Health Action Plan for Afghanistan (HAPA)

Strategic Environmental Assessment (SEA)

Produced by: Simon Mead

For Aga Khan Foundation Canada (AKFC)

January 2016

Table of Contents

Acronyms 1
Executive Summary 3
1. Introduction 6
1.1 SEA Goals and Objectives 6
1.2 SEA Approach and Methodology 6
2. Project Description 8
2.1 Project Goals, Objectives and Location 8
2.2 Main Project Components and Activities 8
3. Environmental Regulatory and Policy Context 12
3.1 Canadian Institutional Setting 12
3.2 Afghan Institutional Setting 13
4. Environmental Management Capacity of Implementing Organisations 18
4.1 Environmental Management Policies, Processes and Tools 18
4.2 Scope of Organisational Capacity 19
4.3 Experience in the Selected Provinces 20
4.4 Human Resources 21
5. Geographic and Environmental Context 21
5.1 Geography 22
5.2 Agriculture 23
5.3 Water and Sanitation 25
6. Assessment of HAPA Outputs and Components 26
7. Assessment of the Program as a Whole 38
8. Conclusions 41
8.1 General Conclusions 41
8.2 Recommended Project Design Changes/Refinements, based on the SEA Findings 42
9. Environmental Management Strategy (EMS) 43
Annexes 53

Tables

Table 1 Environmental Integration Tool 10
Table 2 Population in provinces 21
Table 3 Literacy rate in population aged 15 and over 21
Table 4 Ownership and size of different types of land (000) 23
Table 5 Safe drinking water availability 25
Table 6 Estimated sanitation coverage 25
Table 7 Status of WASH in healthcare facilities in Afghanistan 26
Table 8 Status of WASH in schools in Afghanistan 26
Table 9 Assessment of HAPA outputs and components 27
Table 10 Environmental Management Strategy Framework 44

Acronyms

AKDN	Aga Khan Development Network
AKFA	Aga Khan Foundation, Afghanistan
AKFC	Aga Khan Foundation Canada
AKHS	Aga Khan Health Services
AKPBS	Aga Khan Planning and Building Services
AKU	Aga Khan University
ANHDO	Afghanistan National Horticulture Development Organization
BPHS	Basic Package of Health Services
CBSG	Community-based Savings Group
CDC	Community Development Council
CEAA	Canadian Environmental Assessment Act
CHW	Community Health Worker
CLDC	Cluster Level Development Council
DAIL	Department of Agriculture, Irrigation and Livestock
DDA	District Development Assembly
DFATD	Department of Foreign Affairs, Trade & Development
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EIP	Environmental Integration Process
EIST	Environmental Integration Screening Tool
EMS	Environmental Management Strategy
EPHS	Essential Package of Hospital Services
FFS	Farmer Field School
FMIC	French Medical Institute for Children
GAC	Global Affairs Canada
GIHS	Ghazanfar Institute of Health Sciences
GOA	Government of Afghanistan
HAPA	Health Action Plan for Afghanistan
HCF	Health Care Facility
HIS	Institute of Health Sciences

IMEP	Infection Management and Environment Plan
JMP	Joint Monitoring Program
MAIL	Ministry of Agriculture, Irrigation and Livestock
MDGs	Millennium Development Goals
MEA	Multilateral Environmental Agreements
MHM	Menstrual Hygiene Management
MNCH	Maternal, Newborn and Child Health
MoPH	Ministry of Public Health
MRRD	Ministry of Rural Rehabilitation and Development
NEPA	National Environmental Protection Agency
NSP	National Solidarity Program
ODF	Open Defecation Free
PES	Policy for Environmental Sustainability
PIP	Program Implementation Plan
PMF	Performance Measurement Framework
SDGs	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SOP	Standard Operating Procedure
ToR	Terms of Reference
UN	United Nations
WASH	Water, Sanitation, and Hygiene

Executive Summary

The Aga Khan Development Network (AKDN) and network member Aga Khan Foundation Canada (AKFC) have developed a five-year initiative, the Health Action Plan for Afghanistan (HAPA) which is funded by Global Affairs Canada (GAC) and Agence Française de Développement (AFD). HAPA aims to improve the health status of men and women in selected districts in three provinces of Afghanistan: Badakhshan, Bamyan and Baghlan. The initiative aims to directly benefit 1,264,022 people, including 495,598 women, 525,732 men, 123,773 girls and 118,919 boys (below five years of age).

HAPA will consist of three major components: improving quality and expanding the range of health services in targeted areas of Afghanistan; strengthening availability and quality of human resources in the health sector, with a focus on nursing and midwifery; and enhancing civil society engagement and capacity to support good health practices, with specific attention to gender and nutrition. It will also include capacity building and collaboration with national institutions including the Ministry of Public Health (MoPH).

In order to assess systematically the potential environmental impacts of the initiative, AKFC commissioned a comprehensive Strategic Environmental Assessment (SEA) that will enable it to manage the HAPA program in an environmentally sustainable manner in line with its Policy for Environmental Sustainability (PES) and in compliance with all relevant Canadian and Afghan policy and regulation.

The overall goals of this SEA are:

- To identify potential environmental issues at an early stage so that sustainable environmental planning can be integrated effectively throughout the program activities and development outcomes improved
- To ensure that HAPA complies with all environment-related policy and legal requirements of both the Government of Canada and the Government of Afghanistan

Specific objectives of the SEA are:

- To give an overview of the environmental context in the Afghanistan and Provinces in which activities are taking place.
- To review all program activities through an environmental "lens" and identify the significance of any potential environmental impact, either positive, negative or cumulative.
- Identify activities or components that may require a detailed site-specific Environmental Assessment (EA)
- Develop responses to mitigate or enhance the environmental impact of activities
- Develop an Environmental Management Strategy that identifies key activities, roles and responsibilities, schedules and capacity needs to ensure effective integration of environmental management and compliance into the overall program to ensure long-term environmental benefits and sustainability

HAPA is a multi-sectoral program including components related to health facility renovation, water, sanitation and hygiene (WASH), agriculture and food processing, alternative energy and medical waste.

The HAPA program also includes construction (phase II) of the Bamyan Hospital. However, a detailed Environmental Assessment has already been carried out for that component and, except for the planned installation of a solar photovoltaic system at the hospital, it will not be considered in this report.

Other than the hospital, the HAPA program does not include any activities that are considered of high environmental risk. However, being multi-sectoral program with a diversity of activities, it does have the potential for significant environmental impact, both positive and negative.

The HAPA program has the potential to produce many positive environmental impacts. These are all clearly detailed in the reports along with suggested measures to ensure they are attained and maximised. For example, the improvement of water, sanitation and hygiene (WASH) in communities and the renovation of health care facilities including improved waste management systems and potentially improved WASH facilities will have very positive effects. Throughout the HAPA program there is an emphasis on training and awareness-raising related to improved hygiene and sanitation. This includes awareness raising in schools and communities and health clinics on the benefits of hand washing and personal hygiene, and improved sanitation. There is also the potential, through the more formal training programs being undertaken with health professionals, to build their capacity to better integrate improved hygiene and sanitation practices into their work and to effectively disseminate the information to colleagues and community members.

The livelihood-related components also offers numerous opportunities for positive environmental outcomes through increasing capacity and support for improved soil and water conservation, more effective use of pesticides and fertiliser and the use of more drought – and climate change – resistant varieties of crops and vegetables. As with most components in HAPA there are significant linkages between this component and others. Improved agricultural practices for example have the potential to increase groundwater recharge, reduce the silting and contamination of water sources with eroded soil and the reduced run-off and leeching of pesticides and fertiliser into water sources.

The activity that links all components in HAPA and is the most essential for significant environmental, and indeed other outcomes is improved governance at all levels. HAPA should work closely with existing institutions and follow the existing Afghan legislative and policy frameworks. All major components need to ensure the necessary awareness, training and management structures are in place and systematised. Fairly straightforward activities such as daily cleaning of bathrooms and hand washing at critical times, correct procedures for medical waste incineration and safe use and handling of pesticides, and many other components of HAPA, can all have a major influence – both positive and negative - on the program's environmental outcomes. These, are relatively simple, understandable concepts, but to institutionalise them, so that benefits continue after HAPA will require comprehensive and persistent efforts to integrate them both culturally and into governance mechanisms on an on-going basis.

Several components are designated as category B under the AKFC Environmental Impact Screening Tool (and under the equivalent GAC tool) and as such require a (simple) Environmental Assessment (EA). The program will then be in compliance with Canadian environmental regulations, assuming that all recommendations are followed. Similar EA requirements exist in Afghanistan, so EAs are likely to be transferable with little modification.

AKDN has a wealth of organisational experience in all of the proposed HAPA sectors and over many years has successfully integrated environmental management, mitigation and enhancement

measures into its programming in Afghanistan. The resources at its disposal have grown over the years, so that it now has a comprehensive range of tools and reference materials for environmental integration, backed up by strong environmental policy and a growing environmental capacity of both management and field staff. This includes the recently launched AKFC PES which offers a comprehensive overview of the need for effective environmental management of programs along with clear tools and guidelines for doing so. Launching of the PES has been accompanied by training for representatives of AKDN member organisations and the appointment of Environmental Focal Points in each office, including those in Afghanistan.

The main components that have significant environmental implications are listed below with a summary of management considerations.

Renovation of health facilities will be undertaken. This will generally be minor renovation rather than construction, but is important that on completion, each has appropriate infrastructure for safe and hygienic WASH and for safe disposal of medical wastes, along with the capacity within the facility to use and maintain these effectively. Assessment of these needs should also consider long-term projections, and integration of climate change adaptation measures including water conservation and storage options. Renovation should also integrate measures to reduce risks associated with seismic and flooding events. Vaccination campaigns will also be conducted and must ensure that facilities are available and training undertaken to ensure safe disposal of sharps and other wastes, including those used by mobile vaccination teams.

A community WASH component will be implemented alongside community awareness raising of hygiene and sanitation. Although the specific communities and technical options have not yet been determined, they are likely to be relatively small scale and use technologies such as hand pumps and piped gravity-fed springs. These sources should be tested for chemical and biological quality, as part of an EA should have an assessment of the sustainability of the source and potential "downstream" of cumulative impacts. The construction of latrines should follow appropriate guidelines to ensure they do not cause contamination of water sources and training of artisans involved in latrine construction should prioritize these considerations. A significant issue found during this SEA process is that schools are not to be included in the provision of WASH infrastructure alongside health facilities and communities. This may reduce the potential for very positive health outcomes that are associated with 100% open defecation free (ODF) status in communities, and collective increases in handwashing. If WASH facilities are going to be available in health facilities and at household level, schools that do not have appropriate WASH facilities, will serve as a weak link in the system, significantly reducing program outcomes. It is recommended that either a budget is identified to ensure improved WASH facilities in all schools in the program target communities, or else the selection of target communities should include a criteria that the schools in target communities must have a certain standard of WASH facilities already in place.

1. Introduction

1.1 SEA Goals and Objectives

The Aga Khan Development Network (AKDN) and network member Aga Khan Foundation Canada (AKFC) have developed a five-year initiative, the Health Action Plan for Afghanistan (HAPA) which is funded by Global Affairs Canada (GAC) and Agence Française de Développement (AFD). In order to assess systematically the potential environmental impacts of the initiative, AKFC commissioned a comprehensive Strategic Environmental Assessment (SEA) that will enable it to manage the HAPA program in an environmentally sustainable manner in line with its Policy for Environmental Sustainability (PES) and all relevant Canadian Afghan policy and regulation. As an analytical tool, the completion of an SEA will provide AKFC and its partners with a more comprehensive and holistic understanding of the potential environmental effects (both positive and negative) of each component and will help inform strategies for the effective management of cumulative environmental effects; improve project-level environmental impact assessments; and identify recommended and agreed-upon alternatives, strategies and priorities for the continued management and implementation of the project.

The overall goals of this SEA are:

- To identify potential environmental issues at an early stage so that sustainable environmental planning can be integrated effectively throughout the program activities and development outcomes improved
- To ensure that HAPA complies with all environment-related policy and legal requirements of both the Government of Canada and the Government of Afghanistan

Specific objectives of the SEA are:

- To give an overview of the environmental context in the Afghanistan and Provinces in which activities are taking place.
- To review all program activities through an environmental "lens" and identify the significance of any potential environmental impact, either positive, negative or cumulative.
- Identify activities or components that may require a detailed site-specific Environmental Assessment (EA)
- Develop responses to mitigate or enhance the environmental impact of activities
- Develop an Environmental Management Strategy that identifies key activities, roles and responsibilities, schedules and capacity needs to ensure effective integration of environmental management and compliance into the overall program to ensure long-term environmental benefits and sustainability

1.2 SEA Approach and Methodology

The SEA provides an essential planning tool that can be utilised over the life of the program and as such is written in a clear and concise manner with information presented using plain English and wherever possible in a tabular format for clarity and easy reference. Comprehensive background and baseline information on the environmental context is provided, along with a clear and thorough

analysis of positive and negative potential environmental effects. For each negative effect mitigation measures are recommended including any further action required such as specific EAs.

Positive effects are highlighted and measures recommended to ensure that they are maximised. This information may then be used to ensure that environmental sustainability and environmental mitigation activities can be mainstreamed into all project activities and integrated into the Project Implementation Plan (PIP), Performance Measurement Framework (PMF) and annual work plans allowing them to be resourced and monitored accordingly.

The SEA was developed based on the direction of the Terms of Reference (ToR), which can be found in Annex A, and consultation with AKFC staff, using the following methodology:

Initial meeting with AKFC: An initial meeting was held at AKFC offices in Ottawa between the consultant and two members of the AKFC International Program team to provide an initial briefing on the HAPA program and to clarify aspects of the ToR. HAPA program documentation was also provided to the consultant.

Background reading of project documentation: Key program background documentation, especially the HAPA Program Document was reviewed by the consultant in order to gain an initial understanding of the program.

Develop initial questions and discussion points: Based on the systematic review of program documentation the consultant developed a comprehensive list of questions and discussion points and identified a number of areas where additional information was required.

Meeting with AKFC program officer: A second meeting was held at the AKFC office between the consultant and the HAPA program officer. The meeting served to provide additional information on the program based on the questions and issues identified by the consultant.

Meeting with GAC Staff: A meeting was held with the Senior Program Officer and Environmental Specialist at GAC responsible for the HAPA program. This was an introductory meeting to let them know the SEA was being undertaken and to get their input into whether there are any particular concern they have and to get their experience on AKFCs capacity in environmental management.

Meeting with Aga Khan Development Network (AKDN) staff (remote): A teleconference meeting was held with two staff members of AKDN based in Afghanistan, along with the AKFC program officer. The AKDN representatives were able to provide more specific details and further clarification on some of the questions and information needs.

SEA framework and work plan: Based on the ToRs, requirements of the PES and discussions with AKFC staff members a draft framework and work plan for the SEA was developed.

Additional background and program information: Further program information was provided by AKFC, additional information on the Canadian and Afghan legal and policy environment and the bio-physical environment in the HAPA provinces was found through a variety of documents available on line.

2. Project Description

2.1 Project Goals, Objectives and Location

The HAPA program aims to improve the health status of men and women and children in selected provinces of Afghanistan, particularly women of reproductive age and children under five. The program will work in selected districts in the provinces of Badakhshan, Bamyan and Baghlan, and will also aims to achieve national impact through capacity building and collaboration with national institutions including the Ministry of Public Health (MoPH).

HAPA aims to directly benefit 1,264,022 people, including 495,598 women, 525,732 men, 123,773 girls and 118,919 boys (below five years of age) over a five-year period (2015-2020). An initial envelope of CAD $76.5 million will fund priority initiatives identified within HAPA.

2.2 Main Project Components and Activities

HAPA includes 18 outputs that are scheduled for implementation in this phase. Additional outputs are planned, but only those scheduled for implementation during the current phase are considered in this SEA. Table 1 below is a slightly revised version of AKFC's Environmental Integration Screening Tool (EIST) which is included in AKFC's PES. An EIST was originally completed for HAPA in August 2015.

