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ENVIRONMENTAL COMPLIANCE REVIEW

GROWTH WITH EQUITY IN MINDANAO (GEM) PROGRAM

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ACRONYMS

ARMM	Autonomous Region in Muslim Mindanao
BIP	Barangay Infrastructure Project
BUMP	Beneficial Use Monitoring Program
CAAM	Conflict Affected Areas of Mindanao
CFR	Code of Federal Regulations (US)
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring Plan
EMP	Environmental Management Plan
GEM	Growth with Equity in Mindanao
IEE	Initial Environmental Examination
LGU	Local Government Unit
LOE	Level of Effort
PEA	Programmatic Environmental Assessment
RIP	Regional Impact Project
USAID	United States Agency for International Development

SECTION 1

Project Background

The Growth with Equity in Mindanao (GEM) Program implements a wide range of activities throughout Mindanao, with a special focus on the Autonomous Region in Muslim Mindanao (ARMM) and other Conflict Affected Areas of Mindanao (CAAM). GEM is in its third iteration, with GEM 3 being implemented over a five-year period (2008 – 2013) with a total life of project cost of \$148 million.

GEM 3's objectives are to:

1. Accelerate economic growth in Mindanao and help assure that as many people as possible benefit from the economic growth and that the benefits are equitably distributed
2. Help bring about and consolidate peace in Mindanao

GEM 3 works with producer association and cooperatives, the Mindanao Business Council, the ARMM Business Council, chambers of commerce, private firms, the Mindanao Economic Development Council, the Government of the ARMM, national government line agencies, provincial and local governments, schools, bilateral and multilateral donor agencies, and other organizations and individuals working to bring about equitably distributed economic growth and strengthened peace in Mindanao.

GEM 3 activities include a combination of physical infrastructure development, procurement, technical assistance, training, communication, and advocacy in support of project objectives. GEM 3 activities are implemented through five components, including:

1. Infrastructure Development
2. Workforce Preparation
3. Governance
4. Business Development
5. Former Combatant Reintegration

GEM 3 is a very large and complex project, with a wide range of activities and sub-activities. Effectively screening GEM 3 activities to assure compliance with USAID's environmental compliance requirements, and just as importantly, to assure the environmental soundness of these activities, is a substantial challenge.

SECTION 2

Assignment Objective and Tasks

This assignment focused on helping USAID/Philippines and the GEM 3 team determine whether any steps should be taken to improve the effectiveness of the current environmental screening system. The GEM implementing partner has developed a robust environmental screening system over a number of years. The screening system is based in large part of guidance included in the recently expired Strategic Objective (SO) level Initial Environmental Examination (IEE) that governed environmental compliance for the GEM program.

Chris Perine, an Environmental Impact Assessment Specialist, completed the assignment in January and February, 2010. The assignment scope of work is contained on Annex A. The assignment included travel to the Philippines to meet with USAID/Philippines and GEM 3 project staff members. A list of individuals consulted is contained in Annex B. The assignment included meetings in Manila and Davao City, and a two-day field visit to sites of completed and proposed project activities in Mindanao.

The specific tasks from the assignment scope of work included:

1. Review the existing GEM 3 screening process and methodology, working with GEM 3 environmental compliance staff members to assess how they are conducting environmental screening
2. Develop recommendations for improving the GEM 3 screening system and templates by developing updated templates, and proposing any process improvements to improve the rigor of the process
3. Make spot visits to a number of selected project sites to conduct environmental compliance monitoring
4. Review the draft Environmental Assessments (EAs) for three planned road projects and make recommendations for improving the EA. Make site visits of the project areas as necessary to inform recommendations
5. Provide recommendations concerning preparation of a new GEM 3 Initial Environmental Examination (IEE)
6. Assess the efficacy of conducting a Programmatic Environmental Assessment (PEA), as an alternative to the current environmental screening system, to govern environmental compliance for the remaining GEM 3 life of project

SECTION 3

Analysis and Findings

This section includes a brief analysis of observations and information collected related to each task in the scope of work and findings based on that analysis. This analysis and findings are the basis for recommendations in Section 4.

