis of payment. Clearly, 'numbers of beneficiaries' is inadequate as this does not account for differences in inputs or service quality, and is subject to systematic falsification. Yet, there is no way to attribute changes in the victim numbers (the ultimate objective) with the provision of mine action services. Still, MACA should reassess whether it wishes to fund direct mine awareness training except for well defined target groups, such as:

a) Returning refugees;[2]

b) IDPs;

c) Kuchi about to enter a heavily contaminated region;

d) Women and girls from communities with contamination in residential and other areas where females can go freely.[3]

I6.3. Contracting for monitoring, evaluation, and training services

56. While in theory an evolution to performance based contracting for the services provided by META could be made, the nature and mix of its services are likely to change significantly over the coming years. Therefore, MACA should not introduce performance-based contracting for META.

1 This would be in addition to the use of a standardised land index to assess survey productivity within MCPA and The HALO Trust.

2 A new curriculum for this target audience is required.

3 At the present time, such training may have to be delivered at health facilities.

I7.0. Risk reduction – Clearance operations

I7.1. General

57. Clearance is the process of identifying and removing all mine and UXO hazards to a specified depth. The MAPA standard is the removal of all devices to a depth of 200mm below pre-conflict ground levels.[1] Technologies include:

a) manual clearance,

b) explosive detection dogs, and

c) mechanical systems.

I7.2. Manual clearance

58. The procedures used by MAPA NGOs should meet the quality standards specified by MACA and the ISMA.[2] Supervision and quality control of processes and procedures at field level have improved significantly during the past three years, resulting in a significant reduction in demining incidents and greater confidence in the quality of clearance. Specific comment on quality assurance is included in Annex L.

I7.3. Explosive detection dogs

I7.3.1 Background

59. The effectiveness of explosive detection dog technology is the subject of considerable debate within the international mine action community.[3] Much of the debate centres on a lack of scientific data on how dogs actually detect mines and explosive items, with considerable variation of opinion on best practice for this technology. Despite this, most mine action managers agree that dogs are an essential element of a balanced approach to demining.

60. Internationally, the trend is to apply stringent testing and quality assurance regimes that assess the individual skills of the dog and handler team before accreditation or licensing of the dog and handler.

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[1] 200mm is the depth specified in the 1997 release of international standards for mine clearance.

[2] Most of the Afghan NGOs Safety and Occupational Health standards do not meet the requirements specified in ISMA. See the section on Safety (below).

[3] The GICHD is currently undertaking a study into the effectiveness of explosive detection dog technology. The results this study should inform the development of international standards for the application of this technology. These standards should include specifications for training of dogs and dog handlers, accreditation of organisations using explosive detection dogs in demining, and quality assurance for this technology.

I7.3.2 MAPA Strategy

61. The MAPA uses dog technology in three major roles:

a) to support the technical survey process, providing the capacity for some area reduction;

b) to undertake clearance in areas known or suspected to contain minimum metal landmines, including AP and AT mines; and

c) to undertake clearance in open areas, including grazing and agricultural land and open areas adjacent to residential land and irrigation systems.

I7.3.3 SOPs

62. MDC's SOPs for both MDGs and MDSs outline procedures that should reduce to tolerable levels the risk of using land following clearance.[1] The staff of the MDGs observed during the mission applied the documented SOPs and demonstrated sound knowledge of other documented procedures. All MDGs observed during the mission maintained detailed quality assurance records of the work undertaken by the team.

63. MDSs observed during the mission did not appear to apply the same standards in safety and quality control. The major differences were in the marking systems used to indicate cleared areas and hazardous area of the work-site. The risks associated with these variations include:

a) increased risk to dog handlers and other demining staff, and

b) increased risk of missing a device during area reduction.

MDC and MCPA supervisors and team leaders should ensure strict compliance with the documented SOPs.

I7.3.4 Quality of supervision

64. Teams were closely supervised to control the quality of the specified procedures. Team leaders' diaries were generally well maintained, recording information on daily work activities and quality assurance inspections undertaken by dog trainers and by operations management staff of MDC.

[1] The aim of the clearance process is the removal of all hazards. However, we must recognise the limitations of technologies and the people employing them. Therefore it is not possible to declare any cleared area as hazard free. The term tolerable risk, in this circumstance, is used to recognise the ever-present residual risk in using land once contaminated by mines and UXO. During the mission, a mine incident occurred in Herat, in an area declared clear following clearance by an MDG. The MACA undertook an investigation into the incident. The investigation report and intended remedial action were not confirmed at the time of this report.

I7.3.5 Identification of non-conformities and corrective action

65. In late 1999/early 2000, MDC and the MAPA conducted a review of the procedures and work practices applied by the MDGs to identify actions needed to reduce the number of missed mines. The review developed modifications to the procedures used in controlling clearance on the work-site to assure that clearance is undertaken in accordance with the SOPs developed in 1994. The result has been a considerable improvement in procedures that reduce the risk of error and missed mines.

I7.3.6 Care and control of dogs

66. The MAPA treats explosive detection dogs as a valuable programme asset. As such, MDC places appropriate emphasis on maintaining the health of the dogs, quality of processes and outcomes, and safety.

67. The first level of care and control is provided by the dog handler, who is trained to monitor and evaluate the dog's health and performance.

68. At field level, each MDC field site office has para-vets for veterinary care during deployment missions and dog trainers for daily training and evaluation sessions of all dogs and handlers.

69. At the headquarter level, MDC has a large compound in Kabul housing the training areas, breeding kennels, dog evaluation areas, and surgical and quarantine facilities, which appear to be of high standard. The headquarters holds documentation on the health and performance of each dog.

70. The Federal Government of Germany provides additional in-kind support to MDC, which includes a full time technical adviser plus visits by consultants to the MDC breeding programme and for the training and veterinary care of dogs. We believe MDC applies sound procedures for the care and control of explosive detection dogs.

I7.3.7 Quality assurance

71. Quality assurance procedures and work practices have improved significantly in recent years. Despite this, there were two "missed device incidents" in areas searched by explosive detection dogs reported during the review mission. The MAPA takes these incidents seriously, completing prompt investigations into the circumstances surrounding the incidents to determine the cause and identify weaknesses in the procedures or processes. The results of these two investigations were not available before the completion of this mission.

