E4014 v1

Islamic Republic of Afghanistan
Ministry of Agriculture, Irrigation and Livestock

Environmental and Social Management Framework (ESMF)

For the

Afghanistan Agricultural Inputs Project (AAIP)

Final Report

Directorate for Programs
Afghanistan Agricultural Inputs Project (AAIP)
Project Coordination Unit
Environmental and Social Safeguards

August 2012

Acronyms

AAIP	Afghanistan Agricultural Inputs Project
ANDS	Afghanistan National Development Strategy
AP	Affected Person
ARIA	Agricultural Research Institute of Afghanistan
BS	Breeder Seed
CDC	Community Development Council
CS	Certified seed
CWDA	Community Water Development Assistant
DAIL	Department of Agriculture, Irrigation and Livestock
DOWA	Department of Women Affairs
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EIRP	Emergency Irrigation Rehabilitation Project
EMA	External Monitoring Agency
EMP	Environmental Management Plan
ESS	Environmental and Social Safeguards Staff of the PIU
ESM	Environmental and Social Management
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FAO	Food and Agricultural Organization
FQCAID	Food Quality Control and Agricultural Input Directorate
FS	Foundation Seed
FSC	Farm Service Center
GDP	General Directorate for Programs
GPs	General Policies
GoA	Government of Afghanistan
HDI	Human Development Index
HLP	Horticulture and Livestock Project
HQ	Headquarters
IA	Irrigation Association
IDA	International Development Association
IEC	Information Education & Communication
ISE	Improved Seed Enterprise
MAIL	Ministry of Agriculture, Irrigation and Livestock
MAPA	Mine Action Program of Afghanistan
MEW	Ministry of Energy and Water
NRVA	National Risk and Vulnerability Assessment
NGOs	Non Government Organizations
NEPA	National Environmental Protection Agency
NERAP	National Emergency Rural Access Project
NSP	National Solidarity Program
OP/BP	Operational Policy/Bank Procedure
O&M	Operation and Maintenance

OM	Operational Manual
PAP	Project Affected Person
PCU	Project Coordination Unit
PID	Project Implementation Plan
PPQD	Plant Protection and Quarantine Directorate
PSD	Private Sector Directorate
RBOs	River Basin Organizations
REA	Rapid Environmental Assessment
SIA	Social Impact Assessment
UNEP	United Nations Environment Program
WB	World Bank
WCS	Wildlife Conservation Society
WFSC	Women Farm Service Center
WHO	World Health Organization

Executive Summary

Project Objective

The project objective is strengthened institutional capacity for safety and reliability of agricultural inputs and sustainable production of certified wheat seed.

Project Components

The project design structure consists of four (4) components: (i) Improved Seed Production and Certification (ii) Quarantine Networks and Quality Control for Agro-chemicals, (iii) Inputs Delivery Systems and, (iv) Project Management, Coordination and M&E.

Environment and Social Management Framework

The Ministry of Agriculture, Irrigation and Livestock (MAIL) has developed the present Environmental and Social Management Framework (ESMF) through a safeguards team consisting of an international consultant, a national counterpart and selected staff members within the AAIP project unit. The team worked in close collaboration with the remaining members of the AAIP Team, all participating directorates of MAIL, the Pest Management Plan consultant, as well as relevant experts hired by MAIL for managing similar environmental and social issues in other relevant Bank-assisted projects, e.g. the Horticulture and Livestock Project (HLP), the National Solidarity Program (NSP), the On Farm Water Management Project (OFWP), and the USAID funded Women Farm Services Center in Kabul. Desk review and information gathered during field investigations guided the ESMF design process.

In line with the project preparation requirements, the review of Bank funded projects presently under implementation, and conditions observed during the field study, it is acknowledged that social and environmental management in Afghanistan currently faces critical capacity constraints. The proposed project activities may have potential adverse impacts, albeit limited, on the physical and social environment. The mitigation and management of these impacts are essential to a sound and sustainable development. Hence, a framework approach is adopted which recognizes the existing management capacity, and permits the necessary flexibility to take account of investments unknown at the time of project appraisal. This approach provides for early identification of potential adverse impacts, without the requirement of rigorous analysis through quantification, and also provides broad guidance for their effective mitigation. Consistent with existing national legislation, the objective of the Framework is to help ensure that activities under the AAIP will:

- Protect human health;
- Prevent or compensate any loss of assets and livelihood;
- Prevent environmental degradation as a result of either individual sub-projects or their cumulative effects;
- Prevent a widening of the gap between the better off and the poor as a result of either individual sub-projects or their cumulative effects;
- Enhance positive environmental and social outcomes;
- Support gender equality principles, and
- Ensure compliance with Afghan national law on the environment and World Bank safeguard policies.

The ESMF prescribes guidelines and procedures that would avoid, mitigate, or minimize adverse environmental and social impacts of supported activities and interventions. The ESMF was prepared by

the Government of Afghanistan (GoA) in accordance with definitions provided in the World Bank Policies on Environmental Assessment (OP 4.01), and Pest Management (OP 4.09) as well as relevant national laws and regulations.

Key findings revealed by ESMF field investigations include the following:

Regarding Seeds, farmers and key stakeholders in the 10 provinces investigated raised issues relating to needs for: **(i)** training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance (ii) application of existing regulations, Enforcement of Quality Control, open pollinated seeds should be imported, (iii) easement of recourse process and trust building, (iv) social awareness through any possible sources such as Mass-Media, Mosque, community Leaders, Schools, Universities, people gathering events and official national campaigns.

Regarding issues relating to Agro-chemicals inputs across the board, comfort in using these was clearly link to users' product knowledge which was reported to be constrained by: (i) the lack of translation in local languages of usage instructions. Stakeholders partaking to the assessment pointed out the need for training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance; (ii) application of existing regulations, public awareness through DAIL, public media; (iii) enforcement of Quality control; (iii) poor/inappropriate labels of produce on the market; (iv) weak/inexistence of at boarders. The overall situation is characterized by: poor handling capacity overall; and a high need for training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance.

Regarding Social outreach, at least four key social issues are relevant for service delivery: (i) the participation of the poorest, isolated, and most vulnerable groups; (ii) the participation of women; (iii) the avoidance of elite capture; and (iv) social accountability. Above all social safeguards considerations, the socio-cultural context in Afghanistan and risks related to agricultural inputs delivery which involves the use of agrochemical, call for an integrated and responsible social outreach strategy for awareness building. This is a matter of social accountability that the AAIP will need to consider in a large and comprehensive way, as essential to sustainable development of agricultural input delivery systems in Afghanistan.

Regarding distance between private water wells from septic tanks and field lines, it will be imperative to make sure that septic systems are properly designed, installed, and maintained to reduce possible harmful impacts to the groundwater that supplies drinking water, neighbors' drinking water, or surface waters such as a nearby stream.

The present ESMF is based on the following principles:

The proposed project will support multiple sub-projects, the detailed designs of which are not known at the time the present ESMF is designed. To ensure the effective application of the World Bank's safeguard policies, the Framework provides guidance on the approach to be taken during implementation for the selection and design of sub-projects, and the planning of mitigation measures.

All proposed sub-projects will be screened to ensure that the environmental and social risks are adequately addressed through the application of standardized guidelines.

The ESMF includes instruments and tools to help identify potential subproject social and environmental impacts and to avoid, reduce and/or to mitigate these impacts of subprojects, such as: Environmental and Social Screening & Assessment Procedure; Subproject Screening Checklist; typical impacts and

mitigation measures; community participation and consultation; environmental and social management plan (ESMP); and monthly progress reports.

In all subprojects which require consultations with stakeholders including private sector and local farmers groups (men and women) as well as communities, consultations will be conducted to elicit the views of both the male and the female population.

The ESMF includes **capacity building activities both institutional and geared toward stakeholders**.

The project implementation unit (PIU) will employ social and environmental staff at the headquarter level to monitor the implementation of the provisions of the ESMF, including an ESM (international) Adviser to support the Project Director for the first three years in assessing, monitoring, and reporting on compliance.

At local level, the ESMF places attention on developing practical, **hands-on training** for Farmers and their cooperatives leaders including women and adolescent farmers. Capacity building of stakeholders and farmers including women and adolescent farmers is considered. Proposed trainings to include:

- Building knowledge and skills of farmers through training in inputs selection and utilization
- Building village organizers' awareness of social and environmental issues and enhancing their capacity to monitor mitigating measures.
- Assessing the potential impacts of the project activities on crops and personal health (if any) and their relevant mitigation measures.

Among others, the present ESMF also puts **emphasis on gearing some efforts toward agricultural higher learning institutions** (university colleges, and vocational learning centers), to encourage the development of environmental and social safeguards training curricula in their institutions.

A **Grievance Redress** Committee (GRC) will be established under the AAIP, consisting of a CDC representative from district government, representative from the PIU- Technical Assistance Unit, and participating NGO. The GRC would meet to try and resolve the matter and make a recommendation within 7-10 working days.

To address the **need for a strong communication** campaign to strengthen users' capacity to select and use inputs that are safe and efficient, a Mass communication strategy is an essential component of the ESMF.

During implementation of the present ESMF, **coordination with all PMP activities will be quintessential**.

This Environmental and Social Management Framework will be disclosed in Afghanistan in Dari and Pashto, and at the World Bank InfoShop.

Implementation of the present ESMF will require a total of **US$1,805,000** for ESMF related staffing, training and capacity building of staff, contractors, training manuals, awareness materials, preparation of site specific EMP, communication, and monitoring.

A. 0 Background and Project Context

Agricultural productivity in Afghanistan is generally low. Compared to the pre-conflict era agricultural (and livestock) productivity levels have declined significantly as a result of decades of conflict, systematic destruction of productive rural infrastructure, insufficient basic services, and low availability of quality agricultural inputs. For example, the average yield of wheat – the main staple in Afghanistan – is less than 2 metric tons (MT) per hectare (ha), compared to nearly 3 MT/ha in Pakistan and India. The differences for irrigated wheat are even larger.

Limited access to quality inputs at affordable prices is a key constraint to higher agricultural productivity. Increasing the quantity and quality of key agricultural inputs, and their delivery systems, is an important step towards increasing farm production and productivity which in turn would improve food security and boost farm incomes through higher marketable surpluses. Furthermore, improvements in agricultural productivity would promote farm employment, and may raise non-farm rural employment and reduce vulnerability.

Expanding farm production and crop productivity require increased availability of high quality seeds, establishment of quality control systems for agrochemical inputs, and improvements in systems of inputs delivery. A large proportion of Afghan farmers is still producing wheat, using seed of traditional varieties and without applying agrochemicals. Use of improved varieties and seed of certified quality alone can improve yields by an estimated 30%, whereas combined with improved growing techniques, fertilizer application and disease control their yield could double. Presently a formal seed production system has been created with a capacity of producing over 30,000 MT of Certified Seed, which would be sufficient for the country, provided it was adequately distributed and farmers would re-multiply their seeds three to four times taking care of preserving the quality. Certified Seed, however, is distributed by GoA, donors and NGOs at highly subsidized rates. Improved production and distribution systems would make the seeds more accessible to farmers and in turn ensure a stable supply by economically sound private seed enterprises. Afghanistan has a National Seed Law (2009), a recently reviewed Seed Policy and is in the process of formulating seed rules and regulations. A well functioning seed certification system will soon be adopted as an official directorate in the Ministry of Agriculture. A National Seed Board which holds office in the National Seed Secretariat building supervises all activities and actors in the seed sector. All these need to be strengthened and firmly rooted in the Afghan public and private sector to provide a stable supply of improved certified seed to the Afghan farmers.

Fertilizers and other agrochemicals are nearly entirely imported but often of unreliable quality. The potential of improved seeds for improving crop productivity cannot be realized without the simultaneous judicious use of quality agrochemical inputs. However, Afghanistan currently lacks the legal and regulatory frameworks, as well as the infrastructure to exercise and enforce quality control for fertilizers and other agro-chemicals (pesticides, fungicides, herbicides etc). The lack of a quality control system makes it easy for traders to cut corners. Furthermore, farmers' access to inputs is often insufficient and knowledge regarding their safe transport, storage and use remains incomplete. This not only discourages farmers from consistently including improved inputs in their planning, but is also potentially damaging to the crop as well as the environment and humans.

The agricultural inputs delivery network remains underdeveloped, weakly regulated, and of a rather monopolistic nature. Despite donor-assisted increases in the number of farm stores ('Ag Depots') after the 2007-2008 food crisis, outlets for private sector delivery of inputs need to be expanded and regulated through a clearly defined certification system. There is also need to inject more competition into the system – from importing to distributing and retailing. The system also needs to be enhanced in order to serve as a reliable source of information on the correct usage of inputs.

A.1 Project objectives and components

Project Objectives
The project objective is strengthened institutional capacity for safety and reliability of agricultural inputs and sustainable production of certified wheat seed.

The project design structure consists of four (4) components:

Component A: Improved Seed Production and Certification. This component aims to strengthen a sustainable, commercially viable, and technically efficient seed production and certification system. The project will focus on strengthening seed production and distribution for wheat – the country's main staple crop – while supporting other food crops including vegetables and grain legumes where appropriate. The project will cover the entire seed chain beginning with research in variety selection to generate breeder seed, production of foundation and registered seeds from breeder seed, and multiplication of registered seed into certified seed. In addition, the project will encourage compliance with the seed industry regulatory framework comprising the national seed policy, the seed law, and accompanying seed rules and regulations. Component A is organized into 3 sub-components - Varietal Selection and Production of Breeder Seed, Production of Foundation and Registered Seed, and Coordination of Seed Sector.

Component B: Quarantine Networks and Quality Control for Agro-chemicals. This component aims to build and strengthen institutional capacity and physical infrastructure required for quality control of agrochemicals and plant quarantine. Project activities will focus on preventing marketing of banned, hazardous, sub-standard, and unreliable pesticides and fertilizers, as well as preventing introduction and spread of quarantine pest into the Country. This would be achieved through facilitating enforcement of the recently finalized Pesticides and Plant Quarantine Acts and Regulations. The goal is to comply with international standards for quality control of agrochemicals and plant quarantine practices. Component B is organized into 2 sub-components - Quality Control of Agrochemicals and Plant Quarantine Networks.

Component C: Input Delivery Systems. The ongoing preparation phase will undertake two comprehensive in-depth surveys to collect data that would be analyzed to develop a plan of action for investment activities in inputs delivery systems. The first survey involves a detailed account of farm level production activities for wheat and other major crops, including farm budgets, input use (especially seeds and agrochemicals), working capital requirements and sources, yields, post-harvest losses etc. The second survey will focus on input distribution networks for major inputs (mainly seeds, fertilizers, and other agrochemicals) and will mainly consist of a value chain analysis at various levels (importers, producers (seed), wholesalers, retailers). By mid-term review (MTR) of the project, data from these surveys would have been analyzed to develop a feasible plan of action for investment in input delivery system. It is proposed that the project will seek additional financing at MTR to support investment activities that would be outlined in the plan of action.

Component D: Project Implementation and Management. The project will be implemented by the Ministry of Agriculture, Irrigation and Livestock (MAIL). The following main technical Directorates from the MAIL side will be involved in the preparation and implementation of the proposed project: (i) for Component A (Improved Seed Production and Certification): Improved Seeds Enterprise (ISE); (ii) for Component B (Quarantine Networks and Quality Control for Agro-chemicals): Plant Protection and Quarantine Directorate (PPQD) and Foof Quality Control and Agricultural Inputs Directorate (FQCAID); (iii) for Component C (Improve and Expand Input Delivery System): FQCAID and Private Sector Directorate (PSD); and (iv) for Component D: (Project Management, Coordination, Monitoring & Evaluation): Technical Deputy Minister's Office and General Directorate for Programs (GDP). Moreover, the project will establish links with the Research Directorate and Extension Directorate.

A.2 Implementation Arrangements

The implementation of the AAIP is the responsibility of a project implementation unit (PIU) created and staffed under the Ministry of Agriculture, Livestock and Irrigation (MAIL). A Project Implementation Plan (PIP) and an Operations Manual (OM) are being developed. Other key documents include the Environmental and Social Management Framework (ESMF) and the Pest Management Plan (PMP). The project documents will outline the roles and responsibilities of all agencies involved in the main AAIP main project, as well as details of project processes and implementation steps.

The Project Implementation Unit (PIU) for the AAIP is headed by a National Project Director at its head office in Kabul and falls directly under the office of the Technical Deputy Minister. The PIU is comprised of a team of subject matter experts who are assisted by international experts. Fiduciary arrangements during the preparatory phase are building on the fiduciary unit that was established for both the OFWMP and AAIPA. A national FM and Procurement specialists to work exclusively on the AAIP was hired and is working with a support team already in place. An Internal Control/Internal Audit unit has already been established under the OFWM and reports directly to the Minister of MAIL – the same unit will also be used for AAIP.

B.0 Purpose of the ESMF

The Ministry of Agriculture, Irrigation and Livestock (MAIL) has developed the present Environmental and Social Management Framework (ESMF) through a safeguards team consisting of an international consultant, a national counterpart and selected staff members within the AAIP project unit. The team worked in close collaboration with the AAIP Team, all participating directorates of MAIL, the Pest Management Plan consultant, as well as relevant experts hired by MAIL for managing similar environmental and social issues in other relevant Bank-assisted projects, e.g. the Horticulture and Livestock Project (HLP), the National Solidarity Program (NSP), the On Farm Water Management Project (OFWP), and the USAID funded Women Farm Services Center in Kabul

In line with the project design requirements, the review of Bank funded projects presently in implementation, and conditions observed during the field study, it is acknowledged that social and environmental management in Afghanistan currently faces critical capacity constraints. The proposed project activities may have potential adverse impacts, albeit limited, on the physical and social environment. The mitigation and management of these impacts are essential to a sound and sustainable development.

During the development of the ESMF risks associated with the various project interventions within the AAIP systems were identified and procedures, guidelines, check lists and mitigating and management measures were developed to be used during selection and design of subprojects and during project implementation.

The ESMF is designed as a sorting mechanism for environmental and social impacts regarding investments and activities unknown before the appraisal. It is an instrument to identify and assess environmental and social impacts of future sub-projects to be funded by the program. As such, it serves as a guide for developing specific Environmental and Social Management Plans (ESMPs) of the sub-projects the number, sites, environmental and social features of which are still unveiled. In addition, the present ESMF defines the framework for monitoring and surveillance as well as institutional arrangements for implementing the program and implementing activities to mitigate environmental and social adverse impacts, avoiding or reducing them to acceptable levels.

A framework approach is adopted which recognizes the existing management capacity of the implementing agency, and permits the necessary flexibility to take account of investments unknown at the time of project appraisal. This approach provides for early identification of potential adverse impacts, and also provides broad guidance for their effective mitigation. Consistent with existing national legislation and compliant with the WB operational Policies and Environmental and Social Safeguards, the Environmental and Social Management Framework (ESMF) provides general policies, guidelines, codes of practice and procedures for the management of environmental and social issues to be integrated into the implementation of AAIPAAIP. More specifically, the objectives of the ESMF are:

- To establish clear procedures and methodologies for the environmental and social screening, development of ESMPs, approval and implementation of subprojects to be financed under the Project;
- To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social safeguards issues related to subprojects;
- To determine the training and capacity building needed to successfully implement the provisions of the ESMF;
- To establish the project funding areas required to implement the ESMF requirements; and
- To provide practical resource materials for implementing the ESMF.
- Protect human health;
- Prevent or compensate any loss of assets and livelihood;
- Prevent environmental degradation as a result of either individual sub-projects or their cumulative effects;
- Enhance positive environmental and social outcomes;
- Ensure compliance with Afghan national law and World Bank safeguard policies.

The present ESMF has been developed to effectively address environmental and social concerns and opportunities, to reduce and mitigate negative social and environmental impacts of the project. These measures include: (i) implementing a pest management plan; (ii) enhancing the skills and abilities of farmers, through training in appropriate technologies, IPM approaches, (iii) providing guidelines for establishment of a Grievance Redress Mechanism in the project as well as guidelines for public consultations.

B.1 ESMF General Guidelines

The ESMF provides general policies, guidelines, codes of practice and procedures for the management of environmental and social issues to be integrated into the implementation of the project. It contains the following guidelines:

All proposed sub-projects will be screened to ensure that the environmental and social risks can be adequately addressed through the application of standardized guidelines:

- **Industry/Facility Classification, Annex 1**
- A negative list of characteristics that would make a proposed component ineligible for support, Annex 2
- Sub-project screening, Annex 3
- Checklist for new constructions, Annex 4
- Protection of cultural property, Annex 5
- Typical Measures for Environment Impact Mitigation in AAIP sub-projects, Annex 6
- Template for Environmental and Social Management Plan, Annex 7.
- NEPA EIA Regulation, Annex 8
- Training Action Plan for Environmental and Social Safeguards, Annex 8 a

- Training and Capacity-Building Activities at different levels, Annex 8 b
- Scheduling and reporting by PIU E & S Specialist, Annex 9
- A list of pesticides and other chemicals banned or severely restricted but sold in the afghan's market, Annex 10
- A list of pesticides sold and used in Afghanistan with and/or without the government's consent, Annex 11
- A Good Management Practices Guide and Pesticides Management Measures Annex 12
- Basic Principles of Integrated Control of Pests and Diseases, Annex 13
- Examples of available tools in the IPM toolbox, Annex 14
- The "do" and "do not do" of IPM policy, Annex 15.
- Assessment based on the data collected and the stakeholders identification, Annex 16
- Generic Environmental and Social Management Plan, Annex 17
- Generic ESMP, Annex 18
- Generic ToR, Environmental Assessment, Annex 19
- Grievance redress Guidelines , Annex 20
- Public and Social Awareness Guidelines, Annex 21
- ESMF Monitoring and Evaluation Guidelines, Annex 22
- Guidelines on waste water management (septic tanks and separation of agrochemical labs wastewaters), Annex 23
- Generic TORs for Safeguards Specialists, Annex 24

B.2 Background studies for ESMF Preparation

For the preparation phase of the ESMF, a national ESMF specialist was recruited. From the experience of other Bank funded projects in the country, staff with specific responsibility for the implementation of the ESMF provisions during subproject identification, preparation and implementation will be added to PIU at headquarter.. At the level of the Technical Deputy Minister, a lead ESMF adviser (independent technical assistance) will coordinate and oversee performance sector wide on environmental and social development.
For the purpose of the ESMF field surveys were undertaken. Out of 34 provinces in 7 regions, ten were investigated:

- Mazar-e Sharif, in the north of the country
- Herat in the west of the country
- Nangarhar, in the east of the country
- Seven provinces in the center region including Kabul the Capital city. For these seven provinces, a workshop was organized in Kabul, bringing together stakeholders from Kabul, Parwan, Logar, Wardak, Kapisa, Bamiyan, Ghazni to participate in the baseline assessment.

