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**ENVIRONMENTAL & SOCIAL MANAGEMENT FRAMEWORK (ESMF) STUDY**

# **MULTI-SECTORAL ACTION FOR NUTRITION PROJECT**



**EXECUTIVE SUMMARY REPORT  
DECEMBER 2016**



**EMC Pakistan  
Private Limited**



**Pakistan**

**Multi-Sectoral Action for Nutrition Program**

**Environmental and Social Management  
Framework (ESMF)**

**Directorate of Urban Policy & Strategic Planning, Planning &  
Development Department, Government of Sindh**

**Executive Summary report  
December 2016**

## General

Local Government and Housing Town Planning Department, GOS and Agriculture Department GOS with grant assistance from DFID funded multi donor trust fund for Nutrition in Pakistan are planning to undertake Multi-Sectoral Action for Nutrition (MSAN) Project. ESMF Consultant<sup>1</sup> has been commissioned by Directorate of Urban Policy & Strategic Planning to fulfil World Bank Operational Policies and to prepare “Environmental and Social Management Framework (ESMF) for MSAN Project” at its inception stage via assessing the project’s environmental and social viability through various environmental components like air, water, noise, land, ecology along with the parameters of human interest and mitigating adverse impacts along with chalking out of guidelines, SOPs, procedure for detailed EA during project execution.

The project has two components under Inter Sectoral Nutrition Strategy of Sindh (INSS), i) the sanitation component of the project aligns with the Government of Sindh’s sanitation intervention known as Saaf Suthro Sindh (SSS) in 13 districts in the province and aims to increase the number of ODF villages through certification while ii) the agriculture for nutrition (A4N) component includes pilot targeting beneficiaries for household production and consumption of healthier foods through increased household food production in 20 Union Councils of 4 districts.

### Saaf Suthro Sindh (SSS)

This component of the project will be sponsored by Local Government and Housing Town Planning Department, Sindh and executed by Local Government Department (LGD) through NGOs working for the Inter-sectoral Nutrition Support Program. 100% “Open Defecation Free (ODF)” Villages will be maintained through the Village Org. (VOs) and the UC staff of the LGD. The sub-projects under this component will be located in Dadu, Jacobabad, Kashmore, Larkana, Kambar-Shahdadkot, Tharparkar, Badin, Sanghar, Tando Muhammad Khan, Umerkot, Shikarpur, Thatta; and Sujawal. The proposed interventions under this component are i) Preparation of District ODF Plans, ii) Human Resource Development, iii) Community Behavior Change Activities and iv) Hardware support for Schools.

### Agriculture for Nutrition (A4N)

This component will be sponsored by Department of Agriculture (DOA), GOS and executed by DG, Agriculture extension. NGOs / CSO/ Communities are operating under this component. The sub-projects under this component will be located in Jacobabad, Tharparkar, Sanghar and Umerkot. The proposed interventions under this component are i) Mobilization and Group Formation, ii) Food Production and Management, iii) Awareness Raising, Capacity Building, Research and Knowledge Management and iv) Project Management, Inter-sectoral Coordination, Monitoring and Evaluation.

### Targeted Results

The sanitation and agriculture components linked to the Inter Sectoral Nutrition Strategy (INSS) of Sindh and will focus on nutrition results in a coordinated manner to have integrated impact. Relevant core sector indicators are expected to be utilized, i.e. (i) People trained to improve hygiene behavior or sanitation practices under the project (number of), and (ii) Clients who have adopted agricultural

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<sup>1</sup> M/s EMC Pakistan Private Limited

technologies and approaches promoted by the project. Expected key results will be further refined during project preparation and are likely to include:

- Eradication of open defecation of the villages in the 13 target districts;
- Percentage of targeted households that are consuming a more diverse and healthy diet;
- Platforms established and functioning for inter-sectoral coordination and planning at provincial and district levels.

### **Intermediate Results**

- Capacity of key staff at local and provincial government is improved to coordinate across administrative boundaries and extend appropriate service to target households;
- Percentage of the rural population in targeted villages wash hands with soap at critical times;
- Number of small farmers, landless peasant / women are trained in kitchen gardening, poultry, honey bee keeping and livestock rearing including small ruminants;
- Number of household raising livestock and preparing livestock products.