I8.0. Mechanical clearance

72. In 1990, UNOCHA funded an ATC mechanical clearance project with two Aardvark flails. The project aimed to clear large areas of agricultural and grazing land more quickly and cheaply than manual clearance. A 1995 UNOCHA review of mechanical clearance recommended closing the project. The review cited project management, technical, maintenance and logistics problems resulting in exceptionally high cost of cleared land, unreliable clearance rates, and a high number of demining incidents involving clearance staff supporting the machine. The flail unit project closed in October 1995.

73. Research and development into mechanical technology has failed to produce a machine that meets quality standards specified in ISMA. At this time, most mechanical systems are used to support manual clearance, by preparing ground[1] for deminers who complete a final search of the area.

Equipment presently in use at all stages of the demining process

Equipment	Land Type[2]				
	Residential	Grazing	Agricultural	Irrigation	Roads
Backhoe	XXXX			XXXX	
Front-end-loader	XXXX				
Rock crusher	XXXX				
Excavator with rotary head tiller	XX			XXX	

Legend:
- XXXX = Excellent, realising considerable cost savings
- XXX = Good, providing savings in costs and increasing output of a demining team
- XX = Fair, assists in reducing physical work required of manual demining staff.

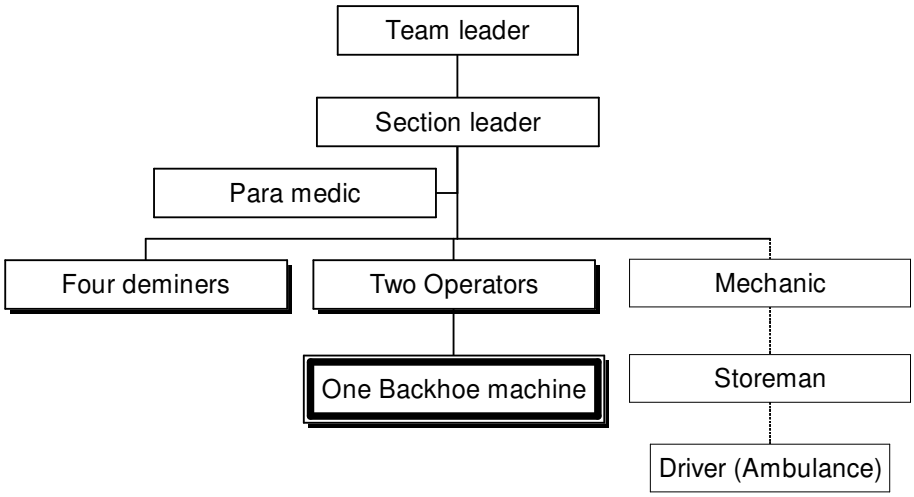
I8.1.1 Backhoe

74. ATC, DAFA and OMAR use commercial off-the-shelf industrial backhoe machines to improve speed and safety in excavating debris from collapsed buildings in residential areas and in excavating silted irrigation systems. The original operational concept for these machines was to assist manual demining teams working on tasks needed significant excavation work. In recent years, the MAPA has moved to a concept of mechanical clearance teams, organised as depicted in the following chart.

[1] Either softening ground, removing vegetation or undertaking other aspects of work that slow the manual clearance process, achieves ground preparation.

[2] Land types are based on the classifications used by the MAPA.

MAPA Backhoe mechanical clearance team



75. This structure provides excellent operational and deployment flexibility. However, we believe the demining organisations should be able to reduce the overheads in operating these machines without significant reduction in the quality of the clearance process or outcomes, including safety and maintenance. Issues needing resolution are:

a) The employment of two plant operators per machine. Discussion with field staff of OMAR revealed that OMAR does not use its two operators to run two shifts each day. Rather, the operators rotate on the same work rest schedule as the deminers who check excavated material. We believe these machines should be operated for the maximum number of daylight hours. A system of two-shift operation should be used.

b) It may be more appropriate to use the same medical support principles and standards as are applied to manual clearance.

76. We visited three sites using this technology. In all cases, the demining teams applied the organisation/MAPA SOP. The procedures and work practices reduce to tolerable levels the risk of harm from a demining incident. We believe this technology has made a significant contribution to clearance output for both residential areas and irrigation systems.

77. The two operators should be used to ensure the machine operates for as many hours as possible each day. If the above structure is maintained, the mechanic should be used to provide operator maintenance support to minimise maintenance and repair down time.

I8.1.2 Front-End-Loader (FEL)

78. FEL technology was introduced by The HALO Trust in 1996. Like the backhoes, this technology has contributed to a significant increase in output during the clearance of residential areas. Their documented procedures and work practices reduce to tolerable levels the risk of harm from a demining incident. We declined an opportunity to observe a demonstration of the technology.[1]

79. We have not undertaken a comparative analysis of the backhoe and FEL technologies. They have different strengths and weakness and, if used in a coordinated manner, could be complementary, providing further improvements in output.

I8.1.3 Rock crushing plant

80. The HALO Trust introduced a portable rock crushing plant, which was modified to process material excavated during clearance of residential areas. The plant is set to produce 70mm evenly graded material, which should safely detonate or destroy all AP mines commonly to Afghanistan. The documented procedures and work practices for the technology reduce to tolerable levels the risk of harm from a demining incident.

81. We observed the rock crushing plant and front-end-loader machines clearing agricultural land in Tapa Tajpaig, near Kabul. The clearance concept was quite simple. The FEL machines removed the 30cm of topsoil from the hazard area. The topsoil is then fed into the rock crushing plant for processing. On the task visited, The HALO Trust team dumped and spread the processed material into watercourses close to and within the clearance task. The HALO Trust management team had not considered the environmental impact of this process. We believe there is a risk this process will harm the environment through soil erosion and reduced productivity from land processed in this manner. Additionally, it is unclear whether this process is economically viable. Records examined during the on-site visit indicate the team's average clearance rate was less than 90 m^2 per hour, which is considerably less than manual clearance and explosive detection dog technologies. The Halo Trust should review this process.