His Excellency Ghani Ghuriani, Technical Deputy Minister in MAIL, opening the workshop

Farmers' cooperatives leaders, provincial DAIL directors and senior staff, Provincial Councils heads and members, invited from Kabul, Parwan, Logar, Wardak, Kapisa, Bamiyan, Ghazni, actively discussed the subject and provided first hand information on input delivery challenges in their respective provinces.

Plenary-Conference hall MAIL- Kabul

In small groups their brainstormed, exchanged about their experience and expectations on efficiency of agricultural input delivery system and discussed their experiences and challenges. A selected member of each group, serving as group rapporteur then presented their respective conclusions to the plenary.

Group brainstorming & discussion

In order to capture challenges from women on the subject, arrangements were made for interaction with female stakeholder groups on women and children's involvement with agro chemicals through meetings with provincial Department of Women Affairs (DOWA) offices, and a dedicated workshop took place in Kabul, at the AAIP office.

Focus group brainstorming & discussion with women in Kabul

After gathering and studying relevant documents, relevant World Bank Operational Policies, Afghanistan Environmental Law and Regulations, and ESMF and PMP documents for the NHLP and

Map 1: Political map of the Islamic republic of Afghanistan, 34 provinces

OFWMP and IRDP, studying the currently available draft pesticide law in the country, available implementation arrangements, obstacles and achievements in the adoption and application of environmental and social safeguard measures in Afghanistan, the present report is proposing relevant recommendations in the context of Afghanistan for the AAIP that can overcome the identified ESMF implementation weaknesses.

The report includes a proposed institutional arrangement for the ESMF at the MAIL HQ level to address the shortcoming. It also incorporates the lessons learnt from other relevant projects. An assessment of training needs is also included as part of the ESMF.

B.3 Assessment of ESMF implementation in other projects

The implementation of the ESMF in other projects in the country (HLP, IRDP, NSP, and OFWMP) was reviewed and the main lessons learned and incorporated in the present ESMF are:

1. Timeline of ESMF activities important in scheduling and alignment with objectives.
2. Start and sequence of ESMF activities suffering from weak initial programming.
3. Including one social safeguard officer/specialist with one environmental safeguard specialist may help avoid the neglect of any aspects of the ESMF.
4. Trained staff with clear job descriptions and conducting environmental and social audits has given good results. Exposure visits to similar projects inside and outside the country can greatly enhance the understanding and attitude of the staff in terms of safeguards issues. Repeated training in relevant fields is important considering staff turnover.

5. Regular and timely engagement of the World Bank team with the senior leadership of the line ministries helps to focus attention on, and compliance with, ESMFs.
6. Allocation of budget and resources with clear implementation arrangements for the ESMF are essential.
7. It is important to ensure availability of ESMF documents, including all guidelines, in local languages at project sites.
8. ESMF provisions must be incorporated in bidding/contract documents with accompanying translation in local languages and must be reviewed with contractors by PIU management prior to start of any construction work.
9. Contractors need training in understanding and complying with ESMF provisions.
10. Performance indicators may be used to gauge how the system works.

Summary of Findings from Field Visits and Stakeholders Consultation

Social outreach

Based on the findings from the field investigations conducted during the ESMF design, the safeguards team identified at least four key social issues relevant for service delivery: (i) the participation of the poorest, isolated, and most vulnerable groups; (ii) the participation of women; (iii) the avoidance of elite capture; and (iv) social accountability. Drawing lessons from international experience attention will be placed on strengthening the participatory process and for consolidating project interventions through existing planning instruments at national, regional and local levels. Above all social safeguards considerations, the socio-cultural context in Afghanistan and risks related to agricultural inputs delivery which involves the use of agrochemical, call for an integrated and responsible social outreach strategy for awareness building.

This is a matter of social accountability that the AAIP will need to consider in a large and comprehensive way, as essential to sustainable development of agricultural input delivery systems in Afghanistan.

Distance between private water wells from septic tanks and field lines

In Afghanistan, visits conducted on the field showed that labs, office building, factories including those processing chemical, as well as most rural homes use some type of septic system to treat household wastewater. These systems generally are economical and effective in treating these wastes. However, septic systems must be properly designed, installed, and maintained to reduce possible harmful impacts to the groundwater that supplies drinking water, neighbors' drinking water, or surface waters such as a nearby stream.

State of inputs delivery in Afghanistan: users' perception

From the group discussions with stakeholders on the present state of inputs delivery the information below summarizes the key findings. Annex 16 comprises the assessment based on the data collected and the stakeholders' identification.

Regarding Seeds, farmers and key stakeholders in the 10 provinces investigated raised issues relating to needs for:

- Training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance.
- Application of existing regulations, Enforcement of Quality Control, open pollinated seeds should be imported.
- Ease recourse process and build trust.
- Social awareness through any possible sources such as Mass-Media, Mosque, community Leaders, Schools, Universities, people gathering events and official national campaigns should be organized.
-

Regarding issues relating to Agro-chemicals inputs across the board, comfort in using these was clearly link to users' product knowledge which was reported to be constrained by:

- The lack of translation in local languages of usage instructions. Stakeholders partaking to the assessment pointed out the need for training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance.
- Application of existing regulations, public awareness through DAIL, public media.
- Enforcement of Quality control.
- Retailers should not sell agro-chemicals on the streets and they should be pharmacists.

- Labels to include local languages with danger signs and special format approved by MAIL.
- Increase Boarders control and Feasibility of a government owned and run agro-inputs –store.
-

Regarding machinery issues raised by stakeholders included the need for

- An internal code of conduct and transparent procedures in distribution of equipment.
- Concerns on machinery that seemed not to be adapted to local conditions, and not designed to be used also by women.
- Gender consideration.

Regarding social characteristics the assessment yielded a need for:

- Women targeted activities, developing women councils.
- Pointed out that, in Afghanistan, women need to be accompanied by a male family member (Mahram) where necessary.
- Dire need for an awareness campaigns.
- Storages and industries should be built for agricultural product process.
- Reinforce Control brigades and inspections schedules and reports.
-

Regarding waste management (solid and liquid, industrial and households) including existing installations the field surveys and discussions with stakeholders indicate a need to:

- Assess state of all existing installations in regard to appropriate waste management system, coordination between municipalities and MAIL.

To reach people most frequently interacting with agricultural input the survey pointed out that there is a need to:

- Design, develop training instruments in quality and quantity to ease training and communication.
- The design should be gender and age sensitive as well as appropriate.

Regarding agro chemical products handling, the overall situation is characterized by:

- Poor handling capacity overall.
- Training need for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance.
- Absence of enforcement of existing regulations.
- Lack of enforcement of quality control.
- Need to ease recourse process.
- Need to build trust.

Key to complaints handling appeared through the survey and the discussions with stakeholders to be:

- The need to build trust and equity

C.0 World Bank Operation Policies triggered

Environmental and Social Safeguards Requirements: as shown in the table below, two of the WB's Environmental and Social Safeguards Policies and Procedures - Environmental Assessment (OP/BP 4.01), and Pest Management (OP/BP 4.09) are triggered. In addition, to the Worldd Bank Policies the Afghan Environmental law (see annex 1) is also requiring Environmental Assessment and Environmental Management in such projects.

C.1 Operational Policy/Bank Procedure 4.01: Environmental Assessment

The Afghanistan Agricultural Inputs Project (AAIP) is intended to: (i) Improve seed production and certification, (ii) Establish infrastructure and policies regarding quality control and safe use of agrochemicals, (iii) Assess input delivery systems, and (iv) Establish efficient project management, implementation and coordination mechanisms. However, since the project would be dealing with pesticides and fertilizers application there might be adverse impacts, if not properly managed, the project will be requiring rigorous environmental and social management and follow up. Furthermore liquid waste resulting from the laboratory operations may contains some chemical substances which can contaminate water quality. After field visits conducted in four provinces including Kabul, a number of remarks and recommendations are worth making, which will be considered in the screening list in annex of the present ESMF.

C.2 Operational Policy 4.09: Pest Management

The AAIP will develop the public infrastructure necessary to strengthen the input delivery system for major crops including wheat, industrial crops, vegetable crops and perennial horticulture crops, through (i) consolidating and extending the existing system of improved seed supply through the formulation of a comprehensive seed policy (including the planting material for perennial crops) and development of requisite institutions and infrastructure; (ii) developing the necessary infrastructure and policies that will serve farmers' needs for appropriate, effective and safe use of fertilizers and other agro-chemicals, and (iii) Expanding the network of the local agricultural input delivery system and encouraging and facilitating the use of improved agricultural machinery and equipment.

As pesticides will have to be used in crop protection or in the fight against vector-borne disease, the AAIP has included a Pest Management Plan (PMP), as a stand-alone document. In summary, the Pest and Pesticide Management Plan (PMP) addresses the Afghanistan Agricultural Inputs Project's(AAIP) concerns relative to the risks associated with the use of agrochemicals in Afghanistan to deal with the control of pests and diseases. In addition, the PMP addresses the need to comply with the World Bank Safeguard Policies on Pest Management (OP 4.09 and BP4.01 Annex C) consistent with the priorities for agricultural investments and policies under the National Agricultural Development Framework (NADF), implemented by the Ministry of Agriculture, Irrigation and Livestock in collaboration with the Development Partners.

C.3 Pesticides-application, occupational safety and health guidelines

All individuals, farmers, products retailers, wholesalers, government staff as well as NGOs and all qualifying personnel in the agricultural input supply chain and those involved in the application of pesticides should be fully informed about the pesticides they are handling. They should be aware that pesticides can be absorbed through the skin, by breathing and by eating. They should be aware of general signs of illness, including such symptoms as malaise, headaches, dizziness, nausea and other central

nervous system effects, and they should be aware of the need to obtain prompt medical attention upon experiencing such symptoms.

The following pesticides should not be used: DDT, Aldrin, Dieldrin, Chlordane, Heptachlor, 2, 4,5T (2, 4, and 5 Trichlorophenoxyacetic Acid), EBDC (Ethylenebisdithiocarbanmate), all mercury compounds, all arsenic compounds, MIREX (Dechlorane), and DBCP (Dibrcmochloro Propane). And the PMP as designed and approved for the present project will be the key reference on all pesticides matters.

C.4 Land acquisition:

No land acquisition will be funded or take place under this project, and only existing government land will be used for seeds multiplication and upgrading of physical infrastructure. Before physical work can start on such government lands, documentation that the land is free of squatters and other encumbrances shall be submitted to the WB.

Table 2: Safeguards table

World Bank Safeguard Policies	Yes	TBD	No
Environmental Assessment (OP/BP 4.01)	x		
Natural Habitats (OP/BP 4.04)			x
Forests (OP/BP 4.36)			x
Pest Management (OP 4.09)	x		
Physical Cultural Resources (OP/BP 4.11)			x
Indigenous Peoples (OP/BP 4.10)			x
Involuntary Resettlement (OP/BP 4.12)			x
Safety of Dams (OP/BP 4.37)			x
Projects on International Waterways(OP/BP 7.50)			x
Projects in Disputed Areas (OP/BP 7.60)			x

D.0 Policy, Legal and Regulatory Framework

In Afghanistan, the legal and regulatory framework for social and environmental issues are:

- The Environment Law of Afghanistan (2007)
- Law on the Preservation of Afghanistan's Historical and Cultural Heritages (2004);

D.1 Background references of the framework

With reference to international convention, from sources available including the draft PMP report, the Government of The Islamic Republic of Afghanistan (GoA) has signed and/or ratified the following conventions:

- United Nations Convention to Combat Desertification (UNCCD) in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
- Vienna Convention for the protection of ozone layers
- The Montreal Protocol on Ozone Depleting Substance
- International Treaty on Plant Genetic Resources for Food and Agriculture
- Convention on Biological Diversity (UNCBD)
- United Nations Convention on the Law of the Sea
- Unite Nations Framework Convention on Climate Change (UNFCCC)

- Declaration on Control and Prevention of Air Pollution and its Likely Trans-boundary Effects for South Asia
- London Convention on the Prevention of Marine Pollution by Dumping wastes and Other Matter (London Convention)
- Convention on the Protection of World Cultural and Natural Heritage
- Convention on Fishing and Conservation of Living Resources of the High Seas
- Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES)

The Islamic Republic of Afghanistan is not party or signatory to the following important international agreements, conventions and treaties:

- Rotterdam Convention on the International Code of Conduct on the Distribution and Use of Pesticides on Prior Informed Consent (PIC)
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- International Plant Protection Convention (IPPC)
- Convention on the Conservation of Migratory Species of Wild Animals
- Kyoto Protocol Convention on Climate Change
- Agenda-21 Global Program of Action for Sustainable Development (Environmentally sound management of toxic chemicals and prevention of illegal international traffic in toxic and dangerous products)
- The Rio Declaration on Environment and Development- which addresses the sustainable use of natural resources and its development

The Islamic Republic of Afghanistan has signed but not ratified the Basel Convention regarding trans-boundary movement and disposal of hazardous waste, and is in the process of acceding to the Convention on Migratory Species (CMS) and the Ramsar Convention on Wetlands.

D.2 Environment Law of Afghanistan, 2007

The Ministry of Agriculture and Irrigation is the focal point for the (i) UN Convention on Biological Diversity (UNCBD), (ii) the UN Convention to Combat Desertification (UNCCD) and (iii) the Convention on International Trade of Endangered Species (CITES).

NEPA is the focal point (NEPA Environmental Policy Paper) for (i) the ozone treaties, (ii) the Vienna Convention and the Montreal Protocol, and (iii) the UN Framework Convention on Climate Change (UNFCCC).

The Environmental Law of Afghanistan promulgated in 2007 is quite comprehensive and covers most of the aspects of natural resources management. The law requires inter alia that planning for sustainable use, rehabilitation and conservation of biological diversity, forests, rangeland and other natural resources, prevention and control of pollution, and conservation and rehabilitation of the environment from adverse effects shall be an obligatory element of all national and local land-use plans and natural resources plans developed by all relevant ministries and national institutions. (art.23). Furthermore, it stipulates local communities should be involved in decision-making processes regarding sustainable natural resource management (art. 23, para 10), and that affected persons must be given the opportunity to participate in each phase of the project. (art. 19, 1)

D.3 National Environmental Protection Agency (NEPA)

NEPA was created in 2005 and it is the prime environmental regulatory and approval authority in the country. The Act under which NEPA was established specifies that the proponents of any project, plan, policy or activity must submit to NEPA a preliminary Environmental Assessment, in order to allow NEPA to determine the associated potential adverse effects and possible impacts. After reviewing the preliminary assessment, NEPA can either authorize - with or without conditions – the project, plan, policy or activity, provided that the potential adverse effects of the proposed activities on the environment are unlikely to be significant. Otherwise, NEPA may require the proponents to submit a detailed environmental impact statement including a comprehensive mitigation plan for its review and approval.

NEPA EIA Board of Experts review, assess and consider applications and documents of the sub-project submitted by the proponent. Acting on the advice of the EIA Board of Experts, NEPA has the option of either granting or refusing permission. Once permission is granted the proponent needs to implement the project within three years of the date of which the permission has been granted, otherwise, it will lapse. EIA Board of Expert decisions can be appealed (Art. 19).

A detailed EIA procedure has been laid out by the NEPA for the proponents to follow for mandatory environmental compliance (see Annex 8).

D.4 Implications of the Environment Law and the EIA Regulation for AAIP

It is envisaged that all subprojects and activities of the AAIP fall under Category 1, which applies for activities that are 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.

The Afghan EIA Regulation requires that the project proponent and owner should submit an application form and a screening report to NEPA. The documents should be meeting the agency's required technical guidelines for the screening report, e.g., description of the activities, completion of Rapid Environmental Assessment (REA) to identify potential impacts and their sources and the relevant mitigation measures, public participation in the assessment process and etc.

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. The 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.

Once the application form and other relevant documents are submitted to NEPA according to the agency EIA regulation NEPA would: (i) issue a Certificate of Compliance, with or without conditions, (ii) advise the applicant in writing to review the technical reports and address the concern of NEPA. According to the EIA regulation NEPA would grant a Certificate of Compliance or would refuse to do so and provide written reasons for the refusal to the applicant. The EIA regulations are silent on NEPA rules during implementation of the activities and projects.

E.0 Environmental and Social Management Framework (ESMF)

Many activities foreseen might have negative environmental and social impacts. Among those are

Components A and B which include infrastructure construction and equipment, laboratories, storage facilities, farms for seeds production, and quarantine posts at locations still to be determined/confirmed. Above all there is a strong need to mitigate negative impact of overall use of inputs including agrochemicals by farmers as observed and reported during field visits and consultations for the preparation of the present ESMF. The project has prepared a separate Pest Management Plan, which has been cleared by the WB. Consistent with Bank requirements as well as applicable regulations on the environment in Afghanistan, the ESMF sets out specific mitigation and enhancement measures to address the social and environmental aspects of project interventions, including safeguards screening guidelines for sub-projects. Each subproject will undergo a review process to screen for sensitive environmental/social issues. Sub-projects with attributes registered on the 'negative list' will be ineligible for support. (Annex 2).

E.1 Stakeholder identification, consultation and participation

Agricultural inputs stakeholders identified are:

1. Farmers with and without land (including paid laborers),
2. Farmers' organizations,
3. Input retailers and wholesalers,
4. NGOs,
5. Women farmers with and without land (including paid laborers)
6. Respective cooperatives,
7. Donors' agricultural supply networks representatives,
8. Local DAILs, DOWAs, NEPA
9. Border Control Posts,
10. CDC members (male and female), and
11. Agriculture Schools and Research Institutions, etc .

These can be grouped in 2 categories: (i) farmers with and without land (including paid laborers), farmers' organizations, input retailers and wholesalers, NGOs, women farmers with and without land (including paid laborers) and respective cooperatives, (ii) donors' agricultural supply networks representatives, local DAILs and DOWAs, etc .

Stakeholder consultations were conducted during the design phase of the present ESMF, summary outcomes of which are reported above. The full outcome is reported in separate working document in MAIL, including list of participants and addresses.

E.2 Institutional Arrangements

Two Safeguards specialists (one for social aspects and another for environmental aspects) will be required at AAIP headquarters. An ESM (international) Adviser to the Project Director would be hired for the first three years, to assess, monitor, and report on compliance.

E.3 Institutional Capacity Building

The overall objective will be to strengthen the institutional capacity of the PIU to better support the development and integration of social and environmental measures into the project. Details on

institutional capacity building, including budgeting, are presented in Annexes 8a and 8b. The institutional capacity building strategy will bear in mind the need to:

- Develop organizational mechanisms to ensure that environmental and social policies of the World Bank and Afghanistan are followed in all project components.
- Ensure coordination between AAIP and NEPA on environmental issues
- Ensure compliance with the National Strategy for the Environment and the Environmental Action Plan as laid out under Environmental Law of Afghanistan.
- Assist MAIL in strengthening their own capacity to deal with social and environmental issues and develop socially and environmentally sound investment programs.
- Define overall needs for environmental education, information, promotion and training.

The AAIP team and MAIL will establish contacts with the relevant NEPA departments to cooperate and coordinate in the implementation of the environmental laws, policies and regulations as well as the World Bank safeguards policies.

E.4 Capacity building of stakeholders and farmers including women and adolescent farmers

At local level, attention will be placed on developing practical, hands-on training for Farmers and their cooperatives leaders including women and adolescent farmers.

Trainings will include:

- Building knowledge and skills of farmers through training in inputs selection and utilization
- Building village organizers' awareness of social and environmental issues and enhancing their capacity to monitor mitigating measures.
- Assessing the potential impacts of the project activities on crops and personal health (if any) and their relevant mitigation measures.

Some efforts will be geared toward agricultural higher learning institutions (university colleges, and vocational learning centers). It is necessary to encourage the development of environmental and social safeguards training curricula in their institutions. They should be incentivized to develop volunteer activity to support farmers' capacity enhancement in regard to the selection and utilization of safe and efficient agricultural inputs in their respective neighborhoods provinces and regions. These learning institutions will be encouraged to develop more engagement and advocacy for good practices in agriculture.

Periodic seminars will also be organized at DAIL level on rights and obligations of inputs wholesalers and retailers on products quality.

All activities will have appropriate media coverage.

E.5 Monitoring and Evaluation

Implementation of the ESMF will be subject to internal monitoring at two levels.

National level PIU Safeguards staff will take overall responsibility for overseeing progress in implementing the ESMF and assessing the effectiveness of mitigation measures against agreed indicators.

They will be responsible for preparing quarterly reports which will inform both the Government and the World Bank on progress.

Independent/external assessment of compliance with mitigation measures will also be carried out mid way during project implementation and another one at project completion by an External Monitoring Agency (EMA) with the results communicated to the PIU and the World Bank.

In due course, a detailed task description will be prepared by the ESM Sr. Adviser, which will include key areas and challenges to be assessed, addressed, and advised on by the EMA report, including constructive problem solving recommendations. Based on the results of the compliance report, the ESM Adviser (international) will recommend to MAIL/the World Bank if the necessary works activity can commence.

E.6 Grievance and Complaints Redress

A Grievance Redress Committee (GRC) will be established under the AAIP. The GRC does not have any legal mandate or authority but acts as a facilitator to try and resolve issues between the complainant and the MAIL/PIU.

The GRC will consist of a CDC representative from district government, representative from the PIU-Technical Assistance Unit, and participating NGO. The GRC would meet to try and resolve the matter and make a recommendation within 7-10 working days.

Also, Safeguards Specialists will have an important role in ensuring that communities have a full understanding of their rights and responsibilities regarding purchase and use of agricultural inputs, as well as wholesalers and retailers obligation to disclose products specifications. Provincial DAILs will be in charge of recording and reacting to any reported suspicions of existence of inappropriate produce on shelves.

A guideline for grievances redress is outlined in Annex 20.