The revised version below includes the following changes from the August 2015 version:

- Only the currently approved and budgeted outputs and components are included;
- Several of the categories have been adjusted based on more detailed review; and
- Impacts have been colour-coded to identify whether the impacts are negative/risks, positive/opportunities or environmentally neutral/insignificant.

As can be seen, some outputs have both positive and negative impacts. Both the positive and negative impacts of each component are addressed in this SEA.

The tool includes columns for categories A, B, C and D, with A as the most significant. A description of each category, along with examples (copied from AKFC's PES) can be found in Annex B. Each component has been categorised and the overall output related to each component has been graded based on the most significant category of any of its components, i.e. if one output has a component categorised as B and two components categorised as C, the output will still be categorised as B.

As can be seen in Table 1, there are no components that are designated as Category A. The construction of the Bamyan hospital is a Category A initiative, but a detailed EA for all three planned phases of the Hospital has already been completed in an earlier phase of the program. Construction of Phase II is planned under HAPA. Several of the outputs and components are listed as Category B, both positive and negative (pink and green). These components have a variety of potential environmental outcomes both positive and negative.

One of the few significant differences between AKFC's description of categories and GAC's description of categories is that for GAC Category B initiatives *"require further environmental analysis. The required depth of environmental analysis is commensurate with the initiative's*

environmental significance." AKFC's category B initiatives require an EA using Tool #3 from the PES.

It is assumed that the positive category B outputs will not need an EA, as long as enhancement measures proposed in this SEA are undertaken, and it is also assumed, as stated by AKFC staff, that AKFC's EA (Tool #3) satisfies GAC's requirement of "further environmental analysis".

A more detailed assessment of each output and associated components can be found in Section 6 of this report.

Table 1 Environmental Integration Tool

Tool #1. ENVIRONMENTAL INTEGRATION SCREENING TOOL – SUMMARY TABLE					
Name of project: Health Action Plan for Afghanistan					
Updated from original of August 18, 2015					
KEY					
	Potential impacts predominantly risks/negative				
	Potential impacts predominantly opportunities/positive				
	Environmentally neutral/insignificant				
	CATEGORY OF ENVIRONMENTAL RISK A, B, C or D categories, based on classifications in AKFC Policy for Environmental Sustainability (PES) -May 2015				
PROJECT COMPONENT OR ACTIVITY *List Log Frame outcome and/or output number, and name of component or activity* *NOTE: only outputs that are proposed for this phase of HAPA are included*	**Category A. High potential environmental risk**	**Category B. Low to moderate environmental risk or opportunity**	**Category C. Negligible environmental risk or opportunity**	**Category D. Emergency**	**Not enough information/ will be screened later** *(indicate when, if known)*
1.1.1: BPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.					
1.1.2: EPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.					
1.1.3: Knowledge management and mobilization for improved health service design and delivery supported.					
1.2.1: Phase II of Bamyan Hospital - solar power component					
1.2.2: Health infrastructure in Badakhshan, Bamyan and Baghlan enhanced.					
1.2.3: FMIC infrastructure upgraded and expanded					
1.4.1: Mobile teams, outreach services and capacity building for routine immunizations expanded					

2.1.2: Capacity of GIHS and Badakhshan IHS to offer high-quality nursing and midwifery education and safeguard education standards supported.					
2.2.1: Community health nurses trained and supported in their placements.					
2.2.2: Community midwives trained and supported in their placements.					
2.2.3: Post graduate medical education program established and improved.					
2.3.1: FMIC's capacity to provide health professional development augmented.					
2.3.2: Institutional, managerial and technical capacity of MoPH supported.					
3.1.1: Gender-responsive health, hygiene and sanitation awareness campaigns to enable good health practices established and implemented.					
3.1.2: Small-scale community initiatives to improve water and sanitation infrastructure supported.					
3.1.4: Community organisations supported to play an oversight role in government health service delivery.					
3.1.5: Relevant community actors trained in the use of community participatory monitoring and social audits.					
3.2.1: Household and community level initiatives addressing food insecurity expanded.					

3. Environmental Regulatory and Policy Context

3.1 Canadian Institutional Setting

Canadian Environmental Assessment Act (CEAA) (2012): CEAA is the Act of Parliament, originally passed in 1992 and re-written in 2012, that requires all federal departments, including GAC to conduct environmental assessments for proposed projects where the federal government is the proponent or where the project involves federal funding. As such it informs all of the GAC environmental policies and processes.

GAC Environmental Integration Process: In May 2014, GAC adopted a new Environmental Integration Process (EIP) applicable to development assistance initiatives, to comply with the revised Canadian Environmental Assessment Act (2012). The new process is still in a state of flux but is intended to integrate and streamline the department's environmental policy and legal requirements into a single process. GAC's requirements for integrating environmental considerations have remained the same, but have been streamlined with the introduction of a new Environmental Screening Tool to be used by partners when designing an initiative. This was developed in parallel with AKFC's similar Environmental Integration Screening Tool (EIST), which has been determined by GAC to be equivalent.

GAC's Policy for Environmental Sustainability: GAC's Policy for Environmental Sustainability commits the agency to integrating environmental considerations and sustainability into its programming activities, and to working with partners and stakeholders to develop and promote environmentally sustainable development. The policy has the following operational objectives:

- To ensure that environmental considerations, including opportunities for enhancing environmental sustainability, are integrated into sector and cross-sector programs, program assistance, and project planning and implementation, taking into account views of beneficiaries and local communities;
- To promote and support environmental and broader socio-economic policy dialogue, program assistance and projects that directly address environmental issues;
- To implement design measures that minimize negative environmental impacts and enhance environmental benefits of projects, or identify alternatives;
- To encourage and support Canadian, international and developing country partner organizations to develop policies, programs and projects that further the objectives of environmental sustainability;
- To contribute to the development of knowledge and experience in Canada and in developing countries, on undertaking environmentally sustainable forms of development;
- To promote education and awareness among governments and the public in Canada and in developing countries of the importance of environmentally sustainable approaches to development.

Government of Canada SEA Cabinet Directive: The CIDA SEA Handbook (2004) provides guidance on the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, as applied to programs and projects supported by CIDA [GAC].[1] A SEA is required when a policy, plan or program proposal is submitted to an individual Minister or to Cabinet for approval, and where implementation of

[1] Canadian International Development Agency, *Strategic Environmental Assessment of Policy, Plan, and Program Proposals: CIDA Handbook*, 2004, p.5.

the proposal may result in important environmental effects, both positive and negative. A SEA may also be conducted to help a development policy, plan, or program achieve sustainable development goals. This is the rationale for the production of the HAPA SEA, which will help to ensure a robust framework for achieving the goals set out in AKFC's Policy for Environmental Sustainability.

3.2 Afghan Institutional Setting

Afghanistan Environment Act 2007: Afghanistan's Environment Act of 2007 was introduced by the National Environmental Protection Agency (NEPA), which was established in 2005. NEPA serves as Afghanistan's environmental policy-making and regulatory institution. Its role is to regulate, coordinate, monitor and enforce environmental laws as well as to be the focal point in managing and regulating Afghanistan's environment for the benefit of all citizens.
The Environment Act 2007 provides a regulatory framework covering a wide range of environmental issues including air, water, environmental assessment (EIA), biodiversity natural resource management, and integrated pollution control, and the handling of hazardous wastes.

The primary purposes of the Act, as stated in Article 2 of the Act, are to:

- Improve livelihoods and protect the health of humans, fauna, and flora;
- Maintain ecological functions and evolutionary processes;
- Secure the needs and interests of future generations;
- Conserve natural and cultural heritage; and
- Facilitate the reconstruction and sustainable development of the national economy.

The Act creates the framework for an EIA permitting system. A National EIA Policy was formulated in 2007 to implement the EIA based on which the EIA Regulations of 2008 were promulgated. The Act provides the regulatory framework for pollution prevention and control and waste management through the identification of prohibited activities, which need a license before they can be undertaken. The law also gives an outline of the licensing process.

EIA Regulations 2008: The Environmental Impact Assessment Regulations 2008 govern the process for EIA and describe the procedure for preparation of EIA and obtaining the Compliance Certificates. The regulations have set out two categories for the activities that are prohibited and require approval from NEPA.

Category 1: A proposed project is classified category 1 if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented, and affects an area broader than the sites or facilities subject to physical works.

Category 2: A project is classified as Category 2 if its potential adverse environmental impacts on human populations or environmentally sensitive areas (e.g. wetlands, forests, grasslands and other natural habitats) are less adverse than those of Category 1 projects. These impacts are site specific, and few are irreversible. In the event that a number of projects are to be undertaken by the same proponent in a given area as part of a development proposal then it is not suitable to classify each project individually

Under the EIA regulations a Screening Report should be provided to NEPA when a proponent decides that they wish to undertake a project within Afghanistan. Information required in a screening reports can be found in Annex C. Once a Screening Report has been submitted, NEPA has 14 days to determine the suitability of the report and if it is included in the list of prohibited activities requiring a certificate of

compliance from NEPA. NEPA reserves the right to refer the Screening Report back to the proponent should they consider the information contained in the Screening Report insufficient or lacking relevant information.

NEPA may choose to undertake a public consultation activities within the period of 21 days stipulated in the interim procedure. Once a screening report has been submitted and the public disclosure period completed, NEPA will make a decision on whether the proponent can proceed with the project with the release of a certificate of compliance or whether the proponent is required to complete an EIA study.

Implications for HAPA:
It is apparent that all of the activities to be conducted under this phase of HAPA fall under Category 2 under the regulations and will therefore require a screening report. The information that has to be provided in a screening report (see Annex C) is very similar to the information required for AKFC's EA's as detailed in the PES (Tool #3), the only significant difference being that NEPA recommends that "*projects must be combined and categorized based on their collective potential to impact on the environment. It is preferable that all projects are included in one screening report*[2]"

It is recommended that AKDN establish a working relationship with NEPA (if they do not already have one) in the three Provinces and consult with them to ascertain whether the AKFC EA format (tool 3) is acceptable for submission as a screening report and whether separate reports for each output may be submitted. If not, it will not be particularly burdensome for a consolidated report to be developed for submission to NEPA.

National EIA Policy 2007: This policy contains the proposed procedures for the environmental assessment in Afghanistan, long with the approval process. The National EIA policy provided the basic framework for development of the EIA Regulations 2008.

Pollution Control and Management Policy (Draft, 2008): The draft policy document contains recommendations on administrative arrangements for pollution control and introduction of pollution control instruments and mechanisms. It develops a system of integrated permitting that reinforces EIA procedures. It also provides a framework for management of small and medium sized enterprises that have the potential to pollute the environment.

Implications for HAPA
The recommendations of the policy are yet to be implemented through formulation of regulations and standards, so at this point HAPA has no responsibilities for obtaining permits under this policy. If the regulations and standards are promulgated HAPA will be required to obtain all approvals under the regulations and comply with the pollution control standards.

National Waste Management Policy: The National Waste Management Policy represents the foundation for the development of regulations and standards for the management and control of waste as described in the Environment Act. The policy identifies the process for achieving better management and control of clinical wastes. Nine categories of clinical wastes have been identified and standards for management and disposal of waste have been provided in the policy. Technical standards for treatment and disposal of clinical wastes are described in the policy.

[2] Administrative Guidelines for the Preparation of Environmental Impact Assessments, NEPA 2008

Infection Management and Environment Plan (IMEP) (2009): As a response to on-going concerns about the low standards in infection management and healthcare waste disposal an Infection Management and Environment Plan (IMEP) with MoPH under the World Bank's SHARP project. Standard Operating Procedures (SOPs) have been developed as part of a Health Care Waste Management component of the Plan which include guidelines for discarding needles and the disposal of medical waste using incinerators.

Implications for HAPA (National Waste Management Policy and IMEP)
HAPA must ensure that facilities have the appropriate facilities for safe waste disposal and that training for HCF staff includes comprehensive background and application of the SOPs and that there is appropriate long term monitoring of such.

The Water Law (2008): The Water Law addresses institutional and management issues and regulates uses and users of Afghanistan's water resources. The law concerns conservation of water resources to ensure fair distribution, effective and sustainable use of water resources which include both surface and ground water, improvement of national economy and ensuring the rights of water users based on Islamic Jurisprudence and customs and traditions of the country.

Implications for HAPA
Implications for HAPA of the Water Law are mainly dependent on which technologies are selected for community water supply initiatives, which are yet to be determined. A key consideration must be the careful design and situation of latrines and waste disposal facilities along with the use of pesticides and fertiliser, so that water bodies are not contaminated.

Afghanistan National Rural Water, Sanitation, and Hygiene (WASH) Policy (2010): This policy, implemented by MRRD offers a clear road map for the implementation of WASH in rural areas of Afghanistan and follows internationally recognised best practices in the sector. It is also accompanied by an implementation manual[3]. The policy has the following policy objectives:

- Improve access of the rural population to 25 litres per capita per day (LPCD) from 27% to 50% in 2014, and 70% to 100% in 2016 and 2020 respectively and improve potable quality of drinking water (WHO standards).
- Make all villages/rural communities in the country 100% ODF free and fully sanitised by 2020; and 50% and 70% by 2014 and 2016 respectively by empowering communities to: Improve existing traditional latrines to become safe, hygienic and ensure user privacy;
- Make new latrines as models of safe sanitation in households, schools and clinics;
- Undertake the safe disposal of solid and liquid wastes;
- Provide hygiene education with appropriate follow-up activities in schools, households and communities for sustained behaviour change and adoption of safe hygiene practices.

[3] MRRD, Rural Water, Sanitation and Hygiene (WASH) Implementation Manual,2010

Key policy principles include: community participation in; capital cost sharing and 100% operation and maintenance responsibility by the community for all water facilities; gender mainstreaming through women's active involvement; the human rights (safety, security, privacy and dignity) of people, particularly of women, children, returnees, IDP, and physically and mentally challenged; and protecting the environment by conserving water sources, adapting to climatic changes through the preservation and improvement of catchment areas, with a focus on recharging ground water.

The policy also covers issues such as the inclusion of menstrual hygiene management (MHM) in schools, the standardisation of hand pumps ensuring a no-subsidy approach to latrine construction.

Implications for HAPA
This should be the primary guidance HAPA should follow in its WASH activities if it is to align itself with GoA priorities in the sector. Of particular note are its focus on Open Defecation Free (ODF) status, which is current best practice in the sector, rather than number of latrines constructed which has proved to be of little use in terms of outcomes achieved. Other notable points are its promotion of women's involvement and human rights, inclusion of the importance of MHM in schools and the protection of groundwater and environmental resources.

The Agriculture Master Plan (2006): The Agriculture Master Plan was endorsed by the Economic Subcommittee of the Cabinet of the Government of Afghanistan (GOA) in May 2006 as a comprehensive development blueprint for the sector that identifies priorities for investment. The Ministry of Agriculture, Irrigation and Livestock (MAIL) is responsible for implementing the Plan. The Master Plan provides a road map for Afghan Agriculture focussing on a number of priorities including food security, horticulture, livestock production, alternatives to poppy production.

The Master Plan has cross-cutting themes including: management of natural resources; research and extension; farmer associations and community participation; rural finance; and gender. It also identifies key environmental considerations to be integrated into all agricultural planning and activities including water and watersheds; land management; and forests and wildlife.

Implications for HAPA
The goals and components are very much in line with many of the activities proposed by HAPA to improve food security under Output 3.2.1. The Master Plan provides an excellent resource for HAPA to ensure alignment with Government goal and plans, which may lead to opportunities for further synergies both with Government agencies and other actors who are providing support for the implementation of the plan. However, the MAIL and the Departments of Agriculture, Irrigation and Livestock (DAILs) have limited technical capacity and will benefit from greatly from HAPA's proposed training and technical assistance.