I8.1.4 Excavator with rotary-head tiller attachment

82. The Government of Japan made an in-kind contribution to provide a machine to assist clearing heavily vegetated areas and irrigation systems. ATC is undertaking field trails to assess the machine. These trials were underway during the review mission. We observed the machine working on a heavily vegetated (in Afghan terms) task in Kabul. The observed procedures and work practices reduce to tolerable levels the risk of harm from a demining incident during clearance.

[1] One member of the Review Team has observed the technology on frequent occasions in 1996 and 1997. Examination of the documented procedures did not reveal any obvious changes to the procedures.

83. The trials manager informed the team that ATC and the MAPA were experiencing difficulties getting adequate support from the manufacturer of the technology under trial, citing difficulties with tines and cutting edges for the tines on the rotating drum used to destroy mines. Further trials will be needed to assess the machine and develop procedures and work practices that take full advantage of the technology.

I9.0. UXO Clearance

84. Mine accident data suggests that UXO present a greater risk than mines to Afghan civilians. There may be many reasons for this including:

a) UXO are generally visible and represent an opportunity for income from scrap metal and explosives;

b) they are attractive items for the inquiring mind, leading to high numbers of incidents involving boys, and

c) in countries like Afghanistan where the conflict has continued for many years throughout the country, UXO are far more prevalent than mines.

85. All demining staff are trained in the identification and disposal of mines and UXO to 85mm. The HALO Trust and ATC have people trained in special or advanced explosive ordnance disposal (EOD) procedures. The Halo Trust EOD teams operate in Kabul and their operational areas in the northern region. ATC has three teams providing EOD support in the Central, Southern, Eastern and Western regions.

I9.1. Priority response to UXO reports from the community

I9.1.1 Scale of the problem

86. International experience is that UXO will continue as a significant but decreasing hazard for decades after a conflict has ended. For example, EOD teams are still working in the United Kingdom and continental Europe to respond to clearance requests of UXO from WW I and WW II.

87. The MAPA EOD strategy has been to develop specialist battle area clearance (BAC) teams skilled in completing rapid surface clearance of former battle areas. Initially, the MAPA formed these in response to the high UXO incident rate after the influx of people to Kabul in 1995. The techniques developed have now been transferred to other manual demining teams.

88. The second level of response is provided through small teams of people trained to high skill levels of EOD procedures. These EOD technicians deal with larger items, including bombs and rockets, and other items that pose a significant risk to people or property if destroyed in-situ.

I9.1.2 Prioritisation

89. The MAPA has been criticised for its prioritisation process. We found that priorities were logically and applied with no evidence of corruption in the system or method of control. However, the MAPA may be able to improve its response time to UXO reports through targeted training of staff to deal with appropriate types of hazards. Such training will ensure that all demining staff have the skills and equipment needed to deal with the UXO items that form 80% of the hazard problem.

I9.1.3 Response

90. We investigated claims of significant delays in response to UXO hazard reports in both the Southern and Western Regions. We discovered that MCPA and the RMAC in the Southern Region had responded to all recorded requests for assistance. We examined a random sample of twenty reports to find that much of the delay could be caused by problems in the management of the reporting process. The following table outlines the time taken at various stages of the processing EOD requests.

Table: Time taken to complete respective steps in the response process

STEP	Processing time in days				
	1-7 days	8-30 days	31- 90 days	91+ days	Total Number of tasks
NGO deliver report to the RMAC/MCPA regional office.[1]	2	7	9	2	20
MCPA deploys a quick response team to complete EOD procedures.	7	8	5		19[2]
Total response time	2	3	11	4	20

1. Based on the date the UXO report was signed to the date the report is registered as received by MCPA office.
2. One task requires specialist EOD procedures beyond the scope of the MCPA quick response teams

91. Many of the response problems could be resolved by improving the reporting process. It should not take more than 30 days from the time of reporting to an appropriate authority to clear a UXO. The UXO clearance problem will not be solved by improving the management of the small number of EOD teams currently available. Other options for improving responsiveness are outlined below.

I9.1.4 Training

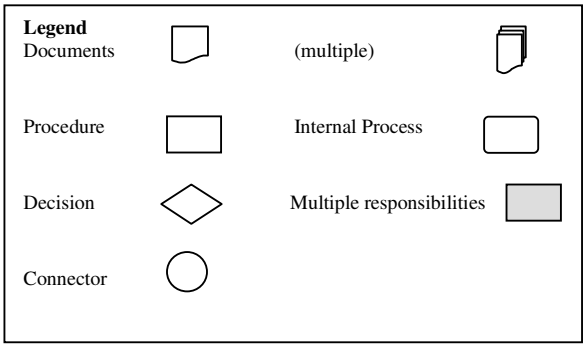
92. The MAPA has placed restrictions on the size and type of UXO that deminers with basic training are able to destroy. It is unclear whether this is an appropriate cut off point. The MAPA has little data on the quantities, by size and type, of munitions found Afghanistan. With such data, the MAPA could determine and target training needs to enhance the capability of all demining teams. This would provide the capacity to deal with the majority of UXO, reducing demand on specialist EOD staff.

I9.1.5 Safety

93. As mentioned earlier in this report, security restrictions and EOD team leave breaks prevented the Review Team from observing EOD work in progress. From discussions however, we believe the international EOD technical advisers have assisted in developing sound and safe EOD policies, procedures, and work practices.