E.7 Communication

Based on the assessment of present knowledge on risks related to improper selection and use of agricultural inputs there appear to be an urgent need for a strong communication campaign to strengthen users' capacity to select and use inputs that are safe and efficient. Mass communication strategies using existing media as well as eventually creating project specifically dedicated channels (including regional FM radios and transistor distribution) need urgently to be considered.

A communication strategy to increase the overall awareness and effectiveness of the project will be developed by the ESM Adviser (International) and will be implemented principally by environmental and social safeguards specialists. Its key objectives will include:

- Providing relevant information to communities about the project through appropriate communication channels,
- Facilitating a meaningful two way exchange of information with different groups of stakeholders throughout the course of the project
- Building trust between project staff and communities and promoting collaboration among all stakeholders.
- Facilitating collaborative relationships with other development agencies
- Strengthening local governance and building trust among inputs delivery actors.

E.8 Budget for Environmental and Social Safeguards Compliance

Implementation of the present ESMF will require a total of **US$ 1,805,000** for ESMF related staffing, training and capacity building of staff, contractors, training manuals, awareness materials, preparation of site specific EMP outreach and communication, and monitoring. . This cost will be met from the allocation for the respective subproject.

Table 3: Budget for Environmental and Social Safeguard Compliance

No.	Activities	Unit	Cost (US$)	Duration
Staffing, monitoring and training				
1	Environmental Safeguards Specialist	1	240,000	5 years
2	Social Safeguards Specialist	1	240,000	5 years
3	Various ESMF related trainings	48	200,000	3 training days/staff
4	EMA (External Monitoring Agency)	2	100,000	1st at mid way& 2nd by project completion
5	ESM Adviser (International)	1	300,000	4x3=12 months
Manuals and subproject ESMP				
6	a) Preparation of Environmental & Social Safeguards Training Manual (local languages)	1	20,000	1 month
7	b) Preparation of Environmental & Social Safeguards Operational Manual	1	10,000	1 month
8	c) Sub-Project-wise Preparation of Environmental and Social Management Plan (ESMP)	20	200,000	1 month
Training and awareness to farmers, men, women, youth, and to private sector				
9	a) Development Materials in Local Languages	1	25,000	1 month
10	Funding curricular activities in selected agricultural higher learning institutions (university colleges, and vocational learning centers)	7	210,000	5 years
11	Seminars on rights and obligations of inputs wholesalers and retailers on products quality with media coverage	34x2	160,000	5 years
12	Communication campaign (TV, Radio, news papers, posters, mosques, etc.)		100,000	5 years
Total			**1,805,000**	

Staffing, monitoring and training

The AAIP will have one (1) Environmental Safeguards Specialist and one (1) Social Safeguards Specialist (preferably female) for the entire lifetime of the project (5 years) at US$ 4000/month/person.

Cost for an ESM Adviser (International) is included at a net rate of US$25,000/month 4 months /year, for 3 years (12 months in total). As support to Project Director, this adviser will have the responsibility of supervising and assuring the proper implementation of the ESMF and all related subprograms and to prepare the Afghan national ESMF team to responsibly and rigorously implement and follow up the program. The Project Director and the selected ESM Advisor will agree on terms and specifics of the assignment.

Manuals and subproject ESMP

These will include (i) preparation of Environmental & Social Safeguards Training Manual (local languages), (ii) preparation of Environmental & Social Safeguards Operational Manual, and (iii) sub-Project-wise Preparation of Environmental and Social Management Plan (ESMP), for a total of US$230,000.

Training and awareness campaigns

These will include (i) development Materials in Local Languages, (ii) on-site training program on safeguards for men and women farmers, (iii) funding curricular activities in selected agricultural higher learning institutions (university colleges, and vocational learning centers), (iv) seminars on rights and obligations of inputs wholesalers and retailers, on products quality, with media coverage, and (v) a robust communication campaign (TV, Radio, news papers, posters, mosques, etc.) for a total of **US$** 495,000. ESS, SSS, will serve as facilitators for PMP scheduled trainings on safe handling, storage, distribution, and use of agrochemicals.

Process and Responsibilities of Social and Environmental Screening/Assessment

All schemes/sub-projects identified for implementation under the Project will be subjected to the screening process to ensure compliance with the provisions of this ESMF and to determine whether they are permissible and abide by all the legal requirements of the government and safeguard policies of the World Bank.

- Proposals for schemes involving voluntary land donation or involuntary acquisition and resettlement or serious environmental issues would be subject to World Bank's prior review and clearance.
- NEPA's approval would be sought where required under the Law.
- An independent third party/External Monitoring Agent (EMA) would review AAIP safeguards compliance at mid-term and at project completion.

E.9 Disclosure

This Environmental and Social Management Framework (ESMF) was developed by the MAIL on the basis of the generic Framework for World Bank-funded reconstruction operations, a review of the ESMF implementation in related WB-funded projects and a review of the specific requirements of the planned project. Prior to approval of the project by the World Bank, the ESMF and the associated Pest Management Plan will be disclosed on September 10, 2012 by MAIL in Afghanistan in both *Dari* and *Pashto* on the MAIL website, Libraries, HQ and provincial offices, MAIL implementing partners offices and by the WB Infoshop.

Annex 1: Industry/Facility Classification[1]

According to the National Environmental Impact Assessment Policy, potential polluters are divided in to three categories (red, orange, green) according to degree of pollution. The red category comprises of several industries relevant to present project (highlighted).

Red Category

1. Thermal power generation (> 200 MW)
2. Nuclear power generation and related activities (heavy water production, rare earths, etc.)
3. Petroleum refineries
4. Olefinic petrochemical complexes
5. Airports and other oil depots
6. Industrial parks
7. Production of petrochemical intermediates (DMT, Carpolactam, LAB, etc.) and basic plastics (LDPE, HDPE, PP, PVC)
8. Exploration of oil, gas and their production, transportation and storage
9. Cement plants
10. **Production of fertilizers**
11. **Production or formulation of plant protection chemicals (pesticides, insecticides, and fungicides)**
12. Chlor alkali industry
13. Production of hydrocyanic acid and its derivatives
14. Production of meta amino phenol
15. Production of asbestos and asbestos products
16. Glass and fibre glass production and processing
17. Production of synthetic rubber
18. Manufacture of resins
19. Production of viscose staple and filament yarn
20. **Basic manufacturing of organic and inorganic chemicals**
21. Integrated paint complexes and manufacture of basic raw materials for paints
22. Pulp and paper mills
23. Newsprints
24. Production of bulk drugs and pharmaceuticals
25. Distilleries
26. Food processing (sugar mills, slaughtering, etc.)
27. Primary metallurgical industries (aluminium, copper, lead and zinc smelters, production of iron and steel and ferro-alloys)
28. Foundries
29. Electroplating
30. Metal finishing industries
31. Lime kilns
32. Mining of major minerals, coal, sulphur, precious stones, etc. (with leases > 5 ha)
33. Stone crushers
34. Dyes
35. Tanning and leather finishing
36. Integrated textile processing mills
37. Storage batteries integrated with manufacture of oxides of lead and lead antimony alloys

[1] NEPA; NATIONAL ENVIRONMENTAL IMPACT ASSESSMENT POLICY. An Integrated Approach to Environmental Impact Assessment in Afghanistan; Final (November 2007)

38. Hospitals, clinics and diagnostic laboratories
39. Disposal and/or storage of hazardous or toxic wastes (landfills, incinerators, etc.)
40. Other waste disposal/storage facilities with annual capacity > 10,000 m^3

Annex 2: Negative List of Sub-project Attributes

Sub-projects with any of the attributes listed below will be ineligible for support under the Afghanistan Agricultural Inputs Project:

Attributes of Ineligible Sub-projects
Involves the significant conversion or degradation of critical natural habitats. Including, but not limited to, any activity within: • Ab-i-Estada Waterfowl Sanctuary; • Ajar Valley (Proposed) Wildlife Reserve; • Dashte-Nawar Waterfowl Sanctuary; • Pamir-Buzurg (Proposed) Wildlife Sanctuary; • Bande Amir National Park; • Kole Hashmat Khan (Proposed) Waterfowl Sanctuary; and • Shewa Lake in Badakhshan
Will significantly damage non-replicable cultural property, including but not limited to, any activities that affect the following sites: • Monuments of Herat (including the Friday Mosque, ceramic tile workshop, Musallah complex, Fifth Minaret, Gawhar Shah mausoleum, mausoleum of Ali Sher Navaii, and the Shah Zadehah mausoleum complex); • Monuments of Bamiyan Valley (including Fuladi, Kakrak, Shar-I Ghulghular and Shahr-i Zuhak); • Archaeological site of Ai Khanum; • Site and monuments of Ghazni; • Minaret of Jam; • Mosque of Haji Piyada/Nu Gunbad, Balkh province; • Stupa and monastry of Guldarra; • Site and monuments of Lashkar-i Bazar, Bost; and • Archaeological site of Surkh Kotal. • Other conservation hot spots
Requires pesticides that fall in WHO classes IA, IB, or II.
Supports commercial logging or plantations in forested areas.
No land acquisition will be funded under this project.

Annex 3: Sub-project Screening Checklist

A	Environmental and Social Impacts	Response
Location		
1	Are there environmentally sensitive areas (forests, pastures, rivers and wetlands) or threatened species that could be adversely affected by the sub-project?	
2	Does the sub-project area (or components of the project) occur within or adjacent to any protected areas designated by government (national park, national reserve, world heritage site, etc.)?	
3	If the sub-projects are outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected areas (e.g., interference with the migration routes of mammals, fish or birds)?	
4	Will the sub-projects reduce people's access to the pasture, water, public services or other resources that they depend on?	
5	Might the sub-projects alter any historical, archaeological or cultural heritage site or require excavation near such a site?	
Physical and biological environment		
6	Will sub-projects require large volumes of construction materials (e.g. gravel, stones, water, timber, firewood)?	
7	Might the sub-projects lead to soil degradation or erosion in the area?	
8	Might the sub-projects affect soil salinity?	
9	Will the sub-projects create solid or liquid waste that could adversely affect local soils, vegetation, rivers, streams or groundwater?	
10	Might river or stream ecology be adversely affected due to the installation of structures such as weirs, etc.?	
11	Will the sub-projects have adverse impacts on natural habitats that will not have acceptable mitigation measures?	
12	Do the sub-projects have human health and safety risks, during construction or later?	
13	Might the sub-projects lead to migration into the area?	
Alternatives		
14	Is it possible to achieve the objectives above in a different way, with fewer environmental and social impacts?	
B	Social Issues	
1	Have all groups within the community been consulted about the proposed sub project?	
2.	Which groups have not been consulted?	
3	Will the sub-projects require acquisition of land (public or private)and/or other assets for its development?	
	Will the sub-projects require voluntary land donations?	
4	Will anyone be prevented from using economic resources (e.g. pasture, community place, forests etc.) to which they have had regular access?	
5	Will the sub-projects result in the involuntary resettlement of individuals or families?	
6	Will the sub-projects result in temporary or permanent loss of crops, fruit trees and household infrastructure such as granaries, toilets, kitchens etc?	

7	Will the sub-projects affect the livelihoods of particular groups within the communities,, especially vulnerable groups such as the landless?	
8	Will the sub-projects affect the well-being and livelihoods of women, particularly female-headed households?	
9.	Will the sub-projects benefit all groups within the community equally?	
10.	Are there ongoing land or water disputes within the community/ with neighbouring communities?	
C	**Local Minorities**	
1	Might the project adversely affect local minority groups or vulnerable people living in the area?	
2	Are there members of these groups in the area who could benefit from this project?	
If any project affected people are suffering negative livelihood impact because of the project or any of their land or assets are impacted, or access to any of these, then further action is required in terms of identifying impact, consult with PAPs, minimize impact and find mitigation measures and compensation.		
D	**Pesticides and Waste Materials**	
1	Will the project result in the introduction of pesticides or an increase of pesticide use if use of such products currently exists?	
2	Will the project result in the production of solid or liquid waste (e.g. water, domestic or construction waste), or result in an increase in waste production, during construction or operation?	
E	Is there probability of the presence of landmines or unexploded devices at or near the proposed sub-project area?	
F	**Systematic walkthrough on dispositions of the PNP with detail report. See annexes 11, 12, 13, 14, 15, and 16 of present ESMF, or/and PMP report**	

Annex 4: Check list for new construction/rehabilitation/technical equipments of infrastructure

S. No	checklist questions	Yes	No
1	Will it cause land use conflicts?		
2	Is any person living on or near the land needed for the subproject, or is any person farming there, using the land for grazing or watering of animals or for any other purpose?		
3	Generates excessive dust and noise?		
4	Leads to creation of open pits?		
5	Reduces biodiversity?		
6	Leads to construction wastes?		
7	Leads to loss of vegetation?		

Circle screening conclusion:

If the answers to the checklist questions are "No" then there is no need for further action.

If the answers to the questions are "Yes", then consult the relevant procedures /guidelines for assistance in addressing issues of concerns.

Annex 5: Protection of Cultural Property

Physical culture includes monuments, structures, works of art, or sites of "outstanding universal value" from the historical, aesthetic, scientific, ethnological, or anthropological point of view, including unrecorded graveyards and burial sites. Within this broader definition, cultural property is defined as sites and structures having archaeological, paleontological, historical, architectural, or religious significance, and natural sites with cultural values.

The AAIP is aiming at improving agricultural input delivery systems which is envisaged with activities that are unlikely to pose a risk of damaging cultural property, as the subprojects will largely consist of small investments on existing government properties free of such cultural significance. Furthermore, the negative list of attributes, which would make a subproject ineligible for support (Annex 2), includes any activity that would significantly damage non-replicable cultural property. Nevertheless, the following procedures for identification, protection from theft, and treatment of chance finds should be followed and included in standard bid documents.

Chance Find Procedures

Chance find procedures are defined in the law on Law on the Preservation of Afghanistan's Historical and Cultural Heritages and Artifacts (Official Gazette, April 16, 2004), specifying the authorities and responsibilities of cultural heritage agencies if sites or materials are discovered in the course of project implementation. This law establishes that all moveable and immovable historical and cultural artifacts are state property, and further:

- The Archaeology Institute and the Historical Artifacts Preservation and Repair Department are both responsible to survey, evaluate, determine and record all cultural and historical sites and collect and organize all historical documents related to each specific site. No one can build or perform construction on the recorded historical and cultural site unless approved or granted permission or agreement is issued from the Archaeology Institute.(Art. 7)

- All moveable and Immovable historical and cultural artifacts and heritage items that are discovered or remain buried and not discovered/excavated in Afghanistan are the property of the Islamic Republic of Afghanistan and any kind of trafficking of such items is considered theft and is illegal.(Art. 8)

- Whenever municipalities, construction, irrigation or other companies (whether they are governmental or private) find or discover valuable historical and cultural artifacts during the conduct of their projects, they are responsible to stop their project and report any findings to the Archaeology Institute about the discovery.(Art. 10)

- Any finder or discoverer of historical and cultural sites is obligated to report a find or discovery to the Archeology Institute immediately but not later than one week if it is in the city and not later than 2 weeks if it is in a province. All discovered artifacts are considered public properties and the Government of Afghanistan will pay for all lands and sites which are considered to be of historical or cultural value.(Art. 19, 1)

- Whenever there is an immovable historical and cultural site discovered which includes some movable historical and cultural artifacts, all such movable artifacts are considered public property and the owner of that property will be rewarded according to Article thirteen (13) of this Decree.(Art. 19, 2)

- A person who finds or discovers a movable historical and cultural artifact is obligated to report the discovery to the Archaeology Department no later than seven (7) days if he/she lives in the capital city of Kabul, and in the provinces they should report the discovery to the Historical and Cultural Artifacts Preservation Department or Information and Culture Department or to the nearest governmental Department no later than fourteen (14) days.

- Mentioned Departments in this article are responsible to report the issue to the Archaeology Department as soon as possible and the discoverer of the artifact will be rewarded according to Article 13 of this Decree. (Art. 26)

- Whenever individuals who discover historical and cultural artifacts do not report such discoveries to the related Departments within the specified period according to Articles 19 and 26 of this Decree, they will be incarcerated for a minimum of one (1) month but not more than a maximum of three (3) months.(Art. 75)

The above procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the Site Engineer shall monitor that the above regulations relating to the treatment of any chance find encountered are observed.

Relevant findings will be recorded in World Bank Project Supervision Reports (PSRs), and Implementation Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural resources mitigation, management, and capacity building activities, as appropriate.

Annex 6: Typical Environment Impacts and Mitigation Measures for Sub-Projects

Managing Environmental Impacts				
Environmental Concerns	**Potential Impacts**	**Mitigation Measures Identified**	**Implementation Arrangements**	
			Primary/Execution	**Supervision**
Design Stage				
Environmentally sensitive areas like forests, pastures, rivers, etc close to the site	Adverse effects on flora and fauna	Avoid the site altogether Carry out a detailed environmental survey	Regional PIU environmental officer	Technical Assistance Team's Environmental Officer
Protected areas/national reserve; cultural heritage sites close to the site	Adverse effects on flora and fauna; history/culture	Avoid the site altogether Carry out a detailed environmental survey	Regional PIU environmental officer	Technical Assistance Team's Environmental Officer
Presence of landmines or unexploded devices at or near the proposed site	Threat to life and property	Clearance as de-mining zone	Regional PIU environmental officer	Technical Assistance Team's Environmental Officer
Soil erosion	Risks of drainage failure	Consider slope and pier protection with retaining structure and gabion	Regional PIU environmental officer Design engineer	Environmental Officer/Design Engineer
Water borne diseases	Increase incidence of disease such as Malaria and cholera	Proper drainage of the area. Link to other agencies (government and NGOs) working on health issues in the locality so that improved health care practices can be introduced to/adopted by local communities.	Regional PIU environmental officer Design engineer	Environmental Officer/Design Engineer
Construction Stage				
Soil				
Soil erosion	Risks of drainage failure	Plantation of appropriate vegetation on hill slopes and other potentially erodible places Design consideration for erosion: slope and pier protection with retaining structure and gabion Appropriate earth compaction and in construction of access roads	Contractor/ Regional PIU environmental officer Design engineer	Technical Assistance Team's Environmental Officer/Design Engineer

		Restriction of vehicular and construction machinery movements when necessary		
Landscape Degradation				
Degradation of borrow areas	Loss of topsoil	Replace stockpiled soil cover Replant grass/ shrubs Install sediment runoff control devices Ensure ongoing erosion monitoring	Contractor	Regional PIU environmental officer
Topsoil	Loss of topsoil	Stripping and storing of topsoil prior to construction and reuse it during construction	Contractor	Regional PIU environmental officer
Generation of excavated materials/debris/waste materials	Landscape degradation	Ensure contractors comply with contract provisions for restoring landscape	PIU Supervisor	Regional PIU environmental officer
Excess of const. ruction work may involve felling of trees	Reduction of vegetation or cutting of trees	Twice as many will be planted	PIU Supervisor	Regional PIU environmental officer
Water				
Water logging/salinity	Soil degradation	Ensure proper drainage	Contractor	Regional PIU Environmental Officer
Solid/Liquid Wastes and Hazardous Materials				
Wastes from new/potential activity in site	Contamination from wastes	Include details on liquid and solid waste management (collection, disposal, treatment, and detailed design sketches of installations if planned on site…)	Contractor	Regional PIU Environmental Officer
Wastes from contractor's yard and construction camp	Contamination from wastes	All solid wastes to be collected and removed from the camp sites and disposed in local waste disposal sites Provision of impervious base to storage areas to prevent contamination of hazardous materials to water sources, leaching into ground water	Contractor	Regional PIU Environmental Officer
Air and Noise Pollution				
Air pollution	Discomfort and health hazard	Regular maintenance of vehicles and machinery used for construction Regular spraying of water in the materials mixing and handling areas/temporary access roads	Contractor	PIU/ Environmental Officer and supervisors
Noise pollution		Necessary permission from NEPA if blasting is carried out Regulation of vehicular movements, especially closed to	Contractor	PIU/ Environmental Officer and supervisors

		habitats		
Worker's health, safety and hygiene	Health impact	Provide adequate protective devices, drinking water and sanitary facilities to workers	Contractor	PIU/ Environmental Officer and supervisors
Water borne diseases	Increase incidence of disease such as malaria and cholera	Proper drainage of the area	Contractor	PIU/ Environmental Officer and supervisors
Operation Stage				
Fertilizer/pesticides runoff leading to pollution of canal water	Health hazards for human and livestock	Community awareness on use of pesticides and agro-chemicals in agricultural fields close to canal	CDCs, Farmers cooperatives, Women farmers associations, Regional/local Councils, Agricultural Inputs wholesalers and retailers etc.	PIU/ Social Safeguards Specialist and Officer and supervisors
Water borne diseases	Use of water channels as Waste water drains Incidence of diseases such as malaria and cholera	Maintain proper drainage of the area Periodic flushing of the channels Liaison with health authorities on early Warning sign communication	CDCs, Farmers cooperatives, Women farmers associations, Regional/local Councils, Agricultural Inputs wholesalers and retailers etc.	PIU/ Social Safeguards Specialist and Officer and supervisors Environmental Officer /M & E unit

Annex 7: Template for Environmental and Social Management Plan (ESMP)

Subproject Activity	**Potential Environmental and Social Impacts**	**Proposed Mitigation Measure(s)**	**Institutional Responsibilities**	**Cost Estimates**	**Comments (e.g. secondary impacts)**
Pre-Construction Phase (Design)					
Construction Phase					
Operation and Maintenance Phase					

Annex 8: NEPA EIA Regulation

Bismillah – e – Rahman – e – Rahim
Islamic Republic of Afghanistan

Environmental Impact Assessment Regulations

Official Gazette No. 939, dated 10 March 2008

UNOFFICIAL ENGLISH LANGUAGE TRANSLATION
(the official Dari and Pashto versions are contained in the abovementioned Gazette)

CHAPTER ONE
GENERAL PROVISIONS

Regulation 1. Rationale

These Regulations are issued in accordance with Article 22 of the Environment Law in order to govern the process for environmental impact assessment.

Regulation 2. Application of the Regulations

1. In accordance with Article 13(1) of the Law, these Regulations apply to the following prohibited activities:

(1) Category 1 activities, set out in Schedule I of these Regulations;

(2) Category 2 activities, set out in Schedule I of these Regulations;

(3) any activity that is likely to have a significant adverse effect on the environment of an area that has been determined by the National Environmental Protection Agency to be an environmentally sensitive area; and

(4) any other activity that is likely to have a significant adverse effect on the environment and which is determined by the National Environmental Protection Agency to be a prohibited activity.