National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH: National Communication Strategy for Hygiene Promotion. (2014) is a recently updated version of the National Hygiene Education Policy Guideline (2007). The strategy stresses the need for community empowerment, and inter-sectoral collaboration in order to promoting behavioural change. It also highlights the stakeholders who should be the focal points for increased hygiene awareness including Imams, school teachers, CHWs and youth groups and identifies the need for hygiene related information integrated into training materials for these groups.

National Solidarity Programme: The National Solidarity Programme (NSP) was created by the Government of Afghanistan and is headed by the Ministry of Rural Rehabilitation and Development

(MRRD). It aims to develop the ability of Afghan communities to identify, plan, manage and monitor their own development projects. Through the promotion of good local governance, NSP works to empower rural communities to make decisions affecting their own lives and livelihoods.

NSP supports local governance and poverty alleviation by:

- Establishing a national network of Community Development Councils(CDCs) that empower communities to make decisions;
- Funding priority subprojects that improve access to infrastructure, markets, and services;
- Strengthening community capacities through participatory processes and training; and
- Promoting accountability and wise use of public and private resources.

Implications for HAPA
AKF is an NSP facilitating partner in all of the three HAPA provinces and has supported MRRD in establishing CDCs in hundreds of communities in the three HAPA provinces. These established relationships both with the MRRD and the CDCs offers great opportunities for HAPA in mobilising effective community action on a wide variety of HAPA activities from improved agriculture and food security to WASH programming.

International Conventions: Afghanistan is signatory to several international conventions and agreements relating to the protection of the environment which include:

- Millennium Development Goals/ Sustainable Development Goals (MDGs/SDGs)
- Convention of the United Nations on Combating Desertification;
- The Convention on Biological Diversity, United Nations
- The Convention of the United Nations Framework on Climate Change and the Kyoto Protocol;
- Vienna Convention for the Protection of the Ozone Layer and its amendments
- Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat;
- The Convention on international trade in endangered species of wild flora and fauna threatened with extinction;
- Basel Convention on Transboundary Movement of Hazardous Wastes and their Disposal
- Montreal Protocol on Substances that Deplete the Ozone Layer
- Convention on the conservation of migratory species of wild animals;
- The Stockholm convention on persistent organic pollutants;
- Rotterdam Convention on Prior Informed Consent.

4. Environmental Management Capacity of Implementing Organisations

Given the size, complexity and multi-sectoral nature of the program it is important that the implementers are in a position to integrate a comprehensive system to ensure effective environmental management of the program. To do this the following key components must be in place:

- Appropriate environmental management policies, processes and tools;
- Organisational experience and capacity necessary to integrate, sustainably and effectively, environmental management considerations into all appropriate sectors; and
- Human resources experience and capacity (technical and managerial) necessary to integrate, sustainably and effectively, environmental management considerations into all appropriate sectors.

As can be seen in the sections below, AKF has a wealth of organisational experience in the all of the proposed HAPA sectors and over many years has successfully integrated environmental management, mitigation and enhancement measures into its programming. The resources at its disposal have grown over the years, so that it now has a comprehensive range of tools and reference materials for environmental integration, back up by strong environmental policy and a growing environmental capacity of both management and field staff. AKFC's strong capacity in environmental management was also noted during a meeting with the Senior Program Officer and Environmental Specialist at GAC. This strong capacity and experience means that AKF has the resources internally to undertake most of the EA and environmental management work itself. However, there are a number of specialist areas where it will likely need to contract specialists, namely in assessing hydro-geological data; training for water quality testing (both Output 3.1.2); and conducting the EA for solar power installation at Bamyan hospital (Output 1.2.1) and in (Output 3.1.2).

4.1 Environmental Management Policies, Processes and Tools

AKFC has had a comprehensive stand-alone PES since 2005. The new AKFC PES (2015) was significantly revised and aligns itself closely with the environmental requirements of GAC.

The PES clearly states AKF's continued commitment to the integration of Environmental sustainability into all of its programming, and has the following goal, objectives and guiding principles:

Goal: Ensure that AKFC and AKFC-supported initiatives are environmentally sustainable.

Objectives: Ensure that AKFC and its partner organizations:
1. Mitigate possible negative impacts of their initiatives on the environment;
2. Enhance positive environmental impacts (benefits) from their initiatives;
3. Address possible negative impacts of the environment on their initiatives (e.g., natural disasters, natural resource degradation);
4. Address possible impacts of climate change on their initiatives, incorporating climate adaptation and resilience strategies, as needed;
5. Strengthen their capacity to design, implement and monitor environmentally sustainable initiatives; and
6. Help Canadians learn about and support environmentally sustainable development.

Guiding Principles:
1. Meet Government of Canada and DFTAD environmental legal, regulatory, policy and procedural requirements and guidelines.

2. Meet relevant host country environmental, legal, regulatory and policy requirements.
3. Support Canadian and partner country commitments to multilateral environmental agreements, especially the UN conventions on climate change, biodiversity and desertification/land degradation.
4. Go beyond compliance and administrative requirements to ensure that environmental integration improves development outcomes, based on international best practices.
5. Use screening and scoping to ensure that environmental assessment is tailored to the type and scale of a proposed project, and related environmental risks and opportunities.
6. Engage local partners and communities in implementing practical environmental sustainability strategies and activities that address their needs and priorities.

The PES also includes an overview and process descriptions for environmental along with a number of tools such as the EIST (See section 2.2), SEA Overview, site specific Environmental Assessment Form and Class Environmental Assessment Overview.

Other tools and reference materials developed by AKFC include a variety of sector-specific environmental guidelines including the following selection that are most applicable to HAPA:

- Introduction to integrated pest management
- Introduction to integrated water resource management
- Introduction to occupational health and safety
- Introduction to safe handling of hazardous materials
- Environmental Guidelines for Small Scale Enterprises
- Environmental Guidelines for Food Processing
- Environmental Guidelines for Small-Scale Health Care Facilities
- Environmental Guidelines for Small-Scale Water and Sanitation Projects
- Environmental Guidelines for Small-Scale Irrigation Projects
- Environmental Guidelines for Small-Scale Dryland Agriculture
- Environmental Guidelines for Community Forestry
- Environmental Guidelines for Raising Livestock /Animal Husbandry
- Environmental Guidelines for Building Construction
- Environmental Guidelines for the use of pesticides

4.2 Scope of Organisational Capacity

HAPA is a multi-sectoral program that has the benefit of a broad range of partners, with varied multi-sectoral skills and experience. The partners are also part of a network and so are well-accustomed to working together. The list of partners can be seen below, and a summary of their experience can be found in Annex D

- Aga Khan Development Network (AKDN)
- Aga Khan Foundation Canada (AKFC)
- Aga Khan Foundation, Afghanistan (AKFA)
- Aga Khan Health Services (AKHS)
- Aga Khan University (AKU),
- French Medical Institute for Children (FMIC)
- Aga Khan Planning and Building Services (AKPBS)

4.3 Experience in the Selected Provinces

The Aga Khan Foundation, through AKDN and AKFA and with support from the above network partners, has been working in Afghanistan since 1995, initially through its affiliate Focus Humanitarian Assistance, and Badakhshan, Bamyan and Baghlan were all part of this early programming. AKF's direct involvement began in 2002 and it now represents the organisation's largest program with a staff of over 1600.

The key areas of support to the three provinces over the last 20 years are listed below and as can be seen they reflect the key sectors in which HAPA will be working. This give confidence in the levels of experience present at both institutional and individual level to ensure the technical abilities to integrate environmental management measures into programming , an understanding of the environmental, institutional and cultural context in these sectors along with the necessary management and coordination abilities.

Infrastructure development: including WASH, health clinics, schools and roads. This includes the provision of WASH in schools and clinics as required.

Agricultural development: capacity development for extension workers and farmers, including the development of farmer field schools, the promotion and distribution of quality seeds and fertiliser for both arable crops and vegetables, promotion of appropriate fruit tree cultivation, promotion of improved fodder production for livestock and research with MAIL into improved wheat varieties.

Natural resource/watershed management: working with communities on protecting watersheds through soil conservation activities, planting trees vegetation, improved agricultural practices, water harvesting and renewable energy technologies. AKF also helped establish the Sustainable Land Management Institute in Bamyan.

Strengthening local institutions: including the establishment of Cluster Development Councils (as part of NSP) which among other things help communities address issues such as rangeland and watershed management and land use and ownership issues.

Income generation and establishing savings groups: This has increased financing available for individuals, often women, to establish income generation opportunities such as development of food processing and storage facilities and has supported the development of effective value chains

Livestock development: AKF has developed a veterinary service delivery program including both field units and mobile teams offering comprehensive veterinary service.

Health: AKF works in collaboration with AKHS to develop health systems and capacities, implement and support vaccination programs and improve health facilities including the provision of clean water and sanitation infrastructure and awareness raising on sanitation and hygiene issues.

Education: AKF utilised a "whole school approach" which looks at all aspects of school improvement including teaching, curriculum, learning resources and the physical infrastructure of the school. Through its Girls' Education Support Program, AKF works with the Ministry of Education to remove obstacles to girls' enrollment and education. AKF also supports informal literacy classes for adults.

4.4 Human Resources

AKFC's recently approved PES, discussed above is now being rolled out throughout the network to ensure it is well understood and its goals and principles integrated effectively into programming. A training was held recently for all collaborating partners in Asia, including Kyrgyzstan, Tajikistan, Afghanistan and Pakistan. The Canadian consultant who developed the PES gave the training on how to follow the process, including carrying out environmental assessments. Two attendees were from Afghanistan, (1 from AKFA and 1 from AKHS) and they will now serve as environmental focal points in Afghanistan. Both AKHS and AKFA are also making considerable to ensure further integration of the PES among their staff. AKHS Afghanistan is also developing a PES Implementation Plan, which is currently in draft form. AKFA is developing a training plan whereby 20 participants from implementing agencies including from National project office and from health facilities will be trained to understand and follow the PES in their programming work. At AKFC in Canada, there has already been a workshop in using the PES and an AKFC Environmental Focal Point is in place.

As noted earlier, this strong environmental capacity may need to be supplemented for some af the more technically specific activities including assessment of hydro-geological data; training for water quality testing (both Output 3.1.2); and conducting the EA for solar power installation at Bamyan hospital (Output 1.2.1) and in (Output 3.1.2).

5. Geographic and Environmental Context

Bamyan, Baghlan and Badakhshan provinces are all located in the Central and North Eastern areas of Afghanistan, with Badakhshan being the most north-easterly, bordering Tajikistan, Pakistan and China. All of the districts are characterised by their mountainous terrain and predominantly rural populations relying primarily on subsistence agriculture. The population of each province can be seen in Table 2 below.

Table 2 Population in provinces

Province	Population male (000)	Population female (000)	Population total (000)
Badakhshan	486	452	938
Baghlan	459	416	875
Bamyan	218	208	426
National	13,849	13,106	26,955

Central Statistics Organization (2014), National Risk and Vulnerability Assessment 2011-12.

As can be seen in Table 3 below, adult literacy rates are low, especially for women, which are mostly less than half that of men.

Table 3 Literacy rate in population aged 15 and over

Province	Literacy rate male (%)	Literacy rate female (%)	Literacy rate total (%)
Badakhshan	45.7	25.2	35.7
Baghlan	46.0	12.9	29.9
Bamyan	52.3	17.5	35.5
National	45.4	17.0	31.4

Central Statistics Organization (2014), National Risk and Vulnerability Assessment 2011-12.

Each of the provinces is extremely poor, but Badakhshan, especially is considered one of the poorest areas in the world, with limited income generation opportunities and one of the highest rates of maternal mortality in the world, due to the lack of health infrastructure, inaccessible locations, and bitter winters.

5.1 Geography

Badakhshan: Badakhshan is one of the most remote, least developed and disaster-prone regions owing to its remote and mountainous geography. The eastern Pamir Mountains are 3,000 – 7000 meters above sea level and are covered with snow and glaciers throughout the year. The Hindukush range, which forms the border with Kashmir and Pakistan, has 38 summits higher than 7000m, including Afghanistan's highest peak Noshaq (7492m). Badakhshan is particularly susceptible to flooding, landslides and seismic activity. A massive landslide, due to flooding, occurred on 2 May in Argo district, Badakhshan province[4] where over 400 lives were lost and considerable damage caused to infrastructure and farmland. In October 2015 Badakhshan suffered from an earthquake that killed over 200 people. According to the IFRC[5] this was the worst earthquake to hit Afghanistan in 30 years. The province has also suffered from serious landslides which have caused.

Badakhshan consists of a variety of ecological zones resulting in temperate and montane grasslands, alpine steppe savannas, deserts, shrub lands, and woodlands along the Pamir River. Common plants found in these areas include pistachio, almond, walnut, apple, juniper, and sagebrush.

As with other Provinces there are significant issues with land degradation, including deforestation and soil erosion which have resulted in reduced soil fertility.

Wakhan Conservation Area encompasses 1,145,678 ha of Badakhshan Province. The main vegetation is typical of arid alpine steppe with a ground cover of usually 20% or less consisting mainly of dwarf shrubs. The Wakhan contain a large number of birds and mammals that are high-elevation specialists, and the region is a stronghold of species that have become rare or even extinct in neighboring areas including Marco Polo sheep, snow leopards, brown bears, wolves and Siberian ibex.

Baghlan: Rural Baghlan has broad ecological diversity that includes large areas of fertile land such as areas along the Baghlan River and parts of the Kunduz River Basin that extends from Khenjan in the South to the edges of Kunduz Province in the North. Traditionally poplar and willow hedges are cultivated by farmers along the river plains.

Much of the landscape features rolling slopes with erratic vegetation along the high-altitude mountains of the Central Highland Range (CHR) in the southern part of the Province. The natural vegetation here is sparse with mostly Juniper shrub zones in the higher altitudes of the CHR. Herbs and grasses are scarce in the rangeland areas where invasive plants like thistles dominate. In the past there were significant forests, but these are now gone.

Baghlan has been particularly susceptible to flooding in recent years. Flooding and landslides regularly occur during the spring-summer rainy season in the north of the country. Most recently, in 2014, floods in

[4] International Federation of Red Cross and Red Crescent Societies – Information Bulletin May 2014
[5] International Federation of Red Cross and Red Crescent Societies – Information Bulletin Oct 27 2015

the Guzargah-e-Nur district of the province 140km north of the provincial capital Puli Khumri killed over one hundred people destroyed 2,000 homes washed away roads[6].

Bamyan: Bamyan Province lies in central Afghanistan within the Hindu Kush range and is 2,000-5,000 metres above sea level. The terrain in mainly characterised but scrub and extensive high altitude pasture lands, most of it severely denuded. Utilisation of wood for fuel and fodder combined with years of drought and war has resulted in the destruction of most forestry and rangeland. Continued over exploitation of various shrubs is resulting in serious soil erosion, flash floods and landslides.

Band-e-Amir National Park, designated in 2009, is considered one of the world's most beautiful natural landscapes. It covers 60,616 ha and is defined by its six lakes, with their crystal-clear, azure water separated by unique, natural travertine dams and surrounded by spectacular red cliffs.

5.2 Agriculture

Subsistence agriculture dominates all three Provinces, this has increased over the years of conflict when established markets were lost and people focussed on survival for their families. As can be seen in Table 4 land holdings are small and many do not own any land at all. For example, in Bamyan it is estimated that 30% of the population is landless. There is significant irrigation, generally utilising small low-tech channels diverting spring or river water.

Table 4 Ownership and size of different types of land (000)

Province	**Total h/hlds** (thousand)	**Irrigated**	**Size** (mean/ median)(Jeribs[7])	**Rain-fed**	**Size** (mean/ median)(Jeribs)	**Garden plot**	**Size** (mean/ median)(Jeribs)
Badakhshan	135	49	4.2/2.0	61	6.4/4.0	26	1.1/1.0
Baghlan	114	54	6.5/4.0	42	13.6/8.0	11	1.8/2.0
Bamyan	56	42	4.2/2.5	43	20.8/10.0	14	1.4/0.5
National	3,629	1,377	6.0/3.0	610	16.4/7.0	347	2.0/1.0

Central Statistics Organization (2014), National Risk and Vulnerability Assessment 2011-12.