Annex J. Survey information exchange process

Procedure description	Responsibility		
	RMAC	MCPA	Demining Organisation
Task Technical Survey Tasks determined from approved quarterly work plan. Issue a technical survey tasking order.			
Undertake Technical Survey Survey completed to MAPA standards through the application of approved SOPs.			
Submit technical survey report (specification for clearance). Technical survey report provides details of: • the request (person/organisation, intended land use, justification for priority). • estimated socio-economic impact • specifications for clearance standards • maps of the clearance task.			
Task prioritisation and allocation Confirm priority allocation by MCPA. Determine most cost effective resource for clearance Issue task order, which includes the MCPA Report (Specification for Clearance).			
Schedule task for clearance			
Onsite visit Briefing and confirmation of specifications for clearance. Normally includes the MCPA Survey team and the site officer of team leader of the clearance team.			
Task clerance Clearance team undertakes for clerance			



Annex K. Afghan implementing partners

1. The Review Team held discussions with all national demining and mine awareness implementing partners in the MAPA. The HALO Trust was included in this aspect of the review mission. The operations, personnel, finance, procurement, and logistics procedures of all the demining NGOs were examined. The Review Team conducted a systematic and critical review of cost structures, financial management, maintenance management, quality improvement and efficiency of the demining process, which represents over 90 percent of expenditures by the NGOs. Analysis of mine awareness activities focused on effectiveness.

K1.0. UNOCHA's risk management strategy

2. UNOCHA's risk management strategy has included the following:

   a) Tight project agreements with very detailed budgets, limiting the flexibility of the Afghan NGOs;

   b) Frequent external audits undertaken by the UNOCHA finance and administration section. These audits assisted in identifying training needs and corrective action to resolve problems before these became major issues.

   c) Centralised procurement of major non-expendable equipment including vehicles, radios, computers, and demining equipment.[1]

3. All demining NGOs have developed acceptable policies and procedures for financial management and inventory management. Most have computerised financial management software. These systems provide audit trails that meet UN requirements.

K2.0. Procurement

4. All agencies have documented procurement policies and procedures that detail processes, responsibilities, and authorities. The policies and procedures make provisions for some decentralised procurement of goods and services. Risk management is achieved through documented cash limits and limits on the purchase of items that are not centrally procured. The procedures include documented guidance for purchasing committees and quality assurance checks that reduce the risk of mismanagement. ATC, The HALO Trust, MCPA, MDC and META have clearly documented policies and procedures for assuring quality and reducing costs. OMAR and DAFA documentation of procurement policies and procedures should be improved to meet the benchmark established by other MAPA NGOs.

[1] Centralised procurement is used for a number reasons including using the UN umbrella to reduce costs associated with importing equipment into Pakistan, overcoming difficulties in importing military equipment such as mine detectors and EOD equipment, and facilitating customs clearance and movement of goods from Pakistan into Afghanistan.

5. Most of the NGOs have policies and procedures for the review of the procurement process. The procedures focus on containing costs and improving the quality of inputs into the demining process. Examples of savings resulting from these procedures include:

a) The shift of purchasing fuel from Pakistan to Afghanistan. A recent increase in fuel imports from Iran has made cheaper fuel of a comparable quality available in Afghanistan, reducing the need to transport bulk fuel from Pakistan.

b) ATC is making some of its bulk purchases of clothing and equipment in Lahore, achieving considerable cost savings over purchases in Peshawar.

K3.0. Logistics

K3.1. Stores management

6. Most NGOs have clearly documented policies and procedures for stores management. These include procedures for the management of stocks and detailed procedures to ensure the organisation improves quality management for receipt and issue of materials and equipment. All NGOs have systems for internal indenting and management of stores by each sub-element of the organisation. The benchmark organisations for stores management are ATC, The HALO Trust, MCPA, MDC and META.

K3.2. Maintenance

7. With the exception of META, each demining NGO has a workshop or maintenance capacity for vehicles, detectors, radios and mechanical demining equipment. These workshops have considerable capacity including major component replacement and minor modifications to vehicles.

8. With the exception of ATC, NGOs do not apply a full cost accounting of their workshop activities. ATC undertakes a quarterly review of all costs associated with operating its internal maintenance system. It was able to demonstrate savings of approximately US$200 per month based on the cost of operating its vehicle workshop compared with estimates received from the marketplace. While this saving seems marginal, ATC believes the workshop also improves response time and quality. We concur with their assessment.

9. The lack of full cost accounting runs the risk that management may be unaware of the real costs of providing maintenance through internal systems. It may be more cost effective to outsource repair and maintenance, if quality standards are maintained. This risk may be very low at present but an accurate accounting system and periodic reviews will minimise future risks. NGOs should document and implement systems that provide accurate periodic reports to monitor their support functions.

K3.3. Manufacture of tools, equipment and training aids

10. The HALO Trust has a workshop that produces good quality protective equipment (visors), demining tools, and aids used in mine awareness education. The workshop is perceived to be both cost effective and contributing to capacity development. However, The HALO Trust does not apply full cost accounting in analysing its workshop operations. Therefore, this facility may not be as cost effective as believed by the management team. The HALO Trust should develop accurate recording and monitoring systems to ensure they are achieving the perceived cost advantages. It may be that outsourcing would identify manufacturing organisations with the capacity to provide high quality products to both the demining sector and other sectors within the community. These could benefit from access to better tools and equipment than are readily available in the market place, which HALO could provide. This too would build local capacity, which may be more sustainable.

K4.0. Personnel management

11. All NGOs have documented policies and procedures for personnel management. The procedures are based on the UNOCHA MAPA Personnel Management SOP[1] developed in 1994 and amended through a consultative process with the six national NGOs. These policies and procedures provide detailed guidelines for recruitment and remuneration, and outline obligations of staff employed within MAPA. NGOs have developed specific procedures for selection and recruitment of staff and renewal of employment contracts.

K4.1. Rumours and criticisms of nepotism

12. A review of the province and district of origin of the management teams did show a tendency to recruit from provinces and regions of the NGO directors.

K4.2. Recruitment through introduction

13. ATC has an open policy of preference to recruiting relatives of staff retiring from the organisation. Justification for this was that recruitment of relatives would minimise the impact of lost earnings on the extended family of the retiring deminer. ATC also believes this policy increases staff loyalty. Experience in other mine action programmes is that there is significant risk of corruption through kickbacks or payment for employment, contributing to erosion of confidence in the integrity of the mine action programme. We believe that ATC's policy, and the likelihood of similar policies in other demining NGOs, presents a risk to fair and open recruitment of quality staff and to the reputation of MAPA.