1. Review the existing GEM 3 screening process and methodology, working with GEM 3 environmental compliance staff members to assess how they are conducting environmental screening.

In general, the GEM 3 environmental screening process is technically and methodologically sound. It is captured in a document entitled “Infrastructure Program Environmental Plan 2008.” The screening system includes a step by step process to categorize GEM infrastructure component activities according to their relative risk level and detailed instructions and templates for preparing environmental documentation, including screening, mitigation and construction. Specific areas in which the system could be improved include:

- The environmental screening system document is not current. If the GEM 3 team wants to make the screening system part of an annual plan, the plan should be updated for 2010 (the current plan is for 2008 and includes a description of activities planned for that year). An alternative is to make the screening system life of project.
- The screening system currently is limited to screening infrastructure component activities only. This is a legacy of the guidance from the SO 12 IEE that covered the GEM program. *That IEE will be replaced by a project level IEE in which application of environmental screening to activities under ALL GEM 3 components will be recommended.*
- The current screening system classifies GEM activities into Categories 1-4 (lowest to highest risk). This classification system is a legacy of the previous SO 12 IEE and generally follows 22 CFR 216 classification of risk, but does not track 100% with the regulations (e.g. moderate risk and high risk are not clearly identified and differentiated in the categorization system).
- The screening system does not clearly identify the procedure for post-construction (e.g. post-intervention) environmental monitoring. A separate GEM 3 operational unit, the Beneficial Use Monitoring Program (BUMP) team, tasked primarily with assuring that Local Government Units (LGUs) responsible for managing completed infrastructure projects are providing proper operational and maintenance support to these completed projects, also conducts post-construction environmental monitoring. It is not clear what the methodology is for this monitoring (e.g. mitigation measures tracked, indicators measured). Post-intervention environmental monitoring should track with a monitoring plan prepared prior to activity implementation and part of the screening process.
- The screening system does not include a set of illustrative adverse environmental impacts, mitigation measures and monitoring protocols typically associated with the

program's interventions. Including this information in the screening system documentation would be very helpful to project implementers.

2. Develop recommendations for improving the GEM 3 screening system and templates by developing updated templates, and proposing any process improvements to improve the rigor of the process

Recommendations in line with the bulleted observation under the previous task are included in Section 4.

3. Make spot visits to a number of selected project sites to conduct environmental compliance monitoring

Several completed GEM program infrastructure interventions were visited during the field visit on 3-4 February. In each case, environmental impacts were observed (e.g. high water marks upstream of bridges, significant erosion downstream of one bridge). It was difficult to determine the causal relationship, if any, between (a) the completed activities and (b) the impacts observed because post-construction environmental monitoring had not been systematically undertaken. This issue is further addressed in a recommendation in Section 4.

4. Review the draft Environmental Assessments (EAs) for three planned road projects and make recommendations for improving the EA. Make site visits of the project areas as necessary to inform recommendations

The GEM environmental management team leader provided the draft scoping statement and EA report for the planned Midsayap-Datu Piang National Highway Upgrading Project. Comments include:

Scoping Statement and Scoping Process

- Need for consultation with representatives in affected communities, rather than limiting public consultation to government officials
- Need to follow 22 Code of Federal Regulations (CFR) 216 requirements for scoping statement. Missing are (a) identification of significant issues and (b) identification of issues eliminated from further consideration.

Environmental Assessment

- Some core environmental issues probably should be considered for analysis (e.g. water resources/hydrology, flora)
- Alternatives analysis missing
- Impacts identified and assessed (Section 5) and impacts included in Environmental Management Plan (EMP) (Section 6) do not match. All impacts identified should be specifically addressed in the EMP.
- Suggest adding a map of the proposed project to Section 3

Depending on the final number of large scale road projects (e.g. RIPs) planned, consideration should be given the relative advantages and disadvantages of combining the EAs for each activity into one “cluster” EA for all of the proposed road segments.