CHAPTER TWO
PROCESSING OF APPLICATIONS

Regulation 3. Issuing Certificate of Compliance

1. The National Environmental Protection Agency is the sole authorized agency to issue a Certificate of Compliance to undertake the prohibited activities identified in Regulation 2, and no ministry, national institution or non government agency may issue an authorisation for the execution of an activity that has been identified as a prohibited activity in terms of these Regulations.

2. Should an applicant under these Regulations intend to undertake an activity that is both a prohibited activity in terms of sub-regulation 1 and is likely to cause significant pollution, the applicant shall obtain a separate authorisation in terms of the relevant legislation, in addition to a Certificate of Compliance in terms of these Regulations.

3. Should an applicant under these Regulations be required to obtain from the National Environmental Protection Agency an authorisation under any other legislation, the National Environmental Protection Agency shall endeavour to consider and make a decision on each application with regard to the other application.

Regulation 4. Applications

Should an applicant intend to undertake an activity identified in Regulation 2, the applicant shall submit to the National Environmental Protection Agency an application form in accordance with Schedule II of these Regulations.

Regulation 5. Screening

1. Before submitting an application, the applicant shall conduct a screening process and complete a screening report that is consistent with international best practice set out in Schedule III of these Regulations and submit it to the National Environmental Protection Agency to make a decision. Screening in these Regulations means the assessment to determine whether or not there is a likelihood of significant adverse effects that require further investigation, or whether a decision can be made based on the information provided through the screening process.

2. The National Environmental Protection Agency shall develop a list of international best practice and make this available to applicants.

Regulation 6 .Consideration of applications after screening

1. Within fourteen (14) days of receiving an application and an accompanying screening report, the National Environmental Protection Agency shall distribute a notice of public disclosure to landowners, land occupiers and the elders of local communities likely to be affected by the activity identified in the application. The notice shall contain the following information:

(1) a broad and comprehensible description of the activity and its environmental and social impacts;

(2) informing affected persons that an application will be submitted to the National Environmental Protection Agency under these Regulations;

(3) informing affected persons to register within seven (7) days of the date of distribution of the notice of public disclosure by either:

- sending a written notice of registration to any office of the National Environmental Protection Agency; or
- registering in person at any National Environmental Protection Agency office.

2. The National Environmental Protection Agency shall keep a record of all information set out in sub-regulation 1, which record shall be available to members of the public, whenever required.

3. Within twenty-one (21) days of distributing the notice of public disclosure, the National Environmental Protection Agency shall:

(1) decide whether the information contained in the screening report is sufficient to issue a Certificate of Compliance, with or without conditions, in terms of Regulation 9;

(2) advise the applicant that further or additional information or investigation is required before a decision can be reached; or

(3) instruct the applicant to comply with Regulation 7.

Regulation 7. Environmental impact assessment process

If instructed to do so by the National Environmental Protection Agency in terms of Regulation 6.3, the applicant shall, in accordance with international best practice, prepare an environmental impact statement, which statement shall contain all the information required for the National Environmental Protection Agency to make a decision in terms of Regulation 8, including:

(1) a full description of the activity, and its need and desirability;

(2) a description of the property and the environment in the vicinity of the property where the activity will be undertaken, including any significant geographical, physical, social and cultural features of the property;

(3) an identification, description and assessment of:

- the likely environmental impacts and benefits of the activity on soil, water, air, forests, climate, human health, animals and plants, landscape, archaeological property, cultural heritage, cultural values, social and economic well-being and livelihoods, human settlements and their interactions;
- the likely environmental impacts and benefits of alternative means of carrying out the activity, including the preferred means and the alternative of not undertaking the activity at all;
- the likely environmental impacts of viable alternatives to the activity that would achieve the same aim as the activity was intended to achieve;
- all relevant measures that could be undertaken to avoid, remedy or mitigate any significant adverse effects that could be caused by the activity;
- all relevant measures that will be taken to monitor the likely environmental impacts and benefits of implementation of the activity on affected persons;
- an identification of government and non government institutions, authorities, stakeholders, organisations, communities and other bodies and persons from which either a separate authorisation is required or that are likely to be affected by implementation of the activity; and

- any other information prescribed by the National Environmental Protection Agency in accordance with these Regulations;

(4) a description of the public participation process undertaken during the environmental impact assessment process, particularly in relation to registered affected persons; the major issues that were identified during the consultation process; and how these issues were incorporated into the assessment process.

Regulation 8. Consideration of applications after environmental impact assessment

1. Within forty-five (45) days of the environmental impact statement being lodged with the National Environmental Protection Agency, the National Environmental Protection Agency shall:

(1) issue a Certificate of Compliance, with or without conditions, in accordance with Regulation 9; or

(2) advise the applicant in writing to review the technical reports and information submitted, or the assessment processes adopted, if not in accordance with international best practice. The reviewed report shall indicate the manner in which the applicant has addressed the National Environmental Protection Agency's concerns.

2. Within thirty (30) days of submission of the review document referred to in sub-regulation 1(2), the National Environmental Protection Agency shall:

(1) issue a Certificate of Compliance, with or without conditions, in accordance with Regulation 9; or

(2) refuse to issue a Certificate of Compliance, and provide written reasons for the refusal to the applicant.

CHAPTER THREE
MISCELLANEOUS PROVISIONS

Regulation 9. Certificate of Compliance

1. The National Environmental Protection Agency may issue a Certificate of Compliance in the format prescribed in Schedule IV if satisfied that:

(1) the applicant has complied with the procedural provisions of these Regulations;

(2) the substance of the technical reports and information submitted to the National Environmental Protection Agency in terms of these Regulations, and the process adopted, are in accordance with international best practice; and

(3) the applicant has consulted fully with affected persons, and has adequately addressed the concerns of such persons.

2. The National Environmental Protection Agency may attach conditions to the certificate, if appropriate.

3. The certificate shall state that the applicant shall commence works on the activity that is the subject of the application within three (3) years from date of signature.

4. The National Environmental Protection Agency may withdraw a Certificate of Compliance if the applicant fails to comply with any of the terms and conditions to which the authorisation is subject.

Regulation 10. Appeal procedure

The appeal procedure set out in Article 17 of the Law shall apply to decisions made under these Regulations.

Regulation 11. Fees

When issued a Certificate of Compliance in terms of these Regulations, non-Afghan natural and legal persons and combined Afghan and non-Afghan enterprises shall pay to the Ministry of Finance the sum of 100,000 Afghanis.

Regulation 12. Commencement

These Regulations shall come into effect on the date of their publication in the Official Gazette.

SCHEDULE I:

SCREENING OF ACTIVITIES

Category 1 activities:

Activities likely to have significant adverse impacts: means activities likely to have significant adverse effects that are sensitive, diverse or unprecedented, and affect an area broader than the sites or facilities subject to the physical works of the activity. The activities are:

A. Energy

The construction, installation or upgrading of:

1. hydroelectric power generation facilities over 50 MW;
2. thermal power generation facilities over 200 MW;
3. transmission lines (11 KV or more) and grid stations;
4. nuclear power plants; or
5. petroleum refineries.

B. Manufacturing and processing

The construction or upgrading of:

1. cement plants;
2. facilities for the manufacture of chemicals;
3. fertilizer plants;
4. food processing facilities, including sugar mills, beverages, milk and dairy products, with a total cost of US $1.5m or more;
5. industrial estates (including export processing zones);
6. facilities for the manufacture of man-made fibres and resin with a total cost of US $1.5m or more;
7. pesticide manufacture or formulation facilities;
8. petrochemicals complex facilities;
9. facilities for the manufacture of synthetic resins, plastics and man-made fibres, paper and paperboard, paper pulping, plastic products, textiles (except apparel), printing and publishing, paints and dyes, and oils and fats projects, with a total cost of more than US $150,000; or
10. facilities for tanning and leather finishing.

C. Mining and mineral processing

1. Mining and processing of coal, gold, copper, sulphur and precious stones.
2. Mining and processing of major non-ferrous metals, iron and steel rolling.
3. The construction or upgrading of smelting plants with a total cost of US $800,000 or more.

D. Transport

The construction or upgrading of:

1. airports;
2. national or provincial highways or major roads with a total cost of US $800,000 or more, with the exception of maintenance, rebuilding or reconstruction of existing roads; and
3. railway works.

E. Water management, dams, irrigation and flood protection

The construction or upgrading of:

1. dams and reservoirs with a storage volume of 50 million cubic meters or more, or a surface area of 8 square kilometres or more; or
2. irrigation and drainage projects serving 15,000 hectares or more.

F. Water supply and treatment

The construction, upgrading or development of water supply schemes and treatment plants with a total cost of US $400,000 or more.

G. Waste Disposal

The construction or upgrading of:

1. waste disposal and facilities for storage of hazardous or toxic wastes (including landfill sites and facilities for the incineration of hospital toxic waste); or
2. waste disposal facilities for domestic or industrial wastes, with an annual capacity of more than 10,000 cubic meters.

H. Urban development and tourism

1. Land use studies and urban plans for large cities.
2. Large-scale tourism development projects with a total cost of more than US $800,000.

I. Environmentally Sensitive Areas

All activities situated in environmentally sensitive areas as determined by regulation.

Category 2 activities:

Activities with potentially adverse impacts: means those activities that have potentially significant adverse effects on human environments or environmentally sensitive areas that are less adverse than those in Category 1 and are site specific and in most instances not irreversible. The activities are:

A. Agriculture, Livestock and Fisheries

The construction or upgrading of:

1. poultry, livestock, stud and fish farms with a total cost of more than $150,000;
2. facilities involving repacking, formulation or warehousing of agricultural products.

B. Energy

The construction, upgrading, installation or development of:

1. hydroelectric power generation facilities less than 50 MW;
2. thermal power generation facilities less than 200 MW;
3. transmission lines less than 11 KV, and large distribution projects;
4. oil and gas transmission systems;
5. oil and gas extraction projects including exploration, production, gathering systems, separation and storage; or
6. waste-to-energy generation projects.

C. Manufacturing and processing

The construction or upgrading of:

1. ceramics and glass making facilities with total a cost more than US $800,000;
2. food processing industry facilities including sugar mills, beverages, milk and dairy products, with a total cost of less than US $1.5m;
3. man-made fibre and resin processing facilities with a total cost of less than US $1.5m;
4. manufacturing facilities of apparel, including dyeing and printing, with a total cost of more than US $500,000; or
5. facilities for the processing of wood products with a total cost of more than $400,000.

D. Mining and mineral processing

1. The commercial extraction of sand, gravel, limestone, clay, sulphur and other minerals not identified as Category 1 with a total cost of less than US $1.5m.
2. The construction or upgrading of facilities for crushing, grinding and separating minerals and ore; or
3. The construction or upgrading of smelting plants with a total cost of less than US $800,000.

E. Transport

The construction or upgrading of national or provincial highways and roads (except maintenance, rebuilding or reconstruction of existing metalled roads) with a total cost of less than US $800,000.

F. Water management, dams, irrigation and flood protection

The construction, upgrading or development of:

1. dams and reservoirs with a storage volume of less than 50 million cubic meters or surface area less than 8 square kilometres;
2. irrigation and drainage projects serving less than 15,000 hectares; or
3. small-scale irrigation systems with a total cost of less than US $800,000.

G. Water supply and treatment

The construction or upgrading of water supply schemes and treatment plants with a total cost of less than US $400,000.

H. Waste disposal

The construction or upgrading of waste disposal facilities for domestic or industrial wastes, with an annual capacity of less than 10,000 cubic meters.

I. Urban development and tourism

1. The development of housing schemes.
2. The construction or upgrading of public facilities with significant off-site impacts (e.g. hospital wastes).
3. The development of urban development projects.

SCHEDULE II:
APPLICATION FORM

1.	Name and address of applicant and contact person:		Phone: Email:
2.	Description of activity:		
3.	Category of the activity:	1 ☐ 2 ☐ Other ☐	
4.	Location of activity:		
5.	Objectives of activity:		
6.	Is the screening report attached?	Yes ☐ No ☐	
7.	Does the screening report identify potential sources of impact?	Yes ☐ No ☐	
8.	Does the screening report propose mitigation measures?	Yes ☐ No ☐	
9.	Have alternative sites been considered and reported in the screening report?	Yes ☐ No ☐	
10.	Have affected persons been notified and consulted?	Yes ☐ No ☐	
11.	Will other Category 1 or Category 2 activities be undertaken as a consequence of the implementation of this activity? If so, provide details.	Yes ☐ No ☐	
12.	Details of other permits and licences that the applicant is obliged to obtain.		

I_____do hereby, solemnly declare that the information given in terms of this application is true and correct to the best of my knowledge and belief, and that it is in compliance with the provisions of the Environmental Assessment Regulations.

Signed: _____ Date: _____

Name of applicant: _____

SCHEDULE III:
TECHNICAL GUIDELINE FOR SCREENING PROCESS

If the applicant provides insufficient information then the National Environmental Protection Agency cannot commence the environmental impact assessment process. Therefore adherence to this guideline is advisable. Proponents may, however, choose to submit more information dependent on the activity type.

The Applicant: Name, address, telephone, email and contact point for further queries for the individual or organisation proposing the activity.

The Activity: Brief description of the nature and purpose of the activity. Outline plans or drawings. Size of the activity in terms of, for example, site area, size of structures, throughput, input and output, cost and 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 and 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 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 activity, 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 applicant proposes to use to reduce, avoid or offset significant adverse effects would be useful.

Public participation: A brief description of the nature and extent of consultation with affected communities and persons.

Further information that may be useful includes:
- identification of other permits required for the activity;
- relationship of the activity to other existing or planned activities;
- other activities which may be required or may occur as a consequence of the activity (egg 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 activity;
- photographs of the site and its surroundings; and
- alternative sites, processes or environmental mitigation measures considered by the applicant.

SCHEDULE IV:
RECORD OF DECISION

1. Name and address of applicant: _____

_____

2. Description of activity: _____

_____

_____

3. Location of activity: _____

4. Date of lodging of application: _____

5. After careful review of the application and pursuant to powers vested in terms of Regulation 9 of the Environmental Impact Assessment Regulations, the National Environmental Protection Agency hereby:

☐ approves the application, subject to the following conditions:

_____

_____

_____

☐ requires the applicant to submit an environmental impact statement in terms of Regulation 7.

☐ rejects the application, for the following reasons:

_____

_____

_____

Date: _____ Contact No: _____

Signature: _____

Annex 8a: Training Action Plan for Environmental and Social Safeguards

No.	Activity	Schedule					Responsibility	
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	WB TTL and project team + PIU	PIU
1	Staff Recruitment at PIU	→					Support job description and recruitment process	Implement recruitment
2								
3	Finalization of Training Plan	→					In consultation with PIU/MAIL	In consultation with WB TTL and project team
4	Development of Training Manual	→					Hire consultant to develop manual	Provide inputs and arrange translation into Dari
5	Conduct Training of PIU, social and environmental safeguards officers	→	→	→	→	→	Identify trainers and organize training arrangements	Identify trainees and organize training arrangements
6	Conduct Training to CDC members, farmers cooperatives leaders	→	→	→	→	→	Oversee and monitor progress	Oversee and monitor progress
7	Conduct Training of PIU, social and environmental safeguards officers on all aspects of liquid and solid waste management	→	→	→			Oversee and monitor progress	Oversee and monitor progress
8								
9	Facilitate PMP scheduled Trainings of agrochemical handling related social and environmental issues	→	→	→	→	→		
10	Public awareness raising events	→	→	→	→	→	Organize in coordination with PIU and regional offices	Organize, oversee and monitor progress
11	Monitoring and reporting on ESMF implementation	→	→	→	→	→	WB TTL and project team + PIU M&E staff to support	PIU HQ ESS staff primarily responsible

Annex 8b: Training and Capacity-Building Activities at Different Level

Staff Profile	Type of Training	Training Contents	Training Schedule
ESS staff at PIU HQ	In-country training To be conducted by international trainer(s)	Identifying stakeholders and conducting stakeholder analysis, social and environmental surveys how to use screening checklist to identify environmental and social issues associated with sub-projects Skill building to prepare environmental and social mitigation plans for individual sub-projects Leadership dynamics Developing and maintaining effective partnerships with NGOs and other stakeholders. Monitoring progress and evaluating impact. Effective communication – Communication for Development	Preparation Early in project i.e. year 1 onwards
ESS staff at PIU HQ Design and Supervision staff at PIU HQ and Management staff of contractors Engineers, Environment, social, health and safety staff of contractors	In-country training Site specific To be conducted by local and international trainers	Technical capacity to oversee/supervise contractors' environmental and social compliance Analysis of wildlife and vegetation related sensitivities of the project Understanding of the key findings of the ESMF Preparation and implementation of ESIAs of sub-projects and agreed mitigation measures Preparation and implementation of contingency plans	Implementation Year 1 onwards
Construction crew of the contractors Engineers, Environment, social, health and safety staff of contractors	Site specific training for sub-projects To be conducted by WB and PIU ESS staff of the respective region	Site specific environmental and social issues Preparation of site-specific health, safety, environment and social plan Cover other topics such as safe waste disposal, dust management, etc.	Implementation Year 1 onwards
Drivers of the PIU regional offices Drivers of the contractors	On-site training To be conducted by ESS staff of PIU and the contractor Oversight and TA by WB ESS regional staff	Health, safety, environment and social plan Road safety Road restrictions Vehicle restrictions Defensive driving Waste disposal and littering Social and cultural values of the area	Implementation Year 1 onwards
Mechanics of the contractors	On-site training To be conducted by ESS staff of PIU and	Waste disposal Health, safety, environment and social plan	Implementation Year 1 onwards

	the contractor Oversight and TA by WB ESS regional staff	Vehicle restriction	
Camp staff of the contractors	On-site training To be conducted by ESS staff of PIU and the contractor Oversight and TA by WB ESS regional staff	HSES plan; Camp operation Waste disposal Natural resource conservation Housekeeping	Implementation Year 1 onwards

Annex 9: Scheduling and Reporting by PIU Environmental and Social Specialist

Activity	Year 1				Year 2				Year 3				Remarks			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Mitigation Measures ---------- ---------- etc.																
Monitoring ---------- ---------- etc																
Institutional Strengthening ---------- ---------- etc																
Training ---------- ---------- etc																

Environmental and Social Progress Report Format

Sl. No	Sub-Project	Key environmental and social issues	Mitigation measures taken	Implementation and monitoring of ESMP	Training & capacity-building programs implemented	Convergence	Lessons learnt	Remarks

Annex 10: Pesticides & chemicals banned/severely restricted but sold in Afghanistan

It is illegal in Afghanistan to import, manufacture, formulate, offer, hold in stock, sell, use or advertise the following banned chemicals – even if the law is not enforced:

Pesticide/ Chemical Compound Banned	
1. 2,4,5-T (2,4,5 Trichlorophenoxyacetic acid) 2. ALDRIN 3. ALDICARB 4. BENOMYL+CARBOFURAN+THIRAM Formulation 5. BENZENE HEXACHLORIDE 6. BINAPACRYL 7. CALCIUM CYANIDE 8. CAPTAFOL (80% Powder) 9. CABOFURON (50% SP) 10 CHLOROBENILATE 11. CHLOROBROMOPROPANE 12. CHLORODANE 13. CHLORODIMEFORM 14. COPPER ACETOARSENITE 15. DDT (Persistent Organo-Phosphate, found in Cock Brand Coil from PRC) 16. DIELDRIN 17. DINOSEB 18. DINOSERBY SALTS (DNOC and its salts) 19. ENDRIN 20. ETHYL MERCURY CHLORIDE 21. ETHYL PARATHION 22. EHTYLENE DIBORMIDE (EDB) 23. ETHYLENE DICHLORIDE 24. ETHYLENE OXIDE 25. FLUOROACETAMIDE	26. PARATHION-METHYL (Toxic Oragno-Phophorus Pesticide present in "Spiridin" 27. HCH 28. HEPTACHLOR 29. HEZACHLOROBENZENE 30. LINDANE (Present in Thiodal form Senegal) 31. MALEIC HYDRAZIDE 32. MENAZONE 33. MERCURY COMPOUNDS 34. METHAMIDOPHOS FORM 35. METHOMYL 12.5% L 36. METHOMYL 24% L 37. METHYL BROMIDE 38. METHYL PARATHION 39. MONOCROTOPHOS and its Formulations 40. NICOTIN SULFATE 41. NITROFEN 42. PARAQUAT DIMETHYL SULFATE 43. PARATHION 44. PENTACHLORO-NITROBENZENE 45. PENTACHLOROPHENOL 46. PHENYL MERCURY ACETATE 47. PHOSPHAMIDON 48. SODIUM METHANE ARSENATE 49. TAA (Trichloro Acetic Acid)

	50. TETRADIFON 51. TOXAPHENE

Source: Plant Protection and Quarantine Department of the Ministry of Agriculture, Irrigation and Livestock, Islamic Republic of Afghanistan

Annex 11: Pesticides sold and used in Afghanistan with and/or without the government's consent[2].

Trade Name	Class	Status	Manufacturer	Active Ingredient	Area of Use
2,4.D	III	C	Rhône Poulenc	2,4-dichlorophenoxyacetic acid	Herbicide broad leaf weeds
6-Fenoxy supper	None	R	Qingdao Jiner Agrochemicals	Fenoxaprop-p- ethyl	Herbicide
Abamore	None	R	Shenyang jinlaiwang Chemical	Dimethylavermectin alamixture + dimethyl 2.5-di (1-methylpropyl) -2.5 (methylethyl) avermectine	Insecticide
Abomore	None	R	Shenyang jinlaiwang Chemical	Abamectin	Insecticide
Acis	II	C	Aventis	Deltmethrin	Insecticide
Acarus	None	C		Fenpyroximate	Acaricide
Afra	None	C	Calliope	Cypermethrin	Insecticide
Agreezor	None	C		6+12+6 Fe+Zn+TE	Supplementary
Agrifol EC	III	C		Dicofol	Insecticide
Aluminium Phosphides	None	R		Aluminium Phosphides	Rodenticide
Ametrin	None	C		Cayno (3 phnoxy phenyl) (methyl 3-(2-2,-dichloroethenyl)- 2,2-	Insecticide
Amitraz	None	R		Amitraz	Insecticide
Antracal wp	None	R		Propine other ingrediets	Fungicide
Arisban	II	R	Dow AgroScience	Chlorpyrifos	Insecticide
Arisbon	II	C	Dow AgroScience	Chlorpyrifos	Insecticide
Atlantis	None	C		Mesosulfuron-mythel	Herbicide
Azylon	None	C		Phosalone	Insecticide
Best	None	C			Supplementary
Bioestrene	None	C		Fe	Supplementary
Biomax	II	C	Dow AgroScience	Chlorpyrifos	Insecticide
Bordeaux Mixture	None	C		Tobacco and soap	Insecticide
Bordeaux	II	C		Copper sulphate and lime	Bactericide
Boxer EC	II	R	Zeneca	Lambda-cyhalothrin	Insecticide
Buthchi	None	R		Buthachlor	Herbicide
Chlorofet-EC	None	C		Chlorofet	Insecticide
Chlorpyrifos	II	C	Dow AgroScience	Chlorpyrifos	Insecticide
Ciran	None	R		Zn, I, B, Cu, Mg, Mn, P, N, Cl	Supplementary

[2] Approved Pest and pesticide Management Plan (2011); AfghanistanAgricultural Inputs Project (AAIP),.