Badakhshan: Badakhshan has very diverse agro-ecological zones, resulting in a number of different farming systems and harvesting times ranging from May to July in Baharak and in Jurm valley to September-October in many of the border regions.

Fertility is similarly diverse with highly fertile areas such as Baharak and Jurm Valley and poor and denuded soils resulting in low fertility in places such as Wakhan, where even subsistence farming is difficult. For the majority of the population, cultivation and livestock don't provide for the entire household. Many rely on additional wage labour which accounts for about 50-70 percent of the annual household income of the poor[8]. The average farm size is between one and two hectares, but many farmers do not own the land they farm and absentee landlords and share-cropping are prevalent in many areas.

Wheat is the staple crop in most areas, but the varied agro-ecological zones allow a relatively wide variety of crops to be grown throughout the Province including paddy rice, various vegetables, dry fruits, pistachios, walnuts and mulberries. The last few years have seen a significant improvement in the farming system in the region predominantly due to the increased use of quality seeds and fertilisers. The use of

[6] BBC website 7 June 2014

[7] One Jerib is 0.2 hectare (2,000 m2)

[8] Regional Rural Economic Regeneration Strategies (RRERS) GRM (2007): Provincial Profile for Badakhshan, Afghanistan. Conducted by NABDP and Funded by Japan

plastic tunnels has also increased yields of vegetables in some areas. Opium poppy growing continues to be a major source of income in the province.

Animal husbandry, predominantly cows kept for milk, are an important livelihood strategy in the Province, but numbers have been significantly depleted in recent years due to drought.

Baghlan: Fertile soils in some areas of Baghlan, particularly the river plains, allow double-cropping agriculture that is only limited by extensive frost periods during the harsh winter season. Wheat, rice and fruit production dominate but there has recently been a revival of the diversity that marked and benefited the region in the years prior to conflict. Increasingly many areas are being areas are being cultivated with cotton, potato and fodder crops such as alfalfa, maize, and barley. Water melons, carrot, onion, tomato and okra are also being grown in some areas.

The mainly loess-covered, soft hillsides are often depleted of soil nutrients and therefore have limited livestock carrying capacity. In the remote areas, small ruminants are well integrated and play an important role in small traditional Afghan farming systems for the production of wool, meat and milk. However livestock husbandry is restricted by the limited availability of fodder from the largely depleted pastureland.

Baghlan has a tradition of high-quantity milk production and there have been a number of initiatives to build on this including cross-breeding through Artificial Insemination, the re-establishment of animal health services, and the rebuilding of a dairy facility.

Bamyan: It is estimated that 30% of the population in Bamyan is landless and those who do own land only have very small holdings. Many families, both landless and those with little land, work as sharecroppers and receive only between a fifth to a quarter of the yield. Some areas of Bamyan have had particular issues with conflict over land ownership and this has been experienced first-hand by the AKDN in its Micro Area Development Programme, before any implementation activities had to spend significant time on land conflict resolution with community members[9].

The main crops grown in Bamyan are wheat, barley, beans and potatoes. Given that livestock is extremely important for people in Bamyan, fodder crops are common as well. Bamyan is particularly known for its "shuttle system" of planting potatoes, wherein seed potatoes are grown in winter in Jalalabad, a warm area of eastern Afghanistan, and then transferred to Bamyan for spring re-planting.

There is generally only one cropping season and agricultural productivity is limited by poor soil quality, severely cold winters, annual spring flooding and regular drought in the summer months. Most fields are ‘snow-fed’, irrigated by water from the melting snow or by springs.

Most farming in the province is subsistence, and there is usually little surplus for selling and there is very little market activity in the agricultural sector. Farmers do have some success selling potatoes, but over production, cheaper imports from Pakistan and a lack of storage facilities has often resulted in limited markets and financial benefits to the local population.

Livestock is the traditional source of livelihood in the area and prior to the years of conflict provided a significant source of income for many. Livestock is still viable and is sold both nationally and regionally and milk products such as the traditional “kurut’ are sold both locally and in Kabul. However, years of war, drought and land degradation have reduced the markets, livestock numbers and the availability of fodder.

[9] Mountain Development Resource Book, ICIMOD, 2009

5.3 Water and Sanitation

Safe drinking water coverage

While lack of safe drinking water and sanitation are a critical issue in Afghanistan, recent years have shown some significant progress in availability of safe drinking water if not in sanitation. Nationally, Afghanistan, was deemed in 2014 to have met its targets for water coverage under the Millennium Development Goals (MDGs), to which Afghanistan is a signatory, but as can be seen in each of the three HAPA provinces the coverage is considerably lower than the national average.

Table 5 Safe drinking water availability

Province	Safe drinking Water (% of h/hlds)
Badakhshan	37*
Baghlan	28*
Bamyan	21*
National	46* / 55 (JMP 2015)

*Central Statistics Organization (2014), National Risk and Vulnerability Assessment 2011-12.

There are considerable issues with water quality at supposed "safe" sources in Afghanistan[10]. Some water sources have been found to contain chemicals of health significance, particularly arsenic, fluoride and nitrate in concentrations significantly above the safe levels for health for long term consumption recommended by the World Health Organisation. Others have been found to contain fecal contamination and others have issues with salinity and hardness.

Nationally Afghanistan was categorised as having "limited or no progress" in sanitation under the MDGs. Data for improved sanitation is not available at Provincial level, but the most recent National level survey from the UN Joint Monitoring Program (JMP) (2015) are shown in the Table 6 below. As can be seen the coverage for improved facilities is particularly low in rural areas, such as the ones targeted in HAPA.

Table 6 Estimated sanitation coverage

	Urban	Rural	Total
Improved facilities	45	27	32
Shared facilities	22	8	12
Other unimproved	33	48	43
Open defecation	0	17	13

WHO/UNICEF JMP, 2015

Information on WASH facilities in health care facilities (HCFs) is not very detailed, but a recent global survey of existing data by WHO and UNICEF[11] published the following data for Afghanistan.

[10] Saboor, Abdus. Assignment Report, Water Quality, 01 Jun 2012 - 30 April 2013, WASH Section, UNICEF Afghanistan Country Office

[11] Water, sanitation and hygiene in health care facilities – Status in low and middle income countries and the way forward, WHO, UNICEF, 2015

Table 7 Status of WASH in healthcare facilities in Afghanistan

Year of data	# of HCFs in sample	Info from	Water coverage	Sanitation coverage	Hygiene coverage
2009	400	UNICEF	56%	91%	72%

WHO/UNICEF 2015 (2009 data)

It should be noted that these data only represent the presence of water and sanitation facilities. They do not consider the quality of the water or the functionality of the latrines, which would most likely bring the coverage down considerably.

Considerable progress has been made in improving school WASH in recent years. The MoE now has standard latrine designs and senior management in the education sector have increasing awareness of WASH issues and their impact on school enrollment, attendance and results. A 'Call to Action' on WASH in schools was undertaken in 2010, and this provides a useful and practical resource document on good practices for WASH in schools[12].

A fairly comprehensive collection of WASH in schools data collected from 9000 schools in Afghanistan was made in 2010, funded by UNICEF[13] . The results of this can be seen in Table 8 below.

Table 8 Status of WASH in schools in Afghanistan

Sanitary toilets available (latrine/ student ratios not available)	Separate boy/girl toilets	Separate toilets for disabled	Safe drinking water available	Handwashing facilities available	Soap available	Hygiene promotion undertaken
40%	41.9%	8.8%	37.1%	12.9%	12.9%	78.5%

UNICEF 2011

6. Assessment of HAPA Outputs and Components

Table 9 below lists each approved and budgeted component of the HAPA program, under their respective outputs as described in the HAPA Action Plan. Activities under each component are described focussing particularly on any that may have environmental implications. The key potential positive and negative environmental-related issues are given a significance and risk rating, based on the guidelines in the PES and as appropriate mitigation and/or enhancement measures are suggested. It should be noted that many of these recommendation for enhancement measures may already be planned and integrated into the HAPA design. Their inclusion is to ensure a comprehensive list and does not indicate that they have not already been considered. Potential external and cumulative impacts are also considered as appropriate and are described in more detail in section 7. The right hand column indicating EIST category is taken from the EIST in Section 2.2 and also identifies which outputs should have an EA.

[12] GoIRA, MoE, MRRD and UNICEF. Afghanistan, Call to Action for Water, Sanitation and Hygiene in Schools, School Water, Sanitation and Hygiene Implementation Guide. 2010

[13] Manzoor, Asim. Final Analysis Report on WASH Data in Schools in Afghanistan. Organizational Development Consultants International and UNICEF. 2011

Table 9 Assessment of HAPA outputs and components

KEY	
Negative	Potential impacts predominantly risks/negative – **if B then EA required**
Positive	Potential impacts predominantly opportunities/positive
neutral	Environmentally neutral/insignificant

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
Output 1.1.1: BPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.					**B – EA**
Emergency Obstetric and Neonatal Care	Supply of medical equipment Training	Waste related to use of medical equipment may not be handled and disposed of appropriately **(low/med**)	Training and systems should integrate waste management considerations related to new medical equipment.		C
Maternity Waiting Rooms	Minor repairs to waiting rooms in maternity rooms in Badakhshan	Potential risk of contamination from waste materials from renovation **(low/low)**	Guidelines and supervision necessary to ensure that hazardous materials are stored carefully and waste products are removed from the site.		C
Child Health and Immunization	Vaccination campaigns and delivery at AKDN-managed facilities in Badakhshan, Bamyan and Baghlan Mobile immunisation team in Badakhshan Training	Unsafe storage and disposal of syringes, and other waste may lead to significant health and environmental risks **(high/high)**	AKDN must ensure MoPH guidelines are clear to all and well integrated into training. Facilities must be available for safe disposal of sharps at both mobile unit and health facilities. Functional and effective incinerators must be available in each facility.		B
Improved Health System Capacity to Address Acute Malnutrition	Repair of existing 14 facilities, no construction. Supply of medical equipment Training	Potential risk of contamination from waste materials form renovation **(low/low)**	Guidelines and supervision necessary to ensure that hazardous materials are stored carefully and waste products are removed from the site.		C
Output 1.1.2: EPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.					C

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category	
Provincial Hospitals in Bamyan and Badakhshan	Provision of equipment Training	Waste related to use of medical equipment may not be handled and disposed of appropriately **(low/med)**	Training and systems should integrate waste management considerations related to new medical equipment.		C	
Centres of MNCH Excellence in Badakhshan	Training	N/A	N/A		C	
Output 1.1.3: Knowledge management and mobilisation for improved health service provision supported.					C	
Mother and Child Surveillance System	Data management system extension	N/A	N/A		C	
Action Research Support Unit	Research in public health	N/A	N/A		C	
Output 1.2.1: Phase II of Bamyan Hospital					**B - EA**	**B**
Solar power installation	Provision of solar panels The peak power output of the Photovoltaic System shall be 400 kWp with expected generated energy output of 490,000 kWh and above per year. PV system located 720 m away from hospital, requiring underground cables to hospital site.	Reduced reliance on non-renewable energy sources Reduced air pollution and reduced potential for pollution through fuel spillage Acid from batteries, could leak or batteries explode due to over-charging.(**med/med**) Batteries could be damaged, or acid leaked out during attempted theft**.(med/med)** Land disturbance from installation of PV system and cables could cause loss of vegetation and soil erosion **(low/med)**	Batteries will include high integrity post seal design to prevent electrolyte leakage. Battery cells will be equipped with one-way safety valves to allow excess gas to escape when overcharging. Secure storage must be ensured. Vegetation loss will be limited as there is very little existing in area. Cables must be well buried and backfilled soil well compacted to prevent gullying and erosion.			
Output 1.2.2: Health infrastructure in Badakhshan, Bamyan, and Baghlan enhanced.					**B - EA**	

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
Rehabilitation and renovation of health facilities in program provinces	Renovation (not construction) of 16 existing health facilities in Badakhshan WASH facilities are generally in place. Majority of water is sourced from gravity-fed springs and some tube wells. Renovation to consider necessary seismic requirements and infection prevention	Existing WASH and waste management facilities may not be of acceptable quality and lead to spread of disease and infection and pollution of groundwater **(med/med**) Facilities may be damaged by seismic events **(med/med)** Facilities may not have appropriate trained staff to ensure effective maintenance **(med/med)** Potential risk of contamination from waste materials during renovation **(low/low)**	Renovation of the health facilities offers an opportunity to improve WASH facilities, improve drainage, waste disposal and meet standards for seismic risks. Health facility assessments should include a projection of increased usage and designed for increased capacity. Staff should receive appropriate training in WASH and waste management Water quality should be tested and conform to WHO standards Guidelines and supervision necessary to ensure that hazardous materials are stored carefully and waste products are removed from the site.	Inadequate waste management and sanitation provision could contaminate ground or surface water sources.	B
Output 1.2.3: FMIC infrastructure upgraded and expanded					C
Mother's Wing	Minor renovation of existing facilities, such as painting and tiling. Supply of medical equipment	Potential risk of contamination from waste materials from renovation **(low/low)**	Guidelines and supervision necessary to ensure that hazardous materials are stored carefully and waste products are removed from the site.		C
Output 1.4.1: Strengthened and expanded routine immunisation services					B
Mobile teams, outreach services and capacity building for routine immunisation expanded	Expand vaccination campaigns and services including a focus on un-served pockets, establish mobile team in Badakhshan; pulse and immunisation	Unsafe storage and disposal of syringes, and other waste may lead to significant health and environmental risks **(high/high)**	AKDN must ensure MoPH guidelines for storage and disposal are clear to all and well integrated into training.		B

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
	campaigns in Bamyan and Baghlan. Capacity development of MoPH to improve immunisation planning.		Facilities must be available for safe disposal of sharps at both mobile unit and health facilities. Functional and effective incinerators must be available for waste disposal.		
Output 2.1.2: Capacity of GIHS and Badakhshan IHS to offer high-quality nursing and midwifery education and safeguard education standards supported.					C
General Diploma Nursing Program at GIHS Kabul and BIHS in Faizabad.	Training Minor renovation of nursing department, such as painting, carpeting, blinds, some plumbing etc. and supply of appliances	Potential risk of contamination from waste materials from renovation **(low/low)**	Guidelines and supervision necessary to ensure that hazardous materials are stored carefully and waste products are removed from the site.		C
Midwifery Education Program at GIHS	Training	Potential to improve curriculum and training in issues such as improved hygiene and sanitation practices and waste management	Ensure hygiene and sanitation practices and waste management are incorporated into the curriculum and included in training effectively		C
Training and Policy Unit at GIHS to build and safeguard education standards strengthened.	Training	Potential to improve curriculum and training in issues such as improved hygiene and sanitation practices and waste management	Ensure hygiene and sanitation practices and waste management are incorporated into the curriculum and included in training effectively		C
Output 2.2.1: Community health nurses trained and supported in their placements.					C
Community Health Nursing Education Program	Training	Opportunities to reach a wide audience with associated health and hygiene messages such hygiene (esp. hand washing), safe water use and storage, nutrition.	Opportunities for integrations with Intermediate Outcome 3 - Community nurses can enforce messages on nutrition and WASH		C
Output 2.2.2: Community midwives trained and supported in their placements					C
Community Midwifery Education Program		Opportunities to reach a wide audience with associated health and hygiene messages such	Opportunities for integrations with Intermediate Outcome 3 - Community midwives can enforce messages on nutrition and WASH		C