5. Provide recommendations concerning preparation of a new GEM 3 IEE

Based on discussions with USAID/Philippines and GEM 3 staff, a substantial revision to the draft GEM 3 IEE has been prepared that (a) evaluates the environmental risk associated with all activities under each GEM 3 component according to 22 CFR 216 definitions and requirements and (b) includes application of the IEE to all GEM 3 components and activities. The draft revised IEE has been provided to USAID/Philippines.

6. Assess the efficacy of conducting a PEA, as an alternative to the current environmental screening system, to govern environmental compliance for the remaining GEM 3 life of project

A PEA is an effective approach to environmental compliance for programs with a relatively high number of high risk activities planned that require an EA. A PEA also is most effective when planned high risk (e.g. EA required) activities are across multiple sectors (e.g. roads, bridges, vertical structures) that are known at the time of PEA preparation. According to discussions with USAID and GEM 3 staff, current plans include implementing approximately three high risk activities per year for each of the program’s remaining three years. However the nature of these high risk activities is unclear. Given the limited number and unpredictable nature of activities requiring prepared an EA, the efficacy of preparing a PEA is not clear.

SECTION 4

Recommendations

1. Screen activities under all GEM 3 components for adverse environmental impact, according to requirements of 22 CFR 216. The new project level IEE being prepared for GEM 3 will require screening of some of the activities under each GEM 3 component. In addition to the infrastructure development component (e.g. Regional Impact Projects or RIPs, Barangay Infrastructure Projects or BIPs), activities under the remaining four components that involve construction of facilities or procurement of certain agriculture and aquaculture inputs (e.g. seed, fertilizer, brood stock) will require screening.

2. Expand environmental management team responsibilities to include environmental compliance responsibility for all GEM 3 program components and activities. Currently the GEM 3 environmental management team conducted screening of infrastructure development component activities only. This arrangement is a legacy of the previous SO 12 IEE for which environmental screening was required for GEM infrastructure activities only. The GEM 3 IEE currently being prepared will extend screening requirements to all other GEM 3 components and associated activities. It therefore will be necessary for the environmental management team to take on additional responsibility, which may require additional resources. Overall screening workload likely will increase by approximately 15%. It also may be advantageous for the environmental management team to be moved organizationally outside of the infrastructure development component, as is the case with the GEM program BUMP team.

3. Focus on identifying adverse environmental impacts in the screening process. Positive environmental impacts resulting from project activities are great. In fact, the objective of many GEM 3 activities is to sustain or improve environmental conditions and natural resource levels. However, the objective of the environmental screening process is to identify potential adverse environmental impacts and mitigate them. Explicitly identifying positive impacts is not relevant to the exercise, and can either (a) become a distraction from the objective or (b) create the perception that the screening process is a balancing of positive versus adverse impacts (which is absolutely is not).

4. Strengthen mitigation and monitoring toolbox that is part of environmental screening system. It would be useful for the GEM 3 screening system templates to include information to assist screeners to prepare thorough documentation. This information should include: (a) illustrative low, moderate and high risk activities, (b) illustrative adverse impacts and mitigation measures and (c) an annotated template for environmental monitoring. While not exhaustive and to be used as references only, these tools likely would help approve the overall quality of the screening process. Sample mitigation and monitoring tools have been provided to USAID/Philippines for possible use on GEM 3.

5. Strengthen activity-specific environmental monitoring regime, particularly post-completion (e.g. post-construction). Environmental monitoring is always a challenge because it requires the consistent, long time allocation of resources to be effective. GEM 3 has an effective construction phase environmental monitoring regime that is an

extension of its core construction monitoring system. However, post-construction monitoring appears not to be undertaken systematically, or with specific reference to mitigation measures and monitoring protocols developed in the activity-specific screening documentation. BUMP teams undertake minimal environmental monitoring as part of their larger monitoring visits, but BUMP team observations do not appear to be keyed to activity-specific environmental documentation or otherwise systematic. In general, all activities should have a specific environmental mitigation and monitoring plan (EMMP) in which there is a one-to-one relationship between (a) mitigation measures and (b) monitoring indicators. Sample mitigation and monitoring tools have been provided to USAID/Philippines for possible use on GEM 3.