### **Regulatory Review**

Sindh Environmental Protection Act 2014 being as principle legislation of environmental protection in Sindh Province envisages protection, improvement, conservation and rehabilitation with the help of legal action against polluters and green awakening of communities. The discharge or emission of any effluent, waste, air pollutant or noise in an amount, concentration or level in excess of the Sindh Environmental Quality Standards (SEQS) specified by the Sindh Environmental Protection Agency (SEPA) has been prohibited under the Act.

Location and design of the sub-projects to be undertaken under MSAN project are not known yet, therefore a framework approach has been being taken to carry out environmental and social assessment of these subprojects. Under this approach, the present ESMF/RPF has been prepared to identify the potential generic negative environmental and social impacts, propose generic mitigation measures, provide basic screening criteria, list the type of safeguard instruments to be developed and provide institutional, monitoring, reporting and documentation measures for environmental and social safeguards compliance.

The World Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. As per World Bank's OP 4.01: (7) Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement: environmental impact assessment (EIA), regional or sectoral EA, strategic environmental and social assessment (SESA), environmental audit, hazard or risk assessment, environmental management plan (EMP) and environmental and social management framework (ESMF). Therefore, this ESMF will be prepared to fulfill Bank's EA requirements and Operational Policies.

### **Triggered Operational Policies (OPs) of World Bank and their management under ESMF**

*OP 4.01 - Environmental Assessment:* The Project intends to finance a variety of types of small-scale interventions (e.g. toilets and hand washing stations in schools, kitchen garden demonstrations comprising tunnel farming, livestock sheds, fish ponds, use of pesticides and chemical fertilizers) that

can have adverse but small nature environmental impacts. *The ESMF checklist is designed to identify these potential impacts, and direct communities and project teams to practical ways of avoiding or mitigating them. If project screening used by implementing agencies that more detailed planning work is required, they can require that an acceptable ESMP be prepared before the project application can be considered further.*

*Operational Policy OP 4.09 - Pest Management:* This policy is triggered for A4N component as the component comprising activities engaging with pesticides and pest management. *An Integrated Pest Management Plan (IPMP) will address pesticide usage especially in vegetable crops besides other crops being considered in the project. The plan will also articulate a strategy to incorporate IPM principles in A4N interventions specifically.*

## **Environmental and Social Management**

The ESMF report presents the regulatory review, broad baseline data collected for air, water, land, biological and socio-economic components of environment, identification, prediction and evaluation of generic impacts and preparation of ESMF with Resettlement Policy Framework (RPF) for mitigation of adverse impacts that may arise due to the proposed project interventions.

### **Baseline Data Collection**

After initial information was collected and reviewed, Reconnaissance Survey (RS) in each district was conducted to collect primary information for the sub-projects. Profiles of each district were made during the RS depicting varied baseline conditions. 70-90 % of the population in the villages openly defecate. Unemployment is the also a main problem for females in villages. In fact, not a single female is educated in the some villages.

Northern parts of target area of project is subjected to waterlogging and salinity as well as the deltaic area of river Indus. Consequently in desert region, extreme drought conditions prevails throughout the year make it difficult for agriculture through irrigation. In desert areas, rain is the main source of water and therefore agriculture and livestock activities are dependent on rainfall, the failure of monsoon means no fodder for the cattle and livestock. The dug well is the only source of drinking water in the area. The underground water is largely brackish with limited spots of sweet water.

### **Stakeholder consultations**

Stakeholder consultations have been carried out with (i) local communities who are the direct beneficiaries of the project interventions and (ii) institutions who have an important role in enabling the realization of the project interventions. These consultations have revealed that the proposed MSAN project is considered to have a positive social impact by improving sanitation while eradicating open defecation as well as provision of nutrition food by the introduction of nutrition sensitive agriculture. Communities were of the view that i) SSS programme can change villagers' health and environment and can save children from diseases ii) people were aware that diseases are cause due to unhygienic conditions but find it very difficult for them to build latrines and enclosed washrooms, iii) several community members were expected to be provided financial assistance from any organization for the construction of latrines, iv) due to waterlogging situation in some districts, fish farming becomes a good source of livelihood and many farmers have switched their lands into fish farms, v) farmers are keen to learn good agriculture practices (GAP) because they are unaware of them, and vi) Improved

employment opportunities and skill set trainings for women were identified as the priority areas for future interventions.