Citruban	II	C	Dow AgroScience	Chlorpyrifos	Insecticide
Confidor SL	II	C		Imidacloprid	Insecticide
Copper oxychloride	II	C		Copper oxychloride, inertingrediets	Fungicide
copravit	None	C		Copper	Fungicide
Copravet Blue 50%	None	C		Copper oxychloride	Fungicide
Crops plus	None	C		Increase crops growth	Fungicide
Crown SL	II	C		Imidacloprid 200 mg/L	Insecticide
Cyclodan EC	None	C		Endosulfan + Emulsifier-Stabilizer Solvent	Insecticide
Cypermethoate	None	C			Insecticide
Cypermethrin1WP	None	C	Calliope	Cypermethrin	Insecticide
Cupervit Blue	None	C		Dipteryx Malathion	Insecticide
Daemavite EC	None	C		Immolation	Insecticide
Damon	None	R		Bromopropylate	Acaricide
Danadim EC	II	C	Cyanamid	Dimethoate	Insecticide
Danitol EC	II	R		Fenpropthrin	Insecticide
Dasa-1	None	C		Growth hormones for grapes	Supplementary
Deltamethrin	II	R	Aventis	Deltamethrin	Insecticide
Deltamethrin	II	R	Aventis	Deltamethrin Emulsifier	Insecticide
Denadol EC	II	C	Cyanamid	Dimethoate + and immolathion	Insecticide
Denadoul	III	C	Calliope	Malathion	Insecticide
Dena Super	None	C		S-12 bis (Ethoxycarbony) ethyl10.0 Dimethyl Phosphorodithioate	Insecticide
Diazinon	II	R	Marubeni	Diazinon	Insecticide to control stem borers of cereals sugarcane, millipedes, locusts and grasshoppers
Dicofol	III	C		Dicofol	Acaricide
Diflubenzuron	U	R		N-[[(4- chlorophenyl) amio] carboyl] -2,6- difluorbenzamide	Insecticide
Dimethoate	II	C	Cyanamid	Dimethoate	Insecticide
Dimethoate	II	C	Cyanamid	Dimethoate	Insecticide
Dimilin	II	A	Uniroyal Chemical	Diflubenzuron (60g/l)	Insecticide against locusts
Dipterex	II	R		Trichlorophon	Insecticide
Dragon	III	C	Calliope	Glyphosate	Herbicide
Eagle EC	None	R	Calliope	cypermethrin	Insecticide

Endoria	II	R	Changzhou Biochemical Co.	Endosulfan	Insecticide
Endosulfan	II	R	Changzhou Biochemical Co.	Endosulfan	Insecticide
Ethion	None	C		Ethion	Insecticide
Fenoxysuper	None	R		Extractable Acid	Insecticide
Fenvalerate	II	C	China AgroChem	Atropine sulphate	Insecticide
Fenvalerate	II	C	China AgroChem	Fenvalerate	Insecticide
Fifanoun	None	C	Nanjing Chemicals	Malathion	Insecticide
Flea & Tick	II	C	Zeneca	Lambda-Cyhalothrin	Insecticide
Foliol winter oil	None	C		Mineral oil	Preventive
Gima	None	R		Neo Pynamin + Solvent + LPG (Propan butan)	
Green crop	None	C		N,K,B,Zn,Mg,Cu	Supplementary
Green Crop	None	C		N,K,Zn, Mg,Cu	Supplementary
Haloxyfop	None	R		Haloxyfop-R methyl Exter	Herbicide
Hawk	None	R		Ioxynil Octanoate	Herbicide
Hef oil	None	R		Sulphonation	Fungicide
Helal Pearl	II	R		Imedaclopride	Insecticide
Herbikill	I and II	C	Vapco	Paraquat	Herbicide
Icon 1	III	C	Zeneca	Perethroid lambda-Cyhalothrin	Insecticide
Ifra	None	C	Calliope	Cypermethrin	Insecticide
Illograss	III	C		Diclofop Methyl	Herbicide
Imidacloprid	II	C		Imidacloprid	Insecticide
Imidacloprid WP	II	R		Imidacloprid + Methylena bis – naphthalines + Sodium Sulphonate + Sodium Lauryl Sulphate + Light Calcium Carbonate	Insecticide
Imidacloprid 2	II	C		Imidacloprid + Other ingredients	Insecticide
Killer EC	None	R		Diethyl mercaptosuccinate	Insecticide
Kissan SL	Ib	C		methamidophos [O,S-dimethyl phosphoramidothiate]	Insecticide
Kumulus - DF	None	C		Active ingredients + others	Fungicide
Karate	II	C	Zeneca	Lembda-Cyhalothrin	Insecticide
Lannat SP	None	C		Thioacetimidate-	Insecticide
Lazer EC	Non	C		Cypermthrin + Dimethoate + other ingredients	Insecticide
Lobello	II	R	Aventis	Deltamethrine	Insecticide
Lorsban EC	II	C	Dow AgroScience	Chlorpyrifos	Insecticide

Mactomeil EC	None	C	Calliope	Cypermethrin 100, Immolation	Insecticide
Malathion	None	C		Malathion	Insecticide
Mancozeb	U	C		Mancozeb + Other Ingredients	Fungicide
Mantax-forte	U	C		Mancozeb + copper + xychloride and sulfate + Iron sulfate	Fungicide
Manthane	U	C		Mancozeb	Fungicide
Matador	II	R	Zeneca	Fenpropathrin	Insecticide
Matox	none	C		Tetramethrin	Insecticide
Mr-Clean	None			Parathyroid	Insecticide
Naboud	II		Calliope	Cypermethrin 1	Insecticide
Oxadiazon	U	C		5- tert-butyl 1-4dicloro-5)	Herbicide
Padan SP	None	R		Cartap Hydrochloride	Insecticide
Padide	II	C	Senchim AG	Cypermethrin kind of crawling	Insecticide
Paraxon	I and II	R	Zeneca	Paraquat	Herbicide
Paraxon SL	None	C		1,1dimethyl 4,4 bipyridilium and dichloride	Herbicide
Partner w/p	III	C		Isoproturon	Herbicide
Parto	II	C	Calliope	Cypermethrin-	Insecticide
Parumi	None	C		Permethrin-	Insecticide
Patak	None	C	Senchim AG	Tetramethrin + Cypermethrin, Perfum + Solvents and	Insecticide
Patron	II	C	Calliope	Cypermethrin	Insecticide
Peykar	None	C	Senchim AG	D-allethrine Tetramethrine + Cypermethrine + Pipronlle butoxide Solvent + Propellant	Insecticide
Power Leather	II	C	Dow AgroScience	Chlorpyrifos	Insecticide
Project	None	C		Propargite	Acaricide
Pujing EC	None	C		Fenozaprop-p-ethyl	Herbicide
Puma Super	None	C		Puma	Herbicide
Puma super EW	None	C		Fenozaprop-p-ethyl + other ingredients	herbicide
Pyridate	None	C		Pyridate	Herbicide
Radical	None	C		EPTC	Herbicide
Rat Kill	Ib	C		Zinc phosphide	Rodenticide
Rest	II	C		Propiconazole	Fungicide
Roundup	III	C		Glyphosate 490 gm and inert material	Herbicide
Sahara	None	C			Rodenticide
Senitox EC	II	C	Cyanamid	Dimethoate	

Sevan wp	None	C			Insecticide
Seven Top	None	C			Insecticide
Spain ghar	None	C		All micronutrients	Supplementary
Spot	None	C			
Stream	None	C		Tridemorph	Fungicide
Sulfur	None	C		Sulfur	Fungicide
Sunicidin	None	C		Cyano-3phenoxy-benzl-2(4chlorophenyl)-3methyl-butyrate+optanal	
Supercide	None	C		Methidathion	Insecticide
Superdin	None	C	Calliope	Malathion + immolathion	Insecticide
Super dithion	None	C		Superdithion + Amosulphide	Insecticide
Super Don EC	None	C		Superdon	
Super grower	None	C		N,P,Mg,S,Boron,Co,Ma,Iron	Supplementary
Super Lorsban	II	C	Dow AgroScience	Chloropyrifos	Insecticide
Super Malathion	None	C	Calliope	Malathion	Insecticide
Super sure	None	C	Calliope	Malathion + immolation	Insecticide
Super Tonic	None	C		Co. + Ma. + N	Supplementary
Super top	None	C		C23H19CIF3NO3	Insecticide
Super top	None	R		Parathyroid	Insecticide
Super work U46 Combi Fluid	None	R		Extractable acid , 2,4 Dunethumin salt	Insecticide
Systan	Ib	R		Oxydemeton-methy	Insecticide
Taromar	None	C	Senchim AG	Cypermethrin PBD, Perfume	Insecticide
Thiodan EC	II	C	Senchim AG	Endosulfan	Insecticide
Timer EC	None	C	Qingdao Jiner AgroChem	Emamectin benzoate	Insecticide
Tophas	None	C	Calliope	Malathion	Insecticide
Topgun	None	R		Clodinafop Propargyl	Herbicide
Trichlorfon SP	II	R	Dow AgroScience	Trichlorfon	Insecticide
Trymethoate 40%EC	None	C	Cyanamid	Immolation	Insecticide
Unigol	None	C		K,P,N,I,EDTAchelate,Z,Boron, Mg,Co,Mo	Supplementary
Vacomil-Plus 50	None	C		Copper Oxycholoride	Fungicide
Vetavax thiram wp	None	R		Thiram , Emulsifier	Fungicide
Wettasul-[illegible]	None	C		Sulphur	Fungicide
Zed	None	C	Calliope	Cypermethrine	Insecticide

Zineb wp	U	C		Active Ingredients + Zinc ethylenebis (dithiocarbamate) (polymeric) + Others	Fungicide
Zinc Phosphidew/	Ib	R		Zinc Phosphide	Rodenticide
Zubin	II	C	Sumitomo	Fenvalerate	Insecticide
Zubin EC	None	C	Sumitomo	Cyano(3-phenoxyphenyl) + methyl-4-chloro-a	Insecticide

(Source: Plant Protection and Quarantine Department; HLP's Agro-chemical survey 2009, and ASAP-PERSUAP).

The table above shows the inventory of pesticides that have been retrieved from survey of all the stakeholders. Furthermore, the database has been divided into different categories on various classification bases i.e. on pesticide type bases, systemic/contact etc, also classified according to world standards based on their active ingredients as A= environmentally friendly; C= acceptable; R=dangerous; RR= very dangerous; and B= Banned. Unfortunately, among all the pesticides in the inventory only the "Dimilin" insecticide falls under the environmental friendly (A) category.

Annex 12: Good management practices guide and pesticides management measures:

Required measures for the reduction of pesticides-related risks

Safe use of pesticides

Pesticides are toxic for pests and also for humans. However, if sufficient precautions are taken, they should not constitute a threat either for the human population or for non-targeted animal species. Most of them can have harmful effects if swallowed or in case of prolonged contact with the skin. When a pesticide is sprayed in the form of fine particles, there is a risk of absorbing them with the air we breathe. There is also a risk of water, food and soil contamination. Specific precautions should therefore be taken during the transportation, storage and handling of pesticides. The spraying equipment should be regularly cleaned and well maintained to avoid leakages. The individuals using pesticides should learn how to use them safely.

Pesticides registration

Reinforce the registration process of insecticides by ensuring:

- Streamlining, between the national pesticides registration system and other products used in Public Health;
- Adoption of World Health Organization (WHO) specifications applicable to pesticides for national registration process purposes;
- Reinforcement of the pilot regulatory body;
- Collection and publication of data relating to imported and manufactured products;
- Periodical review of registration.

It is also recommended, when planning to buy pesticides to control vectors, to consult the guiding principles issued by WHO. For the acquisition of insecticides intended for public health use, the following guidelines are recommended:

- Develop national guidelines applicable to the purchase of products intended for vector control and ensure that all the agencies buying them strictly comply with those guidelines;
- Use synthetic Pyrethroids: Deltamethrin SC, Permethrin EC, Vectron, Icon, Cyfluthrin, as recommended by the national policy;
- Refer to the guiding principles issued by WHO or FAO on calls for tenders, to FAO recommendations regarding labelling and to WHO recommendations regarding products (for indoor spraying);
- Include in calls for tenders, the details regarding technical support, maintenance, training and products recycling that will be part of the after-sale service committing manufacturers; apply the back-to-sender principle;
- Control the quality and quantity of each lot of insecticides and impregnated supports before receiving the orders;
- Ensure that the products are clearly labelled in English and in local language (Dari/Pashto) and in the strict respect of national requirements;
- Specify which type of package will guarantee efficiency, preservation duration as well as the human and environmental security of handling packaged products while strictly complying with national requirements;
- Ensure that donated pesticides intended for public health, comply with the requirements of the registration process in The Islamic Republic of Afghanistan and can be used before their expiry date;

- Establish a consultation, before receiving a donation, between the ministries, agencies concerned and the donors for a sound use of the product;
- Request users to wear protective gears (clothes and equipment) recommended in order to reduce their exposure to insecticides to the strict minimum;
- Obtain from the manufacturer a physic-chemical analysis report and the product acceptability certification;
- Request the manufacturer to submit an analysis report of the product and of its formulation along with guidelines to follow in case of intoxication;
- Request the buying agency to perform a physic-chemical analysis of the product before shipment arrival.

Precautions

Labelling

Pesticides should be packaged and labelled according to WHO standards. The label should be written in English and in Dari/Pashto language; it should indicate the content, the safety instruction (warning) and any action to be taken in case of accidental ingestion or contamination. The product should always remain in its original container. Take all appropriate precautionary measures and wear protective gears/clothes in accordance with recommendations.

Storage and transportation

Pesticides should be stored in a place that can be locked up and is not accessible to unauthorized individuals or children. The pesticides, should, in no event, be stored in a place where they could be mistaken for food/medicine or beverage. They should be kept dry and out of the sun. They should not be transported in a vehicle that also carries food products.

In order to ensure safety during storage and transportation, the public or private agency in charge of managing purchased insecticides and insecticide-impregnated supports, should comply with the current regulations as well as the conservation conditions recommended by the manufacturer regarding:

- Preservation of the original label;
- Prevention of accidental pouring or overflowing;
- Use of appropriate containers;
- Appropriate marking of stored products;
- Specifications regarding the local population;
- Products separation;
- Protection against humidity and contamination by other products;
- Restricted access to storage facilities;
- Locked storage facilities to guarantee product integrity and safety.

Pesticides warehouses should be located far from human residences or animal shelters, water supplies, wells and channels. They should be located on an elevated surface and secured with fences with restricted access for authorized individuals only.

Pesticides should not be stored in places where they could be exposed to sunlight, to water or to humidity, which could harm their stability. Warehouses should be secured and well ventilated.

Pesticides should not be transported in the same vehicle with agricultural products, food products, clothes, toys or cosmetics as these products could become dangerous in case of contamination.

Pesticides containers should be loaded in vehicles in order to avoid damages during transportation, so that their labels will not tear off and they would slip off and fall on a road with an uneven surface. Vehicles transporting pesticides should bear a warning sign placed conspicuously and indicating the nature of the cargo.

Distribution

Distribution should be based on the following guidelines:

- Packaging (original or new packaging) should ensure safety during the distribution and avoid the unauthorized sale or distribution of products intended for vector control;
- The distributor should be informed and made aware of the dangerous nature of the cargo;
- The distributor should complete delivery within the agreed deadlines;
- The distribution system of insecticides and impregnated supports should enable to reduce the risks associated with the numerous handlings and transportations;
- In the event the purchasing department is not able to ensure the transportation of the products and materials, it should be stipulated in the call for tenders that the supplier is expected to transport the insecticides and impregnated supports up to the warehouse;
- For all pesticides and spraying equipment the distributors should have an exploitation permit in accordance with the current regulation in force in the Islamic Republic of Afghanistan.

Disposal of pesticide stocks

After the operations, the remaining stocks of pesticides can be disposed off without risk by dumping them in a hole dug specifically or in a pit latrine. A pesticide should not be disposed of by throwing it in a place where there is a risk of contaminating drinking water or for bathing or where it can reach a pond or a river. Some insecticides, such as pyrethroids, are very toxic for fish. Dig a hole to at least 100 meters from any stream, well or habitat. If in hilly areas, the whole must be dug below. Pour all waters used for hand washing after the treatment away from streams and rivers. Bury all containers, boxes, bottles, etc. that have contained pesticides. Reseal the hole as quickly as possible. Packaging or cardboard, paper or plastic containers— the latter cleaned — can be burnt, if allowed, far away from homes and drinking water sources, avoiding the re-use of containers after cleaning.

Pyrethroid suspensions can be discharged on a dry soil where they are quickly absorb and then will go through a decomposition process making them harmless for the environment.
If there is an amount of insecticide solution left, it can be used to destroy ants and cockroaches. Simply pour a little bit of solution on infested areas (under the kitchen sink, in corners) or to rub a sponge soaked with water on it. To temporarily prevent insect proliferation, a certain amount of solution can be poured inside and around latrines or on other breeding places. Pyrethroid suspensions for mosquito nets treatment and other fabrics can be used days after their preparation. It can also be used to treat mats and rope mattresses to prevent mosquito to bite from the bottom. Mattresses can also be treated against bugs.

Cleaning of empty pesticide packaging and containers

Re-using empty pesticide containers is risky and it is not recommended to do so. However, it is estimated that some pesticide containers are very useful to be simply thrown away after use. Can we therefore clean and re-use such containers? This depends both on the material and the content. In principle, the label should indicate the possibilities for re-using containers and how to clean them.

Containers having contained pesticides classified as hazardous or extremely dangerous should not be re-used. Under certain conditions, containers of pesticides classified as dangerous or that do not present any

risk under normal use, can be re-used unless they are not used as food or drink containers or as food containers for animal food. Containers made of materials such as polyethylene that preferentially absorb pesticides, must not be re-used if they have contained pesticides whose active ingredient has been classified as moderately or extremely dangerous regardless of the formulation. Once a recipient is empty, it should be rinsed, then filled completely with water and allowed to stand for 24 hours. Then it should be emptied and this process should be done over again.

General Hygiene

Do not eat, drink or smoke when handling insecticides. Food should be placed in tightly closed containers. Measurement, dilution and transfer of insecticides should be done with the adequate material. Do not shake or take liquid with unprotected hands. If the nozzle is blocked, press the pump valve or unblock the opening with a flexible rod. After each fill, wash hands and face with water and soap. Eat and drink only after washing hands and face. Take a shower or a bath at the end of the day.

Individual protection

- Adapted coveralls covering hands and legs
- Dust, gas and respirator masks, based on the type of treatment and product used
- Gloves
- Goggles
- Hoods (facial shield)

Protection of the population

- Minimize the exposure of local populations and livestock
- Cover wells and other reservoirs
- Sensitize populations on risks

Protective clothing

Treatments inside homes

Operators should wear coveralls or a long sleeves shirt over a pair of pants, a flapped hat, a turban or any other type of headgear as well as boots or big shoes. Sandals are not suitable. Nose and mouth should be protected using a simple method, for example a disposable paper mask, a disposable surgical or washable mask or a clean cotton cloth. Once the fabric is wet, it should be changed. Clothing must be in cotton for easy washing and drying. It must cover the body and contain no opening. In hot and humid climates, it can be uncomfortable to wear additional protective clothing; therefore one will be forced to spray pesticides during hours when it is not very hot.

Preparation of suspensions

People responsible for bagging insecticides and preparing suspensions, particularly for the treatment of mosquito bed net units must take special precautions. In addition to the above-mentioned protective clothing, they must wear gloves, an apron and eye protection, for example a facial shield or glasses. Facial shields protect the entire face and keep less warm. Nose and mouth should be covered as indicated for treatment in homes. They should ensure that they do not touch any part of their body with gloves during pesticide handling.

Treatment of nets

To treat mosquito nets, clothes, grills or with tsetse traps with insecticides, it is necessary to wear long rubber gloves. In some cases, additional protection is required, for example against vapours, dusts or insecticide dusting that could be dangerous. These additional protective accessories should be mentioned on the product label and may consist of aprons, boots, facial masks, coveralls and hats.

Maintenance

Protective clothing should always be impeccably maintained and should be checked periodically to verify tearing, wearing that could lead to skin contamination. Protective clothing and equipment should be washed daily with water and soap. Particular attention should be paid to gloves and they must be replaced once they are torn or show signs of wear. After usage, they should be rinsed in water before removing them. At the end of each working day, they will need to be washed inside and outside.

Safety measures

During spraying

Spurt form the sprayer must not be directed towards any part of the body. A leaking sprayer must be repaired and skin must be washed if it is accidentally contaminated. The household pets must stay outside during the whole spraying activity. Avoid treating a room where there is a person — a sick person for example — who cannot be taken outside. Before starting spraying activities, kitchen utensils should be taken out and all utensils as well as dishes containing drinks and food. They can be gathered in the centre of the room and covered with plastic film. Hammocks and paintings should not be treated. The bottom part of furniture and the side against the wall should be treated while ensuring that surfaces are effectively treated. Sweep or wash the floor after spraying. Occupants should avoid contact with walls. Clothing and equipment should be washed every day. Avoid spraying organophosphate or carbamate for more than 5 to 6 hours daily and wash hands after each filling. If Fenitrothion is used or old stocks of Malathion are used, operators should control the level of cholinesterase in their blood every week.