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
		hygiene (esp. hand washing), safe water use and storage, nutrition.			
Output 2.2.3: Post graduate medical education program strengthened and improved					C
PGME program at FMIC	Training	N/A	N/A		C
Partnerships with University of Calgary and Alberta	Training Research Technical exchange	N/A	N/A		C
Output 2.3.1: FMIC's capacity to provide health professional development augmented.	Training Research Technical exchange	N/A	N/A		C
Output 2.3.2: Institutional, managerial and technical capacity of MoPH supported.	Capacity development of MoPH in Kabul and Provinces to lead and manage the delivery of gender responsive health services Trainings also will focus on human resource management , public health management and leadership	Potential for building capacity for improved environmental awareness in health facility management, leading to systematising of improved procedures for WASH, waste management, etc.	Undertake HR audit at facilities to ensure adequate capacity for effective sanitation and waste management. Ensure WASH and waste management is integrated into facility management training.		B
Output 3.1.1: Gender-responsive health, hygiene and sanitation awareness campaigns to enable good health practices established and implemented.					B
Comprehensive Community Health Promotion	Awareness raising activities in households and schools in health, hygiene, nutrition, environmental issues	Improved health and hygiene practices such as hand washing with soap at critical times Self-initiated activities such as construction of latrines, improved environmental practices such as drainage, soil conservation, waste water management Health and hygiene improvements in schools may be limited if they do not have appropriate WASH	Integrate comprehensively with output 3.1.2 – WASH, especially the importance of latrines Ensure that schools in target communities have acceptable WASH facilities Ensure promotion of critical times for handwashing with soap as this simple change in behaviour can have dramatic health benefits.	Positive cumulative impacts related to both handwashing with soap and building and use of latrines (i.e. ending open defecation). Individual change in behaviour will not reduce prevalence of diarrhea etc. –	B

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
		facilities (i.e. school WASH is not being implemented in this Phase of HAPA) **(med/med)** Lack of menstrual hygiene management (MHM) as part of school awareness-raising will limit the effectiveness of the component. MHM is not mentioned in the HAPA proposal **(med/med**)	Include awareness raising and training in schools, especially for sensitive issues such as MHM	need entire community change in behaviour.	
Child nutrition and health modules integrated into early childhood development curricula	Training and awareness raising for teachers and parents in child health and nutrition	Some concepts, such as WASH-nutrition links, may be difficult for parents and teachers to grasp**.(low/low)**	Ensure the curriculum/and trainers clearly, but simply link the importance to nutrition of improved WASH, including critical handwashing times.		C
Community libraries	Stocking libraries in 200 communities in the 3 provinces with materials to raise awareness of nutrition, agriculture, WASH and health issues. Libraries are existing and there will be no construction and no renovation	Enhanced availability of materials promoting health, nutrition, improved agricultural techniques, WASH issues etc. Literacy rates are low, so written materials will only be useful to segment of the population. **(low/low)**	Library will be utilised as a hub for community information exchange on environmental, WASH issues etc. This will give opportunities for non-literate to also benefit. Activities such as drama, music etc. could take place		C
Output 3.1.2: Small-scale community initiatives to improve water and sanitation infrastructure supported.					**B -EA**
New Water and Sanitation Infrastructure	43 safe drinking water projects in Badakhshan Additional projects to follow in Baghlan and Bamyan following the same model. 2200 latrines – supported through community contributions	See cumulative impacts on groundwater recharge and pollution Opportunity for improved health and livelihoods through effective WASH implementation.	AKDN has long term experience in development of community WASH programming and should ensure it uses this to its advantage, involving staff who have long-term experience, utilising its SOPs and integrating	There is potential for groundwater depletion, depending on location and population of communities.	B

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
	AKFP Area offices (12) will be trained and equipped to do regular water quality testing Micro-grants made available for safe water and sanitation projects	Increased livelihood/educational opportunities for women and girls due to reduced work load from water carrying, sickness etc. Increased security and dignity for women and girls as they will no longer have to go outside for open defecation (often done at night) Latrine construction may not lead to increased latrine use **(med/med)** Technical skills and supply chain may not be present for effective and safe latrine construction and maintenance of WASH facilities to ensure sustainability and safety in longer term **(med/med)** Lack of WASH implementation in schools for this phase of HAPA means that if school WASH infrastructure is insufficient the community will not be able to attain 100% coverage for key WASH targets such as safe water, open defecation free (ODF) status or handwashing. Benefits of all of these are limited if coverage is not universal in a small community.**(med/med)**	lessons learned from previous programs Hydro-geological data analysis to determine groundwater availability and recharge. Monitoring frameworks for latrines should be outcome-based, focussing on open defecation levels rather than number of latrines constructed. Initially, both chemical and biological water quality parameters should be tested. Review of capacity and supply chain for latrine construction and WASH maintenance necessary, followed by training and/strengthening of supply chain where needed. If school WASH facilities are not adequate, AKF should consider means for funding upgrades to infrastructure to accompany awareness-raising activities.	Potential for contamination of groundwater from increased number of latrines if they are not constructed following SOPs Climate change may reduce water availability	
Output 3.1.4: Community organisations supported to play an oversight role in government health service delivery					C

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category	
Health Shuras	Training of Health Shuras in managing health facilities in 169 health facilities	Improved management of facilities will include improved environmental management. Health Shuras have more direct link with community so will be in a able to relate to their issues and to promote awareness raising in communities	Opportunity for raising awareness and capacities in environmental and waste management in health facilities and sanitation and hygiene management		C	
Clusters and District Development Assemblies	District Development Assembly (DDA) members and Cluster Level Development Council (CLDC) members in 29 Districts given health management training and linkages created with health department officials	Potential to develop understanding and support for improved environmental issues among local leadership – this can help drive change and awareness DDAs and CLDC may become more engaged and proactive in supporting health facilities	Opportunity for raising awareness and capacities in environmental and waste management in health facilities and sanitation and hygiene management		C	
Output 3.1.5: Relevant community actors trained in the use of community participatory monitoring and social audits.					C	
Community Participatory Monitoring	Support/training for monitoring through existing community structures such as Health Shuras and DDA	Higher level of engagement and awareness by local institutions Increased opportunity for locally determined solutions to issues	Ensure monitoring framework has key environmental indicators		C	
Social Audits	Development of accountability mechanism where community can hold Health Shuras and DDA to account for the running of BPHS facilities	Increased accountability on health facility management will include management of environmental issues	Ensure accountability mechanism includes key environmental issues		C	
Output 3.2.1: Household and community level initiatives addressing food insecurity expanded.					**B - EA**	**B**
Increased Production of Staple Crops	Training and support for farmers in use of disease-resistant, high yielding seeds	Reduced climate change vulnerability Improved water use effectiveness	Seed banks must ensure the availability of improved, but open/self-pollinated seed varieties to ensure continuing	Greater use of fertilisers and pesticides throughout the	B	B

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category	
	Establishing seed banks and improved seed distribution Improved storage Operational-research (potatoes)	Fertilisers and pesticides may be applied more effectively leading to reduced local water contamination Hybrid seeds used may not produce their own viable seed for use the next year, having significant impacts for poor and subsistence farmers. (**med/med)** High yielding, disease resistant crops may not all be appropriate to the local agro-climatic zone and to local culture and tastes**.(med/med)** Use of fertilisers and pesticides may lead to local contamination of water sources **(high/med)** Unsafe storage and application of pesticides hazardous to health **(med/med)**	availability of seeds for subsistence farmers. Before the establishment of seed banks, significant background study should be done to determine both which seeds will be the most viable for the agro-climatic zone and also what the farmers and their families will be prepared to eat Awareness raising and training in safe and effective pesticide and fertiliser use and safe storage and handling. Farmer to Farmer learning opportunities will help spread best practices and benefits	target areas may lead to contamination of water bodies, but if well managed might actually improve the situation		
Improved Horticulture	Support for improved horticulture projects that increase variety of nutritious foods. Off season production through use of greenhouse technologies (plastic sheeting) Capacity development in food storage and processing activities especially for women	Reduced climate change vulnerability Fertilisers and pesticides may be applied more effectively leading to reduced local water contamination Reduced food waste Increased use of fertilisers and pesticides may lead to local contamination of water sources **(high/med)**	Farmer to Farmer learning opportunities will help spread best practices and benefits Awareness raising and training in safe and effective pesticide and fertiliser use and safe storage and handling.		B	B

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category	
	Irrigation will not be supported	Unsafe storage and application of pesticides hazardous to health **(high/med)**				
Improved Livestock	Improved fodder systems Livestock health Backyard poultry promotion	Improved food security and nutrition Increased availability animal products for income generation Livestock/poultry waste can be used for fertiliser for horticulture and agriculture Potential pollution/water source contamination if livestock waste and silage liquor is not managed correctly **(med/med)**	Those involved in animal vaccination must be trained to appropriate standards and have resources available for safe and effective waste disposal of hazardous materials. Ag. Extension activities need to include significant component t on environmental management related to livestock waste management		B	B
Professional Development and Support to Government	Capacity development of MAIL/DAIL in nutrition, ag extension etc. Develop systems based approach with government and other stakeholders for more effective agricultural capacity development and technology transfer.	Opportunity increase effectiveness and adoption of more sustainable and environmentally friendly agricultural practices including: soil and water conservation, effective use of fertilisers and pesticides, effective use of animal based fertilisers	Capacity development to government agencies activities should include integration of sustainable environmental practices	Improved soil and water conservation practices may lead to improved water quality and ground water recharge and reductions in land degradation and flooding	B	
Market Development Program: Value Chain Development	Supporting improved value chain development through diversification of products, processing, preservation and storage Operational research on focused value chain development and nutrition status	More diverse produce and its preservation may reduce risk of food shortages/poor nutrition related to climate change, pestilence and drought. Food processing activities may cause contaminating waste **(med/low)**	Ensure that adequate analysis is done on potential effluents and by products related to value chain development and that mitigation measures are integrated into implementation program and associated training		B	

Outputs/components	Summary of activities	Potential impacts pos/neg Significance/Risk- low-med-high	Mitigation /enhancement measures	Potential external/cumulative impacts	EIST category
School gardens	Establishing school gardens in 50 schools in Baghlan and 56 schools in Bamyan and 20 schools in Badakhshan (as continuation of exiting program)	Increased availability of diverse and nutritious food in school Increased skills and appreciation of growing nutritious vegetables and fruits among school children Opportunity for small income generation in schools to pay for things such as small purchases, maintenance and repairs	Ensure roles and responsibilities for this component are established in the school and that identified focal point/coordinator in the school is well trained both in sustainable management of the garden along with nutritional awareness		B
Access to Savings and Credit Opportunities for Households, Especially Women	Establishing Community-based Savings Groups (CBSGs) in all three provinces for agricultural inputs such as seeds, fertiliser and tools.	Increased opportunity to grow a wide range of nutritious foods for both subsistence and income generation.	Integrating with the value chain and extension components will enhance livelihood and environmental outcomes.		C

7. Assessment of the Program as a Whole

Section 6 above has noted specific enhancement and mitigation measures related to components, but it is also necessary to consider a broader context in which the programming can enhance or mitigate environmental effects. This includes the awareness and management of cumulative effects, the potential impact of climate change and the integration of gender equality and improved governance and coordination to ensure environmental issues are managed effectively and sustainably. Cumulative effects are noted, as applicable, in Section 6 alongside their related component. It will be noted that most are related to the contamination and availability of water.

Cumulative effects: The increased use of fertilisers and pesticides; the poor siting, design and construction of latrines and inadequate or badly managed waste management systems in health facilities all have the potential to contaminate water bodies, such as aquifers, rivers, lakes, at a cumulative level if not effectively managed.

At a program level, the key mitigation measure for ensuring the protection of water bodies from contamination is a comprehensive and integrated package of environmental awareness raising and capacity building to ensure a complete understanding among participants in the relevant sector. For example participants in the food security –government extension officers, farmers etc. – should receive comprehensive instruction on optimal fertiliser and pesticide use along with safe handling and storage to prevent leaching into water sources. Likewise, managers and staff at health facilities should be trained in safe waste disposal and have the resources available to do it effectively. In the sanitation program guidelines on latrine construction need to be well communicated and enforced within the communities and artisans trained in construction should receive training to the effect.

If these mitigation measures are well implemented, then there may be significant positive impacts. For example increased understanding of optimal application of pesticides and fertilisers may cause a reduction in the leeching into water sources and result in a net improvement in quality. Additionally training of farmers and extension workers in improved soil and water conservation practice will also help to reduce contamination. Practices that reduce run-off , such as contour farming and bunding reduce the entry of contaminants, including soil, into streams and rivers, and specific riparian protection measures, such as planting of grasses, reeds etc., can provide a useful resource whilst also protecting the water source from agricultural contamination.

Depending on the population numbers and proximity of water abstraction projects another potentially significant cumulative impact may be the depletion of water sources, which can effect, not just an individual community, but potentially a very wide area using the same aquifer or living in the same watershed. This could potentially be exacerbated by the effects of climate change which may reduce rainfall or change rainfall patterns, either of which could have a significant impact on water resource availability. Key issues are likely to be aquifer depletion and over-use of a spring source, resulting in a stream not being available to downstream users. It is recommended that once communities are selected for the community WASH component (Output 3.1.2) that an assessment of available water sources is done including –as appropriate – a groundwater availability and recharge study, spring flow and downstream use study.

As in the case of contamination, good management could have positive impacts on water resources and offer an opportunity to offset or adapt to changes related to climate change. Soil and water

conservation measures, such as bunds, soak pits, terracing etc. which should be integrated into the food security component, can be very effective in increasing groundwater recharge and in maintaining steady and reliable river flows along with reducing land degradation.

Another very positive potential cumulative impact is related to the increased building and use of latrines (i.e. ending open defecation) in Output 3.1.2 and the accompanying hygiene awareness raising (Output 3.1.1), both in individual families and in institutions such as health facilities and schools. These two activities are cumulative, as in small communities if even just a few members are practising open defecation or not washing their hands at appropriate times, then the whole community is easily susceptible to diarrhea or other sickness related to fecal coliforms. For this reason best practice in the sanitation sector considers anything less than open defecation free (ODF) communities to be a sub-optimal outcome. Increasing awareness raising and practice of handwashing with soap at critical times has low capital cost but has led to significant health outcomes but likewise needs a community-wide approach including families, schools and clinics.

A concern in the HAPA program is that the potential for these positive impacts may not be realised due to the lack of WASH infrastructure programming in schools. If WASH facilities are going to be available in health facilities and at household level, schools that do not have appropriate WASH facilities, will serve as a weak link in the system. School children will for example use a latrine and wash their hands when at home, or even when visiting the clinic, but when they get to school may find that there are no facilities to do so. If the selected communities for HAPA include schools where there are sub-standards WASH facilities this could result in significantly reduced program outcomes. If this does prove to be the case, it is recommended that either a budget is identified to ensure improved WASH facilities in all schools in the program target communities, or else selection of target communities should include a criteria that the school have a certain standard of WASH facilities already in place.

Climate Change: Climate change, as mentioned above may impact availability of ground water and surface water sources, which should be conserved accordingly through the improved practices mentioned and additional initiatives such as including water conservation issues in awareness raising activities and through the promotion of water storage at household and institutional level to ensure more consistent supply. This may be storage of rainwater, collected from roofs or storage of a groundwater/spring supply etc.

Reduced or erratic rainfall related to climate change may also be an issue for improving food security. This may result in reduced harvests and growing periods, damage to crops and increased soil erosion and run-off, and increased risk of flooding and landslides, which are already a major problem in some of the program areas. Adaptation measures that will assist in mitigating this include the introduction and promotion of more drought resistant crops and the introduction of improved soil and water conservation techniques as discussed above.

Gender Equality: Key environmental-focussed gender equality issues in HAPA relate to improved access to WASH and to improved food security and livelihoods. HAPA will have significant positive impacts in these areas.

A lack of safe and reliable WASH facilities has a disproportionately negative impact on women and girls. Women without a latrine in their home or compound usually walk some distance, often at times of darkness, to a private area where they can defecate openly. This can expose them to the risk of being attacked or raped. Similar risks to security arise while collecting water. This is usually

a responsibility of women and girls who may spend up to several hours per day walking to and from water sources and carrying heavy containers of water. This can lead to health issues and also a considerable amount of wasted time, leading to reduced opportunities for livelihood or household activities, schooling for girls, along with limiting time for social or leisure activities.