6. Strengthen public consultation element of environmental screening and environmental assessment processes. Input from local people in communities that will be directly or indirectly affected by a proposed activity can be extremely valuable. Although it can be a challenge to effectively organize and management community meetings, it is important, both as a means of collecting information that may influence the design and/or operation of planned facilities, and as a means of assuring community buy-in to the process and ownership of the completed facilities. For those activities assessed using the screening process, make public consultation part of the screening process. It likely already occurs on an *ad hoc* basis. Whenever possible design and engineering teams, as well as the environmental management team should document that consultation (and the screening templates should be revised to include space for that documentation). For those activities requiring EAs, make public consultation a required part of the scoping process. In all cases, the wider the range of perceptiveness that the project obtains, the more likely that the final product will be physically and institutionally durable.

7. In the preparation of EAs, strike a constructive balance between (a) descriptive information and (b) analytical information and actions. As a general rule, the descriptive information sections of a scoping statement or an EA should not constitute more than one half of its total length. Descriptive information is a useful and necessary part of Scoping Statements and EA reports. It provides the background for readers, particularly approvers, to understand the project. Briefly describing the project objective, proposed project activities and the affected natural environment helps set the stage for subsequent analysis and actions. But the analysis and actions are the heart of the process and should be given the most attention. For Scoping Statements, collection of issues from stakeholders, and analysis of those issues to determine significant issues to be evaluated during the EA process are the critical elements. For EAs, the determination of adverse environmental impacts, and the identification of mitigation measures and monitoring protocols to reduce or eliminate those impacts are the critical elements.

8. Include all of the elements required by 22 CFR 216 in EA Scoping Statements and EA reports. 22 CFR 216 is specific about the required element for Scoping Statements and EAs. Scoping Statements must include (a) a determination of issues judged significant (and to be evaluated during the EA process), (b) identification of issues raised but judged not significant and therefore eliminated from further study, (c) any proposed variations in the EA format, (d) a schedule for completing the EA and (e) a description of the EA

team. For EAs, reports must include (a) an executive summary, (b) a statement of the EA purpose, (c) consideration of alternatives to the proposed project, (d) a description of the affected environment, (e) environmental impacts, mitigation measures and monitoring protocols, and (e) a list of the EA preparers.

9. Continue preparing activity-specific EAs for high risk activities rather than preparing a PEA for GEM 3. As discussed in Section 3, (a) the limited number of high risk activities (e.g. RIPs) projected for the remaining life of project and (b) the unpredictability of the activity types that will be undertaken combine to argue again a PEA and for the continued preparation of activity-specific EAs. In some cases, it may make sense to prepare a single EA for a cluster of specific activities, if the timing of two or more activities makes this clustering practical.

ANNEX A

Assignment Scope of Work

Scope of Work

Environmental Impact Assessment Specialist

USAID/Philippines GEM 3 Project Environmental Compliance Review

1. BACKGROUND

Beginning in 1995 and implemented through a partnership between USAID/Philippines and the Mindanao Economic Development Council, the Growth in Equity in Mindanao (GEM) project currently is in its third phase. GEM 3 began in January 2008 and is expected to operate until the end of 2012. The GEM program operates throughout Mindanao, with a special focus on the Autonomous Region in Muslim Mindanao (ARMM) and other conflict-affected areas of Mindanao (CAAM). GEM 3 activities include a mix of infrastructure development, governance and business growth support, education promotion, and former combatant reintegration.

USAID/Philippines has expressed interest in drawing on technical assistance available through the Environmental Management Capacity Building task order (EMCB) to identify ways assess environmental compliance under the GEM 3 project. EMCB provides USAID missions in Asia and the Middle East with technical assistance on environmental compliance, including but not limited to: 1) Regulation 216 (22 CFR 216) training; 2) Regulation 216 and environmentally sound design (ESD) technical support in best management practices (BMP) and application of environmental management principles and practice for ANE Mission staff; and 3) Regulation 216 knowledge management and information dissemination (*ane-environment.net* web site management).