Monitoring exposure to organophosphate

There are country kits available on the market to control cholinesterase activity in the blood. If this activity is low, it can be concluded that there is excessive exposure to organophosphate insecticide. These dosages should be done every week with people handling such products. Any person whose cholinesterase activity is very low should be stopped from working until it returns to normal.

Fabric spraying

When handling insecticide concentrates or preparing suspensions, gloves should be worn. Attention should be paid particularly to spraying in the eyes. A big bowl not too high should be used and the room should be well ventilated to avoid inhaling smokes.

Measures to minimize transportation, storage, handling and usage risks

Step	Determining factor	Risks			Mitigating measures
		Public health	Environment	Personnel	
Transport	Lack of training		Accidental discharge, water-table pollution through leaching	Product inhalation : vapor, dust, risk of skin contact	- training—in-depth sensitization of pesticide management personnel on all aspects of the pesticide chain as well as on emergency responses - provide the personnel with protective equipment and encourage them to wear it - Provide the personnel with adequate storage facilities, refurbish existing sites - proceed to awareness-raising among the public on pesticide use and their containers - training for a safe disposal of empty containers - ban transfer to high volume containers - reduce the quantity of pesticides used through use of efficient alternatives
Storage	Lack of means Deficit in pesticide management training	Accidental contamination Inconvenience of populations living in the vicinity	Soil contamination	Skin contact through Contact with the skin through accidental spillage caused by the narrowness of the premises	
Handling and manipulation	Deficit in training and sensitization	Contamination of water sources through washing of containers	Soil contamination through accidental spillage or intentional discharge, water-table pollution	Vapor Inhalation, skin contact through splashing during preparation or product transfer	
Disposal of packaging	Deficit in training and sensitization	Product ingestion by re-using containers		Skin contact and respiratory tract	
Washing of containers	Deficit in training and sensitization	Skin contact, contamination of wells and nearby streams	Acute poisoning of fish and other Crustacea, pollution of wells, ponds, water-tables	Skin contact	

Poisoning symptoms and appropriate care to victims

Poisoning symptoms	Appropriate care
Eye contamination (pain or irritation)	• Rinse well with tap water • If the condition worsens, consult a physician
Skin irritation (tingling and burning sensation)	• Wash affected part with water, never with oil • Apply a soothing cream on it • If symptoms persist, consult a physician
Tiredness, headaches or dizziness	• Rest • Do not start over until after complete rest • If symptoms persist, consult a physician
Lungs contamination	• Stay in the shadow • Place under medical observation

Treatment methods of empty containers

Treatment of empty containers is focused on two fundamental activities: decontamination and the actual disposal with its primary packaging.

Decontamination

It comprises three steps and concerns all pesticides containers:

- ensure maximum product emptying and drainage for 30 seconds (the content is emptied into a mixing container, in glass for the final dosage (for spraying) ;
- rinse the container at least three times with a volume of water not less than 10% of the container total volume;
- pour-rinsed water in a sprayer, in a pit (spraying).
- A decontaminated container does not however, qualify for storage of food or animal feed or for water or domestic consumption.

Disposal

Unless intended for recycling, the first disposal activity consists in making them unusable for other purposes: « packaging». Holes should be made with a sharp tool and the container should be flattened when it is metal cans and drums; glass bottles should be broken in a bag to avoid splinters; plastics are shredded and ground. Capsules and screws are removed beforehand.

Combustible containers are disposed off through monitored burning (paper and plastic packaging [PVC containers must not be burnt], carton) or deposited in a landfill accepting toxic waste of this nature (tear into pieces plastic jugs, glass containers and metal cans); ashes resulting from burning in the air are buried. However, the sticker on the container can bear a notice not recommending burning. Indeed, burning for example of some phenoxyacetic acid-based herbicidal containers can lead to the release of fumes toxic for human and surrounding flora.

Precautions: combustion must neither take place under conditions where wind is likely to send toxic smoke towards houses, livestock, and granary in the vicinity, nor towards those carrying the operation.

Non-combustible high volume recipients 50 to 200 liters can follow the chain as follows:

- return to supplier,
- sale/recovery to/by a company specialized in the sale of drums and used barrels with adherent material toxicity neutralization technologies that can proceed to recovery,
- evacuation towards a monitored landfill whose owner is informed of drums content and is warned about the potential release of toxic fumes if combustion is applied,
- evacuation towards a private site, fenced, guarded, while respecting environmental standards and used specifically for pesticides.

Non-combustible low volume recipients up to20 liters are either:

- conveyed towards public landfill, or
- buried on private site after removal of capsules or covers, perforation of containers, breaking of glass containers. The pit with a depth of 1 to 1.5 m used for burial purposes will be filled up to 50 cm of the soil surface and then covered with soil. The site will be away from homes and water bodies (wells, ponds, rivers), should not be cultivated and will not be in a flooding area; ground-water level should be at least at 3 m from the soil surface, the soil must be waterproof (clay-like or light sandy). The site will be fenced and identified.

Annex 13: Basic principles of integrated control of pests and diseases

PRINCIPLES	IMPLEMENTATION	RESULTS
PRINCIPLE 1 Obtain and plant quality planting material	Choose seeds, cuttings, tubers or residues from very productive, healthy varieties and resistant to pests/diseases. To obtain certified seeds, contact national registered seeds growers or the national research centers for seed multiplication. Farmers could plant material taken from healthy plants from the previous campaign. Do not stock planting material for more than one season. Carry out summary germination tests.	The use of quality planting material will provide a healthy and productive and consequently a quality harvest. Certified seed varieties are often resistant to several pests and diseases. Remember the popular saying that good seeds make good harvests.
PRINCIPLE 2 Choose fertile soils and areas adapted to planting	Select soils with good natural drainage, suitable for cultivation. Some farming (low-land rice or irrigated rice for example) prefer submerged soils. Always perform cultivation in weed-free farms.	Crops need a maximum soil/land and water management to develop and compete effectively with weeds.
PRINCIPLE 3 Adopt good practices in nursery	Establish nurseries on disease-free soils to promote growth of seedlings. Cover the sol with mulch of Neem leaves or dry grass or straws.	After replanting in farm, rigorous seedlings will produce sturdy plants.
PRINCIPLE 4 Adopt devices and adequate planting devices	Plant in line, with an appropriate spacing for the crop species to avoid an excessive density. Intercropping is generally practiced in rows, alternated rows or strips.	A very high density prevents crop development and by creating a humid environment, encourages the emergence of diseases. Planting in line help save seeds and carry out easily agricultural activities such as (weeding) in weed control. Intercropping reduces pressure from insects and guarantees yields.
PRINCIPLE 5 Planting crops at the right time to synchronize their growth period with a low incidence of pests and diseases	Schedule planting to avoid periods of pest and disease prevalence in farms. Coordinate plantation dates at the regional/provincial level to prevent pest from moving/migrating between crops and to maintain a seasonal rest period.	The crop defies strong incidence of pests and diseases during their development and growth. Pest development cycle is interrupted. Pest populations do not have the necessary time to reproduce massively.
PRINCIPLE 6 Practice crop rotation	Plant successively crop that do not have common pests (cereals and root and tuber crops rotation with vegetables and legumes for example). Plant blanket crops during fallow (for example velvet bean and other legumes).	Crop rotation prevents the proliferation of diseases and soil-borne pest (nematodes or pathogens for example), as well as diapausing or overwintering insect pest survival. Blanket crops enrich soils and suffocate weeds.
PRINCIPLE 7 Adopt good soil conservation practices	Cover the ground with mulch, improve soil with compost or organic fertilizer and if needed, correct the nutrient balance with mineral fertilizers to enrich less fertile soils. Split fertilizer inputs, particularly nitrogen to better meet crop needs.	Poor soils are enriched at little cost to stimulate the growth and development of healthy crops and to obtain high yields, if fertilizer is used in a cost-effective manner.

PRINCIPLE 8 Adopt adequate and proper water management practices	Plant in soils with good natural drainage (except for rice). If necessary, build drainage channels to eliminate excess water; prepare water harvesting channel or pod (in millet or sorghum, for example) for sufficient water reserve. In irrigated condition, irrigate plants regularly depending on their need.	Crop development and growth are not compromised by lack of water; in addition crops do not suffer from water logging.
PRINCIPLE 9 Regular weeding	Place crops in weed-free farms. To prevent the production of seeds with weeds, hoe within three weeks after planting and hand-hoe superficially until the crop is covered. Pull out first weed seedlings before flowering and bolting.	This measure helps to save labor cost and avoid harming crop roots. Competition between crops and weeds is eliminated; the latter fail to produce seeds. Parasitic weeds cannot settle in farms.
PRINCIPLE 10 Regular farm inspections	Inspect farms every week to monitor crop growth and development, follow the development of auxiliaries and quickly detect the emergence of hot spot pests, diseases and weeds; carryout an agro-ecosystem analysis and decide on crop activities to be carried out.	Regular inspection of farms enables farmers detect problems and implement necessary integrated control measures to avoid extension of damage and, consequently, considerable yield losses.
PRINCIPLE 11 Keep farms perfectly clean	Always keep farms clean. Remove all residues (plants from previous year and plant residues for example); most residues are used as forage for livestock. Pull out and destroy crops with disease symptoms at early vegetative cycle. After harvest, remove crop residues (mow them and use them as livestock forage or bury them as soil amendment)	These results prevent pests and disease proliferation and their movement from plant to plant. Pest and diseases cannot spread to the whole farm.
PRINCIPLE 12 Combat pests and diseases effectively	Adopt a strategy on the prevention and growth of auxiliaries. Avoid control methods (excessive use of pesticides) that are harmful to human or crops as well as those causing environmental degradation; give preference to mechanical or natural methods (neem tree seeds/leaves extract, soapy solution for example). If the use of chemical pesticide becomes compulsory, (for example in case of outbreaks of Sunn pest or migratory crickets/grasshoppers or forest insect invasions, apply appropriate product in recommended areas, in accordance with required techniques in compliance with precautionary measures.	Pest and diseases problems under control contribute to a high and sustainable production with low-cost inputs. Natural products are cheaper and less harmful to human and the environment.
PRINCIPLE 13 Encourage growth of natural enemies (auxiliaries)	Adopt practices that create enabling environmental conditions for insect natural enemies' growth and reproduction (minimal use of synthetic pesticide, use of plant producing pesticides such as neem tree extract, and mulching to stimulate the reproduction of natural enemies such as predatory ants, spiders, beetles, flower flies and ladybird beetles).	Pest populations are efficiently and naturally controlled by a significant population of natural enemies. Natural pest control is neither harmful to human nor to the environment.
PRINCIPLE 14 Minimize chemical pesticide applications	Avoid the systematic and regular applications of pesticides. If really needed, use only selective pesticides. Give preference to plant products. Do not use phyto-pharmaceutical products as soon as pests or early symptoms appear. Always analyze the agro-system (AESA) before any treatment. In the event of pest overgrowth and considerable damage, use natural products (neem tree seeds/leaves extract soapy solution or pyrethrin).	The parsimonious use of selective chemical pesticides allows auxiliary populations (predatory ants, spiders, mantis and ladybirds, for example) to grow at the expense of pests. It is a natural method for controlling pest.
PRINCIPLE 15	Harvest crops upon maturity; be prudent to avoid harming, tearing, breaking or causing damage to	Farmers obtain better prices for clean and pest-free produce. Pest-free produce

Adopt good practices of harvest	harvested produce. Avoid harvesting or storing fruits and vegetables in the sun.	is easily conserved as it does not constitute an entry point for pests and pathogens. Freshly harvested produce and preserved at low temperature are conserved for a long time.
PRINCIPLE 16 Adopt appropriate and quality storage facilities.	Warehouses should be always clean, dry and well ventilated. Store only whole produce. Keep harvests in tight containers to protect them from pests of granaries. In general, damage caused by pests become significantly worse after three months of storage; therefore, distribute harvests in several batches according to their self-life. Process only batches intended for long-term preservation (with appropriate products like neem tree oil, pyrethrin or recommended pesticides for store products).	The quality of products in stocks is maintained during warehousing. Store products are not too much exposed to pest and pathogen contamination. Stored grains remain dry. Recommended pesticides for stock treatment are used economically.

Annex 14: Examples of available tools in the IPM toolbox

(Source 'Pest Management Guidebook' http://web.worldbank.org)

There is a wide variety of techniques that can be applied under IPM approaches. Applicability of individual techniques depends on various factors, including: the crop, the cropping system, the pest problems, the climate, the agro-ecological conditions, etc. Generally, IPM involves a combination of techniques. Some examples of such techniques:

Cultural practices that can help prevent build up of pests:

• Crop rotation
• Inter-cropping
• Field sanitation and seed bed sanitation
• Use of pest-resistant crop varieties
• Managing sowing, planting or harvesting dates
• Water/irrigation management,
• Soil and nutrient management
• Practices to enhance the buildup of naturally existing predator and parasite populations
• Weed management within and in the field borders or other hand-weeding
• Cover crops and grass species
• Use of traps or trap crops in borders or strips within the field
• Flowering plants along the borders
• Trap crops for insect pest, also used as reservoir for beneficial predators and parasites
• Planting and harvesting dates for pre-and post harvest loss preventions

Mechanical control practices

• Hand-picking of pests and sweeping
• Soil tillage to destroy insects and expose them to birds and other predators
• Complete decomposition of organic mattered in a field before planting
• Longer fallow periods between crops or more frequent grass rotations
• Vacuuming and destroying insect pests
• Floating row covers and plastic tunnels reduce access to many pest species
• Use of reflecting mulch in early aphid infestations
• Sticky trap barriers and attractants as monitoring devices
• Water pressure sprays
• Use of Diatomaceous or clay sprays against soft body insect pests
• Insecticidal Soaps

Biological inputs

• Biological control through release of predators, parasites, or pathogens (*B. thurigiensis, B. bassiana*, etc.)
• Biological control through fish, ducks, geese, goats, etc.
• Release of sterile male insects
• Bio-pesticides
• Biological preparations (e.g. Neem extract, rotenone, etc.)

Chemical inputs

• Chemicals that disrupt insect behavior (e.g.: pheromones, repellents, etc.)
• Growth-regulators
• Conventional pesticides

Annex 15: The "do" and "do not do" of IPM policy

(source 'Pest Management Guidebook' http://web.worldbank.org)

DO NOT DO – *Examples of elements that may contribute to a policy environment that encourages reliance on pesticides*

• Pesticide use is directly or indirectly subsidized
• Inadequate pesticide legislation or weak enforcement of legislation to control import, distribution, handling and use of pesticides
• Requesting/accepting donor support in the form of pesticide donations, (i) without adequate assessment of actual requirements, (ii) without paying adequate attention to non-chemical alternatives, (iii) without appropriate pricing of these pesticides to avoid unnecessary use induced by availability at below-cost prices
• Government agricultural programs and associated budget allocations emphasize input supply more than farmer training in IPM
• Absence of IPM extension, as a result of which farmers have little or no access to information about alternative approaches that reduce reliance on chemical control
• Extension schemes/programs/messages are oriented towards chemical control
• Agricultural advisory services for extension staff and/or farmers have a financial interest in selling pesticides (e.g.: extension advice is provided by private sector entities that sell pesticides; extension staff receives commissions on pesticide sales)

DO - *Examples of policy elements that reduce biases towards chemical control*

• Social and environmental costs internalized in prices through polluter pay tax
• Enforcement of pesticide legislation
• Enforcement of food safety legislation regarding pesticide residues (quality control)
• Enforcement of environmental protection legislation
• Emphasis on development of agro-ecosystem management skills and knowledge
• Establishment of formal policies on IPM covering inter-agency coordination and common agendas' incentive systems, regulatory and information systems for sustainable agriculture, generation and dissemination of appropriate approaches and technologies
• Encouraging research on the economics and the environmental and health impact of different plant protection approaches and make this information available
• Development of an effective regulatory framework to enhance food safety and to reduce risks related to the distribution, handling and use of pesticides
• Orienting agricultural research in general to be more demand driven and with greater beneficiary participation.

Annex 16: Assessment based on the data collected and the stakeholders identification

Fact	Relevance to project/ component	Actors implicated	ESMF Action recommended	Timeline/duration
Existing agricultural inputs and delivery system				
Seeds				
• Quantity of seeds provided by MAIL through DAIL or local NGO is insufficient and of low quality. Farmers' cooperative members say to have to reuse same seeds for several seasons. • In the market, some imported seeds are not adapted to local environment. For instance Agha Khan Foundation distributed seeds in Northern provinces which resulted in no harvest. Seed companies imports hybrid seeds which can't be reused • Existence of many fake labels are encountered in the market • Seeds on the market without information and proper usage guidance in language accessible to users • Need for a single responsible and accountable national source to deal with seeds, to verify quality and control market price, to warrantee its fitness and adaptation, and eventually subsidies products and research on seeds.	High Social impact high on farmers economic return	**Overall responsible sources:** MAIL, Agric-NGO's DAILs, Wholesalers, Retailers, petit handlers, Farmers' cooperatives, farmers, international donors including Afghan Farm Service Alliance (AFSA-USAID and others) , local community leaders, … **Quality control sources:** MAIL, NEPA, ANSA, MoC, Costume-borders, MoPH, **Social Awareness:** MAIL, NEPA, ANSA, MoC, Costume-borders, MoPH, DOWAs, DOWAs, MOWA-Provincial MOE, MoTC, MORRD, Public Media, Ministry of culture, MoHE	Training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance, Application of existing regulations, Enforcement of Quality Control, open pollinated seeds should be imported, Ease recourse process and Build trust Social awareness through any possible sources such as Mass-Media, Mosque, community Leaders Schools, Universities, people gathering even and official national campaigns should be organized	5 + years 5 + years 5 + years
Sources of seeds:				
- DAIL Programs - International Donors - Private sector			Seeds should be distributed through government owned enterprises to cooperatives and via them to people or CDCs	5 + years
Agro-chemical				

• Low quality of products on the market • No proper guidance to their usage which affects goods and often time have negative effects on farmers health as well as economic losses, some women or children have eaten agro-chemicals. • NOOR brothers and HELAL GROUP are the main provider, have their own respective networks of retailers. • Retailers are subject to accreditation by MAIL/DAIL including a signed agreement with obligations to train farmers. However there is weak inspection and follow up on agreements • Agro-chemical products have labels/information only in English and most often are sold by retailers without any English language abilities • Agro-chemical products of all kinds of make and origin (disclosed or not) • Presence of DDT, and other	High	MAIL, MOWA-Provincial DOWAs, MOE, NEPA, ANSA, MORRD, DAILs, MoC, Customs, Wholesalers, Retailers, petit handlers, Farmers' cooperatives, farmers, international donors including Afghan Farm Service Alliance (AFSA-USAID and others) , local community leaders.	Change the name/usage instruction of agro-chemicals in its local translation. Training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance	To start with/at project launching and fully deployed within Max 2 years after project start
			Application of existing regulations, public awareness through DAIL, public media,	
			Enforcement of Quality control	To start with/at project launching and fully deployed within Max 2 years after project start
			Retailers should not sell agro-chemicals on the streets and they should be pharmacists,	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
			Labels to include local languages with danger signs and special format approved by MAIL	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
			Increase Boarders control and Feasibility of a government owned and run agro-inputs -store	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
Machinery				

• MAIL owned equipments not sufficient to meet local/provincial needs, used by elites, machinery increases unemployment, • Low quality • No equity in distribution • Not timely	Medium	MAIL, DAIL, Wholesalers, Retailers, Farmers cooperatives and farmers	Internal code of conduct and transparent procedures in distribution of equipment, Machinery should be consistent with local conditions, and designed to be used also by women, Gender consideration	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
Irrigation system				
• Poor irrigation system (Primary and secondary installations), women are not or not asked to be involved in irrigation, • Lack of rehabilitation after destruction by war • Lack of maintenance of irrigation system and urgent need for improvement in irrigation system (Primary, secondary and tertiary installations) • Water-shortage • Weak and insufficient development of traditional irrigation system	No	OFWMP, MAIL, DAIL, Farmers…	OFWMP	
Social characteristics				
• Strong tendency to prevent communication with women	High	Women advocate groups, MOWA, DOWAs, Donor Community, Religious Leaders, Men, Learning institutions	Women targeted activities, developing women councils,	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
• Water shortage and low level of revenues from farming activities are driving rural population out, resulting to migration to cities or/and out of the country, lands extortion by powerful people, with no means of recourse and no hot given back.	No			

• Many immigrants competing for farmland and building lots. Reason for increase in land cost in urban and rural areas. Nomads destroy agricultural lands sometimes.	No			
• Almost all rural women are involved in farming, 70 % directly or indirectly.	No		Awareness campaigns	
• Some farmers not allowing their children to go to school because they need their assistance during farm	High			
• Very few districts agricultural facilities have office buildings				
• No sufficient office space for cooperatives	High			
• No storages and agric product process	High		Storages and industries should be built for agricultural product process	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
As per interviewed farmers there is lack of access to information about agriculture pesticide usage	High/Medium		Training and Awareness campaigns Reinforced Control brigades and inspections schedules and reports	
Land acquisition constraints				
Agricultural land is an input	**High**		**Complaints handling and arbitration process**	
A strong presence of the administration will reduce conflicts on land ownership and misusage of governmental land, women are given as Bad in the recourse of land issues. Women are vulnerable when an agricultural land is destroyed for the purposes of making channels or other establishments,				
Space for future infrastructure is available				
Rich people shift lands to housing and residential areas reducing agricultural land in cities' peripheries				
In villages most conflicts are on water distribution and/or land acquisition				
Existing installations				

Existing installations are insufficient and are not existent in each province. Existing labs funded by donors including USAID are under staffed, underequipped, and not in use or underused.		MAIL, Ministry of Urban Development (MoUD), NEPA, and respective Municipalities	Needs assessment including waste management component, women recruitment,	Efforts to this end To start with/at project launching and fully deployed by project completion (5years)
Waste management (solid and liquid, industrial and households)				
There are municipal dumpsites although poorly managed	High	Ministry of Urban Development (MoUD), NEPA, and respective Municipalities Ministry of Urban Development (MoUD), NEPA, and respective Municipalities	Assess state of all existing installations in regard to appropriate waste management system, coordination between municipalities and MIAL required by law	Efforts to this end To start with/at project launching – Baseline condition survey and action plan by end of year one (1)
For most buildings under construction to host new labs, it is unclear how liquid and/or solid waste from lab activities will be managed				
On public properties and constructions including labs, liquid waste is directed to an onsite septic tank that will be emptied using municipal sanitation services and equipments.		Ministry of Urban Development (MoUD), NEPA, and respective Municipalities		
Wastewater without any treatment is directly guided/dumped to the river system, causes diseases and pollute underground waters, causes economic loss for women		Ministry of Urban Development (MoUD), NEPA, and respective Municipalities		
Destruction of forest for heating and cooking purposes.				
People most frequently interacting with agricultural input				
Men are #1 but for income generation and poverty and lack of labors women and children are involved in farming, women are directly and indirectly involved 70%			Design develop training instruments in quality and quantity to ease training and communication	Efforts to this end To start with/at project launching and fully functional by end of year one (1)