Consultation with institutions revealed that i) different environmental and socio-economic conditions of the target districts calls for localized management plans to implement the environmental and socio-economic targets, ii) training and capacity-building components must be imparted for implementation and monitoring of community-based environmental protection, iii) existing project should be designed to ensure rigorous periodic awareness and sensitization sessions, iv) clean water should be ensured in schools as part of the health and hygiene awareness component, v) lesson learning from previous projects and ground realities must be incorporated for both the SSS and A4N projects, vi) available technologies of latrine construction should be carefully revised for social and environmental implications, and vii) coordination amongst various stakeholders at all levels to enable knowledge-sharing, incorporation of lessons learnt and harmonization of project execution at the field level.

### **Impact Assessment**

Most of the Project's environmental and social impacts will be beneficial, including for example the positive effect on health caused by the reduction in Diarrhea and sanitation related diseases and the associated socio-economic benefits, considerable behavior change activities at community and district levels, and improved productivity (particularly benefiting females) generated by taking nutritious diet and good sanitation and hygiene conditions. The potential negative environmental and social impacts of the project are i) construction related localized and short-term impacts under SSS such as air and water pollution, noise generation, drainage and safety hazards etc. ii) under A4N includes increased use of pesticides and other agro-chemicals, water contamination especially surface water etc. these impacts require appropriate mitigation and management measures to contain them.

### **Environmental and Social Management**

Under ESMF approach, each subproject will be screened for the severity and extent of environmental and social impacts. Subprojects having negligible environmental and or social impacts will be screened through a rapid assessment checklist. Subprojects having some negative but localized environmental and or social impacts will require a generic Environmental and Social Management Plan (ESMP) to be prepared.

### **Recommendations under Environmental and Social Mitigation Plan**

#### *Subproject Siting to any sensitive area*

- It will be ensured through screening checklist that the subproject avoids any ecologically sensitive areas, PCRs and involuntary resettlement.
- Involuntary Resettlement Screening Checklist to be used to check the land belong to the school or government land and free from any disputes.
- Village Organizations and LGD officials will be taken onboard for the identification construction site in schools.
- The subprojects will be established on the land owned by Agriculture department. However, private land if acquired will be through VLD procedure. If VLD will not be possible, the RPF as part of this report will be applied. Complete documentation will be maintained for VLD.

- Valuation and compensation of affected assets of community should be in line with RPF/Sub-projects RAPs and considered before the field activities.
- Community consultations will be carried out before establishing the sites.

#### Unsuitable toilet construction may lead to water contamination

- During behavior change activities in the communities, environment friendly designs of toilets (suitable for that specific area) will be disseminated within the communities as a guide and unfriendly design impacts shall be communicated.
- Monitoring shall be made during project life cycle to check the sustainability of implemented interventions.
- Flush toilets should not be encouraged in areas under the project where water is scarce and in dry season. It will be ensured to provide these site specific provisions in toilets construction guidelines by the project implementation unit.

#### Pit/septic tank Sludge Management

- Sludge Management should be made part ESMPs of each sub-project. Sludge after emptying the tanks/pits should be landfilled at proper location and left for degradation.
- During behavior change activities in the communities, this aspect will be communicated and awareness raising workshops will be conducted in communities.

#### Use of Adulterated/ banned Pesticide / Excessive use of chemical Fertilizer

- Judicious use of the irrigation water, chemical inputs and use of alternate techniques (such as integrated pest management, using disease-resistant seeds, and mulching) will be promoted through awareness raising and capacity building initiatives.
- The capacity building program will also include safe handling of hazardous substances such as pesticides.
- High efficiency irrigation technologies (e.g. tunnel farming) which is included one of the interventions of A4N component will be promoted to conserve already scarce irrigation water. ES of IP and ES from directorates will ensure to promote it in above areas after filling environmental checklists and incorporated in the FFS scope.

#### Health and Safety Hazards for the farmers

- Awareness and capacity building regarding Material Safety Data Sheet (MSDS) for each hazardous substance will be promoted.
- WB Group's EHS Guidelines will be implemented as appropriate.
- Use of appropriate personal protective equipment (PPE) will be mandatory while using pesticides.

#### Impacts on Women, Children, and Vulnerable Groups

- Women's participation is already included in project interventions like development Female farmer field schools (F3S), construction of girl toilets, focusing on women as the main agriculture producers.