[1] Exceptions include AREA, ARI, The HALO Trust, DDG and other international NGOs who apply their own remuneration, insurance and employment contract policies and procedures.

K5.0. Project and operations management

14. The demining and mine awareness NGOs have considerable experience in managing demining operations, developed with the assistance and guidance of MACA. Efforts over the past three years to improve internal quality assurance and safety have contributed to noticeable improvement in work-site safety and quality assurance, and a reduction in demining incidents.

K5.1. Productivity

15. The Review Team was asked to undertake a comparative analysis of the productivity the demining NGOs. To achieve this we intended to:

a) Provide a time series to examine trends in the productivity of demining teams, organisations and technologies in demining land types as classified by the MAPA.

b) Develop an indexing system that would provide a method for adjusting relatively standard variations in output for land types (i.e., to adjust consistently slow or difficult demining tasks and particularly easy or quick demining tasks to a baseline). This would allow a meaningful comparison of data between periods with significant variation in degree of clearance difficulty.

16. We received records on 3,550 demining tasks surveyed and cleared from 1996 to 2000. The records indicate 2,832 completed tasks, of which 2,614 (92%) had information on the clearance teams and times. However, on close examination of the data, a comparison of estimated and actual clearance times shows:

a) more than 5% of the records show 'estimate of clearance effort required' in team hours but 'actual clearance effort input' in team days;

b) approximately 34% probably use the same unit of labour to record the 'estimated effort required' and 'actual effort used', but it is unclear whether the unit used is team hours or team days;

c) more than 9% of the records show 'estimate of clearance effort required' in team days but report 'actual clearance effort input' in team hours; and

d) in more than 50% of cases, it is unclear whether the unit of labour is team hours or team days.

e) We believe these inconsistencies prevent any meaningful attempt at producing the time series data and productivity index figures. As well, use of this data by MAPA is likely to result in incorrect planning decisions for demining operations.

17. Still, there is sufficient evidence to identify a few ready measures for increasing productivity or cost efficiency:

a) For demining operations, expand the number of MDGs, which are more cost effective in all situations for which dogs can be used. This could be achieved by:

- moving MDS dogs from survey teams to support manual demining teams (the dogs working with the survey teams are working at about 40% of their potential output); or
- breeding more dogs to establish dog sets to support manual demining teams.

b) Reducing costs of demining teams by eliminating the assistant team leader positions.

c) For mine awareness, shift resources from direct to indirect approaches, reserving direct training for tightly defined target groups and situations (e.g., returning refugees; Kuchi).

K6.0. Future Evolution of the Afghan NGOs

18. Through a combination of foresight and good fortune, MAPA has evolved into a resilient system comprising a variety of organisations, which—individually and collectively—have demonstrated the ability to innovate, solve problems, and improve performance. Many of the individual NGOs are motivated to continue their evolution and prepare for the day when they are no longer dependent on MACA or, eventually, the Afghanistan mine action program itself. The further evolution of the national implementing partners could entail one of more of the following:

a) managing mine action projects internationally;

b) supplying goods and services to the international mine action community from Afghanistan;

c) implementing non-mine action development projects within Afghanistan;

d) providing other public services (e.g., technical training) within Afghanistan.

19. The Review Team believes the further evolution of the NGOs into independent organisations should be encouraged as this will increase the likelihood the NGOs will survive the future transitions facing MAPA, thus preserving a decade of donor investment in capacity development. Short-term risks to MAPA are manageable because five large NGOs give sufficient redundancy within the system. The failure of one demining NGO would not spell disaster. Medium-term risks can be reduced by a parallel effort at capacity development, which should incorporate components specifically aimed at developing these organisations as NGOs (e.g., governance for NGOs).[1] The NGOs themselves should initiate any such effort.

[1] For a discussion of weaknesses in current NGO governance structures, see Section 4.2.2.1

20. Accordingly, the major Afghan NGOs—perhaps operating through their umbrella organisation, the Afghan Mine Action League (AMAL)—should prepare a proposal for a capacity development project and submit this directly (i.e., not via the AETF) for consideration by donors supporting the mine action program. This project should include components for at least:

a) NGO governance;

b) accountability;

c) corporate planning;

d) project preparation;

e) negotiation skills;

f) corporate financial management.

21. Not all the NGOs will have the same priorities for assistance. The project might reasonable begin with a scoping phase to confirm priorities and activity plan for each of the NGOs.[1]

22. Such a project would complement the Review Team's other recommendations relating to performance-based contracting (see Annex I, Section I6.0).

[1] Consultants for this phase could be obtained from a number of specialist NGO capacity development organisations such as Intrac (http://www.intrac.org/) in Oxford, U.K. In addition, a donor-NGO network called the International Forum for Capacity Building (http://www.ifcb-ngo.org/) has recently been established.

Annex L. Quality assurance

L1.0. International experience and trends

1. The revised ISMA provides specifications and guidelines for both risk management and quality management in mine action. These include guidance on ISO 9000 standards, but do not require mine action organisations to achieve ISO 9000 certification.

2. The principles presented in the ISMA outline a two-stage approach to quality assurance. The first step is a process of accreditation and licensing of mine action organisations, with particular emphasis on the demining element of mine action. This process is used to evaluate the documented procedures and work practices applied during the demining process and to ensure the demining organisation seeking accreditation and licensing has the staff, equipment, and financial resources to implement the procedures. The second step is to undertake quality control checks through on-site inspections and post-clearance sampling of tasks completed by demining teams.

3. This is a proven approach in many manufacturing, engineering, and service industries, but is new to the mine action sector.

L2.0. The MAPA

4. The MAPA has had a similar approach to quality assurance of demining operations. The MAPA training project implemented through META has the responsibility for inspecting and evaluating all demining teams in the application of procedures and work practices. META teams also assist demining NGOs in taking corrective action on problems identified. MAPA has not undertaken post-clearance inspections of land before declaring it safe for public use. It intends to use the new release of ISMA (due for formal issue in February 2001) to further develop their quality assurance system. Work done by NGOs to develop individual operations, logistics, and financial management SOPs will contribute to this quality management approach.