Products in shelves for sale by merchants are with labels and usage directives in languages not mastered neither by farmers nor by merchants themselves			Gender, age, appropriate	Efforts to this end To start with/at project launching and control brigades to be fully functional by end of year one (1)
Agro chemical products handling				
Generally framers complaints from on agro chemicals are related to:			Training for farmers, cooperative leaders, women farmers groups, DAIL, extension staff and merchants on selection and quality assurance	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
- Usage			Application of existing regulations	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
- Level of quality				
- Miss usage			Enforcement of Quality Control	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
- Impacts on animals, human and farms				
- Number of technical staff assigned to the job			Ease recourse process	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
- Accessibility of good quality agro-chemical in the market				

Death of relative due to usage of agrochemical reported			Build trust	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
Complaints				
• Most/all farmer interviewed expresses disappointment; meaning that no one act on their complain, most of women's lands are registered in the name of men, women's complaints are handled by men, no specific help for women by judiciary			Need to Build trust and equity	Efforts to this end To start with/at project launching and fully functional by end of year one (1)
• Complaints are mostly addressed to local authorities				
• Due to corruption no one hears them				
• There is a widespread distrust due to corruption and the absence of the rule of law. Local leaders play a very important role in complaints handling. Farmers are hesitant to seek/refer to any authority for any kind of arbitration.				
Motive of complaints				
Mostly the complain were focuses on: -lack of water and improved seeds -Lack of communication with farmers -Lack of extension research -Lack of access to technology -Distribution of the seeds and plants without research on adaptation -Lack of market and process systems -Deforestation due to lack of facilities for cooking and heating -Lack of agric-project sustainability -Low quality -Lack of expert -No control on agric-chemical			Improve Complaints handling and arbitration process and be clear on for qualifying complaints Increase Boarders control and Feasibility of a government owned and run agro-inputs - store	Efforts to this end To start with/at project launching and fully functional by end of year one (1)

markets -Lack of proper water and its management -Shifting of agric land to residential areas -Environmental pollutions -Flooding and drought -Lack of water and its distribution -Lack of sufficient payment to governmental professionals -Low attention to cooperatives improvement -Response to insects only by chemical not organic Entrance/imports of any *type of agrochemical without control in borders*				
Public Awareness				
Farmers (men, women, children) are not aware of properly using agro-chemicals, seeds, and other inputs	MAIL, DAILs, MoE, MOIC, MoC, NEPA		Awareness through mosques, schools, councils, media, magazines, mobile groups, social workers on using agricultural inputs, should be included in school curriculum, establishing a quality control system, involvement of women in grass roots mobilization, communication campaigns and training	Efforts to this end To start with/at project launching and fully functional by end of year one (1)

Annex 17: Generic Environmental and Social Management Plan

For….Subproject name…..…… [NAME]…..…… Province -Afghanistan

Date: …. /…. /….

Summary

In compliance with Afghanistan Environmental law, EIA regulation and World Bank Safeguard Policies, the Environment & Social Management Framework was produced to summarize and accelerate the incorporation of environment and social considerations into overall AAIP cycle. Therefore, based on environment and social screening and technical feasibility study, this ESMP was developed to avoid or minimize the predicated adverse impacts of the project on environment and human health. The ESMP include the Purpose of ESMP, Public Consultation and Public Disclosure, Project Description, Project Objective, Physical Resources, Socio-economic Conditions and Development, Potential Environmental and Social Impacts, Environmental and Social Mitigation Plan, Mitigation Cost, Implementation of Mitigation Measures, Institutional Requirements and Environmental Monitoring and Reporting. In addition, the ESMF supported documents, Community Commitment's letters and other documents will be attached.

Purpose of ESMP

The Project ESMP is a project-specific source document detailing the environmental protection requirements to mitigate and minimize environmental impacts. The Project ESMP's primary purpose is to ensure that the environmental requirements and commitments associated with the project are carried forward into implementation and operational phases of the project and are effectively managed. The specific objectives of this ESMP are as hereunder:

- Minimize the identified potential adverse impacts of the project on environment and human health
- Prevent or compensate any loss of livelihood;
- Prevent environmental degradation as a result of either individual subprojects or their cumulative effects;
- Enhance positive environmental and social outcomes;
- Ensure that the ESMP is feasible and cost-efficient.

As an Action Plan, ensure that the project impact mitigation measures are properly implemented and monitored.

Public Disclosure and Community Consultation:

During survey and preparation of the Project ESMP all relevant parties including local people, stakeholders and statutory authorities that have environmental protection responsibilities will be consulted about the impact of the project. Public announcement and consultation will also be conducted during the implementation of the ESMP. During project implementation, people living in the vicinity area where new labs, storages, will be constructed will be informed about the negative impacts of the project and its possible hazards. Each public organization and individuals having structure in proximity to the site of the

work will be notified in advance (with sufficient time) about start of the organization and individuals could take necessary step.

Sub-project description:

……
……
……
……
……
……
……
……
……
……
……

Project Objectives:

……
……
……
……
……
……
……
……
……
……

Physical Resources:

Topography

……
……
……
……
……
……
……

Climate

……
……
……
……
……
……

Air Quality

……
……
……
……

……
……

Water Resources

……
……
……
……
……
……

Geology

……
……
……
……
……
……
……
……
……
……
……
……
……
……

Potential Environmental and Social Impacts:

Examples:

Air pollution and Water contamination
Damages to trees or vegetation covers
Land acquisition
Loss of property and land and consequently
Soil erosion
Possible development of social imbalances in communities
Financial risks for the farmers due to needed investments
Irregularities on the supply chain
Development of dependencies on external inputs (hybrid seeds not usable for reuse, pest control based on synthetic pesticides)
Health risks for the farmers

Annex 18: Generic Terms of Reference for an Environmental Assessment

Afghanistan Agricultural Inputs Project (AAIP)

Terms of Reference (TOR)

Project Background

The overall project development objective (PDO) of the AAIP is to increase adoption of improved crop production technologies through expanding development of certified seeds and improving access to agricultural inputs of reliable quality.

The project will deliver a variety of interventions in the agricultural inputs sector. First, the project will increase the efficiency of production of certified seeds and develop local capacity for continued development of the seed industry. Second, it will develop accredited facilities and regulatory frameworks for safety and quality control of inputs. Third, the project will implement capacity building programs that will contribute to appropriate handling, storage and use of fertilizers and other agro-chemicals. Fourth, the project will design and operationalize a demand-led action plan to improve and develop market based input delivery systems for seeds, fertilizers, other agro-chemicals, and farm machinery & equipment. The main focus will be on wheat (the major staple crop) but industrial crops, vegetable crops and perennial horticulture crops will also be included in project activities. The project will also explore how innovative information and communication technology (ICT) applications may support these interventions [3], including use of mobile phone applications to verify quality of agro-chemicals.

Component A: Improved Seed Production and Certification. This component aims to strengthen a sustainable, commercially viable, and technically efficient seed production and certification system. The project will focus on strengthening seed production and distribution for wheat – the country's main staple crop – while supporting other food crops including vegetables and grain legumes where appropriate. The project will cover the entire seed chain beginning with research in variety selection to generate breeder seed, production of foundation and registered seeds from breeder seed, and multiplication of registered seed into certified seed. In addition, the project will encourage compliance with the seed industry regulatory framework comprising the national seed policy, the seed law, and accompanying seed rules and regulations. Component A is organized into 3 sub-components - Varietal Selection and Production of Breeder Seed, Production of Foundation and Registered Seed, and Coordination of Seed Sector.

Component B: Quarantine Networks and Quality Control for Agro-chemicals. This component aims to build and strengthen institutional capacity and physical infrastructure required for quality control of agrochemicals and plant quarantine. Project activities will focus on preventing marketing of banned, hazardous, sub-standard, and unreliable pesticides and fertilizers, as well as preventing introduction and spread of quarantine pest into the Country. This would be achieved through facilitating enforcement of the recently finalized Pesticides and Plant Quarantine Acts and Regulations. The goal is to comply with international standards for quality control of agrochemicals and plant quarantine practices. Component B is organized into 2 sub-components - Quality Control of Agrochemicals and Plant Quarantine Networks.

Component C: Input Delivery Systems. The ongoing preparation phase will undertake two comprehensive in-depth surveys to collect data that would be analyzed to develop a plan of action for investment activities in inputs delivery systems. The first survey involves a detailed account of farm level production activities for wheat and other major crops, including farm budgets, input use (especially seeds

[3] ICT applications could strengthen quality control and input delivery systems, and support M&E activities.

and agrochemicals), working capital requirements and sources, yields, post-harvest losses etc. The second survey will focus on input distribution networks for major inputs (mainly seeds, fertilizers, and other agrochemicals) and will mainly consist of a value chain analysis at various levels (importers, producers (seed), wholesalers, retailers). By mid-term review (MTR) of the project, data from these surveys would have been analyzed to develop a feasible plan of action for investment in input delivery system. It is proposed that the project will seek additional financing at MTR to support investment activities that would be outlined in the plan of action.

Component D: Project Implementation and Management. The project will be implemented by the Ministry of Agriculture, Irrigation and Livestock (MAIL). The following main technical Directorates from the MAIL side will be involved in the preparation and implementation of the proposed project: (i) for Component A (Improved Seed Production and Certification): Improved Seeds Enterprise (ISE); (ii) for Component B (Quarantine Networks and Quality Control for Agro-chemicals): Plant Protection and Quarantine Directorate (PPQD) and Food Quality Control and Agricultural Inputs Directorate (FQCAID); (iii) for Component C (Improve and Expand Input Delivery System): FQCAID and Private Sector Directorate (PSD); and (iv) for Component D: (Project Management, Coordination, Monitoring & Evaluation): Technical Deputy Minister's Office and General Directorate for Programs (GDP). Moreover, the project will establish links with the Research Directorate and Extension Directorate.

Objectives

This study is being carried out to ensure that environmental implications of the proposed AAIP have been identified, analyzed and clearly communicated to the decision makers. In order to achieve this target, the following objectives have been set:

- To prepare inventory of the biophysical and socio-economic environmental attributes in the project intervention areas;
- To involve the local population in project preparation through active consultations which could also assist in identifying the attributes important to them;
- To identify and assess the magnitude and significance of impacts due to the proposed activities on the attributes identified;
- To consider a range of proposals should be considered and if so whether they would be less environmentally damaging;
- To propose avoidance, mitigation and enhancement measures for adverse and positive impacts;
- To assess the current capacity for environmental management to develop institutional arrangements for this and subsequent (like) projects; and
- To prepare an environmental management plan to ensure implementation of the management measures selected from the ones proposed, along with budgetary allocation (to feed into the overall project cost estimates) and institutional responsibility.

Environmental Assessment Requirements

The Environmental Assessment shall be guided by the requirements of OP4.01 and other relevant safeguard policies of the World Bank such as OP4.04, etc.

Scope of Work

The current information has led to the development of the following tasks, which may be modified with consent of the MAIL if new information comes to light during the course of the study (e.g. the presence of sensitive receptors not known when the ToR is finalized).

Task 1. **Description of the Proposed Project**. General design and extent of construction and rehabilitation works (specifications kind and scope of work, size of command area, etc.); size and constraints in regard to connectivity to urban services networks etc.

Task 2. **Description of the Environment.** Assemble, evaluate and present baseline data on the relevant environmental characteristics of the project intervention areas. Include information on any changes anticipated before the project commences.

Physical environment: geology; topography; soils; climate and meteorology; ambient air quality; surface and ground- water hydrology; existing sources of air emissions; existing water pollution discharges; and receiving water quality.

Biological environment: flora; fauna; rare or endangered species; sensitive habitats, including parks or preserves, significant natural sites, etc.; species of commercial importance; and species with potential to become nuisances, vectors or dangerous.

Socio-cultural environment: land use (including current crops and cropping patterns); land tenure and land titling.

Task 3. **Legislative and Regulatory Considerations**. Describe the pertinent regulations and standards governing environmental quality, health and safety, protection of sensitive areas, protection of endangered species, land use control, etc., at international, national, if any.

Task 4. **Determination of the Potential Impacts of the Proposed Project**. Potential impacts to be assessed include:

Project location: resettlement of people; loss of forest land; loss of agricultural land (cropping and grazing); impact on flora and fauna; impact on historic and cultural sites; effects on water resources outside and inside command area.

Project Design: disruption of hydrology; drainage problems; design of dams and other structures; crossings for people and animals.

Construction Works: soil erosion; construction spoils (disposal of); sanitary conditions and health risks associated with construction camp and workers coming into area; social and cultural conflicts between imported workers and local people.

Project Operation: pollution by agrochemicals; impacts on soils (water logging, salinization, etc.); changes in ground water levels inside and outside command area; changes in surface water quality and risks of eutrophication; incidence of water-borne and water-related diseases.

Review of AAIP's PMP.

Task 5. **Analysis of Alternatives to the Proposed Project**. Describe alternatives that were examined in the course of developing the AAIP and identify other alternatives which would achieve the same objectives. The concept of alternatives extends to sitting, design, technology selection, construction techniques and phasing, and operating and maintenance procedures. Compare alternatives in terms of potential environmental impacts; capital and operating costs; suitability under local conditions; and institutional, training, and monitoring requirements. When describing the impacts, indicate which are irreversible or unavoidable and which can be mitigated. To the extent possible, quantify the costs and benefits of each alternative, incorporating the estimated costs of any associated mitigating measures. Include the alternative of not constructing the project, in order to demonstrate environmental conditions without it.

Task 6. **Development of Environmental Management Plan, with focus on three generic areas**: Mitigation measures, institutional strengthening and training, and monitoring. The emphasis on each of these areas depends on the needs in the specific project context, as identified by the EA itself.

Mitigation of environmental impact: Recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Estimate the impacts and costs of those measures. Consider compensation to affected parties for impacts which cannot be mitigated. The plan should include proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures.

Institutional strengthening and training: Identification of institutional needs to implement environmental assessment recommendations. Review the authority and capability of institutions at local, provincial/regional, and national levels and recommend steps to strengthen or expand them so that the management and monitoring plans in the environmental assessment can be implemented. The recommendations may extend to new laws and regulations, new agencies or agency functions, inter-sectoral arrangements, management procedures and training, staffing, operation and maintenance training, budgeting, and financial support.

Monitoring: Prepare detailed arrangements for monitoring implementation of mitigating measures and the impacts of the project during construction and operation. Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to carry it out.

Task 7. **Assist in Inter-Agency Coordination and Public/NGO Participation**. Assist in coordinating the environmental assessment with other government agencies, in obtaining the views of local NGO's and affected groups, and in keeping records of meetings and other activities, communications, and comments and their disposition.

Reporting Requirements

Inception Report: The Consultant will submit an Inception report confirming the methodology to be adopted for the study, the deployment schedule of personnel, a schedule of site visits to be carried out and a reporting schedule, within a fixed time from the date of beginning of the assignment. The consultant may want to carry out a reconnaissance survey before submitting the inception report.

Environmental Impact Assessment: The EIA report should include the following items (not necessarily in the order shown):

(a) Executive summary. Concisely discusses significant findings and recommended actions.

(b) Policy, legal, and administrative framework. Discusses the policy, legal, and administrative framework within which the EA is carried out. Identifies relevant international environmental agreements to which the country is a party.

(c) Project description. Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities). Indicates the need for any resettlement plan or indigenous peoples development plan {see also sub-paragraph. (h)(v) below}. Normally includes a map showing the project site and the project's areas of influence.

(d) Baseline data. Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigation measures. The section indicates the accuracy, reliability, and sources of the data.

(e) Environmental impacts. Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.

(f) Analysis of alternatives. Systematically compares feasible alternatives to the proposed project site, technology, design, and operation-including the "without project" situation in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

(g) Environmental Management Plan (EMP). Covers mitigation measures, monitoring, and institutional strengthening; see outline (in III) below.

(h) Appendixes:

(i) List of EA report preparers-individuals and organizations.
(ii) References-written materials both published and unpublished, used in study preparation.
(iii) Record of interagency and consultation meetings, including consultations for obtaining the informed views of the affected people and local nongovernmental organizations (NGOs). The record specifies any means other than consultations (e.g., surveys) that were used to obtain the views of affected groups and local NGOs.
(iv) Tables: presenting the relevant data referred to or summarized in the main text.
(v) List of associated reports (e.g., resettlement plan).
(vi) Environmental Management Plan: The consultant will submit an environmental management plan (in line with Annex C of OP4.01) which will include the following components.

(a) Mitigation The EMP identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient.

(b) Monitoring Environmental monitoring during project implementation provides information about key environmental aspects of the project, particularly the environmental impacts of the project and the effectiveness of mitigation measures. Such information enables the borrower and the Bank to evaluate the success of mitigation as part of project supervision, and allows corrective action to be taken when needed. Therefore, the EMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP.

(c) Capacity Development and Training To support timely and effective implementation of environmental project components and mitigation measures, the EMP draws on the EA's assessment of the existence, role, and capability of environmental units on site or at the agency and ministry level. If necessary, the EMP recommends the establishment or expansion of such units, and the training of staff, to allow

implementation of EA recommendations. Specifically, the EMP provides a specific description of institutional arrangements-who is responsible for carrying out the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, most EMPs cover one or more of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.

(d) Implementation Schedule and Cost Estimates For all three aspects (mitigation, monitoring, and capacity development), the EMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP. These figures are also integrated into the total project cost tables.

(e) Integration of EMP with Project The borrower's decision to proceed with a project, and the Bank's decision to support it, are predicated in part on the expectation that the EMP will be executed effectively. Consequently, the Bank expects the plan to be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation. Such integration is achieved by establishing the EMP within the project/contract documents so that the plan will receive funding and supervision along with the other components.

Reporting Schedule

No.	Title of Report	Due within date from beginning of assignment	No. of copies	Time for comment from M&E Unit of MAIL/WB
I	Inception Report			15 days
II	Interim Report (including screening of alternatives)			15 days
III	Environmental Impact Assessment			1 month
IV	Environmental Management Plan			15 days

Consulting Team
The consulting team shall include the following key experts in addition to any support staff that the consultant may decide.

No.	Qualification	Minimum Experience	Duration of Service Required	Continuous / Intermittent Inputs
1	Post graduate Degree in Environmental Planning/ Engineering	10 years		Continuous
2	Post graduate Degree in Sociology/Anthropology	10 years		Continuous
3	Degree in Agronomy	8 years		Intermittent
4	Degree in Civil Engineering / Hydrology	8 years		Intermittent
5	Degree in Terrestrial / Aquatic Ecology	8 years		Intermittent
6	Degree in Social Science	8 years		Intermittent

Annex 19: Grievances Redress Guidelines

A Grievance Redress Committee (GRC) will be established under the AAIP. The GRC does not have any legal mandate or authority but acts as a facilitator to try and resolve issues between the complainant and the MAIL/PIU.

The GRC will consist of a CDC representative from district government, representative from the PCU-Technical Assistance Unit, and participating NGO. The GRC would meet to try and resolve the matter and make a recommendation within 7-10 working days.

Uptakes options for grievances will include:

Written claims will be addressed to MAIL, AAIP PIU, local/regional DAIL regional representatives. All claims will be recorded in writing by respective AAIP-ESMF regional representatives, and shall include name and contact of claimant(s), issue(s) justifying the claim(s), names and contact of potential witnesses to be subpoenaed, and any document to substantiate the allegations/claim (see form below).

Verbal, **verbal claims will be reported by claimants in person** to MAIL, AAIP PIU, local/regional DAIL representatives. All verbal claims will be recorded in writing by respective AAIP-ESMF representatives, and shall include name and contact of claimant(s), issue(s) justifying the claim(s), names and contact of potential witnesses to be subpoenaed, and any document to substantiate the allegations/claim.

On the **Websites of both MAIL and AAIP, a link to a web-based form to be used to file claims** will be designed and made available. The form will include space same for information requested for written and verbal claims and provide for options to upload files. MAIL and AAIPIT teams will retrieve all claims and forward them to AAIPfor consideration.

In addition to the above mentioned channels, **a grievances hotline will be set to receive claims**. The regional officers will receive and follow up of all leads/claims. They will record the information received accurately and in the format prescribed for rite/verbal claim reporting.

A **database will be established to track complaints and their resolution**. At regional level, all claims will be documented and archived both physically (hard copies) and soft (computer/electronic database including all scanned documents received or related to the case along the process). The ESM team at AAIPHQ will centralize related information received from respective regional databases.

Appeal

An option for appeal will be granted to all claims when claimant does not fell satisfied with conclusions of the GRC.

All complaints should first be negotiated to reach an agreement at the regional level. If this falls, complaints and grievances about these Guidelines, implementation of the agreements recorded in the Meeting Minutes or any alleged irregularity in carrying out the project can also be addressed by the project affected persons or their representative at the provincial DAIL. If this also fails, the complaint may be submitted to the relevant implementing agency for a decision.

The Meeting Minutes, including agreements of compensation and evidence of compensation having been made shall be provided to the regional ESM team, to DAIL and to ESM team at AAIP PIU, who will maintain a record hereof, and to auditors/EMA, ESM international advisor when they undertake reviews and post-project assessment. This process shall be specified in all relevant project documents, including details of the relevant authority for complaints at DAIL and AAIP level.

Complaints regarding illegal/inappropriate sales of agrochemicals

Safeguards Officers will have an important role in ensuring that communities have a full understanding of their rights and responsibilities regarding purchase and use of agricultural inputs, as well as wholesalers and retailers obligation to disclose products specifications. Provincial DAILs will be in charge of recording and reacting to any reported suspicious of existence of inappropriate produce on shelves.