- Lady Extension Workers (LEW) will be engaged as contingent staff for short period, so as, to work with women beneficiaries. (PC-I of A4N)
- Environmental screening checklist will provide first stage information about impacts on poor, women and other vulnerable groups including needs and priority for social and economic betterment;
- IPs and TSPs will ensure the active participation of women in project interventions as well as adequately consulted.
- In awareness raising under SSS, women share should be more compared to men.
- Ensure participation of vulnerable groups in project activities through consultations, to ensure planned investments take the well-being of such groups into consideration

### **Implementation Mechanism**

Project Directors (PD) of SSS and A4N will be overall responsible for the implementation of ESMF compliance throughout the project life. Project Coordinator/ Deputy Director will coordinate with the Implementing Partners / technical support partners (IPs/TSPs) and the District Coordination Committee (DCC) of each district will take the prime responsibility to ensure the ESMF implementation across the district and reports to the PD. Environmental Specialists and Social Specialists will be hired by the PD under Sanitation / agriculture Directorates, who will assist PD to implement ESMF in letter and spirit. Both specialist will directly be responsible for subproject screening, development of subproject specific ESMPs and their implementation, internal monitoring and progress reporting. Environmental and Social Focal Persons (ESFPs) will be designated by the DCC for each district for the implementation of Environmental and social/resettlement issues, addressing grievances, conduct stakeholders consultations and coordination and reporting to Project Coordinator/ Deputy Director. IPs/TSPs will support community participation, consultations and other social activities from the sub-project identification to completion stage.

*Monitoring Mechanism under ESMF:* ESMF monitoring will be carried out to ensure that the mitigation plans are regularly and effectively implemented. It will be carried out at three levels. The directorate level, district level and at field level. At the provincial level, the environment and social specialists will carry out ESMF monitoring to ensure that the mitigation plans are being effectively implemented, and will conduct field visits on a regular basis. The district monitoring unit (DMU) and District nutrition coordination committee (DNCC) will also be responsible for ESMF implementation monitoring and evaluation. The DMU and DNCC will also conduct consultation with communities especially women. IPs and TSPs will carry out monitoring at field level.

### **Training Mechanism**

Implementation of subprojects under SSS and A4N components under MSAN project will require comprehensive trainings, demonstrations & long-term sustainability. The environmental & social aspects identifications and mitigations integrated with the SSS/A4N training effort will equip the project facilitators for a keen sight of project component related environmental issues and their solutions. The trainings will include but not be limited on the subject of responsible social mobilization and eco-friendly approach for appropriate and feasible toilet construction with immediate and long term solutions for waste and waste water disposal. The Components of A4N subproject presently include



provisions for Training of the DOA and DOLF staff for promotion and implementation of nutrition sensitive agriculture (NSA).

Environmental specialist and social specialist under Sanitation Directorate will actually execute the training programs. They will also be responsible for preparing the reports for each of the trainings conducted by various project units. ESFPs will be responsible for the overall implementation of training plan at district level and will also ensure proper relevant documentation. Additionally, IPs/TSPs will be responsible to provide trainings to their field staff and workers under supervision of ESFPs and they will also document the trainings.

### **Grievance Redress Mechanism (GRM)**

In an effort to deter fraud and corruption, the use of a dedicated mobile application has been proposed for reporting of grievances from field level to district and provincial headquarters. This will not only provide a coherent system of checks and balances but will also enable swift redressal and effective monitoring of complaints. The Directorates for both the SSS and A4N projects will serve as the secretariat for the Grievance Redressal Committee (GRC-Directorate) that will be responsible for providing oversight on the entire GRM process at a strategic level and monitoring of complaints management. Grievance Focal Points (GFPs), which will be the ambassador of change and educated people from each community on each sub-project site. Two GFPs (1 male and 1 female) will be selected for each sub-project locations and will be community members who are easily approached by the community. A Public Complaints Center (PCC), which will be responsible to receive, log, and resolve complaints. A Grievance Redress Committee (GRC-District) will be established for each district that will manage GRM aspects for all sub-project locations in each district including decisions to be taken, actions and monitoring of complaints resolution at sub-project level. The ESFPs will play an instrumental role in steering the GRC functions at the district levels.