L2.1. Internal quality assurance

L2.1.1 Afghan implementing partners

5. The MAPA has placed considerable emphasis on improving the quality of processes and outcomes in demining, training, and mine awareness. Over the past three years, most of the Afghan implement partners have developed an improved understanding of quality assurance and implemented policies and procedures that should reduce the risks associated with using land following clearance to tolerable levels. Appropriately, the NGOs have placed most effort into improving processes that present the highest risk to their staff and the public.

6. However, the NGOs should not neglect the finance, logistics and other support functions that contribute to improving productivity within their respective organisations. NGOs need to place more emphasis on developing quality management systems to improve support functions. Many of the staff need additional training to develop a better understanding of quality management theory. Once these principles are understood and embraced as a management philosophy, the staff will need further training on the tools and techniques used to measure performance and identify both non-conformities and opportunities to improve the quality of processes and outcomes.

7. We believe some NGOs – in particular ATC, META, and MDC – have the basic skills and willingness to implement this approach to management.

L2.1.2 UNOCHA & MACA

8. UNOCHA and the MACA have placed a great deal of pressure on the Afghan implementing partners to develop documented procedures and improve management process. We found little evidence that that MACA and the RMACs have placed the same importance and effort on improving MACA management processes and systems.

9. The MACA and the RMAC lack documented procedures for most of their planning, management, and oversight functions. With the exception of duty statements, the UN rules and regulations for financial management, and the procedures for the management of medical evacuations, the MACA and the RMACs do not have documented procedures to guide or monitor their performance. This should be addressed.

Annex M. MAPA history

M1.0. Patterns of Funding and Clearance

	Year								
Funding	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
US $millions	$7.9	$11.1	$17.4	$16.9	$15.6	$17.7	$20.2	$22.2	$22.1
Clearance									
Km^2 minefields	10.2	7.4	9.9	20.7	23.9	21.6	32.6	33.5	34.2
Km^2 battlefields				22.7	19.5	34.1	49.2	39.1	75.7
MAPA estimate of cost/m^2 for mine clearance									
US $/$m^2$	$0.80	$1.50	$1.80	$0.80	$0.70	$0.80	$0.60	$0.70	$0.60

Notes: Only funding via the AETF is included.

M2.0. Evaluations

Evaluations

Date	Evaluation Team	Funded by
Jul-91	Evaluation of the Mine Clearance Programme in Afghanistan, by Brian Florence and James Freedman	UNOCHA
Feb-94	Mine Clearance Operations: Afghanistan Monitoring Report to the Commission of the European Union, by Steve Brown	EC
Apr-95	Monitoring Visit of ODA-Funded Mine Clearance Work Undertaken by the HALO Trust in Afghanistan; overseas Development Administration, by J.A. Craib	ODA
May-95	Mine Clearance Operations: UNOCHA Afghanistan; Monitoring Report to the Overseas Development Administration, by Philip Bean	ODA

M3.0. Major events

Summary of major events		
Date	**Event**	**Remarks**
November 88	UNOCHA Opens office in Islamabad	
February 89	UNOCHA Established a Mine Clearance Training Camp	Risalpur - Peshawar & Belali - Quetta
February 89	Soviet Withdrawal completed	
April 89	RONCO funded by USAID started using mine detection	Mine Dogs to do mine clearance
October 89	ATC was raised as a pilot project	Once Clearance Team, Australian Army Officer as Technical Advisor
November 89	MCPA was raised for mine survey project	
January 90	First team deployed for clearance operations	Kunar province

Summary of major events		
Date	**Event**	**Remarks**
March 90	ATC expanded its capacity 7 MCT	ATC raised a total of 8 teams by July 90
March 90	MCPA was established for planning and quality control	For planning & Quality control, 4 survey teams were raised at initial agreement
May 90	Agreement with ATC to establish a Mechanical Mine Clearance Unit (MMCU)	Project was based on two Aardvark Flail Machines supported by a manual demining team of ten staff.
June 90	South West Afghan Agency for Demining (SWAAD) later to become known as DAFA, was raised for mine clearance operations in Southern Afghanistan	FOUR MCT initially. MAPA now has 12 MCT
September 90	ATC First flail operations commenced in Urgun District of Ghazni	
September 90	OMA signs an agreement for the implementation of a mass public education and Information campaign in mine recognition & avoidance d	
October 90	MCPA raised 6 additional survey team	Survey teams increases from 4 to 10 teams
December 90	ATC raised nine MCT.	ATC 17 MCT SWAAD/DAFA 4 MCT total 21 MCT
September 91	OMA mine awareness project expanded to refugees camps in Pakistan	
Jan - June 1991	SWAAD raised 6 additional teams	ATC 17 MCT SWAAD/DAFA 10 MCT total 27 MCT
June 91	ATC deployed MDD with a team in Ghazni province	Mine Detection Dogs were used on trial with MCT
September 91	Belali Camp of Quetta closed down	
November 91	ARCS signed agreement with UNOCHA for MA	To provide courses and briefing for the residents for the Kabul city.
December 91	DAFA signed MoU with RONCO	On coordination and use of dogs in Mine Clearance Programme
December 91	MCPA accept responsibility for the management of the training project and QA of demining NGOs	
Jan - Dec 1991	SWAAD raised 2 additional teams	ATC 17 MCT SWAAD/DAFA 12 MCT total 29 MCT
January 92	MCPA office relocated from Peshawar to Islamabad	Office collocated with the MACA to provided intimate MAMIS support.
March 92	MCPA appointed Australian Army Officer as advisor for the implementation of mine survey operations inside Afghanistan	
August 92	OMA project expanded to include mine clearance project. 1 team funded by EC	ATC 17 MCT SWAAD/DAFA 12 MCT OMAR 1 MCT total 30 MCT
1992	SWAAD assigned Australian military technical advisor.	
August 92	OMA changed its title to OMAR	According to the changes in its