Family sickness, so much of which is water and sanitation related generally falls on the shoulders of women who must both care for the sick family members, take them to the clinic and perhaps try and find money for medicine while also maintaining their other household, or livelihood responsibilities. The Afghanistan Rural WASH Policy (2010) has made a good effort to integrate gender with some useful practical guidance including challenges, good practices, case studies and a comprehensive list of gender indicators. HAPA should endeavour to involve women in the planning and design of the WASH component and ensure they are involved in on-going management and decision making.

Livelihood activities, especially those that traditionally are undertaken by women such horticulture and food processing and preservation will, apart from offering a more diverse and nutritious diet, also potentially give women some additional income which can be used for accessing better health care for themselves and their family, educating their children and buying nutritious foods. As with the WASH sector it is important that women and women's groups are involved in planning and design of the livelihood components to ensure that the outcomes are in line with their needs and also to ensure that HAPA does not give them a net increase in their workload through additional expectations and responsibilities.

Governance: HAPA is working at improving governance in a variety of sectors and at many levels, right from the National level, to health workers and managers at local levels and local bodies such as DDAs and Health Shuras.

The capacity of the Government of Afghanistan is weak in many areas, but there have been significant improvement in many areas over recent years. This includes a fairly comprehensive legal and policy framework, as summarised in Section 3.2. For example the Rural WASH Policy (2010) is comprehensive and follows international best practices. One of the foundations of good governance within the program should be to follow the institutional framework and in doing so work closely and cooperatively with the appropriate agencies.

To ensure sound environmental governance and sustainability it is essential that environmental awareness is raised and that environmental management is integrated effectively into the work of partners and agencies, including those that do not necessarily see environmental management as their responsibility, enabling a more coordinated and holistic approach.

This can be done through a combination of awareness raising and training, so that the relevant linkages with their sector are well understood and also by enabling better communication and liaison with environment-focussed agencies and groups. The latter can be achieved through arrangements such as including representatives of environmental partners such as NEPA in program activities such as stakeholder working groups and workshops where they will be able to discuss issues from an environmental standpoint. NEPA should also be approached at an early stage to come to an agreement on the format and approval of EAs that have to be undertaken on several outputs. NEPA representatives may also be approached to provide input into environmental training for other HAPA partners and participants, such as MAIL and DAIL extension workers.

8. Conclusions

8.1 General Conclusions

The HAPA program does not include any activities that are considered of high environmental risk. However, being multi-sectoral program with a diversity of activities relating to water and sanitation, agriculture, building renovation, alternative energy and medical waste it does have the potential for significant environmental impact, both positive and negative. Several components are designated as Category B under the AKFC EIST (and under the equivalent GAC tool) and as such require a (simple) EA. The program will then be in compliance with Canadian environmental regulation, assuming that all recommendations are followed. Similar EA requirements exist in Afghanistan, so EAs are likely to be transferable with little modification.

While many of the potential negative impacts are quite significant, the risks can be managed effectively if they are appropriately prioritised, through adequate resourcing and systemisation into the program's planning mechanisms. With the appropriate impacts, many of the potentially negative impacts could be translated into positive effects and many potentially positive effect can be greatly enhanced. Activities such as increased access to pesticides and fertilisers offers the opportunity for more optimal use of these inputs, given accompanying extension support, potentially leading to reduced contamination of water sources. Likewise, improved infrastructure, accompanied by appropriate awareness raising and training will lead to improved sanitation and waste management in health clinics and communities potentially will lead to improved health outcomes and reduced contamination of resources.

Attaining these positive environmental results will require both the capacity and resolve within AKDN, to ensure that environmental measures continue to be integrated, and appropriately monitored, throughout the program. This should be done through integration of these measures into management tools such as the PIP and PMF and through continued adherence to regulation, SOPs and guidelines that have been developed either within AKDN of externally by government agencies or others.

All major components need to ensure the necessary awareness, training and management structures are in place and systematised. Activities such as daily cleaning of bathrooms and hand washing at critical times, correct procedures for medical waste incineration and safe use and handling of pesticides, and many other components of HAPA, can all have a major influence – both positive and negative - on program outcomes. These, are relatively simple, understandable concepts, but to institutionalise them, so that benefits continue after HAPA will require comprehensive and persistent efforts to integrate them both culturally and into governance mechanisms on an on-going basis.

AKDN has a long experience in managing programs in these sectors in Afghanistan and has clearly integrated environmental management components successfully. AKDN's environmental management capacity has been increased recently through its new Policy for Environmental Sustainability (PES) and accompanying training of staff, and appointment of Environmental Focal Points throughout the network, including Afghanistan. All of these developments point to an organisation that recognises the necessity of effective environmental management and is prepared to devote time and resources to making it successful.

8.2 Recommended Project Design Changes/Refinements, based on the SEA Findings

Recommendations for mitigation measure and enhancement measures along with specific action items have been included in the text above as they relate to their specific components. Few of these are major, and many it is assumed are already well known to AKDN and would as a matter of course be integrated into the PIP.

The major recommendations that may not have been previously considered, or are not entirely clear in the program description, and may potentially have significant budget or planning implications are as follows:

Many water contamination issues, both chemical and biological have been found in recent years and both for due diligence and safety AKDN should undertake test on all drinking water sources, including those existing in health facilities being renovated. Sources should be tested for key biological and chemical parameters and meet appropriate Afghan/WHO standards.

HAPA has not proposed to improve WASH facilities in the health facilities it is renovating. Based on the interviews with AKDN staff it is considered likely that facilities are already in place. It is recommended that facilities are assessed carefully. Water quality, as discussed above may be an issue and latrines and hand washing facilities, if not well maintained can present a health hazard not appropriate to a health facility setting. Additionally, future projected use of the health facilities should be considered to determine whether there is adequate water quantity and storage and latrine ratios for any increased population.

The program is unlikely to attain optimal community-wide sanitation outcomes if schools do not have appropriate WASH facilities. The HAPA program, in its current phase proposes infrastructure support to health facilities and communities, but not to schools. However, it will provide hygiene and sanitation awareness throughout the community, including in schools. This will likely significantly reduce the impact of the activity, and is unlikely to lead to outcomes such as community ODF or the benefits of community-wide handwashing at critical times. If a budget cannot be found at this stage, it is suggested that communities be supported only where it is determined that schools already have appropriate facilities that can support a community-wide approach to improved WASH.

9. Environmental Management Strategy (EMS)

As has been detailed in the above sections the program has potential for many significant environmental impacts, both positive and negative and each must be managed effectively so that potential negative impacts are neutralised or at least minimised and positive impacts are maximised.

The frameworks below, have been developed to help manage the environmental impacts of Outputs that have been determined to have significant impacts, either negative or positive and should be considered alongside information in Section 6. The frameworks are organised by output and detail specific action items necessary to mitigate and/or enhancement particular environmental issues that have been identified in each component or output. Also included are reference to key legal, policy or guidance documentation that should be considered in the design and implementation of the component to ensure environmental compliance, streamlining and effectiveness.

Also indicated in the frameworks are monitoring requirements and responsibilities that it is recommended are integrated into program planning documents such as the PMF, PIP and annual work plans as appropriate. Organisational responsibilities only are indicated and it is suggested that these organisations specify an appropriately qualified staff member to be accountable for each action item.

It is also noted where it has been determined – as described in Section 2.2 of this report- that outputs require an EA. In these cases there may be a more detailed list of mitigation measures associated with the output. Care should be taken to ensure that these mitigation measures are also integrated into planning and monitoring documentation. The final column of the frameworks indicates when there would be significant benefits in integrating aspects of the component with other components in HAPA.

Table 10 Environmental Management Strategy Framework

Output 1.1.1: BPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.	**An EA is required for this output** based on the EIST B designation of the "Child Health and Immunization component. This is triggered by the potential production of medical waste from vaccination campaigns **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations 2008 • National Waste Management Policy SOPs of Health Care Waste Management component of the IMEP (2009) • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Emergency Obstetric and Neonatal Care	Assess potential waste management needs related to installation of any new equipment. Ensure integration of waste management disposal into training on use of new equipment	**Commissioning:** Ensure waste management provisions are appropriate **On-going:** include waste management capacity and effectiveness indicators in PMF and any additional mitigation recommended in EA	AKHS/AKFA	All construction related activities should be consistent in standards, guidelines, associated training etc.
Maternity Waiting Rooms Improved Health System Capacity to Address Acute Malnutrition	Include clause in contract to ensure that AKFC building guidelines are followed in construction/renovation activities	**Construction phase :** On-going monitoring to ensure contractors' compliance with AKFC and other guidelines	AKHS/AKFA – site supervisor	
Child Health and Immunization	Ensure MoPH SoPs on immunization waste management are clear to all involved in this component and are well integrated into training. Clinics and mobile teams must be equipped with the appropriate resources for sharp disposal and incinerators for medical waste should be installed at each HCF	**On-going:** include waste management capacity and effectiveness indicators in PMF	AKHS/AKFA	Combine EA and planning with Output 1.4.1: Strengthened and expanded routine immunisation services

Output 1.1.2: EPHS services enhanced and supplemented to improve quality and promote MNCH best practices, including gender responsiveness.	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Waste Management Policy SOPs of Health Care Waste Management component of the IMEP (2009) • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Provincial Hospitals in Bamyan and Badakhshan	Assess potential waste management needs related to installation of any new equipment. Ensure integration of waste management disposal into training on use of new equipment	**Commissioning:** Ensure waste management provisions are appropriate **On-going:** include waste management capacity and effectiveness indicators in PMF and any additional mitigation recommended in EA	AKHS/AKFA	

Output 1.2.1: Phase II of Bamyan Hospital –solar power installation	**An EA is required for this output** as it is a " Small-scale energy production or conservation project" under category B of the EIST **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • EA – when written • AKFC guidelines on safe handling of hazardous materials and occupational health and safety		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Solar power installation.	Include clause in contract to ensure that AKFC building guidelines and EA recommendations are followed. Key issues include: • Batteries to include high integrity post seal design to prevent electrolyte leakage. • Battery cells will be equipped with one-way safety valves to allow excess gas to escape when overcharging. • Secure storage must be ensured. • Cables must be well buried and backfilled soil well compacted to prevent gullying and erosion.	**Construction phase :** On-going monitoring to ensure contractors' compliance with AKFC guidelines and mitigation measures from EA **Commissioning:** Ensure compliance with AKFC guidelines and mitigation measures from EA prior to sign off/use	AKHS/AKFA/AKPBS	

Output 1.2.2: Health infrastructure in Badakhshan, Bamyan, and Baghlan enhanced.	**An EA is required for this output under category B of the EIST.** Once the selection of facilities is finalised and if an inventory of renovation requirements at each is deemed similar it is suggested that a class EA is conducted. **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • National Waste Management Policy SOPs of Health Care Waste Management component of the IMEP (2009) • Afghanistan National Rural WASH Policy. (2010) • EA when written • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Rehabilitation and renovation of health facilities in program provinces	Include projection of potential increased usage over at least the next five years into Health facility assessments and rehabilitation design so that WASH and waste facilities can meet future capacity. Water quality test at each HCF should be undertaken and meet WHO and/or Afghan standards Include clause in contract to ensure that AKFC building guidelines are followed in construction/renovation activities	**Planning:** projection of future usage numbers. **Construction phase:** chemical and biological water quality tests – for both new and existing systems. On-going monitoring to ensure contractors' compliance with EA mitigation measures and AKFC and other guidelines	AKHS	

Output 1.2.3: FMIC infrastructure upgraded and expanded	**No EA required**	**Reference to legal, policy instruments and guidelines:** • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety.		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Mother's Wing	Include clause in contract to ensure that AKFC building guidelines are followed in construction/renovation activities	**Construction phase :** On-going monitoring to ensure contractors' compliance with AKFC and other guidelines	FMIC	

Output 1.4.1: Strengthened and expanded routine immunisation services	**An EA is required for this output** based on the EIST B designation triggered by the potential production of medical waste from vaccination campaigns. It is advised that this be combined with the EA required for Output 1.1.1. – Child health and Immunization component which is very similar **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations 2008 • National Waste Management Policy SOPs of Health Care Waste Management component of the IMEP (2009) • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Mobile teams, outreach services and capacity building for routine immunisation expanded	Ensure MoPH SoPs on immunization waste management are clear to all involved in this component and are well integrated into training. Clinics and mobile teams must be equipped with the appropriate resources for sharp disposal and incinerators for medical waste should be installed at each HCF	**On-going:** include waste management capacity and effectiveness indicators in PMF	AKHS/AKFA	Combine EA and planning with Output 1.1.1.- Child health and immunization

Output 2.1.2: Capacity of GIHS and Badakhshan IHS to offer high-quality nursing and midwifery education and safeguard education standards supported.	**No EA required**	**Reference to legal, policy instruments and guidelines:** • AKFC guidelines for small health care facilities and on safe handling of hazardous materials and occupational health and safety • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH.		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
General Diploma Nursing Program at GIHS Kabul and BIHS in Faizabad	For renovation component of GIHS: Include clause in contract to ensure that AKFC building guidelines are followed in construction/renovation activities	**Construction phase :** On-going monitoring to ensure contractors' compliance with AKFC and other guidelines	AKU/AKFA	
Midwifery Education Program at GIHS	Integrate hygiene, sanitation and waste management into curriculum and training	Monitor learning outcomes on hygiene, sanitation and waste management	AKU/AKFA	
Training and Policy Unit at GIHS to build and safeguard education standards strengthened.	Integrate hygiene, sanitation and waste management into curriculum and training	Monitor learning outcomes on hygiene, sanitation and waste management	AKU/AKFA	

Output 2.2.1: Community health nurses trained and supported in their placements	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH.		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Community Health Nursing Education Program	Integrate components on nutrition and WASH into the training of community health nurses	Monitor learning outcomes of nurses on nutrition and WASH issues	AKHS/AKU	Intermediate outcome 3 - WASH

Output 2.2.2: Community midwives trained and supported in their placements	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH.		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Community Midwifery Education Program	Integrate components on nutrition and WASH into the training of community midwives	Monitor learning outcomes of midwives on nutrition and WASH issues	AKHS/AKU	Intermediate outcome 3 - WASH

Output 2.3.2: Institutional, managerial and technical capacity of MoPH supported	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Waste Management Policy SOPs of Health Care Waste Management component of the IMEP (2009) • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH.		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Institutional, managerial and technical capacity of MoPH supported	Integrate component on facility hygiene and sanitation awareness into MoPH training plans Undertake HR audit at facilities to ensure adequate capacity for effective sanitation and waste management	Include indicator on health and hygiene awareness of MoPH in PMF	AKFA/AKU	

Output 3.1.1: Gender-responsive health, hygiene and sanitation awareness campaigns to enable good health practices established and implemented.	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH. • National Solidarity Program		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Comprehensive Community Health Promotion	Integrate comprehensive handwashing component into health promotion campaign.	Include awareness of critical handwashing times as indicator in PMF	AKFA	Output 3.1.2 – WASH, especially the importance of latrines.