Afghanistan Agricultural Inputs Project (AAIP)

Grievances Recording Form

Last name of claimant (s):_____. First name of claimant (s):_____

Contact address of claimant(s): _____

District location: _____

Sub-project relating to (if any): _____

Issue(s) justifying the claim(s) (add as many lines as needed):

1	
2	
3	
4	
5	

Names and contact of potential witnesses to be subpoenaed (add as many lines as needed):

1	
2	
3	
4	
5	

List of documents to substantiate the allegations/claim (add as many lines as needed):

1	
2	
3	
4	
5	

ESM staff will add all documents to the file, including the Minutes from the meetings.

Annex 20: Public and Social Awareness Guidelines

Concerns have been raised worldwide since 1960 when it was found that organochlorine pesticides, like DDT, were very persistent. Instead of degrading they accumulate in food chain, building up in birds of prey. They weakened the shells of their eggs resulting in a serious decline in their numbers. Similar fears are being raised today in relation to the second generation of rat poisons (secondary anti-coagulants or "super Warfarins"). While there is no evidence of damage, there is evidence that they are accumulating in the food chain as they are more persistent than their predecessors. Cleaning pesticides from water is very costly. The main concerns are:

- Residues in food
- Workers' health
- Neighbors living near spray areas, and
- Mixtures of chemicals among others and also
- The fact that pets develop immunity to chemical pesticides and so greater quantities of chemical poisons are needed is an essential component of a responsible good practice campaign..

Public and social awareness is a key component of sustainable development and is becoming increasingly important in confronting the mounting challenges reaching out to socially vulnerable groups in a conflict threatened social environment such as Afghanistan. Moreover the overarching objective of the AAIP being related to input delivery systems including agrochemical produces, to increase agricultural production, it is essential to put in place a public awareness strategy and campaign that will improve knowledge and capacity of agricultural inputs users and ultimately empower grassroots farmers in the selection and usage of safe and efficient inputs in their farming activities.

A nationwide public awareness strategy and campaign will systematically address current key problems related to agricultural inputs in Afghanistan, and will use all possible communication/outreach media to provide inputs users, their immediate families and neighbors, as well as the entire afghan population with the knowledge to enable them to responsibly select and use the right inputs for their activities, and to denounce bad practices susceptible of social or/and environmental harm.

Current key Problems in Afghanistan

1. Risk associated with use of agrochemical in agriculture
2. Pesticide residues in agricultural products, and in the environment,
3. Hazards to humans and animals,
4. Lack of knowledge in safe selection, use, and proper handling of pesticides among farmers,
5. Label on inputs containers
6. Existing regulations,
7. Complaints handling and recourse process
8. Code of conduct and community watchdogs
9. Gender consideration, and
10. Building trust

The envisaged public awareness strategy and campaign will used every possible medium including:

1. Radio (AM/FM)
2. TV (public and private)
3. Newspapers (public and private)
4. Picture posters and flyers
5. Religious leaders/gatherings

6. Schools (primary, secondary and colleges)
7. NGO, Associations, and individual activists
8. Focus groups and Round table discussion

All messages will be designed by professional communication specialist and will need to be cleared by project's ESM international Adviser and the AAIP Director.

Annex 21: ESMF Monitoring and Evaluation Guidelines

As an overall M&E arrangements is being defined for the AAIP with the objective to measure performance on all project's interventions, including regulatory frameworks for fertilizers and agrochemicals, efficiency gains in production of certified seeds, setting-up and operationalization of various laboratories, and institutional capacity building of various technical departments in MAIL (ISE, plant protection, Quality control, Private Sector, ARIA etc). This will inevitably involve establishing an M&E cell in the Project Management Unit (PMU), ESMF implementation will have to be integrated in the overall M&E design and implementation to enable appropriate measurement on progress on ESMF and envisage steering adjustment to ensure proper goal achievement in minimizing project's negative environmental and social impacts.

Monitoring and evaluation of the ESMF will consist of closely following implementation at all level of activities of the ESMF, making sure staff are hired; work plans are developed; scheduled training are delivered; contracts for outsourced activities are awarded, delivered on, and in a timely manner; that all ESMF related activities are well delivered and on time.

The table below summarizes key tasks on the ESMF that will be closely tracked and included in the project M&E strategy. Monitoring and evaluation of the implementation of the ESMF will follow the process and activities as designed therein. The ESM specialists and officers are in charge of regularly reporting on ESMF progress ESM international Adviser and the EMA will have access upon request to all evaluation reports.

Reports will provide information on all ESMF related activities.

No.	Activities	Metrics/Indicator	Sequence of measurements	Comment
Staffing, monitoring and training				
1	Environmental Safeguards Specialist	Recruited	At project start and confirmed on the job every 6 months	AAIP management
2	Social Safeguards Specialist	Recruited	At project start and confirmed on the job every 6 months	AAIP management
6	Various ESMF related trainings	Delivered	As per schedule	AAIP management and ESMF team- Mixed (part Outsourced)
7	EMA contract	Recruited	Mid way in to implementation	AAIP management, MAIL and WB
8	ESM Adviser (International)	Recruited	At project start and confirmed on the job every 12 months	AAIP management, MAIL and WB
9				
Sub-project selection				
10	Identified	Number by end of years 1	6 months span	AAIP team
11	Implementation status	Number by end of every 6 months	12 months span	AAIP team
Manuals and subproject ESMP				
12	a) Preparation of Environmental & Social Safeguards Training	Delivered	2 months after project start	Outsourced

	Manual (local languages)			
13	b) Preparation of Environmental & Social Safeguards Operational Manual	Delivered	2 months after project start	Outsourced
14	c) Sub-Project-wise Preparation of Environmental and Social Management Plan (ESMP)	Delivered	2 months after sub-project identification	Outsourced
Training and awareness to farmers, men, women, youth, and to private sector				
15	a) Development Materials in Local Languages	Delivered	2 months after project start	Outsourced
16				
17	Funding curricular activities in selected agricultural higher learning institutions (university colleges, and vocational learning centers)	Memorandum of understanding with selected Institutions and assessments every 6 months	1 evaluation per year	MoUs to be drafted by respective institutions and cleared by ESM Advisor and Project Director
18	Seminars on rights and obligations of inputs wholesalers and retailers on products quality with media coverage	Scheduled and delivered in all regions and every year	As per work plan and scheduled	Work plan to be developed by ESM safeguards team and cleared by ESM Advisor and Project Director
19	Communication campaign (TV, Radio, news papers, posters, mosques, etc.)	Delivered	As per work plan and scheduled and covering all media as planned	Under responsibility of ESM Adviser
ESM Staff performance				
20	EMA Audits	Schedule deliverables	Total of 2	Midterm and end of project implementation
21	EIA	Designed and submitted to NEPA	1-2 months after screening, eligibility for EIA, and start date per work program	Linked to work program and overall project implementation
22				
23	Environmental Safeguards Specialist	Schedule deliverables in work plan	Every 6 months	Linked to work program and overall project implementation
24	Social Safeguards Specialist	Schedule deliverables in work plan	Every 6 months	Linked to work program and overall project implementation
24				
26				

ESM specialists to propose a detail format for progress reports for each activity/item to be assessed. To be cleared by ESM Adviser and AAIP director.

Annex 22: Guidelines on Liquid Waste Management (including specifications for septic tanks and for separating agrochemical labs wastewaters from other sewages and common wastewaters)

The purpose of these guidelines is to facilitate implementation of the Environmental and Social Framework of the AAIP in regard to distance between private water wells from septic tanks and field lines, and to safe management of agrochemical labs wastewaters. These guidelines will be used by designers and contractors when designing and building on site wastewater treatment installations. The guidance is also intended to justify the need for such precautions in regard to the environment and to the health and safety of living species that may be affected by poor management of labs wastewaters.

The major elements of health and safety that must be considered are:

- Physical separation from other sewages and common wastewaters;
- Testing and inspection;
- Stringent labs wastewater treatment requirements;
- Treatment system reliability;
- Labs staff/user agreements and use limitations; and
- Education programs.

Distance between private water wells from septic tanks and field lines

In Afghanistan, visits conducted on the field showed that labs, office building, factories including those processing chemical, as well as most rural homes, use some type of septic system to treat household wastewater. These systems generally are economical and effective in treating these wastes. However, septic systems must be properly designed, installed, and maintained to reduce possible harmful impacts to the groundwater that supplies drinking water, neighbors' drinking water, or surface waters such as a nearby stream.

Wastewater tanks built for liquid waste on the site of the new lab in Jalalabad.

Although a well-functioning septic system poses little risk to drinking water, poorly operating systems may be a source of disease-causing bacteria, viruses, household chemicals, and nitrates. If significant

amounts of any of these enter drinking water, they could produce health problems for you, your family, your pets and livestock, or your neighbors.

A properly designed and functioning wastewater treatment system breaks down harmful bacteria. In some cases, local conditions may keep a septic system from performing as designed.

For example, liquid in the septic system may flow to an area where water frequently pools near the surface, or the soil under the septic drain field may drain poorly. If this happens, the system may not completely treat wastewater and may be "recycling" poorly treated wastewater into your home with your drinking water.

Water well on the same lot should be build at required distance

To avoid problems, septic system should be installed in an approved location and maintained properly. Install a new or replacement septic system in well-drained sandy soil and as far as possible from well. Pump out the septic tank regularly to keep it working smoothly and extend the life of the system. A septic system will work better and need less maintenance if the amount of wastewater and solids, such as food wastes, paper towels, and other wastes, entering the system are reduced.

To protect drinking water quality, septic system and all potential contamination sources should be located as far as possible from well. In the US, many State Departments of Health requires that new septic tanks or human-waste lagoons be installed at least 16 meters from a well. Septic tank drain fields must be at least 32 meters from a well.

Although an existing septic system closer to a well may be safe, it is important to maintain these systems properly. It is also require all wastewater, including sink, tub, shower, and wash water, to enter the septic system. Discharging any wastewater off the lot property is illegal. As a general guidance, personal drinking water wells should have a minimum horizontal distance of 16 to 32 feet from such potential sources of groundwater contamination.

The table below gives distance requirements between septic components and wells, streams, trees, property boundaries, lakes, etc. Common guidelines require at least 16 m clearance distance between a

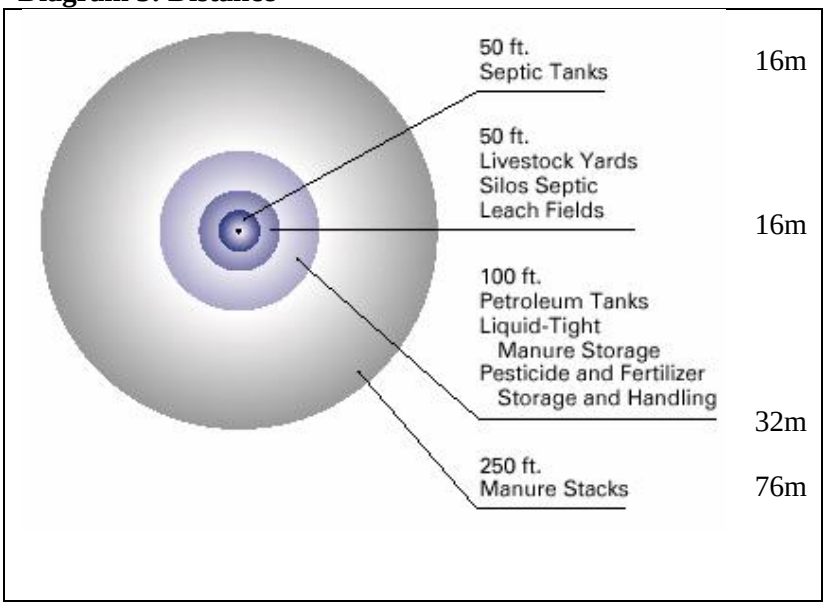
well and a septic system tank or 48 m between a well and a septic drain-field. Local soil and rock conditions are to be considered.

Well Construction & Maintenance Details to Avoid Pollution[4]

Septic System Clearances from Wells, buildings, & Other Site Features			
Min. Separation From	**Septic Tank**	**Drain-field**	**Lagoon**
Structures to Tank/SAS	3m	1,5m	32m
Property line to	3m	3m	23m
Neighboring residence	-	-	65m
Water supply piping to	3m	3m	3m
WATER SUPPLY PIPING under suction	3m	-	32m
Non-potable water well	-	16m	-
Water supply well	16m	23m	-
Public water well	-	65m	92m
Cistern-	-	-	8m
Spring	16m	-	32m
Streams	16m	-	8m
Swimming Pool	5m	-	32m
High water line of lake etc	-	23m	-

SAS = Soil Absorption System - Leach Field etc.

Diagram 3: Distance



These distances are for conventional onsite waste disposal systems which specify clearances, presuming that effluent is being disposed-off after minimal treatment such as is received by a septic tank or cesspool.

Advanced onsite wastewater treatment systems, permit substantial reduction in these clearances, depending on the level of treatment achieved.

Basic guidelines

The basic guidelines for the design, construction, and annual testing of

[4] Table of Required Septic - Well Clearances, http://inspectapedia.com/septic/clearances.htm. Retrieved on May 20th, 2012

are provided below. These guidelines identify methods for proper design, and annual testing requirements that should be adhered to protect the potable water system from cross-contamination.

A. **Regulatory Documents and Permits –** Prior to the design of a wastewater treatment installation, AAIP ESMF teams and engineer should be familiar with the regulatory and permit requirements.

B. **Drawings and Specifications** – Design drawings and specifications of the wastewaters treatment installation system shall be prepared and provided to the municipal authority having jurisdiction for the location of the lab for review.

The drawings should show all components of the system, including piping diagrams, storage tanks, etc.

C. **Installation** – Wastewater piping shall not be placed in the same trench with potable water lines. Applicable provisions of the Afghan code will be observed.

D. **Users Information** – Labs operations staff are required to participate in an information program given by the ESMF team and the contractor. The Information session will inform the designated user and provide a means to answer any questions the user may have.

E. **Inspection and Testing** – An initial and subsequent annual test shall be performed on the wastewater management system to confirm proper installation and functioning of the system.

In addition, soil testing will be undertaken after every case of flooding

The impact of flooding rivers, overflowing sewage and septic systems and other freshwater flooding has an immediate and dramatic effect on the lives of area residents, agriculture and the overall environment. After the water has receded, evaluation of damages is necessary. Flood water can have a pronounced influence on soil fertility and its physical and chemical properties, as well as creating potentially serious environmental issues. **Soil testing for agronomic concerns** is essential, and selecting the appropriate parameters to measure by soil testing will depend on the characteristics of the flooding event.
Soil testing for environmental concerns is also crucial. The flooding of livestock facilities, sewage treatment plants, septic tanks, can be a significant source of pathogenic microbes. Concerns for pesticide contamination result from flooding of locations storing significant amounts of undiluted pesticides.

Annex 23: Generic TORs for Safeguards Specialists

Afghanistan Agricultural Inputs Project (AAIP)
Terms of Reference (TOR)

Project Background

The overall project development objective (PDO) of the AAIP is strengthened institutional capacity for safety and reliability of agricultural inputs and sustainable production of certified wheat seed.

The project will deliver a variety of interventions in the agricultural inputs sector. First, the project will increase production of certified seeds and develop local capacity for continued development of the seed industry. Second, it will develop accredited facilities and regulatory frameworks for safety and quality control of inputs. Third, the project will implement capacity building programs that will contribute to appropriate handling, storage and use of fertilizers and other agro-chemicals. Fourth, the project will design and operationalize a demand-led action plan to improve and develop market based input delivery systems for seeds, fertilizers, other agro-chemicals, and farm machinery & equipment. The main focus will be on wheat (the major staple crop) but industrial crops, vegetable crops and perennial horticulture crops will also be included in project activities. The project will also explore how innovative information and communication technology (ICT) applications may support these interventions[5], including use of mobile phone applications to verify quality of agro-chemicals.

Component A: Improved Seed Production and Certification. This component aims to strengthen a sustainable, commercially viable, and technically efficient seed production and certification system. The project will focus on strengthening seed production and distribution for wheat – the country's main staple crop – while supporting other food crops including vegetables and grain legumes where appropriate. The project will cover the entire seed chain beginning with research in variety selection to generate breeder seed, production of foundation and registered seeds from breeder seed, and multiplication of registered seed into certified seed. In addition, the project will encourage compliance with the seed industry regulatory framework comprising the national seed policy, the seed law, and accompanying seed rules and regulations. Component A is organized into 3 sub-components - Varietal Selection and Production of Breeder Seed, Production of Foundation and Registered Seed, and Coordination of Seed Sector.

Component B: Quarantine Networks and Quality Control for Agro-chemicals. This component aims to build and strengthen institutional capacity and physical infrastructure required for quality control of agrochemicals and plant quarantine. Project activities will focus on preventing marketing of banned, hazardous, sub-standard, and unreliable pesticides and fertilizers, as well as preventing introduction and spread of quarantine pest into the Country. This would be achieved through facilitating enforcement of the recently finalized Pesticides and Plant Quarantine Acts and Regulations. The goal is to comply with international standards for quality control of agrochemicals and plant quarantine practices. Component B is organized into 2 sub-components - Quality Control of Agrochemicals and Plant Quarantine Networks.

Component C: Input Delivery Systems. The ongoing preparation phase will undertake two comprehensive in-depth surveys to collect data that would be analyzed to develop a plan of action for investment activities in inputs delivery systems. The first survey involves a detailed account of farm level production activities for wheat and other major crops, including farm budgets, input use (especially seeds and agrochemicals), working capital requirements and sources, yields, post-harvest losses etc. The second

[5] ICT applications could strengthen quality control and input delivery systems, and support M&E activities.

survey will focus on input distribution networks for major inputs (mainly seeds, fertilizers, and other agrochemicals) and will mainly consist of a value chain analysis at various levels (importers, producers (seed), wholesalers, retailers). By mid-term review (MTR) of the project, data from these surveys would have been analyzed to develop a feasible plan of action for investment in input delivery system. It is proposed that the project will seek additional financing at MTR to support investment activities that would be outlined in the plan of action.

Component D: Project Implementation and Management. The project will be implemented by the Ministry of Agriculture, Irrigation and Livestock (MAIL). The following main technical Directorates from the MAIL side will be involved in the preparation and implementation of the proposed project: (i) for Component A (Improved Seed Production and Certification): Improved Seeds Enterprise (ISE); (ii) for Component B (Quarantine Networks and Quality Control for Agro-chemicals): Plant Protection and Quarantine Directorate (PPQD) and Food Quality Control and Agricultural Inputs Directorate (FQCAID); (iii) for Component C (Improve and Expand Input Delivery System): FQCAID and Private Sector Directorate (PSD); and (iv) for Component D: (Project Management, Coordination, Monitoring & Evaluation): Technical Deputy Minister's Office and General Directorate for Programs (GDP). Moreover, the project will establish links with the Research Directorate and Extension Directorate.

3. Objectives

The objectives of the position are ensuring the ESMF proper implementation, compliance monitoring, reporting and capacity building of relevant project staff and relevant community members and farmers in understanding environmental and social concerns and how to mitigate them.

The AAIP will need the services of one Environmental Safeguards Specialist and one Social Safeguards Specialist to join the ESMF implementation team.

Scope of the task

As member of the AAIP ESMF implementation team, each staff will support the AAIP Director and the ESM International Adviser reporting primarily to the later, in the implementation of the ESMF.

- Environmental and Social Screening & Assessment Procedure for the relevant tasks of AAIP and if needed prepare ESMP for those tasks.
- Monitor compliance of ESMF implementation in AAIP.

- Identify environmental and social concerns, potential impacts, and recommended mitigation measures according to project stage (design, construction and operation).
- Prepare periodic reports that address the environmental and social issues and submit them to AAIP director.
- Organize brief but continuous training schedules to the relevant staff of AAIP.
- Maintain close linkage for flow of information between World Bank and AAIP in environmental and social related fields.
- Develop smooth reporting and work relationship with all relevant staff of AAIP and address whenever serious environmental and social issues arise in the field.

- Provide, disseminate and disclose the relevant ESMF and ESMP documents in the form and language understandable for the relevant staff working with AAIP and possibly to the local communities.
- Perform other duties as requested by AAIP Director and Management.

Required Educational qualification and Experiences:

- University degree preferably in Environment, Agriculture or related fields.
- Minimum 3 years experience in dealing with social and environmental assessments of agricultural projects.
- Working experience in field works
- Good command in written and spoken English.

AAIP Selected bibliography

Afghanistan accelerating sustainable agriculture program (ASAP) pesticide evaluation report and safer use action plan (PERSUAP)- USAID. http://pdf.usaid.gov/pdf_docs/PNADM436.pdf. Retrieved on May 20th, 2012

Environment and Social Safeguards Framework for the Emergency Horticulture and Livestock Productivity Project (HLP)

Emergency Horticulture and Livestock Project (2009) Ministry of Agriculture Irrigation and Livestock (MAIL) Afghanistan; PMP for the EHLP

ESMF-On Farm Water Management project (2010); MAIL, Afghanistan

IRDP-Environmental and Social Management Framework (2011); Main report for the Irrigation Restoration and Development Project, Afghanistan, MAIL

Guidelines for sewage collection system in the states of Georgia; USA; revised version of November 2010;

Guidelines for sewage collection system in the states of Virginia; USA; (2010)

Guidelines for sewage collection system in Fairfax County; USA; (2010)

Nellie J. Brown; Hazard Manual: Wastewater Treatment Plant and Sewer Workers; Cornell University Health; http://digitalcommons.ilr.cornell.edu; Retrieved on May 20th, 2012

NEPA policies guidelines, the stages of the administrative process for screening are shown on the diagram. (2007)

NEPA- National environmental impact assessment policy. An Integrated Approach to Environmental Impact Assessment in Afghanistan; Final (November 2007)

Planning for Domestic Wastewater Systems; State of Georgia, Department of Natural Resources, Environmental Protection Division, Water Protection Branch; http://www.gaepd.org/Files_PDF/techguide/wpb/domestic.pdf. Retrieved on May 10th, 2012

Table of Required Septic - Well Clearances, http://inspectapedia.com/septic/clearances.htm. Retrieved on May 20th, 2012

Pest and pesticide management plan (2011); Improving Agricultural Inputs Delivery System (AAIP) Project

Rebuilding Afghanistan's Agricultural Markets Program; U.S. Trade & Development Agency; http://www.trade.gov/static/afghanistan_agriculturalprogs.pdf; Retrieved on May 20th, 2012