2. OBJECTIVE OF ASSIGNMENT

GEM 3 infrastructure activities and other activities that might have potential adverse impacts on the environment such as aquaculture are screened to assess their potential adverse environmental impact pursuant to the requirements of USAID's Environmental Procedures, codified in Title 22 of the US Code of Federal Regulations, Part 216, (October 1980). These procedures are commonly called Regulation 216. This assignment will be undertaken by an Environmental Impact Assessment (EIA) specialist funded through EMCB with the objective of helping USAID/Philippines determine whether any steps should be taken to improve the effectiveness of the current GEM 3 activity environmental screening system.

3. GENERAL RESPONSIBILITIES

The EIA specialist will work with the USAID/Philippines Mission Environmental Officer, USAID/Philippines staff managing the GEM 3 program and with representatives of the GEM 3 implementing partner.

4. SPECIFIC TASKS

The EIA Specialist will complete the following tasks associated with this assignment:

- With a clear understanding of GEM's current and future activities, particularly infrastructure, aquaculture and other activities that might have a potential adverse impact on the environment, review the existing GEM 3 screening process and methodology, working with GEM 3 environmental compliance staff members to assess how they are conducting environmental screening
- Develop recommendations for improving the GEM 3 screening system and templates by developing updated templates, and proposing any process improvements to improve the rigor of the process
- Make spot visits to a number of selected project sites to conduct environmental compliance monitoring
- Review the draft Environmental Assessment (EA) for three planned road projects (assuming that the EA scoping process is approved by that time) and make recommendations for improving the EA. Make site visits of the project areas as necessary to inform recommendations
- Provide recommendations concerning preparation of a new GEM 3 Initial Environmental Examination (IEE)
- Assess the efficacy of conducting a Programmatic Environmental Assessment (PEA), as an alternative to the current environmental screening system, to govern environmental compliance for the remaining GEM 3 life of project

5. DELIVERABLES

The EIA specialist will prepare the following deliverables:

- A report on the current GEM 3 environmental screening system that includes (a) an assessment of its efficacy, (b) recommendations for improved efficacy, (c) guidance and template to implement report recommendations, and an assessment of continued use of an environmental screening system versus preparation of a PEA
- Specific guidance and input for the planned GEM 3 IEE

6. LEVEL OF EFFORT

This assignment will require approximately 18 days of level of effort (LOE), including:

- 11 field days
- 3 prep/report writing days
- 4 travel days

LOE, travel and per diem will be funded under EMCB. USAID/Philippines and the GEM 3 project will be expected to provide logistical and technical support while in the Philippines, including but not limited to: local transportation and security while visiting project sites in Mindanao.

7. PERIOD OF PERFORMANCE

On/About January 27-February 16, 2010.

8. LOCATION OF THE ASSIGNMENT

The review will be conducted in Manila, and in relevant locations in Mindanao, as required. Final report writing may be completed in the US.

9. WORK SCHEDULE

A six-day workweek is authorized in the field.

10. SUPERVISION AND REPORTING

The EIA specialist will report to the Director of the Office of Energy and Environment, USAID/Philippines, coordinating with the USAID/Asia Bureau Environmental Officer.

ANNEX B

List of Individuals Consulted During Assignment

USAID/Philippines

- Rolf Anderson, Chief, Office of Energy and Environment, USAID/Philippines
- Michael Rossman, Contracting Officer, GEM 3
- Bob Barnes, Economic Growth Advisor and Contracting Officer's Technical Representative, GEM 3, Office of Economic Development and Growth, USAID/Philippines
- Mary Joy Jochico, Urban Environment Specialist, Office of Energy and Environment, USAID/Philippines
- Maria Teresa Robielos, Office of Economic Development and Growth, USAID/Philippines

GEM 3 Program

- Charles Feibel, Chief of Party, GEM 3
- Noel Ruiz, Deputy Chief of Party, GEM 3
- Alex Sunderman, Program Manager, Infrastructure Construction, GEM 3
- Stanley Swerdloff, Mariculture Activities Manager, GEM 3
- Michael Langsdoff, Workforce Preparation Component, GEM 3
- Armando Andaya , Environment Team Leader, Infrastructure Component, GEM 3