Output 3.1.1: Gender-responsive health, hygiene and sanitation awareness campaigns to enable good health practices established and implemented.	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH. • National Solidarity Program		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
	Develop health promotion package for schools and train health promoters - include MHM issues (not mentioned in plan) School WASH is not being implemented in this Phase of HAPA. This should be reconsidered as promotion without infrastructure will be an issue.	Include indicator on MHM as part of school health promotion in PMF		
Child nutrition and health modules integrated into early childhood development curricula	Ensure the curriculum/and trainers can clearly link the importance to nutrition of improved WASH	Assess whether WASH-nutrition links are clearly stated in curricula prior to use.	AKFA	Output 3.1.2 - WASH and awareness of critical hand washing times
Community libraries	Ensure libraries engage in awareness-raising activities that are inclusive of non-literate, otherwise the non-literate will be marginalised in terms of access to information on a wide range of environmental information such as health and hygiene, improved farming practices, safe use of pesticides and fertilisers etc.	Measure # of illiterate participants in library awareness-raising activities	AKFA	Link with all activities related to community awareness-raising

Output 3.1.2: Small-scale community initiatives to improve water and sanitation infrastructure supported	**An EA is required for this output** as it is "small or medium-scale water resource management activity" under category B of the EIST Engage staff who have long-term experience in WASH programming **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • Afghanistan National Rural WASH Policy. (2010) • The Water Law (2008) • AKDN Standard Operating Procedure (SOP) for safe drinking water and improved sanitary systems. • National Solidarity Program • EA when written		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
New Water and Sanitation Infrastructure	Undertake water resource use and availability study, including groundwater recharge, spring use and flow etc. to ensure	**All phases:** monitoring of all specific mitigation measures suggested as part of the EA	AKFA	

Output 3.1.2: Small-scale community initiatives to improve water and sanitation infrastructure supported	**An EA is required for this output** as it is "small or medium-scale water resource management activity" under category B of the EIST Engage staff who have long-term experience in WASH programming **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • Afghanistan National Rural WASH Policy. (2010) • The Water Law (2008) • AKDN Standard Operating Procedure (SOP) for safe drinking water and improved sanitary systems. • National Solidarity Program • EA when written		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
	abstraction will not deplete resource or cause downstream availability issues. Undertake initial biological and chemical water quality tests for each WASH project. Review of capacity and supply chain for latrine construction and WASH maintenance followed by necessary training and/strengthening of supply chain where needed. Review options for ensuring schools involved in HAPA have appropriate levels of WASH infrastructure (see section 8)	**Construction phase:** biological and chemical water quality tests to be conducted before commissioning of each WASH project. **Ongoing:** PMF indicator for latrines should be outcome-based, focussing on open defecation levels rather than number of latrines constructed. Include indicator on WASH supply chain capacity		

Output 3.1.4: Community organisations supported to play an oversight role in government health service delivery	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Communication Strategy for Hygiene Promotion. (2014) MRRD and MoPH. • National Solidarity Program		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Health Shuras Clusters and District Development Assemblies	Ensure training curriculum includes environmental and waste management and WASH in health facilities	Assess whether environmental and waste management and WASH is clearly stated in curricula prior to use Include awareness of these issues as indicator in PMF	AKFA	

Output 3.1.5: Relevant community actors trained in the use of community participatory monitoring and social audits.	**No EA required**	**Reference to legal, policy instruments and guidelines:** • National Solidarity Program		
Component	**Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Community Participatory Monitoring Social Audits	Environmental issues and indicators should be integrated into monitoring framework and accountability mechanism, and monitors trained accordingly	Ensure integration of environmental indicators in community participatory monitoring and social audits	AKFA	

Output 3.2.1: Household and community level initiatives addressing food insecurity expanded	**An EA is required for this output** as it is "small or medium-scale food production under the Category B of the EIST **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • The Agriculture Master Plan (2006) • EA when written		
Component	**Mitigation - Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
Increased Production of Staple Crops Improved Horticulture	Consider choice of any new seeds carefully to ensure availability of improved, but open/self-pollinated seed varieties, those most appropriate to the agro-climatic zones and those which will be acceptable culturally. Ensure effective training program for safe use and handling of pesticides and fertiliser. Integrate farmer to farmer experience sharing models	Ongoing monitoring to ensure that all mitigation measures from EA are complied with Include indicator on training/awareness related to safe and effective pesticide and fertiliser use	AKFA	Develop links with The Afghanistan National Horticulture Development Organization (ANHDO) which has done much work on integrated pest management, value chains etc.
Improved Livestock	Ensure resources and training available for safe use and disposal of vaccination and other veterinary wastes. Ensure environmental management components are included in Agricultural extension activities.	Include indicators on training/awareness of veterinary waste management	AKFA	
Professional Development and Support to Government	Capacity development to government agencies activities should include integration of sustainable environmental practices	Include indicator on awareness of sustainable environmental practices among govt. partners	AKFA	
Market Development Program: Value Chain Development	Carry out analysis on potential effluents and by-products related activities such as food processing Develop appropriate mitigation measures and integrate into implementation program and associated training	On-going monitoring of any mitigation measures from EA related to effluent management etc.	AKFA	
School gardens	Establish detailed roles and responsibilities for this component in the school	On-going monitoring of success. i.e. approximate	AKFA	

Output 3.2.1: Household and community level initiatives addressing food insecurity expanded	**An EA is required for this output** as it is "small or medium-scale food production under the Category B of the EIST **EA should be submitted for approval to NEPA**	**Reference to legal, policy instruments and guidelines:** • EIA Regulations (2008) • The Agriculture Master Plan (2006) • EA when written		
Component	**Mitigation - Action Items**	**Monitoring requirements**	**Responsibility**	**Integration**
	Identify and train a focal point/coordinator in the school in sustainable management of the garden and nutritional awareness	yield and use of crops (eating or sales)		
Access to Savings and Credit Opportunities for Households, Especially Women	Those accessing credit for resources such as fertiliser, pesticides or food processing equipment should be given the appropriate training in safe environmental practices related to those resources	Measure # of participants receiving additional support e.g. ag extension or food processing to ensure improved environmental practices.	AKFA	Integrate with training and extension components on improved agricultural practices and value chains

Annexes

Annex A Terms of Reference

TERMS OF REFERENCE - Strategic Environmental Assessment Consultancy

I. Position:

AKFC is seeking expressions of interest for a short term environmental consultancy to complete a strategic environmental assessment (SEA) for Aga Khan Foundation Canada and its implementing partners under a new multi-input health project in Afghanistan. The dates of this assignment will take place in October to November, 2015 (subject to change).

II. Background and Context:

The *Aga Khan Development Network (AKDN)* is a group of private, international, non-denominational agencies working to improve living conditions and opportunities for people in the developing world. The Network's organizations have individual mandates that range from the fields of health and education to architecture, livelihoods development and the promotion of private enterprise. Together, they collaborate in working towards a common goal – to build institutions and projects that can respond to the challenges of social, economic and cultural change on an ongoing basis.

Aga Khan Foundation Canada (AKFC) was established as a Canadian non-profit international development agency in 1980. AKFC mobilizes Canadian financial, intellectual and technical resources to support the efforts of the larger AKDN through wide-ranging partnerships with the Canadian government, academic and civil society institutions, the corporate sector, and individual Canadians.

III. AKDN Health Action Plan for Afghanistan

The Aga Khan Development Network (AKDN) has developed a five-year initiative that aims to improve the health status of men and women in selected provinces of Afghanistan, particularly women of reproductive age and children under five. Targeting selected districts in Badakhshan, Bamyan and Baghlan provinces, and also seeking to achieve national impact through capacity building and collaboration with national institutions including the Ministry of Public Health (MoPH), the initiative aims to directly benefit 1,264,022 people, including 495,598 women, 525,732 men, 123,773 girls and 118,919 boys (below five years of age).

It will consist of three major components: improving quality and expanding the range of health services in targeted areas of Afghanistan; strengthening availability and quality of human resources in the health sector, with a focus on nursing and midwifery; and enhancing civil society engagement and capacity to support good health practices, with specific attention to gender and nutrition.

Overseas implementing partners include Aga Khan Foundation Afghanistan (AKFA), Aga Khan Health Services (AKHS), Aga Khan University (AKU), Aga Khan Planning, Building Services (AKPBS), and the French Medical Institute for Children (FMIC), among others. Further details on the specifics of the project will be made available during the interview process.

IV. Purpose:

The purpose of this consultancy is to systematically assess the potential environmental impacts of the initiative through a comprehensive Strategic Environmental Assessment (SEA) that includes a review of both overseas project components along with the public engagement component in Canada, in compliance with relevant laws and policies, such as the *Canadian Environmental Assessment Act* (CEAA) and AKFC's *Policy on Environmental Sustainability*. As an analytical tool, the completion of an SEA will provide AKFC and its partners with a more comprehensive and holistic understanding of the potential environmental effects (both positive and negative) of each component and will help inform strategies for the effective management of cumulative environmental effects; improve project-level environmental impact assessments; and identify recommended and agreed-upon alternatives, strategies and priorities for the continued management and implementation of the project.[1] The final output will be development of a SEA for the project, including a summary document to be included as part of the project implementation plan.

V. Approach:

The Consultant will, in consultation with AKFC, develop or adapt an existing framework in order to conduct the SEA. The Consultant will be required to undertake an examination of each component of the project, guided by the final report structure outlined in section VI of this Terms of Reference. Some of the questions that may be relevant include:

i. What is the current context in the geographic areas where the project will be implemented?
This involves identifying and evaluating existing environmental resources, relevant state and non-state institutions, current legislation, policies and projects. Key regional issues and relevant "valued ecosystem components"[2] must be recognized, along with the maximum level of change that these components can tolerate. Context analysis may also require the identification of stressors and trends, such as human or natural drivers of change. This information and analysis will serve to act as the baseline of the project which can then be monitored throughout implementation.

ii. Do the objectives of the project meet the guidelines outlined under the AKFC Policy on Environmental Sustainability and Canadian government policies such as the Canadian Environmental Assessment Act and the CIDA Policy on Environmental Sustainability? If not, provide recommendations on how objectives can be met.

The assessment must clearly demonstrate whether the proposed project activity for each component meets the requirements set out in the policies noted above, while also ensuring compliance with the environment policies and regulations of the country where the activity will be implemented.

iii. What are the positive and negative environmental issues associated with the component's project activity and how significant are they?

Once the positive and negative impacts of the project activities have been identified, the level of risk for these environmental effects must be assessed, taking into consideration compliance with local and international standards, the institutional and/or environmental capacity to address these effects, the likelihood that they will occur and what cumulative effects may occur (if any), and the level of local or broader public concern regarding the project's implementation.

iv. How can the positive effects be augmented and the negative effects diminished?

[1] CCME. 2009. *Regional Strategic Environmental Assessment in Canada: Principles and Guidance.* Canadian Council of Ministers of the Environment, Winnipeg, MB.

[2] Ibid.

Once the relevant risks and benefits have been identified and assessed, it will be important to examine how these can then be addressed. Any recommendations for adjustments to the established programmatic approach must ensure that:

- The objectives of the project are being met;
- They are aligned to relevant AKFC and donor policies on environmental sustainability; and
- There are a minimal number of adverse environmental effects (both known and unknown).

v. How will the associated environmental impacts be measured and evaluated?

The Consultant will also be required to reflect on the utility of the AKFC Policy on Environmental Sustainability (PES) to allow AKFC and its implementing agencies to monitor the beneficial and adverse environmental impacts that will result once project implementation within each component is underway.

The Consultant will also be required to recommend any changes to the AKFC PES that would further strengthen its utility as a tool for monitoring beneficial and adverse environmental impacts of projects. Upon completion of the analysis, the Consultant will draft two documents, a full SEA report (as per the table of contents outlined in section VI) and an 8-10 page SEA summary report that summarizes the overall findings of the full analysis. Both documents will be submitted and presented to AKFC for feedback. For each of the components of the project, the report must document the following:

- The processes and respective outcomes of all of the consultations that were undertaken to perform the SEA;
- The recommended modifications and accompanying justifications, with acknowledgement of the relevant trade-offs;
- An analysis of the institutional capacity of AKFC partners to implement the recommendations and how existing systems can be enhanced; and
- Measures to monitor and evaluate the environmental impacts associated with each component.
- Upon receipt and incorporation of feedback into the drafts, final products will be submitted to AKFC.

VI. Timeline and Deliverables (timeline is somewhat flexible):

Desk review of the AKFC PES, project materials and partner organizational structure and current procedures and materials Up to 2 days
Initial discussion with client (AKFC) by phone/Skype Up to 0.5 days
Development/finalization of framework for conducting SEA
Deliverables: A proposed work plan and draft table of contents
Up to 3 days
Undertake SEA analysis for each of four major project components:

- Background reading
- Research on national/regional policies, environmental contexts
- Interviews with implementing partner staff
- Analysis
- Write-up of analysis and recommendations
- Debriefing with AKFC; presentation of draft findings

Deliverable: Draft SEA report and draft Summary Report

Up to 2.5 days
Finalization of report
Deliverables: Final SEA report and Final Summary Report
Up to 5 days
Total Up to 20 days

All reports are to be submitted in English. The above mentioned deliverables should contain the following sections, to be agreed upon by AKFC and the Consultant:

Work Plan

- Overview of Project/project
- Expectations of assignment
- Roles and Responsibilities
- Assessment Methodology
- Assessment Framework and Timeline
- Information Collection and Analysis
- Reporting
- Work Scheduling

Final SEA Report Structure (maximum 30 pages)

1. Title Page
2. Executive Summary (maximum four pages):
3. Introduction
4. Background

a. Project goals and objectives (including relationship with other relevant projects)
b. SEA objectives
c. SEA methodology
d. SEA consultation process

5. Baseline *(by project component)*

a. Relevant aspects of current state of environment in region(s) where project will be implemented (including existing environmental problems, stressors, trends)
b. Environmental characteristics of areas likely to be significantly affected by the project
c. Environmental protection objectives established at international or national levels relevant to areas of environmental importance

6. Strategic Environmental Analysis *(by project component)*

a. Identification of the project's potential significant and cumulative effects on the environment (positive and negative), including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climactic factors, and the interrelationship between the above factors
b. Measures envisaged to prevent, reduce, and as fully as possible, offset any significant adverse and cumulative environmental effects – and to enhance any potential environmental benefits – of implementing the project
c. Identification of monitoring needs and management actions
d. Linkages with gender equality and governance

7. Conclusions
8. Recommendations
9. Follow-up, Monitoring and Reporting Framework

Annexes to the final report

- Terms of Reference for the review
- Timetable
- List of individuals interviewed and of stakeholder groups and/or communities consulted
- List of supporting documentation reviewed
- Research instruments: questionnaire, interview guide(s), etc. as appropriate
- Specific monitoring data, as appropriate
- Short biography of the consultant

Final Summary Report Structure (maximum of 8 pages)

- To follow same structure as Final SEA Report

VII. Reporting:

On technical and contract-related matters, the Consultant will report to AKFC program staff.

VIII. Qualifications & Proposal Process:

Applicants must demonstrate how they meet the following requirements:
The consultant(s) should be a senior professional with an advanced degree in a relevant field and a minimum of 10 years' experience. The candidate(s) should bring to the position:

- Experience in developing and providing recommendations on Strategic Environmental Assessments
- (SEAs) for multi-sectoral international development projects, including education and health programming;
- Knowledge and experience of international best practices in SEAs;
- Knowledge and experience of CIDA requirements for SEAs; and
- Outstanding written and interpersonal communications skills in English.
- Experience in / understanding of development context in East Africa and Central Asia would be an asset.

- **IX. How to Apply:**

Consultants meeting the above criteria are invited to submit a proposal by e-mail to AKFC Human Resources at: **hr@akfc.ca** no later than October 4, 2015.
Proposals should include the following:

- CV of the consultant(s), outlining previous environment and SEA experience and accomplishments;
- A cover letter, outlining the proposed approach, proposed schedule (earlier dates are preferred) and the consultant's proposed daily rate with justification; and
- Two examples of SEA or other environmental assessment reports recently completed. If possible, at least one of the reports should be relevant to the sectors/geographies of this assignment.

Proposals should be received no later than October 4, 2015
Each technical proposal will be evaluated based on evidence of the following items:

Technical *(50 points)*

- Clarity of proposal and compliance with Terms of Reference;
- Appropriateness of time frame;
- Understanding of the assignment's questions and objectives; and

- Soundness of approach proposed.

Capacity (*50 points)*

- Experience of conducting assessments in the relevant sectors and/or geographies;
- Quality and suitability of the consultant to manage the project; and
- Consultant's qualifications.

Please note that applications from individuals or teams are eligible for this assignment, providing that the number of days does not exceed the total detailed in section VI.

Annex B Environmental Integration Screening Tool – Category Descriptions

Tool #1. ENVIRONMENTAL INTEGRATION SCREENING TOOL – CATEGORY DESCRIPTIONS and EXAMPLES

Category A - High Environmental Risk

Definition: Initiatives involving components and activities with *potentially high environmental risk*.