Grievance Focal Persons will be trained to address grievances on the spot to discourage lengthy procedures and inconvenience to the local community. However, where the case cannot be dealt with by GFPs on an ad-hoc basis, GFPs will use smart phones to lodge and communicate those complaints at the district and directorate levels. The Grievance Redress Committee at the district level will review and identify actions to be taken to address the complaints at its weekly meeting. Also Public Complaints Center (PCC), which will be responsible to receive, log, and resolve complaints via its number(s) disseminated in local DC offices. If not satisfactorily resolved by the Grievance Redress Committee-District, the grievance will be referred to consideration by GRC at the Directorate level within one week. Every effort will be made to address or resolve grievances within the following fixed time-lines, which will be an indicator against the performance of the handling system. Acknowledgement of a written submission will be issued to the complainant within three working days. If not resolved earlier by the IP/TSP/ LGD/DOA/DOLF officers on site, grievances will be tabled for discussion/resolution during Committee meeting within one week of receipt of the written submission. If the complainant is not satisfied, the complaint will have the option to seek redress through court of law.

### **ESMF implementation cost**

The total cost of the ESMF implementation has been estimated to be about Pak Rupees 72.23 million. This includes costs of environment and social specialists, trainings, third party validation, and ESMP preparation for individual subprojects. This cost is included in the overall project cost.

## Resettlement Policy Framework (RPF)

The Resettlement Policy Framework which is a part of this report will only apply to interventions where land may be acquired for small-scale interventions that cannot be acquired through Voluntary Land Donation (VLD) procedures. Directorate of Agriculture will completely avoid land acquisition. Whenever there is additional land requirement, the directorate will interact with the land owners and facilitate voluntary donation of land required for taking up sub-projects under the project. This use of voluntary donation option will be limited to demonstration plots used by Farmer Field Schools (FFS). Under no circumstances, the titleholder shall be subjected to any pressure, directly or indirectly, to part with the land. These actions are expected to minimize adverse impacts on the local population and help in project benefits reaching all sections of community. The directorate will ensure that the process of voluntary donation of land is meticulously documented to avoid confusions, misunderstandings, litigations, etc. at a later stage. A protocol and format for this purpose is provided under VLD protocol.

A Resettlement Unit will be formed under each Directorates. The Directorate of Agriculture under A4N component will have the overall responsibility for implementation of all resettlement tasks. The Directorate will be assisted by SS for implementation of RAPs. The SS under Directorate of Agriculture will oversee and direct all the activities during the implementation of RAPs. ESFPs at the district level will be responsible for implementing the RAP according to the agreed principles and procedures. The Executive District Officer of Revenue Department, along with his staff, will be responsible for the acquisition of private land under Land Acquisition Act of Pakistan. The ESFPs will be responsible for coordination with the Revenue Department.

## Sector-wise Recommendations

*WASH:* 1) Even after a village attains ODF Certification, maintaining this status is a challenge and arrangements should be made to minimize fallout. Trained District, Taluka-level administration and other trained personnel such as LHVs can be play an instrumental role in helping communities maintain ODF status post-project. The role of women both for the promotion of health and sanitation awareness is essential in rural areas of Sindh. 2) During behavior change activities in the communities, environment friendly designs of toilets (suitable for that specific area) will be disseminated within the communities as a guide and unfriendly design impacts shall be communicated. 3) Flush toilets should not be encouraged in areas under the project where water is scarce and in dry season. It will be ensured to provide these site specific provisions in toilets construction guidelines to the beneficiaries by the project implementation unit.

*Nutrition Sensitive Agriculture:* 1) In Jacobabad, western parts of Shanghar and Umerkot districts, water logging persisted due to availability of plenty of water due to the presence of IBIS. Interventions supporting water availability should be considered like fish farming, agriculture through irrigation. However, in water scarce areas like Tharparkar and eastern parts of Umerkot and Sanghar districts, careful planning will be required while implementing interventions under A4N. Livestock is the main livelihood of these areas and it should be promoted through better practices. However, to support the Nutrition Sensitive agriculture (NSA), crops which require less water and are saline water tolerant may be introduced. This idea will support the scarcity of water in the arid region. 2) Use of compost, or decomposed organic matter as fertilizer, has been found to improve soil structure, increasing its water-holding capacity. 3) Best Management Practices (BMP)s in the areas of organic farming should be incorporated.