Summary of major events		
Date	**Event**	**Remarks**
		project
1993	MCPA signed an Agreement with EC for "National Survey of the Mines Situation in Afghanistan"	
1993	ATC raised 1 MCT	ATC 18 MCT SWAAD/DAFA 12 MCT OMAR 1 MCT total 31 MCT
May 93	SWAAD name was changed to DAFA	Demining Agency for Afghanistan (DAFA)
June 93	OMAR raised 3 additional teams	ATC 18 MCT SWAAD/DAFA 12 MCT OMAR 4 MCT total 34 MCT
July 93	Last of the military technical adviser training team departs	
August 93	ATC agreement with EC for mine clearance project for Nangarhar and Kunduz	
October 93	4 new survey teams were raised by MCPA	Total survey teams raised to 16
1993	ARCS has 1 mine awareness team	Comprising 15 instructors
1993	MDC finalised registration with UNOCHA	
1993	OMAR received Engineer Tank fitted with rollers	
February 94	MOU between UNOCHA/USAID to handover responsibility for management and support of MDC	
March 94	RRGA signed Agreement to undertake mine awareness activities for the refugees in Iran.	UNOCHA Tehran responsible for project management and coordination
1994	DAFA established a joint liaison office in Kandahar	The first permanent demining office in Afghanistan
1994	MCPA assisted VVAF	For the research of "Socio-economic impact of Landmines in Afghanistan"
June 1994	MAPA & MDC conduct trials on Mine Dog Group (MDGs)	
July 1994	10 MDGs established	
1994	ARCS team member reduced from 15 to 11	
1994	The nation wide General Survey, funded by EC was completed.	The survey showed that approx. 120 km^2 was high priority area. As of the survey date 55 km^2 was cleared and clearance rate was 10 km^2 per year.
1994	The MAPA has expanded to employ approximately 3000 staff	Manual teams 48 Mechanical teams 2 Survey teams 20 Mine Awareness teams 16 MDG 10 MDS 22
August 95	ATC raised 3 BAC Teams	BAC project in Kabul
1996	ATC signed agreement for BAC/EOD with UNOCHA	
January 96	SCF US signed agreement with UNOCHA	For the project Landmine Education Project mainly focused on MA for children

Summary of major events		
Date	**Event**	**Remarks**
April 96	HI signed MOU for their Community Based Mine Awareness Project with UNOCHA	The project was undertaken in Southern Region called
1996	Six manual clearance teams transferred from OMAR to DAFA. This was a temporary arrangement made to ensure teams continued operations while OMAR and EC and OMAR resolved funding and project management issues required for the approval of further funding.	
1996	ARCS changed funding arrangements to be funded through ICRC.	
1996	The Programme established four RMACs in Kandahar, Herat, Jalalabad and Kabul.	The RMACs were staffed with nationally recruited regional managers
1996	Due to restrictions on women the MA programme was affected and new methods were found to access the women.	
1996	BBC AEP has been directly funded by UNOCHA	Previously BBC AEP was funded through MCPA
1996	MDC increased capacity from 10 to 15 MDGs and increased the number of staff per MDG from 8 to 12 deminers.	
1996	The MACA added two new internationally recruited staff positions. 1. MA adviser 2. Technical Adviser – Operations/Technical development	Total number of internationally recruited staff UNOCHA/MACA 7 NGOs 2
1996	MACA co-hosted the UN Department of Humanitarian Affairs (DHA) workshop on Indigenous Mine Action Capacity and the Development of International Standards for Demining.	
1996	MCPA started to use GPSs during their survey operations	MCPA
1996	ATC's flail project ceased to operate after the evaluation of the project during 1995.	
1997	Mechanical Capacity of backhoe increased from 2 to 6 teams	3 MET with DAFA and 3 MET with ATC
1997	The Monitoring, Evaluation and Training Agency (META) was established.	In order to ensure a uniform and impartial set of quality controls of MAPA activities.
1997	The survey capacity of MCPA was increased from 20 teams to 27 teams and MDSs became part of the survey teams.	
1997	The programme commissioned a national study of the effectiveness of its mine awareness activities. The fieldwork was completed in 1997.	Study was undertaken by CIET International
Mar 1997	A large explosion in Jalalabad where more than 200 people killed, MAPA deployed BAC/EOD teams to clear the area.	
1997	HI was funded directly by EC for its CBMAP.	

Summary of major events		
Date	**Event**	**Remarks**
1997	OMAR expanded its female MA teams some 10 educators were hired and deployed to all four regions.	
1997	OMAR signed agreement with Germany for its female MA project.	
1997	RRGA name was changed to Ansar Relief Institute (ARI), operated with 23 instructors.	
1997	MCPA upgraded its Database system through creation of a computerised geographic system, which allowed for producing accurate minefield maps.	
1997	MCPA established a quick response team of three persons that deals with reports of isolated mines and UXO in southern region.	
1997	DAFA established an eye clinic at Mir Wais Hospital in Kandahar.	The equipment for the clinic was donated by Austrian Government.
1997	Other mine action NGOs including clearance and Survey have started to undertake mine awareness activities	The demining and survey teams during their free time would provide MA training.
1997	OMAR developed community based mine awareness through establishing community volunteers.	
Mar - May 1998	Suspension of UN activities in Southern Afghanistan	
1998	MDC increases capacity: The number of MDSs increased from 27 to 29 MDSs The number of MDGs increased from 15 to 17 MDGs	
1998	Increased the number of EOD teams from 2 to 4 teams	
1998	The number of Backhoe increased to eight teams.	
1998	Responsibility for coordination of mine action in Bamiyan, Logar and Ghazni transferred to Central Region.	
1998	The MAPA undertook a socio-economic study interim report published.	The Study was undertaken by MCPA.
1998	Seven manual clearance teams of ATC, DAFA and OMAR were crossed trained on BAC.	
1998	A new agency, Afghan Mine Awareness Agency was established in Herat.	Funded by EC/Christian Aid, five husband and wife mine awareness teams.
1998	Afghanistan Rehabilitation and Energy conservation Agency (AREA) accepted responsibility to undertake a pilot project of Community Based Mine Clearance in Nangarhar.	
Dec 98	Report of CIET International on Evaluation of MAPA MA was released.	
Sept/Oct-1998	ACBL Afghan Mine Awareness Months	AMAM was celebrated by all MAPA and ACBL member NGOs.
1999	The structure of RMACs were changed, two field coordinators were appointed each controlling 2 RMACs	