Category A initiatives require in-depth environmental assessment, including Strategic Environmental Assessment (SEA) at the program/project level, and site-specific Environmental Assessment (EA) or Class Environmental Assessment (Class EA) for specific project components and activities.

Examples of Category A initiatives include, but are not limited to:

Construction, abandonment, or decommissioning of large-scale infrastructure, including:

- Buildings, such as hospitals, schools, training facilities, housing and community or administration buildings
- Water, sanitation and irrigation projects involving permanent physical works
- Roads, bridges and hydro-electric dams, including mini-hydels
- Barns, animal pens or other permanent physical works
- Rehabilitation of infrastructure after a natural disaster or other major damage

Notes on infrastructure:

- An EA is not required for emergency response activities, which are in Category D.
- An EA is not required for routine repair and maintenance of infrastructure, as long as the original design, location and use is not causing negative environmental effects.

Large-scale water resources management, including: watershed and/or river basin management; water supply and/or management systems (e.g. reservoirs, irrigation, dams, drainage, flood control); wastewater treatment plants; sewage systems

Large-scale land use changes (e.g., non-food crops, deforestation, clearing of vegetation, land use planning)

Large-scale food production (e.g., agriculture, ranching, animal husbandry, agro-industries, food processing, fisheries, aqua- or mariculture)

Large-scale industrial, manufacturing or waste management systems (e.g. domestic, biomedical, electronic, industrial systems)

Medium or large-scale energy production, supply or transmission (e.g. wind or solar farm, dams, power plant, bioenergy)

Extractive sector activities (e.g., mining, oil, gas, quarries)

Medium or large-scale procurement, use, storage, or disposal of hazardous or toxic substances (e.g., pesticides, fertilizers, petrochemicals)

Medium or large-scale population relocation or resettlement

Any activities that could have negative effects on environmentally sensitive or protected areas, including:

- Areas containing vulnerable natural features (e.g., coral reefs, mangrove forests, tropical forests)
- Ecosystems containing plant or animal species at risk, or critical biodiversity or habitat
- National parks, areas protected by law or regulation (international, national or municipal laws, regulations or conventions

Category B—Low or Moderate Environmental Risk or Opportunity

Definition: Initiatives involving sectors and activities with *potentially low or moderate environmental risk or opportunity*.

Category B initiatives require an environmental assessment, using the AKFC EA Form (Annex A, Tool #3), which can be completed by the NPO. Some components or activities with more significant potential impacts may require a more detailed Environmental Assessment Report or a Class EA Report, prepared with external expertise. The decision on which type of EA is required, and its scope, length and level of detail, depends on the significance of the possible environmental risks, impacts and opportunities.[14] (See further guidance under each tool.)

Examples of Category B initiatives include, but are not limited to:

- Construction, repurposing, operation, expansion, abandonment, or decommissioning of small or medium-scale infrastructure (e.g., small- or medium-scale buildings, such as clinics, schools, houses, storage facilities)
- Small- or medium-scale water resources management activities (e.g., wells, latrines, irrigation/drainage activities)
- Small- or medium-scale changes in land use
- Small- or medium-scale food production (e.g. agriculture, horticulture, fruit production, animal husbandry, agro-industries, food processing, fisheries, aqua- or mariculture)
- Small- or medium-scale forestry (e.g. agro-forestry, community forestry, reforestation, nurseries and seed production))
- Small-scale energy production and conservation projects: e.g., heating and cooking, alternative energy, conservation projects
- Small- or medium-scale waste management (e.g. domestic, biomedical, electronic)
- Small-scale procurement, use, storage, or disposal of hazardous or toxic substances (e.g. pesticides, fertilizers, petrochemicals)
- Economic development (e.g., micro, small or medium enterprise development; microfinance; trade; investment):
  - Fishing, shellfish, sea product harvesting, aquaculture
  - Food & beverage processing or marketing (e.g., food smoking and canning, brewing)
  - Small-scale mining, smelting, stone grinding, brassware production
  - Small-scale foundries, metal mechanics and finishing, welding, electroplating, plumbing, car repair and car parts recycling
  - Recycling: collection, reuse, reprocessing and remanufacture, e.g., computers/ electronics, batteries, paper, wire/metals, plastic & glass
  - Tourism and ecotourism
  - Textile manufacturing and finishing, leather tanning
  - Handicrafts, home-based enterprises and piece-work (e.g., textile production, basket-weaving, candle-making, glass-making and ceramics)
  - Production and packaging of chemicals, pesticides and soaps
  - Charcoal brick production and sales
  - Wood processing, such as furniture construction
  - Paint, printing and sign-making shops
  - Production of products from plants and animals, e.g., seashells, turtles, coral reefs, tusks, antlers, bark, plants, seeds, coconuts (especially if rare or threatened species)
- Small-scale population relocation or resettlement
- Humanitarian assistance *after* initial emergency period (e.g. in response to a protracted humanitarian crisis, reconstruction and rehabilitation during the recovery phase, disaster prevention and preparedness)
- Capacity building, training, extension services related to environment, natural resources, or infrastructure (e.g., engineering, agriculture, forestry and small-scale enterprise training)
- Governance or human rights related to environment, natural resources, or infrastructure
- Health, e.g., new medical waste treatment systems or changes to current systems; immunization programs involving

[14] See Annex B, Box 7 on how to determine the "significance" of an impact.

medical waste
Education (unless in category C)
Public engagement or awareness-raising (unless in Category C)

Category C – Negligible Environmental Risk or Opportunity

Definition: Initiatives involving sectors and activities with *negligible environmental risk or opportunity and no physical works or physical activities related to physical works.* Category C applies only to initiatives that focus *solely* on the specific sectors or activities listed below, and that are not related to activities identified under Categories A or B including infrastructure, environment and natural resources.

Category C initiatives may proceed without further environmental assessment.

Examples of Category C initiatives include, but are not limited to:

- Routine repair and maintenance of small-scale infrastructure, if it does not involve major rehabilitation or renovation, and as long as the original design, location and use is not causing negative environmental effects:
  - school, medical clinic or other building
  - road, bridge or other infrastructure
  - irrigation, water and sanitation projects
  - small scale hydro-electric dams, mini-hydels
  - livestock/animal husbandry facilities such as barns, animal pens or any other permanent physical works
- Governance and civil society strengthening (e.g., community mobilization, capacity-building, policy development, public sector reform, information management)
- Human rights, gender equity and child protection programs
- Public engagement and professional learning (e.g., public awareness and education activities, conferences, meetings, seminars, temporary exhibitions)
- Human resource development, including AKFC Internship Programs[15]
- Technical assistance programs, including Canadian Exchange program or CADEX
- Medical professional training, health management information systems, pharmaceutical policy development and management
- Immunization programs
- Reproductive health, child survival, nutrition education, community health and family planning programs
- HIV/AIDS prevention and treatment programs
- Agricultural extension, training, technical advice or other capacity building, unless related to environment and natural resources
- Educational systems strengthening, research and training
- Early childhood education, literacy, teacher training programs
- Business development activities, e.g., training, technical assistance and training for marketing, management, bookkeeping, basic employment skills (literacy, numeracy, financial literacy, business communication skills), unless related to infrastructure, environment and natural resources sectors

Category D – Emergency

Definition: Initiatives carried out in response to an emergency, according to CEAA 2012, where "carrying out the initiative without delay is in the interest of preventing damage to property or the environment, or is in the interest of public health and safety."[16]

This applies to *short-term initiatives carried out during and in the immediate aftermath of a disaster*. Initiatives undertaken

[15] International Development Management (IDM), International Microfinance and Micro enterprise (IMM), International Development Scholarship (IDS)

[16] The determination of "short-term" will depend on the situation, but generally refers to the period of time for any project component or activity which is carried out in response to a disaster, for example, from several months to a year or more.

after the initial emergency period are not considered Category D and therefore do require environmental assessment – the latter include initiatives in response to a protracted humanitarian crisis, reconstruction and rehabilitation during the recovery phase, or disaster prevention and preparedness. Category D initiatives may proceed without further environmental assessment, although international best practices are recommended (e.g. Rapid Environmental Assessment, Sphere Minimum Standards for Humanitarian Response.)
Examples of Category D initiatives include, but are not limited, to humanitarian assistance in *immediate* response to: A rapid onset emergency such as a natural disaster, e.g., catastrophic earthquake, tsunami, hurricane, flooding An emergency conflict situation The sudden deterioration of a complex emergency

Annex C Information to be supplied by proponents in screening report

From: Administrative Guidelines for the Preparation of Environmental Impact Assessments, NEPA 2008

The following is guidance on the information that should be provided by proponents to NEPA. Proponents may choose to submit more information dependent on the project type. However, if insufficient information is provided then the EIA process cannot be commenced by NEPA. Therefore adherence to this guidance would be advisable.

The Proponent: Name, address, telephone, email and contact point for further queries, for the individual or organisation proposing the project

The Project: Brief description of the nature and purpose of the project. Outline plans or drawings. Size of the project in terms of, for example, site area, size of structures, throughput, input and output, cost, duration. Programme for implementation including construction, commissioning, operation, decommissioning, restoration, after-use. Scale of construction activities required.

The Location: A map and brief description of the site and its surrounding area showing physical, natural and man-made features such as topography, land cover and land use (including sensitive areas such as housing, schools, recreation areas); physical/spatial planning policies or zoning; areas or features designated for their nature conservation, landscape, historic, cultural or agricultural importance; water features including groundwater and flood protection zones; planned future developments.

Potential Sources of Impact: Completion of a Rapid Environmental Assessment[17] should provide insight into the potential sources of impact. Any further information which provides detail on the following factors would be useful; emissions to air land or water or any residues that may arise from construction and operation activities and the proposed methods of discharge or disposal, any noise, vibration or heat generated from the project, hazardous or raw materials to be used or stored at the site and procedures for safe management and requirements for raw materials and energy and their likely sources.

Mitigation: Brief description of any measures the developer proposes to use to reduce, avoid or offset significant adverse effects would be useful.

Other information which may be useful:

- Identification of other permits required for the project;
- Relationship of the project to other existing or planned activities;
- Other activities which may be required or may occur as a consequence of the project (e.g. extraction of minerals, new water supply, generation or transmission of power, road construction, housing, economic development)
- Planned future developments on or around the site;
- Additional demand for services such as sewage treatment or waste collection and disposal generated by the project;
- Photographs of the site and its surroundings.
- Alternative sites, processes or environmental mitigation measures considered by the developer.

[17] An REA is a checklist of potential impacts arising from a project. Checklists are developed for specific sectors and will be available at NEPA.

Annex D Program Implementing Partners

Text from HAPA Action Plan (August 2015)

Aga Khan Development Network (AKDN) is a group of international development agencies and institutions which implement programs in rural development, education, health, culture, microfinance and private sector development. Their overarching goal is to help alleviate poverty and promote economic development. AKF is one of AKDN's constituent agencies, specialising in rural development, health, and educational programs. The Foundation was established in 1967. The Geneva-based head office provides technical backstopping and strategic support to the global health program of the Network.
Aga Khan Foundation Canada (AKFC) is a registered Canadian charity which has been executing development projects across a range of sectors since 1980, largely with funding from the Canadian government, and the donations of Canadians. A strong financial management team with rigorous accountability and compliance processes supports a program team that works closely with field implementing partners in more than 15 countries in Africa, Asia and the Middle East. AKFC has significant current portfolios in the health sector and in Afghanistan (more than $120 million), and has a good level of knowledge and technical expertise in both these areas.

Aga Khan Foundation, Afghanistan (AKFA) began working in Afghanistan in 2002, is a registered NGO with the Afghanistan Ministry of Economy since 2005, and currently employs 1,800 of AKDN's 9,000 staff nationwide. Its programs are implemented primarily in seven provinces across central and northern Afghanistan including Bamyan, Parwan, Baghlan, Samangan, Takhar, Kunduz and Badakhshan, as well as at the national level. AKFA is the coordinating agency for an integrated multi-input development program in health, agriculture, civil society, infrastructure, market development and education, implemented with partners both within and outside the AKDN. The ultimate goal of the program is to improve the quality of life of people in focus areas. Across its core program area, AKF interventions indirectly benefit approximately 3.5 million people.
Within the health sector specifically, and in close coordination with the MoPH and other relevant public and private sector stakeholders, AKF and its AKDN partners have worked extensively to improve maternal and child health, nutrition, access to safe water and sanitation, infrastructure, and eHealth and mHealth provision, including through interventions currently funded by GAC and AFD. The value of the current health program of AKFA exceeds $104 million.

Aga Khan Health Services (AKHS) is one of the most comprehensive private, not-for-profit health care systems in the developing world with community health programs in large geographical areas in Central and South Asia, as well as in East Africa. In Afghanistan, AKHS provides health care services mainly on behalf of the government including the Government of Afghanistan's BPHS and EPHS. The agency's scope of work includes the provision of primary health care, curative medical care, nursing and midwifery education, human resource development and hospital management. The current working modality and role of AKHSA in Baghlan and Bamyan provinces will be limited to the provision of technical support to BPHS implementer NGOs. In order to support the implementation of BPHS and ensure high quality service delivery, AKHSA will keep its offices open in these provinces, and through coordination with MoPH/PPHD, GCMU and the signing of MoUs with the current BPHS implementer NGOs, AKHSA will provide technical support as well as capacity building of health personnel, immunization services, nutrition trainings and the training of Community Health Nurses.

Aga Khan University (AKU), founded in 1984 in Karachi, includes a medical school, school of nursing and midwifery, and advanced tertiary care teaching hospitals at campuses in Pakistan, Kenya and Tanzania that provide top-quality education programs and continuing education to health professionals in East Africa and

Central Asia, including in Pakistan, Afghanistan, and beyond. AKU Programs in Afghanistan began operating as an outreach program of the AKU School of Nursing and Midwifery in 2002 to support nursing and midwifery education, and has educated more than 1200 nurses and midwives since its inception. This initiative then expanded to the medical education and higher education, with active support from multiple departments of AKU. Since 2012, in collaboration with the Provincial Health Department and Institute of Health Sciences, AKU Programs in Afghanistan also manages a General Nursing Diploma Program in Faizabad, Badakhshan. AKU is also managing and further developing FMIC in Kabul.

French Medical Institute for Children (FMIC) is the first international, philanthropic, public-private, not-for-profit health institution in Kabul, Afghanistan. It was established in 2005 by Enfants Afghans – a project of La Châine de L'Espoir, a French NGO. A unique, four-party public-private partnership between the Governments of Afghanistan and France, La Chaine de L'Espoir and the AKDN, FMIC was inaugurated on 8th April 2006. The Aga Khan University Hospital based in Karachi provides key fulltime hospital management staff and rotational technical and support staff as required. In addition, La Chaine de L'Espoir, provides medical and clinical support through short- and long-term missions. Since its inception FMIC has provided high quality tertiary care to around three million direct beneficiaries while providing care to around 400,000 patients annually.
FMIC was the first ISO certified hospital in Afghanistan, and provides inpatient care through 85 beds, including 15 intensive care beds for children. It also provides clinical consultations through highly qualified consultant doctors to adults and children. It provides services across a range of paediatric specialties, offers extensive diagnostic services, and houses four operating theatres and a 24/7 pharmacy. FMIC provides eHealth linkages with the Aga Khan University Hospital in Karachi, provincial hospitals in Bamyan, Faizabad and Kandahar, and Khorog Oblast General Hospital in Tajikistan for providing telemedicine and eLearning services.

Aga Khan Planning and Building Services (AKPBS), based in Karachi, is providing management and oversight to the current construction of phase I of the Bamyan Hospital. AKPBS works to improve the built environment, particularly housing design and construction, village planning, natural hazard mitigation, environmental sanitation, water supplies, and other living conditions including health facilities. AKPBS achieves these goals through the provision of material and technical assistance and construction management services for rural and urban areas