Summary of major events		
Date	**Event**	**Remarks**
1999	The MAPA undertook major a trial on the selection of a suitable mine detector for the Programme.	
1999	MCPA increases the number of survey teams from 29 to 33 teams.	
1999	A new NGO Danish Demining Group was established	
1999	The number of MDSs were increase from 29 to 33 MDSs.	
1999	Two Addition Mechanical Teams were added to the Programme capacity.	
1999	All survey teams underwent additional UXO recognition training.	
1999	Nine MCT of DAFA, ATC cross-trained on BAC.	
1999	Two workshops were held to review the existing curriculum and materials used by MA agencies of the programme.	
Sept/Oct-1999	Afghan Mine Action and Awareness Month (AMAAM)	Organised by ACBL
2000	A mechanical machine (UNO Machine) was donated by Japan for mine clearance operations	The machine is used by ATC

Annex N. List of MAPA implementing partners

Organization name	Major activities	Major locations of Activities (by Region throughout the year)					Address
		Central	South	East	West	North	
Afghan Technical Consultant (ATC)	Manual Clearance (21 MCTs)	✔	✔	✔			45, D-4 Old Jamrud Road, University Town, Peshawar, Pakistan. Tel: 92 51 40412/43589
	EOD Teams (4)	✔	✔	✔	✔		
	Mechanical teams (4)	✔	✔	✔	✔		
Demining Agency for Afghanistan (DAFA)	Manual Clearance (11 MCTs)		✔				Main Office: Shar-e-Naw, Kandahar city, close to Dand District Center, Kandahar province, Afghanistan. (Liason Office): H. 32A, Jinnah town, Quetta, Pakistan. Tel: 92 91 825237
	Mechanical Clearance (3)		✔				
Organization for Mine Clearance and Afghan Rehabilitation (OMAR)	Manual Clearance (6Teams)	✔			✔		Main Office: HNo. 206, Street-10 Zal, Wazer Akbar Khan, Kabul Afghanistan. Sub-office: H. 15, St 1, D-2 Phase 1 Hayatabad, Peshawar. Tel: 92 91 81 2084
	Direct mine awareness and indirect through Community 13 teams including male and female	✔	✔	✔	✔	✔	
Danish Demining Group (DDG)	Manual Clearance (3)	✔		✔			Main Office: Wazer Akbar Khan, Kabul Afghanistan. (Sub-Office): HNo. 4, St 12, F-6/3, Islamabad, Pakistan. Tel: 92 51 2870018-21
HALO Trust	Manual Clearance (30 Teams)	✔				✔	Char Rahi Haji Yaqoob, P.O. Box 3036, Shar-e-Naw, Kabul City, Afghanistan.
	Bomb Disposal Teams/BAC (5)	✔				✔	
	Mechanical Clearance (10 teams)	✔				✔	
Agency for Rehabilitation and Energy Conservation in Afghanistan	Community Based Mine Clearance (4 teams)			✔			Main Office: 39-D/3, Saued J. Afghani lane, University Town, P.O. Box 709, Peshawar, Pakistan. Tel: 92 91 45417-844647 Regional Office for Demining: Hada-e-Chaparhar, opposite Qari Jan Shahid, Reg Shamand, Jal, Afg
Mine Detection Dog Center (MDC)	Mine Dog Clearance (17 Mine Dog Groups)	✔	✔	✔	✔		Main Office: HNo. 189, Wazir Akbar Khan, St 13, P.O. Box 449 Kabul, Afghanistan. Sub-Office: Peshawar, Pakistan P.O. Box 1324, Tel: 92 91 842684
Mine Clearance Planning Agency (MCPA)	Mine Survey teams 31 (These which are supported by 33 Mine Dog Sets are performing level-I and II surveys of mine/UXOs areas.	✔	✔	✔	✔		Main Office: Wazir Akbar Khan, St 13, Kabul, Afghanistan. Liaison Office: H 58h2, Phase II, Hayatabad, Peshawar, Pakistan. Tel: 92 91 810803, 810124.

Organization name	Major activities	Major locations of Activities (by Region throughout the year)					Address
		Central	South	East	West	North	
Handicap International (HI)	Direct Mine Awareness and Indirect through Mine Committees: # of Trainers – 56 # of Community Volunteers - 700		✔		✔		Main Office: HNo. 3rd Shar-e- Naw, Highway Sector, Kandahar city, Afghanistan Sub-Office: Arbab Karam Khan road, P.O. Box 477, Quetta, Pakistan. Tel: 91 81 440142, 444793
Save the Children Fund (US)	Direct child focused mine awareness and Indirect through Community Volunteers and partner Trainers: # of Trainers – 12 # of Community Volunteers - 500	✔					Pakistan/Afghanistan Field Office: P.O. 1952, 7-A, St 58, F-7/4, Islamabad, Pakistan. Tel: 92 51 279211-3, 812686
Ansar Relief Organization (ARI)	Direct Mine Awareness in Border Exit Stations of Iranian side.				✔		HNo. 385/3, in front of Majan St, Malekabad Blvd, Mashed, Iran, P.O. Box 91895 - 1196
Afghan Red Crescent Society (ARCS)	Direct Mine Awareness Training by 4 teams	✔					C/o: ICRC, Charrahi Haji Yaqub Shar-I – Nw, Kabul Afghanistan.
Afghan Mine Awareness Agency (AMAA)	Direct mine awareness and Indirect through Community Volunteers				✔		Jada-e- villayat, 34-5, Herat city, Afghanistan.
BBC Afghan Education Project BBC -AEP	Broadcast of Mine Awareness messages through radio Soap Opera “New Home New Life”	✔	✔	✔	✔	✔	Office: 8-Abdara Road, University town, P.O. Box 946, Peshawar, Pakistan. 92 91 842319, 42409

Note: The information with regard to the number of resources and their activities are provided from the MAPA National Operational plan – 2001, which is updated as at 01 March 2001.